# POWER AND WIND POWER: EXPLORING EXPERIENCES OF RENEWABLE ENERGY PLANNING PROCESSES IN SCOTLAND

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**Abstract:**

Energy use and production have become highly salient within both national and international policy. This reflects an international recognition of the need to cut emissions in order to mitigate the threats of climate change. Within the UK there is significant policy support for renewable energy development generally, and wind power in particular. Nevertheless, the UK is not expected to meet its targets for renewable energy production. This is often portrayed as being the result of localised public opposition to particular proposed developments. However, this thesis challenges the notion that local objectors are powerful actors within renewable energy deployment. A detailed, multi-method case study of one planning application for a wind power development was conducted in order to explore how the planning process is experienced and perceived by various different actors involved (i.e. representatives of the developers, local objectors, local supporters). The findings refute the assertion that localised opposition presents significant obstacles for the development of renewable energy; they instead highlight the limited influence of objectors. In order to understand the many different forms of power which may be exercised the research employs Lukes' *three-dimensional view of power* as a framework of how the concept is to be understood. Through this framework, the thesis does not only consider the power of objectors, but also of prospective developers and the forms of power that are found within the structures of the planning system. Power is considered to be visible not only in the outcomes of decision-making processes but also in the processes themselves. It is shown that whilst planning processes are presented as being public and democratic, considerable power is exercised in controlling the participation that is allowed and ultimately the range of outcomes which can be achieved.

**Key Words:** Renewable Energy, Science and Technology Studies, Planning, Power, Participation, Public Interest

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## Contents

**Preface**

The PhD has evolved and gone through considerable changes throughout its three year journey. For myself as a researcher this has been both fascinating and challenging. To begin with the research objectives did not differ significantly from those which I have come to criticise within the wind power literature. The research project was conceived as an opportunity to understand why opposition to wind power developments arose and how it was experienced, in order to identify ways in which developers, or policy-makers could respond to this in the future. As such my own position was informed by the pro-wind power bias which I now seek to redress.

The PhD is funded collaboratively by the Economic and Social Research Council (ESRC) and Scottish and Southern Energy plc (SSE) who are a major UK energy company and a key player in the development of UK renewable energy – and wind power in particular. As such I had excellent access to developers' perspectives on the planning and development of wind farms, and also had a fantastic opportunity to feed back my research findings into a 'real-life' setting. This connection proved to be invaluable within the research, however as the PhD progressed I grew personally more and more uncomfortable with the managerial assumptions underpinning the research design. My review of the wind power literature had led to an awareness of the limiting nature of such assumptions. As such I felt that it was necessary to remove all such assumptions from within my own research and this meant that I could not presume that the opposition which I studied *needed* to be overcome or managed. Therefore it was decided that the research ought to aim to understand the experiences and perceptions of *all* actors involved in the planning of wind power developments, and that all of these actors (whether objectors, supporters or developers) should be examined equally and impartially.

Given my connection with a major energy company – with interests in the development of wind power – this change of focus resulted in further personal, professional and ethical challenges. Working collaboratively with this company led others to have expectations or assumptions about my intentions or my opinions about wind power. When I began conducting research within a community where a wind farm was proposed I was treated with considerable suspicion by many local objectors who considered me to be working *for* the developers. Equally, at times I experienced feelings of guilt that I may not be delivering what was expected of me by my collaborative sponsors. I felt a responsibility to produce tangible outcomes which might be of benefit to the company, however I did not want these benefits to be costly or harmful to any other

party (for example, actual or potential future objectors to wind farms). Such issues were constantly in my mind throughout the PhD process and meant that I strived to conduct my research as honestly and impartially as possible. As will be discussed within chapter five, I minimised as far as possible any form of deception within my research and have been very careful to honour the confidences which individuals placed in me.

The PhD process has required a great deal of critical reflection on its methods, its empirical findings and the contents of the eventual thesis, but also on my own views, interests and intentions. I began the PhD with a very clear (pro-wind power) position, however over the past three years I have found myself at times in opposition to either particular wind farms or wind power in general, at other times still very much in favour of the development of wind power but most of the time entirely uncertain and often bewildered! However, I feel that this uncertainty over the merits of wind power development has, in fact, been an asset within the research and has enabled me to eliminate bias. The result is a thesis which cannot pretend to offer convenient answers but does instead offer an impartial and (as far as possible) accurate account of experiences of wind power planning. It is this which ultimately represents a timely and significant contribution to the wind power literature.

## 1.0 Introduction

### 1.1 The Background to this Research

> wind power is the biggest threat Scotland has faced since the Highland clearances.
> (Cameron McNeish cited in Vidal 2004)

> Our research proves, very clearly, that onshore wind will deliver, bringing major benefits to the economy and the environment while securing our energy supplies.
> (Chris Tomlinson cited in BBC 2006)

In recent years it has become increasingly rare for a week to go by without there being media reports relating to renewable energy, and wind power in particular. Renewable energy has become a highly emotive subject and, as is evident in the two quotes above, press reports suggest ever more polarised positions in relation to wind power and its impacts on society and the environment. On the one hand, supporters of wind power are reported to view them as providing important solutions to environmental problems (notably the threat of climate change) and as having the potential to significantly boost the national economy. For example, after the First Minister Alex Salmond announced that planning permission had been granted for Europe's largest wind farm to be built in Scotland, it was reported that: 'Mr Salmond now expects Scotland to become the green-energy capital of Europe and a major exporter of renewable energy – a move that could bring billions of pounds into the economy' (Haworth 2008). On the other hand, opponents of wind power are reported to consider them to be expensive (highly subsidised by the state) and presenting unacceptable, and ineffective intrusions into valuable natural landscapes (see for example, Leake 2008). As will become apparent within chapter three, the arguments are, of course, far more complex than this, however, the impression given within media reports is that there exist two opposing sides on debates around wind power each arguing their case by reference to environmental, economic and social arguments. It has been contended that wind power now represents both an environmental solution and an environmental problem (Toke and Strachan 2006).

Given the emotive nature of these arguments, and their reporting in the media, it is interesting to consider what it is about wind power which gives rise to such levels of controversy, and whether this is something particular to wind power or representative of wider relationships between technology and society.

Energy use and production have become highly salient within both national and international policy. This reflects an international recognition of the need to cut emissions in order to mitigate

the threats of climate change. The UK has been heavily reliant on fossil fuels throughout its history, as Brennand (2004) notes it has relied on coal since the 18th century, natural gas since the 1960's and oil since the 1970's. However, as 'the prospect of exhaustion of this indigenous fossil fuel endowment combines with a heightening environmental awareness' the importance of developing capacities to exploit renewable energy sources is becoming increasingly clear (Brennand 2004: 83). This also represents a response to increasing national and international commitments to reducing emissions and combating the threats of climate change. The UK is one of 189 member countries of The United Nations Framework Convention on Climate Change (UNFCCC), which was one of three conventions adopted at the Rio Earth Summit in 1992. The ultimate objective of the UNFCCC is to 'stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system' (UNFCCC 2007). To date a key outcome of the UNFCCC has been the 1997 Kyoto Protocol which has been ratified by 182 countries and came into effect in 2005 meaning that the UK (as an Annex 1 country) is bound to reduce its emissions by 8 per cent (from 1990 levels) by 2008-2012. As such the UK is required to make significant changes in order to satisfy its commitments. The drive for renewable energy, which will be made apparent within chapter two, represents an important part of these changes.

Renewable energy is said to be 'an integral part of the Government's strategy for reducing carbon emissions' (DTI 2007: 143) and, as will be shown within chapter two, there is significant policy support for renewable energy development – and wind power in particular. Nevertheless, the UK is not expected to meet its targets for renewable energy production (DTI 2006a). As is discussed in chapter three, this is typically portrayed as being the result of localised public opposition to particular proposed renewable energy developments (Bell *et al* 2005, Devine-Wright 2007, Ellis *et al* 2007, Peel & Lloyd 2007). However, Scotland is currently said to be on course to meet – and even surpass – its renewable energy targets (http://www.scotland.gov.uk...(1)). It has been suggested that development rates have been higher in Scotland compared to England or Wales due to 'a markedly pro-wind power stance by the Scottish Executive' (Toke 2005a: 49) and that the Scottish planning system looks favourably on proposed wind power developments. Given the media and academic attention being paid to wind power opposition it is therefore interesting to consider what the realities of this opposition actually are.

As will become clear within chapter three, the academic literature on this topic widely suggests that localised public opposition to wind farms represents a serious problem for the development

of wind power, and the achievement of national renewable energy targets. The literature focuses on objectors' responses to proposed developments and their arguments or motives for opposition (Ellis *et al* 2007). The objective of academics within this field appears to be to understand opposition in order to manage or overcome it in the future. However, such an objective is based on the presumption that opposition to wind power represents a significant challenge to the deployment of the technology, and moreover that this opposition is misguided.

Chapter three outlines what are considered to be key weaknesses within the wind power literature. This thesis then aims to demonstrate that there is a need to critically reassess the presumptions underpinning it. Central to this literature is the assumption that opposition is an obstacle which must be overcome, however, this assumption serves to limit understandings of experiences with the technology. The literature fails to consider the complexities of objectors' experiences or the potential merits of their arguments. The absence of such assumptions within this research enables more sophisticated and impartial examinations of experiences with wind power and the planning system. This research challenges the literature in a number of ways: In particular, the findings refute the assertion that localised opposition presents significant obstacles for the development of renewable energy; they instead highlight the limited influence of objectors. The research demonstrates that it is essential to question how influential objectors to wind power actually are and what role they play within planning processes. To date the literature has been lacking an impartial account of what actually happens within wind power planning processes. The focus on overcoming opposition has prevented commentators from considering the true experiences of objectors, supporters or developers, and has thwarted full consideration of the roles that different actors play or the power that they possess. The key aim of this thesis is therefore to uncover and examine the real experiences of different actors involved in, or affected by, planning processes for wind power developments.

As will be highlighted in chapter three, the extant literature focuses almost exclusively on objectors and largely overlooks the experiences or attitudes of supporters and prospective developers. As such, the holistic approach taken within this research and its consideration of objectors', supporters' and developers' experiences with wind power planning represents an important contribution to the literature. Additionally, the literature suggests that objectors are influential actors within wind power planning processes; however studies of objectors typically consider the role that they play within the early planning application stage but largely ignore subsequent appeals stages (*i.e.* Bell *et al* 2005, Krohn & Damborg 1999, Wolsink 2007a). This

research will suggest that this inevitably leads to misleading results. Where a planning application is refused it is highly likely that a wind power developer will lodge an appeal and thus it is within the appeals stage where power is most meaningfully exercised. This thesis will therefore pay considerable attention to the appeals process and will highlight the particular demands that this places on local objectors. It will be demonstrated that by overlooking this important stage in wind power planning the literature can easily overestimate the power which objectors possess and underestimate the challenges that they face.

Power is a central theme running throughout the thesis. The assumption that objectors are influential actors within wind power planning is central to the wind power literature and as such questioning this assumption, and examining the influence which objectors possess is of great importance. Crucially the thesis does not only consider the power of objectors, but also of prospective developers and that which is found within the structures of the planning system. Power is considered to be visible not only in the outcomes of decision-making processes but also in the processes themselves. In order to understand the many different forms of power which may be exercised the research adopts Lukes' (1974 [2004]) *three-dimensional view of power* as a framework of how the concept is to be understood. Power is a concept which can be interpreted in innumerable different ways, the reasons for selecting Lukes' three-dimensional view will be outlined in chapter four.

The thesis aims to clarify what the central problem within this research area is, and suggests that rather than focussing narrowly on the goal of achieving renewable energy targets, researchers should be considering a broader range of issues relating to issues of governance and accountability: How do members of the public (as well as prospective developers) understand their involvement in decision-making processes? What influence do they play? And to what extent does public opinion shape the outcomes of decision-making processes?

This thesis aims to redress the persistent pro-wind power and managerialist bias identified within the wind power literature. In doing so it uncovers a myriad of highly interesting and significant social and political issues which have to date been concealed by the limitations of the literature. It is important to emphasise that although it challenges the pro-wind power presumptions underpinning the literature, this research does not take an anti-wind power position. Rather it seeks to consider all different positions relating to the research topic equally and impartially. The findings therefore do not present recommendations for wind power developers or policy makers

aiming to overcome opposition, nor for opponents of wind power objecting to developments. Instead this research provides rich insights into how planning processes are perceived and experienced by different actors. The aim of this research is to *understand* – not to manage – responses to wind power.

## 1.2 Overview of the Thesis

### *1.2.1 Setting out the Context and Theoretical Background*

The following chapter, (chapter two), sets out the policy context behind this research. It begins by outlining the philosophical positions which are considered to underpin current energy and planning policies. It will be demonstrated that whilst policies typically make reference to Sustainable Development, the sentiment of these policies more usually reflects that of Ecological Modernisation. Thus, the current policy climate is essentially modernist and pro-development, having a great deal of faith in science, technology and innovation to solve problems.

The chapter will then provide an overview of current UK energy policies. This will outline the targets for renewable energy production which have been set by the UK (and Scottish) Government, and also the mechanisms which are in place to facilitate the achievement of these targets. The chapter then considers UK, and particularly Scottish, planning policies. The planning system is routinely legitimated by claims that it serves to protect 'the public interest', however such claims will be critically considered and it will be shown that the concept of 'the public interest', while remaining pervasive within planning policies, has been widely discredited within the planning theory literature. Therefore the chapter will consider how this concept is defined and deployed within planning policies and what consequences this may have for planning practice.

The chapter will also consider what role members of the public play within planning processes. It is demonstrated that current planning policies look on renewable energy (and especially wind power) projects somewhat favourably. Thus, the chapter ends by questioning what role or influence local objectors to a proposed wind power development could have within a planning system which is pro-development and pro-wind power.

Chapter three represents a review of the existing literature on public experiences with, or attitudes towards, wind power. The chapter aims to draw attention to key themes and assumptions within this literature and to demonstrate how these have served to limit the contribution of the literature. For example, it is shown that whilst much of the literature presumes that the majority of the

British public are in favour of wind power development, it does not typically provide evidence to back up this presumption. It is not contended that such assumptions are necessarily wrong, but rather that they remain largely unsubstantiated.

The chapter also shows that the extant literature, in taking an uncritically pro-wind power position, has long treated opposition to wind power as an obstacle or problem which must be overcome. As noted above, the objective apparent within the literature is therefore to understand opposition in order to manage it in the future. This managerial approach is seen to bias the literature and ultimately prevents meaningful understandings of the experiences and perceptions of objectors to wind power developments. It is therefore contended that a more holistic and impartial approach is needed in order to fully understand and appreciate individuals' or groups' experiences with wind power planning applications.

It is shown that much of the literature suggests that opposition to wind power developments could be avoided if prospective developers facilitated greater participation of local community members within design and planning processes. However, chapter three demonstrates that participation cannot be envisaged as a means of securing certain outcomes (*i.e.* less opposition and hence higher rates of planning approval). Rather, meaningful participation requires openness, transparency and the empowerment of participants. Ultimately, this can only be achieved if participants are able to 'own' and direct the processes and if they possess the power to meaningfully shape the outcomes of these processes. Thus, meaningful participation could only occur if prospective developers were willing to accept that the outcome might require them to abandon the project.

In sum, chapter three concludes that there is a need for impartial research into the realities of people's experiences with wind power planning. The thesis therefore represents an attempt to redress the persistent pro-wind power bias found within the literature and to provide a much needed critical account of actual planning processes and experiences. As noted above, in doing so the thesis does not intend to be 'anti-wind power' or to suggest that supporters of wind power are misguided (as the literature has suggested of objectors) but rather to treat all arguments as equal and to consider all parties' experiences and perceptions impartially. It is felt very strongly that this is the only way that it is possible to fully understand the subject of the research.

In order to move away from the partisan literature related to public responses to wind power, chapter four sets out and defines the theoretical lenses through which this research will be viewed. Whilst much of the extant literature treats opposition to wind power as a unique or special subject, this research identifies many similarities with wider debates about public relationships with science and technology. Chapter four therefore provides an overview of the literature on this topic from Science and Technology Studies (STS). The STS literature is highly relevant throughout the thesis, and chapter four summarises the main contributions of this literature. In particular, it is shown that STS has challenged the 'special status' of science and expertise in society. It has highlighted the fallible nature of expert knowledge and simultaneously has drawn attention to the valuable knowledges which non-experts possess. Chapter four considers debates surrounding the democratisation of science and demonstrates that lay knowledge might have as much (although different) value within decision-making processes as expert knowledge. This has implications for the public's role within planning processes.

Chapter four will then set out how 'power' – a central concept within this thesis – is understood within this research. A review of several different possible interpretations of power is presented and it is shown that simplistic understandings of the concept cannot do justice to the many different forms of power which are exercised or experienced. Lukes' (1974 [2004]) three-dimensional view of power is therefore employed since it acknowledges many different forms of power and importantly recognises that power is exercised both overtly and covertly, and through latent as well as actual conflict. Furthermore, by acknowledging that power can be exercised through the shaping of people's beliefs or preferences, Lukes' theory has important resemblances with the work of STS where it has been shown that people's expectations of how knowledge is to be produced are shaped by social norms relating to expert and lay knowledge, and the maintenance of the 'special status' of science.

The theoretical discussion within chapter four illustrates the perspective from which the research subject will be viewed. It will become clear throughout the thesis that the themes raised within this chapter are highly salient to the research. Furthermore, they have resulted in valuable new insights on the subject which have previously been overlooked within the wind power literature.

### *1.2.2 Conducting the Research*

Chapters two to four present the context and theoretical background to the research. Chapter five then sets out the methods that have been used. Central to the research design and choice of

methods were the requirements to be impartial and able to reflect diverse interests and viewpoints. A highly flexible and responsive qualitative research design was therefore chosen. A case study of one particular proposed wind power development was used; this involved reviewing secondary material, conducting qualitative thematic analyses of objection letters and an official report of the planning appeal, a period of observation at a public inquiry and a series of semi-structured interviews. As is described within chapter five, the flexible and reflective nature of the research design is considered to have been invaluable and resulted in highly detailed findings and important new insights into the realities of wind power planning.

Chapter six then provides a narrative account of the case study. This is based on a review of secondary materials (*i.e.* local press coverage and official planning documents) as well as observations made by myself. This chapter aims to set out the history of the planning application, it identifies the key stages within the planning process and the key actors involved. Subsequent chapters then consider particular aspects of the case study in more detail.

### *1.2.3 Research Findings*

The research findings are set out in chapters seven to ten. Each of these chapters presents the findings of a particular component (method) within the case study. However, it should be noted that although each of the different components are here presented separately the implications of these findings can only be fully appreciated when taken together (as will be done in chapter eleven).

Chapter seven presents the findings of a qualitative thematic analysis of objection letters. This analysis considered all the objection letters retained on file by the local council (700 letters). The chapter sets out what the key topics within these letters were, and the different forms of objection letters which were sent (*i.e.* individual or proforma). Chapter eight presents the findings of the observation conducted at the public inquiry (which represented the appeals process for the planning application). The chapter sets out the different topics which were addressed within the inquiry and also how members of the local community reacted to inquiry proceedings. The chapter also presents my own reflections on the inquiry process. Chapter nine presents the findings of a qualitative thematic analysis of the official inquiry report. This report contained the eventual outcome of the planning application and presented the decision-maker's rationale for their decision. Chapter nine sets out which topics were discussed in this report, and in how much

detail. Chapter ten is the final findings chapter and presents the findings of the semi-structured interviews.

### *1.2.4 Discussion and Implications*

Chapter eleven then considers the findings of each of the previous four chapters. It takes an analytical approach and discusses the common themes between the findings of different methods within the case study. It highlights how the planning application evolved over time and the different ways in which actors' roles and knowledges were structured. It will be shown that as the planning process progressed debates concerning the planning application became less local or specific in orientation and instead were constructed in highly generalisable, non-specific terms. A key means by which this happened was through the increasing emphasis on expertise and 'facts' and the marginalisation of lay views or knowledges. Additionally, there was an increasing emphasis on national (and at times international) policies relating to energy production and planning (as well as other topics which arose at the inquiry).

Within chapter eleven the connections between this research and the theoretical discussion found within chapter four will become apparent. Lukes' three-dimensional view of power will prove to be particularly useful for examining the various different forms of power which were exerted on objectors to the proposed development. It will be shown that whilst objectors were initially influential actors within the early planning application phase (where the decision-making power lay with elected representatives of the local council), in the later appeals stage (where the decision-maker was a Scottish Executive official) objectors were faced with a number of substantial obstacles which effectively served to limit their influence on the planning application process.

Due to the fact that this research is based on a single case study it is important to assess to what extent its findings may represent wider experience. Chapter twelve, therefore, considers two previous case studies of planning applications in detail and also highlights common themes within various further public inquiry case studies. It will be demonstrated that strikingly similar findings and themes are identified within these case studies and that presented within this thesis. In particular the central role played by expertise is found to be highly salient and consequential within each case study.

Chapter twelve also considers five other Scottish wind power planning applications which were determined around the same time as that discussed in this thesis. Qualitative thematic analyses were conducted on the inquiry reports in which the planning verdicts were published and it is shown that similar patterns are found within these reports and that within the case study. Crucially it is found that, as with the case study in this thesis, policy appears to have played a key role in the determination of each of these planning applications. Furthermore, there is no clear connection between the level of public opposition to particular developments and the outcome of the planning applications, hence reinforcing the finding that local objectors are not powerful actors within public inquiries.

Finally, chapter thirteen concludes this thesis by summarising the key contributions that it makes and suggesting areas for future research. It demonstrates that this research has made a substantial critical contribution to the wind power literature by challenging many of the key assumptions underpinning it, additionally the data presented here represent a significant empirical contribution. Through such contributions, the research presents valuable new insights into the realities of wind power planning. The findings highlight the need for more reflective and critical approaches within the wind power literature.

Chapter thirteen also sets out the contributions which this research makes to the STS and planning theory literatures. The findings have raised important questions about the role of lay knowledge within decision-making processes (especially related to planning). They have also highlighted weaknesses and biases within current planning policies and emphasize the need to reconsider key concepts such as ‘the public interest’.

## 1.3 Summary

This PhD originally set out to understand community responses to wind power developments, and in particular to understand why and how individuals object to such proposed developments. However, in attempting to answer these questions it has uncovered a vast array of complex and significant social and political factors which have so far been largely overlooked within the wind power literature. The key assets of this research are its impartial and holistic approach and its critical and reflective perspective. These have resulted in a thesis which makes important contributions not only to the wind power literature but also those of STS and planning theory. However, the primary and most important contribution remains to the wind power literature of which this thesis is highly critical. The findings and conclusions force a reconsideration of many

of the key assumptions underpinning this literature and will prove to be highly valuable for academics in this field.

## 2.0 The Policy Context

### 2.1 Introduction

In response to increasing national and international commitments to reducing emissions and combating the threats of climate change, energy production and consumption have become highly salient topics (Haugh 1996). The United Nations Framework Convention on Climate Change (UNFCCC), which was adopted at the Rio Earth Summit in 1992 has played a pivotal role in setting targets for emissions reduction around the world (Elliott 2006). There are 189 member countries within the UNFCCC who have each signed up to committing to the objective of 'stabilis[ing] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system' (UNFCCC 2007). The Kyoto Protocol which has been a key output of the UNFCCC (Elliott 2006) has been ratified by 182 countries and came into effect in 2005. Each of these countries has committed to taking action to reduce their greenhouse gas emissions. However, what this action entails is different for different member countries: 'Many of the developing countries, for example, were not required to take on obligations beyond broad reporting, whilst developed country parties committed to facilitating new funds and technologies to developing countries to assist them in meeting their commitments to the convention' (Elliott 2006: 96). The 38 countries classified under the heading of 'Annex One' countries – of which the UK is one - are legally bound to reduce their emissions in line with targets set by the UNFCCC. For EU15 countries (including the UK) the target is to reduce emissions by 8 per cent (from 1990 levels) by 2008 - 2012. However, within the EU 8 per cent 'bubble' there are differentiated targets; for the UK the target is 12.5 per cent reduction in emissions (Connelly & Smith 2003).

It is said that: 'More than two thirds of the world's carbon dioxide emissions come from the way we produce and use energy' (DTI 2007: 7). Thus changes in energy production and consumption are considered key to meeting the targets set by the UNFCCC (Elliott 2006). As will be demonstrated below, whilst reducing energy-related emissions can come through various means (for example; reducing consumption or increasing efficiency) UK energy policy places significant emphasis on the development of clean energy – *i.e.* renewable energy.

This chapter sets out key UK and Scottish policies relating to renewable energy development. Energy policies are introduced first and it is shown that over the past decade such policies have placed increasing emphasis on the role to be played by renewable energy. This has resulted in targets being set for the amount of electricity which must come from renewable sources. Next the chapter will introduce UK and Scottish planning policies. Since planning is a devolved matter there will be greater emphasis on Scottish policies within this section. It

will be shown that the planning system is essentially pro-development, and, it is contended, it has also become pro-renewable energy. Thus, this chapter sets out the ways in which current energy and planning policies favour renewable energy development. This leads to questions as to what role can be played by objectors to such developments.

However, before considering the policies themselves the chapter begins by discussing the philosophical position underpinning such policies. The pro-development and pro-renewables positions identified within policies are considered to have emerged from a particular worldview (that of Ecological Modernisation). It is this worldview which has created the impetus behind the positioning of renewables at the centre of energy policy. As will be made clear below, the emphasis which has been placed on environmental concerns (*i.e.* cutting emissions, or mitigating the threats of climate change) was by no means inevitable and represents a shift in the way in which such concerns have been conceptualised in recent decades.

## 2.2 The Philosophical Justification of Policies

Elliott (2006: 29) states that, 'although people have held and articulated varying attitudes towards nature stretching back many years, it is only since the 1960s that a coherent philosophy and language surrounding the environment […] can be identified'. However, she notes that from this decade onwards environmentalism has emerged as a key policy concern and has been continuously re-invented over subsequent decades.

In the 1970's environmental thinking was dominated by the 'Green Movement', which was strongly eco-centric and employed powerful imagery and ideology (Jacobs 1999). The movement was essentially anti-capitalist and purported the belief that the only sustainable path was one of a steady-state economy and zero population growth (Barry & Paterson 2004). Elliott (2006: 31) notes that this version of environmentalism 'was largely a movement reflecting European and American white, middle-class concerns'. It implied the need to control population growth (in developing nations) and to curb economic development which was seen to be incompatible with protecting the environment.

The 'Green' dominance of environmental ideology was such that Jacobs (1999) argued that it had become close to impossible for people to talk about environmental issues without slipping into the rhetoric of this movement. Further, he contended that this hegemony must end in order for the environment to secure a 'normal' place within political debate (Jacobs 1999). For example, it is suggested that in the early years of the New Labour government taking an environmental stance was avoided since they did not want to be perceived as being 'Green'.

This was due to the fact that 'New Labour identifie[d] strongly – and wishe[d] to be identified in the public mind – with ordinary families and their desires to get on in life. It [saw] environmentalism as at best an irrelevance to ordinary people, at worst as actively hostile to them' (Jacobs 1999: 9). However, this notion refers to a strongly 'Green' version of environmentalism, with its connotations of anti-capitalism and anti-consumption. When environmentalism is re-conceptualised as encompassing a multiplicity of approaches and viewpoints then it can be deemed more acceptable by political parties such as New Labour – this involves breaking down the 'Green' hegemony and is a process which has been underway since the late 70's.

For example, and perhaps most notably, 'Sustainable Development' (SD) may be perceived to have emerged as a new dominant form of environmental thinking. The concept of SD became well-known in 1987 through the World Commission on Environment and Development's (WCED) report 'Our Common Future', (often referred to as 'The Brundtland Report'). The central premise of SD is that economic and ecological goals are not necessarily oppositional and can in fact complement one another, (however, it is widely acknowledged that economic goals are prioritised over ecological goals within SD (Blowers 2002, Hajer 1995, Jacobs 1999)).

Secondly, Ecological Modernisation has also been said to have come to dominate environmental policy debates since the 1980's (Barry & Paterson 2004, Hajer 1995, Mol & Spaargaren 2000, Toke & Strachan 2006). It is, broadly speaking, a mechanism for challenging the traditional assumption that economic growth and environmental sustainability cannot coexist happily and that pursuing either one will be to the detriment of the other (Barry & Paterson 2004, Mol & Spaargaren 2000).

These two concepts will now be discussed in turn in order to illustrate their importance within current policy debates, and particularly how they have enabled a strongly pro-renewable energy stance.

### *2.2.1 Sustainable Development*

As noted above, SD largely entered common parlance as a result of the Brundtland Report published in 1987 (WCED 1987), however its history stretches back at least as far as the 1972 UN conference on the Human Environment, held in Stockholm (Elliott 2006, Yearley 1996). The emergence of SD reflects the coming together of concerns relating to the environment and those relating to development. Just as early environmentalists saw their concerns as being incompatible with (economic) development, so development theorists from the same period

saw environmental concerns as being largely irrelevant, or even damaging to their goals of greater economic prosperity for and 'modernisation' of the developing world (Elliott 2006). Within the thinking of SD, however, it is seen that the environment and development are in fact intrinsically interconnected and neither can be fully understood or facilitated without the other.

There have been many different definitions and interpretations of the concept of SD but by far the most famous and most often cited is that which was set out within the Brundtland Report. It defines SD as;

> Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
> (WCED 1987: 43)

As such it is a concept which requires equity across not only living people but also between existing and future generations. It is a very open and somewhat vague definition which has enabled multiple – and at times divergent – interpretations. This is a point which is both celebrated and criticised. It has been described as a concept which 'is readily understood and yet […] defies simple definition' (Yearley 1996: 130). To some it is the flexibility of SD and the fact that it requires debate and compromise which makes it so appealing, whilst for others these factors mean that it has been defined and redefined so many times as to have rendered it meaningless (Elliott 2006). O'Riordan (1995: 21) contends that 'it's very ambiguity enables it to transcend the tensions inherent in its meaning', whilst others have labelled it an 'intuitively attractive but slippery concept' (Mitchell 1997: 28) and 'an over-used, misunderstood phrase' (Mawhinney 2001: 5).

Central to the concept of SD is its holistic approach and the understanding that society and the environment cannot be separated. As was set out by Barbier (1987) SD requires benefits across three interlocking 'systems'; The Biological System, The Social System and The Economic System. Pursuing goals within only one or two of these 'systems' can not achieve SD, instead all 'systems' must be considered and inevitably trade-offs must be made in order to make progress towards SD.

A second central aspect of SD is its global focus. The concept has been the subject of major international summits – notably the Earth Summit in Rio de Janeiro in 1992 and the World Summit on Sustainable Development in Johannesburg in 2002. Within SD it is acknowledged that many of the challenges for development and the environment are global challenges requiring global solutions; 'ultimately, the achievement of environment and development ends in any single location or for any group of people is connected in some way to what is

happening elsewhere, for others' (Elliott 2006: 41). As such, SD requires greater equity across all nations.

However, despite the undeniable importance of its international focus, within the UK SD is used as a justification for many policies which are of a primarily domestic nature. For example, the Scottish Executive's Sustainable Development Strategy states that;

> Sustainable development presents us with a framework for thinking about the future: the kind of world we want to live in and the legacy we want to leave behind for future generations. The actions we are taking are driven by a vision of the future we want to build, a Scotland that:
> • is a leader in green enterprise
> • has transformed its approach to waste, reducing our dependency on landfill
> • is maximising the potential of our renewable energy sources
> • has a vibrant, low-carbon economy
> • provides a quality environment for all.
> (Scottish Executive 2005a: 13)

As is shown in figure 2.1, 'Scotland's Global Contribution' represents only one small part of the strategy. The emphasis is principally on social and environmental issues *within* Scotland. Importantly for this research, energy policy – and the drive towards growth in renewable energy (which will be outlined below) – is seen to have a key role to play within this strategy.

SD is a concept which has come to have great currency within academic and policy debates (as well as in many other sectors). As noted above there may not be universal agreement over how the concept is to be interpreted or put into action, but nevertheless it is widely used (at least within the UK) to justify a broad range of (social and environmental) activities and initiatives. As noted by Yearley (1996: 134): 'It is a powerful discourse, from which it is hard to disaffiliate since it appears that no one could reasonably disagree with the objective of sustainable development'.

**Figure 2.1: The Context for Sustainable Development**


Source: Scottish Executive 2005a

*2.2.2 Ecological Modernisation*

The concept of EM emerged around the same time as SD and the two are often perceived as being consistent with one another. However, Toke and Strachan (2006) outline three key differences between the two concepts, which are as follows;

1. 'whereas sustainable development arose partly as a response to perceived North-South divisions on environmental issues, EMT [Ecological Modernisation Theory] arose much more as a response to divisions between environmentalists and industrialists in the North.'
2. 'while sustainable development says that ecological sustainability and economic development are compatible, and also mutually necessary, EMT goes further to imply that, under an EMT strategy, ecological production actually accelerates economic development, and vice versa.'
3. 'whereas sustainable development emphasises equity, EMT emphasises the need to use market based mechanisms to achieve its objectives.'

(Toke & Strachan 2006: 156)

It is contended that since the late 1980's EM has overthrown the 'Green' hegemony and has come to dominate environmental ideology and discourses, (Barry & Paterson 2004, Hajer 1995, Mol & Spaargaren 2000, Toke & Strachan 2006). Hajer summarises that; 'In the most general terms ecological modernisation can be defined as the discourse that recognizes the

structural character of the environmental problematique but none the less assumes that existing political, economic, and social institutions can internalize the care for the environment' (1995: 25). Cohen summarises further to say; 'ecological modernisation is a theory that aims to harness the power of human ingenuity for the purposes of harmonising economic advancement with environmental improvement' (1997: 108).

EM is radically different from the 'Green' ideology of the 1970's – most notably because it challenges the economy-environment dichotomy and the traditional environmental assumption that modern institutions must be overthrown (Barry & Paterson 2004). Whilst proponents of 'Green' environmentalism would argue that a major restructuring of society is essential, EM theorists disagree. Mol and Spaargaren (2000) contend that whilst modern institutions may need to adapt to EM strategies they do not, and should not, be overthrown. As such, whereas environmentalists previously campaigned from outside institutions and the Government, they are now working from *within* core institutions (*ibid.*). Further, the Government and environmental groups now work alongside each other, supporting one another's initiatives and policies (Toke & Strachan 2006). This is a striking difference to the situation discussed above wherein the Government shied away from environmental associations. The reasons for this will now be discussed.

As was noted above, the 'Green' movement of the 1970's was strongly anti-capitalist which made it disconcerting for modern society. EM theory provided a more palatable alternative for those who valued the environment but did not want to fundamentally alter their way of life. As noted by Sutton (2004: 150):

> ecological modernisation is a political programme, which *promotes* a particular way of dealing with environmental issues at the expense of others. This political programme is especially attractive to northern governments as it is much less threatening than radical Green politics.

Whilst Mol and Spaargaren (2000) contend that under EM capitalism is neither good nor bad, neither an obstruction nor a pre-condition, others, such as Blowers (2002), assert that EM is indeed strongly capitalist in its nature. However, whether one agrees that EM has a capitalist ideological underpinning or not, it is not questioned that it provides a means of thinking about environmental issues which does not require one to denounce the capitalist way of life.

EM, as its name suggests, is highly modernist. It retains the modernist faith in human progress and the ability of science to better society and solve problems through innovation. It therefore acknowledges the existence of environmental problems or threats but has

confidence that solutions will be found through scientific or technological innovation. This fitted very well with the New Labour Government's pro-development outlook (Jacobs 1999).

Barry and Paterson (2004) argue that the New Labour government, whilst holding a firm faith in globalisation and a desire for the UK to be a strong leader in global markets, also wished to be seen to be more 'environmentally friendly' than the previous (Conservative) government. Therefore New Labour sought a means of protecting the capitalist status quo whilst also creating an 'environmentally friendly' image, and EM was the obvious solution.

With the 'Green' ideology domination of environmental thinking, EM represented a 'credible' way of talking about environmental issues (Hajer 1995). Adopting EM strategies allowed the Government to take a positive, optimistic approach, and to reconstruct environmental problems as environmental *challenges*. As such, if environmental problems are no longer problematic then critiques of modern society and institutions are devalued (Mol & Spaargaren 2000). EM theorists can be perceived to be pro-active optimists in direct contrast with pessimistic 'Green' theorists, as is contended by Mol and Spaargaren (2000: 33);

> Being in the camp of radical ecologists is about being a pessimist by nature: you do not think the bridge can (or ever will) be built. Optimists, however, just start constructing something, using any bricks and steel available to get the building process going.

However, EM is essentially a compromise strategy (Toke & Strachan 2006). For New Labour this compromise was essential as they sought a middle ground between environmental and economic concerns, however it is noted that economic concerns are all too often prioritised over environmental ones (Blowers 2002). This forms a key criticism of EM, since the environment is not prioritised and consequently 'environmentalism can be seen as a sub-plot' (Mol & Spaargaren 2000: 31). A second important criticism of EM, which also highlights a key difference between EM and SD, is that despite the international, even global, nature of many environmental problems EM has a highly nationalistic focus (Barry & Paterson 2004). This could perhaps be taken as a reflection of the prioritising of (national) economic aims over (the more international) environmental aims.

Thirdly, whilst EM places a great emphasis on internalising environmental costs (Hajer 1995), and other environmental factors into processes of production and consumption (Cohen 1997, Mol & Spaargaren 2000) and generating economic benefits through competition and 'eco-efficiency' (Barry & Paterson 2004, Cohen 1997), it is argued that this may all be in vain since increases in efficiency are typically outstripped by increases in consumption (Barry & Paterson 2004). This is linked with arguments that EM is inappropriate to solve the Earth's

environmental problems due to its lack of limits on economic growth (Toke & Strachan 2006).

Interestingly most of these criticisms refer to what would be considered a 'weak' form of EM. 'Weak' EM is the dominant form and largely that which has been discussed above. 'Weak' EM is basically concerned with separating economic growth from environmental degradation, whereas 'strong' EM implies broader social change and an extension of democracy (Barry & Paterson 2004). 'Strong' EM provides a positive reply to the criticisms mentioned above since it aims to reduce consumption and be internationalist in outlook (Toke & Strachan 2006). It is important to note that EM is said to be developing through a series of phases 'each attempting to deal with the substantial critical fire aimed at it and to incorporate some of the significant omissions pointed out by critics' (Sutton 2004: 146-147).

In summary, EM provides an optimistic means of looking at the world's environmental problems. It suggests that we do not need to radically alter our lifestyles or societies in order to avoid environmental crises, and it offers hope that science and technology will provide the answers to our pressing environmental questions. However, whilst such an optimistic approach is comforting, one must question its validity and the applications it is called upon to justify. The apparent adoption of EM by the New Labour government may have enabled them to take a pro-active environmental stance but might also be seen to have been a rhetorical guise for safeguarding the status quo and attempting to keep everyone happy with minimum disturbance.

## 2.3 Renewable Energy Policy

This chapter will now provide an overview of recent and current policies relating to renewable energy. It will become clear that the role which is assigned to renewable energy highlights an institutional faith in technology and scientific development to provide answers to today's environmental problems (most notably climate change). Equally the emphasis on energy production (as opposed to demand reduction or efficiency improvements) reflects the Government's pro-development outlook and evidence of EM thinking.

### *2.3.1 The NFFO*

In 1989 the first steps towards creating a UK renewable energy policy were taken. The Secretary of State announced the introduction of the Non-Fossil Fuel Obligation (NFFO) in the 1989 Electricity Act. The NFFO required 'the 12 Regional Electricity Companies in England and Wales (the "RECs") to make arrangements to ensure there will be available to them a certain amount of electricity generating capacity from non-fossil fuel power stations in

the periods specified in the order' (Brennand 2004: 89). The NFFO was intended to ensure financial support for renewable energy technologies which were deemed to have good commercial potential and which would 'be able to compete in the market in the not-too-distant future, as well as being environmentally acceptable' (*ibid*: 89). However it is also noted that the 'NFFO was primarily set up as a means to subsidise nuclear generation, which had proved too difficult to privatise' (Mitchell & Connor 2004: 1936).

The 1989 Electricity Act also created a means for the RECs to be compensated for the additional costs involved in meeting the requirements of the NFFO. This was done through a Fossil Fuel Levy which was paid by all electricity suppliers, but ultimately passed onto consumers via their electricity bills (Brennand 2004).

At the time of the first round of NFFO contracts in 1990, 'Coal was the dominant fuel for electricity production with a 67% share, followed at a distance by nuclear energy with a 19% share', the only type of renewable energy being used in the UK at the time was hydropower (Dinica 2002: 242). 'The NFFO initiative resulted in 470 MW [mega watts] worth of projects by 1997, and the last round in 1998 added a further 1,777 MW of contracts'(Brennand 2004: 89).

### *2.3.2 Enter New Labour*

In 1997 the New Labour government came to power in the UK and brought with them great optimism about the future of renewable energy. Such optimism was generated by:

- 'a manifesto policy for renewables to supply 10% of electricity by 2010;
- a very vocally supportive Minister for Energy, John Battle; and
- the ushering in of a period of discussion about the future of renewable energy policy within energy policy.'

(Mitchell & Connor 2004: 1937).

In December of the same year, the European Commission published the 'White Paper for a Community Strategy and Action Plan, Energy for the Future: Renewable Sources of Energy' in which a target of generating 12 per cent of the European Union's (EU) energy needs from renewable sources by the year 2010 was set. At the time only half of the target amount (six per cent) of electricity in the EU was sourced from renewable energy (Blok 2006).

### *2.3.3 The Utilities Bill*

In the UK, in 1998, a Utilities Bill Team was established within the Department of Trade and Industry (DTI) (now Department for Business Enterprise and Regulatory Reform [BERR]). The Utilities Bill was originally intended to review the regulation of all utilities (*i.e.* water, gas and electricity) but ultimately only dealt with energy (Mitchell & Connor 2004). The bill, which was published in February 2000, separated the RECs as either distribution or supply companies, and so whilst the RECs had held legal responsibilities for the NFFO, the bill required 'either that the NFFO was transferred within the new legislation or that a new mechanism was put in place' (Mitchell & Connor 2004: 1938). A second major result of the Utilities Bill was the creation of the New Electricity Trading Arrangements (NETA) which were subsequently implemented in April of 2001.

NETA came into force ten years after the privatisation of the UK electricity industry. Privatisation, in March 1990, had been based on the presumption that competitive markets would bring benefits for the consumer and a similar premise lay behind the design of NETA. NETA was 'designed to exert more effective downward pressure on the price of bulk electricity, wholesale prices constituting 50% of domestic and higher than this on industrial electricity bills, in a market worth £7 billion/yr' (Brennand 2004: 90). However, it was proposed that NETA would in fact be detrimental to the progress of emerging renewable energy technologies:

> NETA favours generation processes that provide consistent and regular energy outputs. This is required for the balancing mechanism to work in which future trading of electricity is possible. Because some renewable energy schemes cannot guarantee output, especially wind and solar generation, these technologies will be penalised by the arrangement.
> (Lipp 2001: 39)

### *2.3.4 Further Developments since NETA*

Since the introduction of NETA in 2000, there have been various new developments in UK renewable energy policies and programmes. Firstly, in 2001, the Government created the Carbon Trust which was to be 'an organisation aimed at focusing industry on emission reduction targets committed to at Kyoto, energy efficiency and low-carbon technologies.' It began operating through a £20-25 million programme to support renewables technologies which have no other funds available to them and 'provides *inter alia* a spur and support for renewables R&D' (Brennand 2004: 90).

Secondly, the Climate Change Levy was implemented in April 2001, after having been introduced through the Finance Bill in July 2000. The levy is imposed on industrial, commercial and public consumers – with renewable electricity, excluding hydropower plants

above 10MW, being levy-free. 'In this way, although its main aim is to encourage energy efficiency in order to meet the greenhouse gas reduction target, the levy also acts as an incentive to buy renewable electricity by suppliers and large consumers' (Dinica 2002: 248).

Thirdly, in March of 2001 the Prime Minister announced that £100 million was to be allocated to support emerging renewable energy technologies (Dinica 2002).

### *2.3.5 The Renewables Obligation*

Fourthly, in April of 2002 the NFFO was replaced by the Renewables Obligation (RO). The RO is said to have 'reversed the rules' of the NFFO since it is an obligation on electricity suppliers to buy and supply a certain amount of renewably generated electricity rather than contracts to generate electricity by designated means (Mitchell & Connor 2004). The RO required electricity suppliers to supply 3 per cent of their electricity from renewable sources in 2002-3, rising to 10.4% of their electricity in 2010-11, as such the RO is said to be a 'key instrument' in the Government's ambition of achieving the target of 10% electricity supply from renewable sources by the year 2010.

A key feature of the RO is the existence and trading of Renewable Obligation Certificates (ROCs), which are used to prove to OFGEM (the energy regulator) that electricity suppliers are meeting their obligation. The certificates can be bought 'either directly from a generator (by buying both the energy and the ROC); by buying the ROC only directly from the generator; or by buying the ROC in a trading market' (Mitchell & Connor 2004: 1939). If a supplier cannot, or chooses not to, participate in this mechanism they can pay the "buy-out" price as set by the Government, (which is £34.30/MWh [mega watt hour] in 2007-08 but increases annually in line with inflation). The money generated through this 'buy-out' mechanism is then distributed to the RECs who complied with the RO.

Mitchell and Connor (2004: 1939) note that the 'RO is far more of a market mechanism than the NFFO' and as such has been successful in its aim of forcing 'renewable developers to take part in the electricity market'. However they have also noted various drawbacks with the RO, particularly for emerging renewables technologies. Firstly, suppliers will choose to remain flexible and avoid long-term contracts with generators, in order to reduce risks related to fluctuating market prices. However, for emerging technology developers this poses risks. Mitchell and Connor (2004: 1939) outline three types of risk faced by developers as follows:

- 'Price risk (generators do not know what they will be paid beyond the (short-term) contract);

- Volume risk (generators do not know if they will be able to sell their generation in the future, certainly once the current 10% target for 2010 is met);
- Market risk (generation value varies according to market rules.'

Mitchell and Connor (2004) therefore argue that whilst the RO may be favourable for suppliers it poses greater risks for developers than did the NFFO.

A second drawback of the RO, noted by Mitchell and Connor (2004) is in its targets. When it was first announced its target of 10.4 per cent electricity supplied from renewable energy sources 'was due to be reached in the period 2010-2011, and then to remain at the same level until 2027' (*ibid*: 1940). Thus there was little incentive to go beyond 10.4 per cent renewable energy supply, and as argued by Mitchell and Connor (2004: 1940) once this target was met 'the only new renewables generation [would] be that which is cheaper than the most expensive of the already operating capacity'. Thus, the RO provides little by way of incentives or assurance to emerging or small companies who may have difficulty obtaining finance and would suffer greatly if the targets were to be met and their product made redundant. In December 2003, in response to this issue, the Government increased its RO targets to 15.4 per cent by the year 2015-16, and in the 2007 Energy White Paper (DTI 2007) it was stated that this would continue to be raised up to 20 per cent so as to ensure that it always remains above actual generation levels.

The 2007 white paper also proposed a new "banding" approach to the RO whereby electricity from different renewable energy sources would receive different numbers of ROCs so as to encourage investment in emerging technologies.

### *2.3.6 Our Energy Future: Challenges and Goals*

In 2003 the UK Government published a white paper entitled 'Our energy future – creating a low carbon economy' (DTI 2003) in which key challenges relating to energy production and use were set out. The first challenge related to the threat of climate change and in response a target for the UK to reduce carbon dioxide emissions by 60% by the year 2050 was set. A number of potential ways of achieving this target were outlined. The second challenge was in responding to the decline of UK-sourced energy supplies, (i.e. oil, gas, nuclear and coal). The UK is currently a net importer of energy and it was suggested that by the year 2020 three quarters of our energy may be expected to be imported. This raises concerns over security of supply. Hence, a diversification of energy supply sources was reported as being necessary. The third challenge was to update the UK's energy infrastructure. Particularly this meant upgrading or replacing old plants, and this would be done at least partly through new, renewable technologies.

As well as the above challenges, the white paper acknowledged four goals for UK government policy. These were as follows:

- 'to put ourselves on a path to cut the UK's $CO_2$ emissions by some 60% by about 2050, with real progress by 2020;
- to maintain reliability of supplies;
- to promote competitive markets in the UK and beyond, helping to raise the rate of sustainable economic growth and improve our productivity; and
- to ensure that every home is adequately and affordably heated.'

A combination of means was suggested to move closer to achieving these goals. Energy efficiency was mentioned as the cheapest and safest way of meeting the objectives. However, renewable energy was seen to be an important component. Thus the Government has committed itself to a tricky challenge. A 60 per cent reduction in carbon emissions, combined with the commitments of the RO and targets for renewables share in electricity supply requires a concerted effort to promote and encourage renewable energy technologies. However, to date renewable sources of energy have proved more expensive than traditional means and hence this may seem to be at odds with the goals of ending fuel poverty and promoting competitive markets. Further, despite such investment and backing, outlined above, a report produced by the DTI in 2006 stated that in 2004 renewable energy only supplied an estimated 3.6% of total UK electricity, and this was predicted to have risen merely to 4.1% in 2005 (DTI 2006b).

### *2.3.7 Nuclear on the Agenda*

Since many nuclear and coal fired power stations are due to close, and as electricity demand continues to grow, the 2007 energy white paper (DTI 2007) estimated that the UK will need between 30 and 35 giga watts (GW) of new generating capacity over the next 20 years. The white paper stated that the Government must set the market framework for investment in new generation and that this must be done in such a way as to encourage a low carbon mix. Thus whilst fossil fuels were acknowledged to have continued importance, renewable sources of energy were emphasised along with the possibility of investment in new nuclear build.

In 2006 18 percent of UK electricity generation was from nuclear power and it is estimated that around one-fifth of the UK's electricity needs have been met by nuclear power over the last decade (DTI 2007). However, all but one of the UK's nuclear power stations are due to close by the year 2023. This presents further concerns about security of supply and dependence on imports.

The possibility of investing in new nuclear power generation was raised within the 2003 Energy White Paper and, as noted above, is further considered within the more recent 2007 White Paper. As well as providing a domestic source of energy, nuclear power is perceived as a low emissions technology: Government estimates state that if fossil fuel power stations had been built instead of the existing nuclear plant the UK's total carbon emissions would have been between 5 and 12 percent higher in 2004 (DTI 2007).

In the 2007 White Paper the Government asserts that, whilst there are disadvantages associated with nuclear power, these are outweighed by the advantages that it presents. As such the Government suggests that it is in 'the public interest' to allow the private sector the option of investing in new nuclear power stations. A consultation document was published alongside the White Paper in order to elicit responses and enable discussion of the many issues related to the possibility of investment in new nuclear power stations and it was stated that the results of this consultation would feed into a policy decision. However, it must be noted that this consultation arose as a result of a court case brought against the Government by Greenpeace regarding their previous Energy Review in 2006.

As part of the Energy Review (which evaluated energy policy and solicited views from a broad range of stakeholders) the Government had held a consultation to inform their policy position relating to nuclear power, however the court case brought by Greenpeace ruled that this consultation was inadequate and in places even misleading, as such it was deemed unsatisfactory as a means of informing policy or giving stakeholders sufficient information to reach an informed opinion. The Government was therefore obliged to conduct a full consultation before reaching any policy decision relating to nuclear power.

However, before the consultation had concluded – even before it had started - key members of the Government made their own positions relating to nuclear power very clear. For example, the then Prime Minister Tony Blair was quoted as saying that although this meant that further consultation was needed 'this won't affect the policy at all' (BBC 2007), hence raising questions as to the purpose or significance of the consultation. Subsequently, the newly promoted Prime Minister Gordon Brown asserted in his first "Prime Minister's Questions" (when the consultation was ongoing) that the Government had 'made the decision to continue with nuclear power'. Such statements simultaneously highlight the Government's modernist, pro-development outlook, and at the same time cast doubt on the legitimacy and influence of public consultation.

Among other things, in the future it will be interesting to see if the prospect of new nuclear build changes public perceptions of or reactions to wind power. Potential effects may be either that;

a. Anxieties over the prospect of new nuclear power plant create a more welcoming atmosphere for proposed wind power developments.
b. The serious consideration given to the role of nuclear power in the energy mix may be seen to highlight a perceived ineffectiveness or limited role of wind power and hence heighten hostilities to proposed wind power developments.

*2.3.8 Differences in Scotland*

It is important to acknowledge that, although energy policy is not a fully devolved matter (*i.e.* it is determined by the Westminster Government as opposed to ministers in the Scottish Executive), Scottish energy policies differ from those of the rest of the UK in several respects. Notably, the Scottish Executive is strongly opposed to new investment in nuclear energy (see for example; Scottish Executive 2007). Additionally, Scotland has separate targets for the production of renewable energy from those of the rest of the UK (Scottish Executive 2005b). Scotland's targets are significantly higher than for the UK as a whole, and yet it is estimated that whilst the UK is unlikely to meet its 2010 target Scotland is on course to surpass its (Scottish Executive 2005b). Importantly, renewable energy capacity deployed within Scotland counts towards *both* Scottish and UK targets.

In order to sum up this section it is therefore useful to review the current government targets, both for the UK as a whole and Scotland in particular.

<u>Key Targets</u>

- **For the UK as a whole:** 60% reduction in $CO_2$ emissions by 2050 (with "real progress" by 2020)
- 10% of electricity to come from renewable sources by 2010 (with an aspiration for 20% by 2020)
- **In Scotland:** 18% of electricity to come from renewable sources by 2010 rising to 40% by 2020

This chapter will now provide an overview of UK, and particularly Scottish, planning policies and will highlight how these have been influenced by energy policy.

## 2.4 Planning Policy

The UK planning system has a long history, and at least since the 1940s its existence has been justified by the need to serve and protect 'the public interest'.

> The creation of an effective land use planning system in Britain in the 1940s struck at the heart of private interests in land and property. Planning was conceived as the means by which the *best* use of land could be secured irrespective of market conditions and this required unreserved acceptance of the need to subordinate private interests to the public interest. (Campbell & Marshall 2002: 168)

This reflects the utilitarian underpinning of the planning system – whereby individual or private interests can be disregarded if they conflict with the 'greater good' for society as a whole. Alexander (2002) acknowledges three roles that the public interest has taken on; firstly in legitimising planning as a state activity; secondly; as a norm for planning practice and; thirdly as a criteria for evaluating practice and outcomes. However, the concept of 'the public interest' has come to be highly contested by planning theorists. As Lowri (1994: 101) comments; 'today appeals to the public interest as a source of legitimacy for planning activities sound quaint'. Moroni (2004) notes that planning theorists assert that the public interest does not exist and that such assertions are based on several different arguments. He outlines three different positions as such:

1. *The public interest does not exist as a fact*: this pluralist argument asserts that there is no single public interest but rather a range of competing interests.
2. *The public interest does not exist as an extra-individual (holistic) value*: this moral argument contends that there are no grounds for overlooking the rights or interests of individuals in favour of a 'common good'.
3. *The public interest does not exist as an always overriding substantive value*: This 'meta-ethical' argument contends that there exist a range of individual and group interests and values and that none of these should be favoured or prioritised above others: 'The interests and values of individuals and groups are, in this view, ethically equivalent and totally incommensurable from an ethical point of view' (Moroni 2004: 157).

Although there are those who continue to defend 'the public interest' (for example; Alexander 2002, Marris 2001, Moroni 2004), within planning theory the notion has largely fallen out of favour. Nevertheless, in practice: 'For planners and the planning profession, the public interest has always remained relevant as a legitimating principle and a norm for practice' (Alexander 2002: 226). The persistence of the central, legitimating role of 'the public interest' within the planning system is reflected in the following extract from Scottish Planning Policy One (SPP1) which sets out the purpose and structure of the Scottish planning system;

> The planning system guides the future development and use of land in cities, towns and rural areas in the long term public interest.
> (SPP1: 2)

Campbell and Marshall (2002: 165) note that 'the public interest' is called upon to 'justify action in situations in which there is disagreement'. In true utilitarian fashion, it therefore serves to distinguish between legitimate interests and those which can be disregarded or overridden. Thus, SPP1 states that;

> The planning system does not exist to protect the interests of one person or business against the activities of another, although in some cases private interests may coincide with the public interest. In distinguishing between public and private interests, the basic question is whether the proposal would unacceptably affect the amenity and existing use of land and buildings which ought to be protected in the public interest, not whether owners or occupiers of neighbouring or other existing properties would experience financial or other loss from a particular development.
> (p17)

As such in endeavouring to protect 'the public interest' – an intrinsically ambiguous, and highly contested concept – it is necessary to make (subjective) judgements about which views reflect wider 'public interest' and which are merely of private concern. Due to such observations it has been argued 'that the public interest is a smokescreen or façade which prohibits any real evaluation of what effects the planning system actually has in practice' (Campbell & Marshall 2002: 164). Thus, whilst the 'legitimization of planning as an activity which intervenes in land and property markets has long rested on the notion that some restrictions of individual property rights are necessary if the public interest is to be upheld' (*ibid*: 164), important questions centre around how, and by whom 'the public interest' is defined and interpreted. In contesting the notion that 'the public interest' exists as an objective entity, Sandercock (1998: 196) observes that whenever 'this phrase is invoked, it is always some particular group's interest which is being served'. As Alexander (2002: 232) recognises: 'Political discourse produces laws, rules, and decision criteria that articulate what the relevant polity or community defines as in its public interest'. However, the implementation of this definition of 'the public interest' can only be considered legitimate if there is societal consensus and if the decision-making institutions themselves are felt to be legitimate. Such considerations will become a key theme throughout this thesis.

### *2.4.1 The aims of the Scottish Planning System*

Planning is a devolved matter, meaning that within Scotland it is the responsibility of the Scottish Executive. The Scottish Planning System, as with that of the rest of the UK, works from a pro-development perspective and it is stated that:

> Planning policies and decisions should not prevent or inhibit development unless there are sound reasons for doing so. The goal is a prosperous and socially just Scotland with a strong economy, homes, jobs and a good living environment for everyone.

(SPP1: 2)

As noted above the assumption that the planning system exists to serve and protect 'the public interest' remains a strong source of legitimation. In addition to this, recent planning policies have adopted the language of sustainable development (SD) as a powerful validation for developments which are perceived to be environmentally or socially desirable. As was discussed above, SD has entered common parlance and is used to justify a wide range of initiatives and policies (which do not always closely reflect the goals set out within classical definitions of the concept). SPP1 outlines that;

> The Scottish Executive is committed to integrating the principles of sustainable development in its policy agenda. The Scottish Ministers expect the planning system to support and inform this wider policy agenda, linking principles and actions to enable sustainable development.
> (SPP1: 3)

Whilst environmental stewardship is seen as an important role of the planning system, enabling development is clearly viewed to be a key objective. The SPP relating to planning within rural areas states that;

> planning has to embrace innovation and entrepreneurship whilst protecting what is valuable through good stewardship.
> (SPP15: 12)

and further that;

> Rural Scotland needs to become more confident and forward looking both accepting change and benefiting from it
> (SPP15: 2)

Thus, whilst 'Most rural planning has been negative in the sense that it has focused primarily upon control and preservation' (Robinson 1990: 273), the planning system actively encourages development and change. Within this pro-development outlook renewable energy has an important role to play. Through references to 'the public interest' and SD Scottish planning policy highlights the potential risks which face the country, as well as the wider world, from climate change and states that the planning system has an important role to play in mitigating such risks. Thus, renewable energy developments are viewed as presenting constructive opportunities to take action on climate change, and thus serve 'the public interest' and contribute towards goals of SD. The strong commitment to developing renewable energy within Scotland is set out within the SPP dedicated to the planning of renewable energy projects. It states that;

> The planning framework set out in this SPP will help ensure the delivery of renewable energy targets as well as supporting the development of a viable renewables industry in Scotland […] This SPP sets out how the planning system should manage the process of encouraging, approving and implementing renewable energy proposals when preparing development plans and determining planning applications. Planning authorities should use the development plan process to support and encourage the continued growth of all renewable technologies. In

particular, plans should set out a spatial approach for considering wind farm proposals over 20 megawatts.
(SPP6: *v*)

Similarly, beyond Scotland, the UK's planning policies and guidelines have adjusted in response to the policy commitments for more renewable energy. For example the UK Planning Policy Statement 22 (PPS22), which relates to renewable energy, states that;

Regional spatial strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources.
(p7)

Furthermore, it is suggested that renewable energy developments should be considered with some lenience given their importance to 'wider' environmental issues;

The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.
(p7)

The extracts cited above demonstrate commitments to renewable energy targets which underpin planning policy and encourage the promotion and acceptance of new renewable energy developments. Within both Scottish and UK planning policy there is an explicit bias in favour of such developments, and an encouragement to consider planning applications for renewable energy with some lenience. The promotion and development of renewable energy is clearly viewed to be in 'the public interest', and as such 'the public interest' on this topic appears to have been determined through previous policies relating to energy and climate change. Such policies also reflect the pro-development outlook of UK and Scottish policy-makers, which strongly resonates with the philosophy of EM outlined above.

### *2.4.2 The Scottish Planning System in Practice*

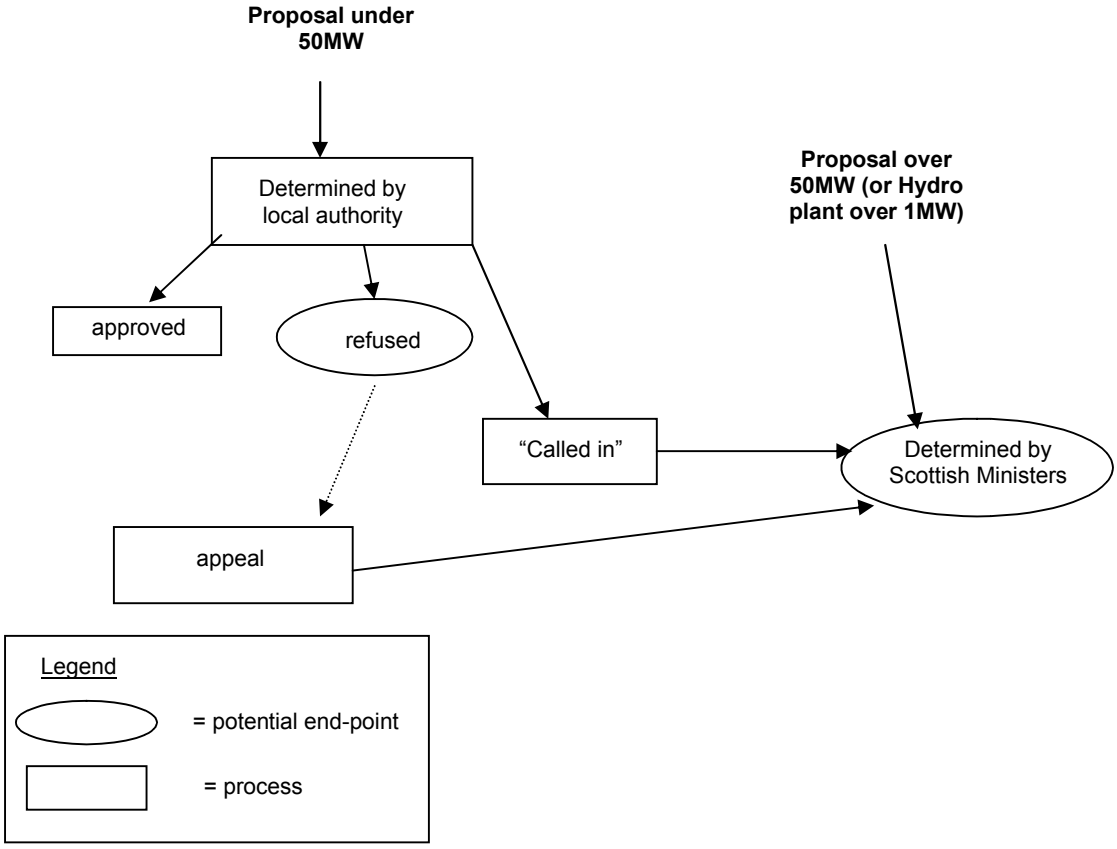
As noted above, planning is a devolved matter and as such the Scottish planning system is independent from that of the UK and therefore has its own policies and legislation for guiding the system and processes. The vast majority of planning decisions are determined at the local authority level.

The general principle under which the planning system operates in Scotland is that decisions should be taken at the most local administrative level unless there are strong reasons for taking them at a higher level.
(SPP1: 1)

For renewable energy developments, planning applications for developments with a total capacity of less than 50MW are decided by local authorities whereas those above this limit (and hydro power projects above 1MW) are decided by ministers within the Scottish Executive. Additionally, some projects below 50MW which are particularly controversial or

deemed to be of national significance are 'called in' to be determined by Executive ministers. Figure 2.2 illustrates the planning process for renewable energy projects and different potential end points of decision-making.

**Figure 2.2: Renewable energy planning application process in Scotland**




Local authority planning committees are expected to take decisions according to the local area development plans which set out the aims for future development within the area (over a five and ten year period).

> The statutory development plan for an area currently consists of the structure plan and the local plan. The purpose of the development plan is to guide the future development of an area. [...] To be effective plans must contain relevant and realistic policies which can be implemented. They should contain a positive and sustainable vision of an area's future based on a thorough understanding of how the area functions, the challenges it is expected to face and community requirements and priorities.
> (SPP1: 10)

Planning policies emphasise the importance of public participation in the planning process (as reflected in the following two extracts from Scottish planning policy statements).

> The Scottish Ministers attach considerable importance to public participation in the planning process.
> (SPP6: 4)

> Everyone must have real opportunities to take part in the planning and decision-making that will influence their future.
> (SPP1: 4)

However, it is also noted that the views of members of the public should not alone be taken as indications of the appropriateness of a proposed development:

> Opposition to a proposal is not in itself a ground for refusing planning permission. The weight given to public concern as a material consideration should be based on the relevance of the planning issues raised.
> (SPP1: 19)

Within the planning theory literature public participation is a much-debated topic. Advocates of participatory planning have argued that: 'From our modernist reliance on state-directed futures and top-down processes, we have to move to more community-based planning, from the ground up, geared to *community empowerment'* (Sandercock 1998: 30). Incorporating the views of members of the public into planning decisions is seen to give greater legitimacy to those decisions (Sandercock 1998).

It has been acknowledged that from the mid-1990's onwards politicians and policy-makers have come to make frequent use (and mis-use) of the term 'collaborative planning' (Healey 2003). Kaza (2006: 256) contends that 'The participatory approach in the public planning domain has become institutionalized as a method of good planning practice' and that 'democratic principles and public participation have become increasingly accepted as means for balancing and rationalizing multiple interests and preferences'. Rydin (2007: 54) contends that within planning theory the 'new orthodoxy clusters around the idea that the core of planning should be an engagement with a range of stakeholders, giving them voice and seeking to achieve planning consensus'. However, participatory approaches have been widely criticized (as will be discussed further in chapter four). Particular concerns have been raised about the emphasis which is placed on process, it has been suggested that 'the focus on interaction directs attention away from the justice and sustainability of the material outcomes of planning interventions' (Healey 2003: 110). Furthermore, it is contended that significant attention must be paid to *who* participates, and simultaneously to who does *not* participate, and as such to which voices are able to dominate participatory processes (Kaza 2006). Within local contexts there can be many conflicting interests (Kaza 2006) and existing relationships of power play critical roles (Healey 2003). Thus participatory approaches to planning are fraught with difficulties and challenges. As March (2004: 412) contends; 'Democratic planning, then, must reconcile a complex of precepts which are desireable, but which pull in

different directions'. Ultimately; 'an inclusionary collaborative process does not necessarily guarantee the justice of either process or material outcomes' (Healey 2003: 115).

Whilst public participation is described as highly important and valuable within Scottish planning policies, the role which members of the public are enabled is perhaps limited. In the SPP relating to the planning of renewable energy developments it is shown that local objections to a planning application should present an opportunity for developers to address concerns and to modify their plans accordingly:

> Where valid concerns have been raised as part of the planning process, the applicant will need to demonstrate how these can be overcome or how any detrimental environmental effects can be minimised, where appropriate advancing any material arguments which might outweigh objections to the proposed development.
> (SPP6: 14)

As such the bias in favour of renewable energy developments is apparent. Under this system objections are expected, even wanted, to be overcome or outweighed by benefits. SPP1 sets out some examples of the range of possible considerations which might be taken into consideration when determining a particular planning application. These are:

> • Scottish Executive policy, and UK Government policy on reserved matters;
> • National Planning Policy Guidelines, Scottish Planning Policies, Planning Advice Notes and Circulars;
> • European policy, where relevant;
> • a draft structure or local plan;
> • a National Park Plan;
> • Area Waste Plans;
> • Community plans;
> • the environmental impact of the proposal;
> • the design of the proposed development and its relationship to its surroundings;
> • access, provision of infrastructure and planning history of the site;
> • views of statutory and other consultees; and
> • legitimate public concern or support expressed on relevant planning matters.
> (SPP1: 17)

It is apparent that great weight is attached to policy (Scottish, UK and European), technical assessments (including for example, environmental impact assessments), and the views of experts (*i.e.* statutory consultees). Public concern/support is, perhaps significantly, last on this list, and even then it is qualified as being *legitimate* public concern or support and only that expressed on *relevant* planning matters. Importantly, which aspects of public concern are considered 'legitimate' and which planning matters are considered 'relevant' are determined by decision-makers.

Both the UK and Scottish planning systems have recently undergone review. It was said that the UK system would be reformed so as to make it 'simpler, faster and more accessible […]

[and] to change the culture of planning, making it a positive tool to steer development actively to the benefit of everyone' (www.communities.gov.uk...). Similarly, the draft planning advice note (PAN) entitled 'Community Engagement "Planning with People"' released in July of 2006 by the Scottish Executive asserted that; 'Scottish Ministers are determined to make the planning system more inclusive and accessible to people, with greater openness and accountability in the decision-making process' (Scottish Executive 2006). Subsequently, a new planning bill came into force in the Spring of 2007 in response to a professed need to modernise the Scottish planning system. Within this new planning bill four of the principal goals were: Strengthening the involvement of communities; Speeding up decisions; Reflecting local views better and; Allowing quicker investment decisions (Scottish Executive 2005c).

Such modifications potentially have significant implications for the planning and development of new renewable energy, and particularly wind power. It is recognised that speeding up decisions and allowing quicker investment decisions may be beneficial since the current system is widely felt to be inefficient for determining wind power planning applications. At the time the new planning bill came into effect wind power was posing a major challenge for the Scottish planning system, and there was a great abundance of unresolved planning applications. The British Wind Energy Association's (BWEA) database of developments at the time listed some 5 316.70 MW of onshore wind power in the Scottish planning system, (comprised of 76 wind farm planning applications) (www.bwea.com...). Therefore it could be easily argued that there was a need to speed up the passage of such applications through the planning system.

However, this 'speeding up' of the planning process appears, at first sight, to be at odds with the desire to 'strengthen the involvement of communities' and 'reflect views better' both of which imply greater local involvement and participation in decision making processes and which therefore might be expected to necessitate a longer and more deliberative process.

Within wider UK planning policy, PPS22 reflects the importance of community engagement in the following extract:

> Local planning authorities, regional stakeholders and Local Strategic Partnerships should foster community involvement in renewable energy projects and seek to promote knowledge of and greater acceptance by the public of prospective renewable energy developments that are appropriately located. Developers of renewable energy projects should engage in active consultation and discussion with local communities at an early stage in the planning process, and before any planning application is formally submitted.
> (PPS22:8)

However, the phrase 'seek to promote knowledge of and *greater acceptance* by the public of prospective renewable energy developments' suggests that community engagement is not intended to enable the reflection of local views, or the incorporation of local interests and concerns into planning decisions, but rather to 'educate' local people and *convince* them of the merits of particular proposals. This cannot, therefore, be taken to represent meaningful participation or engagement with local communities.

A similar sentiment is conveyed in the Scottish planning policy statement relating to renewable energy:

> Community participation is important in planning for renewable energy. It can help provide an opportunity to engage local people actively in the development of schemes; to address concerns about possible impacts; and to explain the wider benefits of renewable energy. This encourages transparency and enables people to form opinions founded on the best possible information.
> (SPP6: 4)

On first sight this extract appears to be a positive indication of the value which is placed on engaging with members of the public in local communities where renewable energy developments are proposed. However, on closer inspection it transmits a similar sentiment as that found within PPS22. Community participation is seen to hold value as an opportunity to educate members of the public on the 'wider benefits' of renewable energy and to ensure that they form opinions based on the 'best possible information' - which might be read as information which is in favour of renewable energy development.

Community involvement in planning procedures and decisions in order to 'strengthen the involvement of communities' and 'reflect views better' requires *meaningful* participation and engagement. However the sentiment expressed in the above extracts from PPS22 (UK policy) and SPP6 (Scottish policy) and the strong commitment to enabling the development of renewable energy conveyed in both of these policy documents mean that this 'meaningful participation' may become mere *information* (by which it is meant that potential developers, or planning officials *inform* but do not *engage with* local community members) in order to secure 'quicker investment decisions'. This is an area of some concern and one which will be central to this thesis.

If a planning application is refused at the local authority level the prospective developers have the right to lodge an appeal. This can be done up to six months of the date of the decision and is lodged with the Directorate of Planning and Environmental Appeals (DPEA) (formerly the Scottish Executive Inquiry Reporters' Unit). Appeals are conducted in one of three ways; through written submissions, a hearing or a public local inquiry.

Around 90 per cent of appeals are decided through written submissions (http://www.scotland.gov.uk...(2)). In this process the prospective developer and the local authority set out their cases in writing and these are reviewed by a member of the DPEA who will also visit the site and consider other appropriate evidence. This process is the cheapest and most efficient means of determining an appeal, however it is viewed as unsatisfactory for major or highly controversial developments. A hearing enables face-to-face interaction between all concerned parties and the decision-maker from DPEA and a semi-formal discussion of the issues. Public local inquiries provide a more formal and comprehensive appeals approach and are used in more complex cases. At an inquiry evidence is presented by 'witnesses' on behalf of the prospective developers and the local authority as well as other 'relevant third parties'. All concerned parties are entitled to representation by a lawyer and witnesses are open to cross-examination. The inquiry process is often long and requires considerable planning and resources, it is also a public event and as such it must be announced in local papers in order to enable any interested parties to participate.

Public local inquiries take two forms; the most common method is a delegated appeal in which the 'reporter' from DPEA oversees the process and then determines the outcome which is published in the inquiry report. In a small number of cases the 'reporter' will not have final power over the outcome and will instead write a letter of recommendation to ministers at the Scottish Executive who ultimately take a decision.

If any party is not satisfied by the appeal they may take a further appeal to the Court of Session within six weeks of the decision. However, this final appeal forum will not take a decision about the outcome of the appeal but instead can refer it back to the decision-maker. The Court of Session will not consider the merits of the planning application but rather the process through which it passed. The appeal can therefore only be lodged on procedural grounds (SPP1).

### 2.5 Implications for this research

This chapter has highlighted the policies which relate most closely to the topic of this thesis. It was shown that current energy policies have emerged out of a pro-development worldview which centres on a modernist faith in science and technology's ability to find solutions to contemporary environmental problems. Although EM is not necessarily referred to in words within policy documents its sentiment and philosophy are more than apparent within renewable energy policy, and are further reflected within planning policy. The strong emphasis on development and new technologies for energy production (as opposed to energy

efficiency or demand reduction) highlight the modernist attitude central to EM. This is further illustrated by the increasing attention being focussed on the possibility of a new generation of nuclear power stations.

Policies make a great deal of use of SD rhetoric, however, this relies on a narrow interpretation of the concept which is typically translated into domestic sustainability or national social and environmental benefits but all too often does not address the important international dimension of SD. SD appears to have become a buzzword which is called upon whenever a policy requires a strong, irrefutably 'good' justification, but the concept is by and large not considered in the terms in which it was first conceived (*i.e.* as being concerned with equity across generations and also parts of the world). Renewable energy policy may be portrayed as playing an important role in tackling the global threat of climate change, however policy documents pay more attention to domestic (primarily economic) benefits. Whilst it is SD that is explicitly referred to, the policies resonate far more strongly with the philosophy of EM.

Planning policy has been shown to be directly responsive to prior policies. The 'public interest', which remains a central legitimating force within planning policy and practice, is defined by what is set out as necessary or 'good' by existing policies. It cannot, however, be denied that 'the public interest', which is highly contested within planning theory, will always remain an inherently ambiguous concept and its interpretation is undeniably a somewhat subjective matter. References to 'the public interest' within current planning policy nevertheless treat it as an objective phenomenon which can be observed and protected. It is implied that subjective assessments are not needed since what is in 'the public interest' has already been set out within existing policies. It is then important to question how this was set out and by whom.

Since the planning system is designed to encourage rather than restrict development and since renewable energy developments are supposed to be considered with some leniency within the planning system, the potential to effectively object to a planning application for a development of this sort might be expected to be minimal – indeed that appears to be an intentional outcome. However, it must be questioned, given the strong commitment to renewable energy development within energy and planning policies, what role or influence objectors can have within the planning process when renewable energy developments are proposed. When policy reflects such strong dedication to the development of renewable energy, and when this is reflected within planning legislation, then one must question what scope remains within planning processes for objectors to influence the outcome of planning

applications for renewable energy developments. Essentially this thesis is therefore examining what role exists for public involvement and deliberation within policy, and more narrowly within particular planning discourses, where the desired outcomes appear to have already been identified (*i.e.* more renewable energy).

## 3.0 Literature Review

### 3.1 Introduction

This chapter will outline the key themes and issues found within the existing literature relating to public reactions and/or attitudes towards wind power developments. It will suggest that the vast majority of the extant literature is underpinned by a strongly pro-wind power perspective. This is considered a problem since it inevitability leads to partial understandings of opposition arguments and objectors' experiences, concerns or interests.

The literature review will begin by outlining the key assumption underpinning this literature: that the majority of the public are supportive of renewable energy and wind power in particular (and hence that opposition represents deviant behaviour). It will also suggest that this conviction present throughout the literature is based on opinion poll data which typically is not questioned, critiqued or even explicitly detailed. This thesis will not attempt to evaluate such data nor will it make any arguments about the nature of general public opinion with regards to wind power, however it will be worth taking note of the positivist approach which is habitually adopted within this literature wherever opinion polls are referred to. It will be argued here that opinion polls should not be taken to represent 'factual' or 'objective' sources of information but rather should be subject to scrutiny and evaluation.

The chapter will go on to summarise some of the simplistic arguments which have been put forward to explain opposition to wind power developments. Such arguments have presented opponents and supporters of wind power as being diametrically opposed to one another, however it will be shown that such classifications are inaccurate and fail to take into account the many varied interests and motivations of both opponents and supporters. Recently studies of communities' or individuals' reactions to wind power developments have become more nuanced and greater attention has been paid to the roles of social or political factors, values and relationships of power. Nevertheless, this chapter will suggest that the literature remains driven by a managerial approach and manipulative intentions. Essentially the motivation for understanding communities' or individuals' reactions to wind power developments is to uncover means of avoiding or mitigating negative reactions in the future, and hence to meet the Government targets for renewable energy deployment.

Increasingly, the literature points towards the need to engender trust between developers and local communities and many commentators highlight the need for greater participation within design and planning processes. Whilst 'trust' and 'participation' are worthy aims, this chapter suggests that achieving 'trust' and facilitating *meaningful* 'participation' is not possible so

long as this aim is based on the intention of overcoming opposition. Meaningful participation would require developers to be willing to respond to the interests of those participating – even if doing so meant abandoning their project.

In sum, this chapter aims to highlight the limitations of the extant wind power literature and hence points towards the need for impartial examinations of the realities of communities' and individuals' experiences with wind power projects. In order to understand such experiences it is felt essential to be free of any preconceived ideas about the merits of any party's arguments or points of view. This is felt to be the key contribution of this thesis.

## 3.2 Assumptions about Public Support

Much of the literature concerned with public reactions or attitudes to wind power takes as its starting point the apparent contradiction that whilst it is said that in all major wind power producing countries public support for wind power is high, (e.g. Wolsink 2000), new wind power developments are becoming ever more difficult to realise. For example it is said that; 'England/Wales and Scotland have big wind resources yet relatively meagre wind power deployment' (Toke *et al* 2008: 5). By and large this is attributed to strongly vocal localised public opposition to wind power developments (Barry *et al* 2008, Bell *et al* 2005, Devine-Wright 2007, Ellis *et al* 2007, Peel & Lloyd 2007). Breukers and Wolsink (2007: 2738) maintain that; 'Wind power projects are increasingly confronted by local opposition which delay or block implementation despite the fact that the level of general public support for wind energy is high and stable'.

The literature relating to public responses to renewable energy developments – and wind power in particular – routinely refers to opinion poll data, or the findings of surveys to suggest that public support for the technology is, in general, high (for example; Barry *et al* 2008, Bell *et al* 2005 among many others). There is evidence to suggest that this may be true (see McGowan & Sauter 2005, POST 2007), however, within much of the literature references to opinion polls and other surveys are typically brief and do not provide any details of the polls/surveys in question, and moreover do not make any critical assessments of them. Within this literature it appears to have become accepted knowledge that opinion polls show high levels of support for wind power (see for example; Bell *et al* 2005, Devine-Wright 2005, Krohn & Damborg 1999, Toke 2002, Wolsink 2000) yet a critical discussion of these opinion polls is lacking. More importantly, the professed high levels of public support are taken as the starting point for many important arguments which have been made in this field. Numerous papers have endeavoured to explain the 'gap' between high support for wind power (as allegedly demonstrated by opinion polls) and the opposition often experienced by particular

proposed developments. Referring to what they term the 'Democratic Deficit Explanation' Bell *et al* (2005: 461) state that;

> […] while opinion polls show that a majority of people are in favour of wind power, particular wind power development decisions are controlled by the minority who oppose wind power.

In this, as in many other papers on the topic, the focus of attention is in explaining the occurrence of the 'minority' who oppose wind power developments. However, equal attention is not given to explaining the strength of the conviction that majority support exists. Cursory references to opinion poll findings are not enough to establish that majority support exists. Furthermore, such references serve to shield these opinion polls from critical analysis. Their findings are accepted as 'factual' and accurate without any discussion as to how they came about. However, opinion poll data should not be taken to represent incontrovertible 'facts', and it should not be presumed that the methods employed in designing, conducting and analysing opinion polls are necessarily entirely objective. A critical approach to considering opinion polls is essential, just some of the issues to be considered include:

> What are the biases inherent in the process? Who commissions them and for what purposes? How knowledgeable and engaged are the polled? How are opinions formed and shaped by campaigns, media etc? How reflective are those views of public opinion?
> (McGowan & Sauter 2005: 2)

Through its references to opinion poll data the literature exhibits its 'unreflectively positivist' approach (Ellis *et al* 2007: 536). Such passing references presume that the opinion poll data provides 'facts' requiring no deconstruction or analysis, however this is not the case. Indeed the very nature of polls as a means of uncovering public opinion has been called into question. As far back as 1948 Blumer contended that:

> I believe it is fair to say that those trying to study public opinion by polling are so wedded to their technique and so preoccupied with the improvement of their technique that they shunt aside the vital question of whether their technique is suited to the study of what they are ostensibly seeking to study.
> (Blumer 1948: 542)

It is beyond the scope of this thesis to attempt to set out whether the conviction that majority support exists for wind power is true, or to test the validity of opinion polls on this topic. However, it is felt to be important to acknowledge the fallibility of such polls and therefore to remain sceptical of the claims and assumptions found throughout the wind power literature.

### 3.3 Themes within the Wind Power Literature

The vast majority of the literature relating to issues of wind power development, particularly public perceptions of and reactions to such developments, is centrally concerned with explaining why, given the perceived high levels of public support for wind power,

implementation of the technology is problematic. For example, a paper by Bell *et al* (2005) opens with the following sentence:

> If approximately 80% of the public in the UK support wind energy, why is only a quarter of contracted wind power capacity actually commissioned?
> (Bell *et al* 2005: 460)

The precise role or influence of the public within wind power planning and development is not clear. On the one hand, much of the literature has suggested that localised public opposition is a key obstacle to meeting government targets for the development of renewable energy (see for example; Barry *et al* 2008, Bell *et al* 2005, Devine-Wright 2007, Ellis *et al* 2007, Peel & Lloyd 2007). On the other hand, Toke (2005a: 49) has argued that 'approaching 60 per cent of the English and Welsh windfarm planning cases determined in the 1999-2004 period have resulted in approval' and further that in 'Scotland, where there has been much activity, the approval rate has actually been over 90 per cent'. He contends that this is due to 'a markedly pro-wind power stance by the Scottish Executive'. This therefore suggests that the political climate is more favourable towards renewable energy developments, and that the level of support for renewable energy is greater in Scotland compared to the rest of the UK. Indeed, Toke (2005b: 1527) asserts that there exists 'a general perception that the planning problems have been worse for wind power in England and Wales compared to Scotland'. As such there exist conflicting accounts as to the current rate of development of wind power, and moreover of the influence of opponents to proposed developments.

### *3.3.1 Simplistic Accounts of Diametrically Opposed Objectors and Supporters*

In attempting to understand public responses and attitudes to wind power, the extant literature is primarily concerned with explaining opposition to wind power developments: 'The logic that has often been applied to explain this phenomenon is that it represents an 'attitude-behaviour gap' which suggests contradictory values amongst the public' (Ellis *et al* 2007: 519). The intention typically appears to be to understand community responses in order to mitigate negative perceptions and opposition in the future and therefore ensure greater rates of planning approval (see for example, Bell *et al* 2005, Peel & Lloyd 2007, Strachan *et al* 2006, Toke 2002, Wolsink 2007a). However the conviction that opposition is an occurrence which must be overcome inevitably impacts on the ways in which the 'problem' is defined and considered and ultimately affects the conclusions that are reached, as Ellis *et al* (2007: 536) have contended:

> The ideological (i.e. unreflectively pro-wind) and epistemological (i.e. unreflectively positivist) bias has led to poor explanatory findings, which in turn has resulted in ineffective policy.

Ellis *et al* (2007) argue that the pro-wind power bias within the literature has led previous research to focus almost exclusively on objectors and therefore to ignore the ways in which support for wind power is constructed. Furthermore, they note that; 'there is a tendency to marginalise and denigrate oppositional voices to schemes that are portrayed as being environmentally progressive' (*ibid:* 536).

Typically supporters of wind power developments are portrayed as being more far-sighted or optimistic than opponents, for example it is said that they are in favour of developments because they 'know the environmental and community benefits of wind energy. These people have "equity" in such a project or believe there is a benefit to them and the community from a wind farm which can go beyond financial concerns' (Ebert 1999: 45). Krohn and Damborg (1999) provide a simplistic categorisation of 'Yes-sayers' and 'Nay-sayers' which highlights the belief that 'Nay-sayers' are more short-sighted or self-interested compared to supporters of wind farms. Their profile of a 'Yes-Sayer' is someone who believes that;

- 'renewable energy is very much an alternative to other energy sources
- the climate change theory must be taken seriously
- wind energy is limitless unlike fossil fuels
- wind energy is non polluting
- wind energy is safe'

(Krohn & Damborg 1999:956)

Conversely, their profile of a 'Nay-Sayer' is outlined as someone who believes that;

- 'renewable energy cannot solve our energy problems
- wind turbines are unreliable and dependent on the wind
- wind energy is expensive
- wind turbines spoil the scenery
- wind turbines are noisy'

(*ibid*: 956)

Such dichotomous categorisations of supporters and objectors have been shown to be simplistic and false. More balanced descriptions of wind farm opponents and supporters are provided by Barry *et al* (2008) Ellis *et al* (2007) and Bell *et al* (2005). Barry *et al* (2008) conducted a rhetorical analysis of documents written by both supporters and opponents of wind power and revealed that:

> there are not two homogenous and undifferentiated discourses of "pro" and "anti" facing one another; but a (not unlimited) variety of pro- and a variety of anti-windfarm discourses, linked together in, and under, what may be termed as a "discursive coalition."
> (*ibid:* 92)

Similarly, Ellis *et al* (2007), in their case study of one proposed offshore wind farm in Northern Ireland, illustrate a multiplicity of motivations and reasons behind the positions of both objectors and supporters. The following extract highlights the diversity of attitudes and approaches identified among objectors to the wind farm:

> while some objectors appear to oppose the project primarily over its specific location, others are more motivated over the very principle of wind farms. Furthermore, while some objectors are most concerned about potential visual impacts, others are motivated by a wider range of reasons, such as local economic concerns. There also appears to be a difference of timescales applied, with some objectors most concerned about longterm impacts, and others more focused on more immediate effects. In terms of process, some objectors appear more sensitive than others on how they are perceived by the wider public and while some objectors accept that both sides of the argument will resort to propaganda, others see this as a tactic used by the developers alone. A further difference amongst the objectors is the way they engage with the broader types of environmental discourse, with some stressing economic rationalism, while others engage in more aesthetic or emotive language
> (Ellis *et al* 2007: 530)

Ellis *et al's* (2007) study, in common with that of Barry *et al* (2008), also highlights similarities which exist between the rationales of individuals of opposing positions. As such these studies (Barry *et al* 2008, Ellis *et al* 2007) provide insightful accounts of the varying views of both objectors and supporters and highlight the numerous, often conflicting beliefs, experiences or values which influence and shape individuals' attitudes towards particular wind power developments (as well as to wind power in general).

Bell *et al* (2005: 461) set out to explain the 'social gap' 'between the *high* public support for wind energy expressed in opinion surveys and the *low* success rate achieved in planning applications for wind power developments', in this line they distinguish three possible explanations of this 'social gap' which are as follows:

1. *'The Democratic Deficit Explanation'*: Here it is presumed that whilst there exists majority support for wind power, particular planning decisions are controlled by a minority who oppose the wind power development. This is felt to be, in part, a consequence of the nature of the planning system; 'whereby initial decisions are made by developers, announced to the public and then defended against public criticism. The role of the public in this 'decide-announce-defend' model of decision-making is to provide criticism rather than support' (Bell *et al* 2005: 462).
2. *'The Qualified Support Explanation'*: Here it is acknowledged that; 'Most of the people who support wind energy do not support it without qualification' (*ibid.*: 463). Thus, although people may support the general idea of wind power they believe that limits and controls should be placed on its development. As such, opposition to particular wind power developments is not necessarily at odds with an individuals' position of general, qualified support for wind power.

3. *'The Self Interest Explanation'*: This explanation of the 'social gap' suggests that there also exists amongst certain individuals an 'individual gap' whereby they support the general principle of wind power but 'actively oppose any developments in their own area for self-interested reasons' (*ibid.*: 465). This view reflects the NIMBY paradigm which will be discussed below.

Of course Bell *et al's* (2005) study is founded on the presumption that the majority of the public support wind power, and this is asserted through (passing) references to opinion poll data. As such, for the reasons set out above, it is based on shaky foundations. Nevertheless, the studies outlined here (Barry *et al* 2008, Ellis *et al* 2007, Bell *et al* 2005) are of great value within the wind power literature. They demonstrate that it is not possible (nor appropriate) to categorise all objectors, or all supporters as a homogenous group and instead that one must acknowledge a wide variety of motivations, values and beliefs. Furthermore, previous studies (*i.e.* Devine-Wright and Devine-Wright 2006, Woods 2003) have demonstrated that different groups interpret aspects of wind power (for example issues relating to intermittency, or to the 'fit' of a wind farm within particular landscapes) in different ways so as to support their own position (i.e. in favour or opposition to wind power). As such particular issues are interpreted in different ways to fit with particular arguments, and importantly this means that similar arguments are made by individuals who both support and oppose particular projects. Thus the classification provided by Krohn & Damborg (1999) is shown to be simplistic and invalid.

### *3.3.2 Visual Impact*

The accounts outlined above highlight the many different motives and rationales which lie behind individuals' decisions to either support or oppose particular wind power projects. However, there remains a strong conviction that people's responses to wind power developments are largely determined by one aspect of wind farms in particular: visual impact. Wolsink (2000, 2007a, 2007b) states that the strongest impact on an individual's attitudes towards wind farms comes from the perceived visual impact, he maintains that: 'This factor is much more decisive for one's standpoint than the perceived environmental benefits of wind power as compared to other forms of conventional electricity generation, such as reduced carbon dioxide emissions' (Wolsink 2000: 51).

Woods (2003) in his account of objectors' arguments relating to a proposed wind farm in mid-Wales has further highlighted the central, and emotive, position of visual impact. He found that:

> Letters and statements from anti-wind farm campaigners speak of the landscape being disfigured, ruined, cruelly desecrated, abused, raped and sacrificed. […] The incompatibility

> of the wind farm with the 'unspoilt', 'natural' landscape is conveyed by the repeated description of it as an 'industrial' development, representing the wind farm as being 'out of place'.
> (Woods 2003: 281)

Similarly, Barry *et al* (2008: 74) found that 'sacrifice and despoliation of pristine and beautiful natural environments' formed key themes within opposition rhetoric.

Though concerns over visual impacts are largely seen to be the principal concern of wind farm opponents, it is important to recognise that in reality many other arguments are put forward in opposition to proposed wind farms or to wind power in general (this is well illustrated within Barry *et al* 2008). For example the following is a selection of arguments taken from the 'nowhinashwindfarm.co.uk' website and a page entitled; 'Facts About Wind Power'. (This website represents the campaigning body 'Say NO To The Whinash Windfarm' which was created to oppose a proposed wind farm development in the Cumbria area).

- 'Wind turbines cannot generate electricity if the wind is too light or too strong'
- 'Wind energy is not free. The product cannot be stored and feeding it into the national grid is complex and costly'
- 'All wind turbines need reliable back up to maintain uninterrupted supplies to the national grid when the wind is not blowing [...] Any number of windfarms cannot replace a single conventional power station without inviting frequent blackouts'
- 'The rush for onshore windfarms is wholly in pursuit of profit'
- A report by DEFRA 'identifies infrasound as a source of stress-related illness, and cites wind turbines amongst the common hazards'
- 'Each turbine requires some 1000 tons of concrete to provide it with a stable footing [...] The process of making cement is extremely polluting. Introducing these quantities of foreign matter into a delicate eco-system is bound to be damaging'
- 'The Government invests far more in wind power than in energy saving'
- 'the Government is manipulating local planning procedures to make it ever easier for developers to locate windfarms wherever they can make the biggest profits'
- 'Property prices in an area targeted for a windfarm would fall by between 10% and 50%'

Thus, there exists a great diversity of arguments being put forward in opposition to wind power developments.

### *3.3.3 NIMBY-ism*

The pro-wind power bias within the literature (reflected through the focus on opposition and the implicit conviction that objectors are 'wrong') is perhaps most apparent within the NIMBY paradigm which has long been called upon to explain opposition to wind power. The NIMBY (Not In My BackYard) paradigm represents the attitude held by people who are in favour of a certain phenomenon (*i.e.* wind farms) in principle but oppose it when it may exist near to them, or in a way which would affect them or their lifestyles. Warren *et al* (2005: 857) note that communities which display signs of 'NIMBY-ism' 'seem to favour wind power as an abstract concept but oppose wind power projects in their area'.

> According to NIMBY-logic, local residents oppose a project in their aim to maximise their own individual utility. Because they are in favour of wind power, they will welcome all turbines not built in their vicinity. They minimise the personally perceived impact of wind turbines by blocking their development.
> (Wolsink 2000: 52)

Warren *et al* (2005) observe that NIMBY attitudes were often revealed through public attitude surveys in the 1990's, however: 'More recent surveys of public attitudes to windfarm developments have found little or no evidence of the NIMBY syndrome, suggesting that its prevalence in early surveys is dwindling as society becomes familiar with the reality (as opposed to the uncertain prospect) of windfarms' (Warren *et al* 2005: 858).

NIMBY explanations have been widely discredited and have been largely replaced by alternative theories (see for example Bell *et al* 2005 or Burningham *et al* 2006). Burningham (2000) argued that although the language of NIMBYism is widely used by parties involved in planning conflicts (and as such the ways by which individuals or groups use the terminology is a relevant topic for research), it is not an appropriate means of understanding the complexities of local opposition to proposed developments. Thus, it is interesting to note how the term has entered the vocabulary of wind power opponents, as both Barry *et al* (2008) and van der Horst (2007) have noted, opponents to wind power developments are often aware of the potential to be branded a "NIMBY" and therefore will seek to avoid being portrayed as such. This perhaps highlights the extent to which it has been used in the past but does not mean that it holds any relevance.

Wolsink (2000) notes that NIMBY explanations are simplistic and do not allow for the consideration of multiple motivations and perceptions; 'proponents of this argument do not distinguish between the interests of the opponents and their motives, and they tend to disregard the opponents' perceptions of risk' (*ibid:* 52). In order to be considered a 'true' NIMBY one must possess a 'combination of free rider preferences and a positive attitude

toward wind energy' (*ibid*: 53). However: 'When we try to locate people that combine a positive attitude and resistance motivated by calculated personal costs and benefits we can hardly find them' (*ibid:* 53). Instead, Wolsink notes that 'Most people with NIMBY-feelings are not so much in favour of wind power at all. Their behaviour is primarily based on their lack of support for wind turbines anywhere' (*ibid*: 54). Wolsink argues that the NIMBY paradigm is insufficient to offer an explanation of public opposition to wind power proposals/developments since it allows for only one possible justification for such opposition and 'misses the multitude of underlying motivations' (*ibid*: 57).

Similarly, Devine-Wright (2005) contests the NIMBY paradigm and points to various 'independent variables' which influence how perceptions of wind power developments are perceived - the existence of such complex variables highlights the inadequacy of NIMBY explanations. Such variables are said to 'include physical, contextual, political, socio-economic, social, local and personal aspects and reflect the complex, multidimensional nature of forces shaping public perception' (Devine-Wright 2005: 134).

Within the wind power literature a broad consensus has emerged that it is highly insufficient to rely on deterministic theories (such as the NIMBY paradigm) to understand public perceptions of wind power developments. However as Ellis *et al* (2007: 520) note; 'despite a large body of literature that undermines the concept of NIMBYism as a credible theoretical construct […] the term continues to be given credence in academic and public discourse over wind farm conflicts, despite an absence of supporting evidence'.

Furthermore, even those accounts which most strongly refute the concept of NIMBYism continue to take a somewhat partial approach and to treat opponents to developments as problems to be tackled. The strong, underlying pro-wind position within the literature can be conceived as being responsible for preventing meaningful understandings of public attitudes and responses towards wind power developments. Devine-Wright (2007: 10) has acknowledged that; 'Despite a range of studies being carried out on public attitudes towards renewable energy technologies, genuine understanding of the dynamics of public acceptance remains elusive'.

It is reasonable to suggest that a body of literature which is so clearly committed to enabling progress towards the goal of increased renewable energy capacity (particularly wind power) will never be able to fully understand or represent the interests, concerns or experiences of opponents to this goal. The implicit assumption that opponents are 'wrong', or even 'deviant' in their views and actions inevitably prevents commentators from understanding their full

range of reasons and ethical, social, political or personal rationales. Without acknowledging that objectors might have legitimate and valid concerns one can never gain insights into the true nature of the events and people under examination. This chapter will now illustrate how this partial approach has been deployed by discussing various arguments that have been made and theories which have been put forward.

## 3.4 Rational Choice and Wind Farms

In a comparative analysis of wind power in the UK and Denmark Toke (2002) posed the question; 'Can rational choice help explain different outcomes?' He observed that, (in 2002), wind power supplied less than one per cent of the UK's electricity, whereas 16 per cent of Denmark's electricity came from wind power by the year 2001. Toke assumed the key 'barrier' to development of wind power in the UK to be local objections. His paper therefore attempted to point out the differences between the UK and Denmark, and was implicitly based on the assumptions that Denmark's progress with wind power was *better* than the UK's and that local opposition found in the UK was a problem.

Toke called upon two well-established theories of rational choice to explain the low uptake of wind power in the UK. These theories are;

- The Tragedy of the Commons (Hardin, 1968)
- The Logic of Collective Action (Olson, 1965)

Both of these theories are concerned with the over-exploitation of natural resources and in finding effective means of natural resource management. Further, by reference to the principle of 'free-riding', they hold many similarities with the NIMBY paradigm. Toke also called upon a third theorist, Ostrom (1990) whose analysis of rational choice theories, such as the two mentioned above, offers a more optimistic interpretation of the problems of managing finite or limited natural resources.

In order to fully explore Toke's argument (and its limitations) each of these three theories will now be examined in turn, and the ways by which they have been adopted, (and adapted), by Toke to apply to low wind power uptake in the UK will be outlined.

### *3.4.1 The Tragedy of the Commons*

Hardin's (1968) 'The Tragedy of the Commons' has been of great significance and influence and, it has been argued, has largely become 'conventional wisdom' in the discourses of natural resource management (Feeny *et al* 1990). The central argument of the tragedy of the commons is that where a natural resource exists with no private property rights and as such is common property to all who wish to use it, it will ultimately be over-exploited and destroyed.

Hardin (1968) uses an analogy of a common grazing land where herdsmen keep their cattle. If a herdsmen were to add one more animal to his herd he would benefit from all the positive aspects of this extra animal, (which could be meat, dairy products or economic returns from its eventual sale), however he would only bare a fraction of the costs of grazing an extra animal on the common since the maintenance of the land is no one person's responsibility. As such the rational herdsman evaluates the costs and benefits of adding an extra animal and comes to the conclusion that the benefits (+1) outweigh the costs (a fraction of -1), and so adds an extra animal. The tragedy comes since all the herdsmen on the common would make the same rational decision and each would add another animal, and another, and another... Hardin concludes that;

> Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.
> (Hardin 1968: 1244)

The tragedy of the commons can be, and very often is, applied in a wide variety of situations to explain the degradation of natural resources and the environment, for example, over-fishing of seas or emitting polluting substances (here the commons is over-exploited as a sink for dangerous inputs rather than a source of finite outputs). However, Toke (2002) takes a very unusual perspective in arguing that the theory can be used to explain the *under*-exploitation of a natural resource (wind).

Toke (2002) contends that opinion polls consistently show that the majority of the UK public are in favour of wind power, being aware of its potential benefits in reducing greenhouse gas emissions and mitigating climate change. However, individuals do not perceive any direct benefits from wind power developments to themselves in the immediate future and as such have no strong incentive to vocalise support for the developments. As such, just as the rational herdsman continues to add extra animals – 'free-riding' on the benefits and not paying the full costs of his actions – the rational citizen does not actively support wind farm developments, effectively 'free-riding' by avoiding the costs of action (associated with organising or campaigning) but sharing in any benefits which may accrue from the development if it were to succeed. As such as every rational citizen (in favour of the development) chooses not to actively support the wind farm, consequently *no* support is forthcoming and it appears that opposition is dominant. This, proposes Toke (2002), is how the tragedy of the commons can be used to explain the low uptake of wind power in the UK.

### *3.4.2 The Logic of Collective Action*

Mancur Olson (1965) proposed that the formation of groups was a fundamental part of human societies. However, he refuted 'Bentley's Theory' which contends that a group's power is relative to its size, and that larger groups, being more representative, will overpower smaller, more specialised, groups. Instead Olson (1965) identifies smaller groups as being 'privileged' while larger groups may be viewed as 'latent'. Rather than arguing that people will inevitably organise and form groups around common interests, he contends that small, minority groups will form where people have highly specialised interests and strong motivations for organisation – this would be a 'privileged' group. However, where people do not have strong incentives to organise they will not and hence are classified as 'latent'. Moreover, Olson argues that since the small 'privileged' group will be better organised it will often defeat the larger 'latent' group, despite the fact that its interests are not representative (Olson 1965: 128).

Toke (2002) applies this theory to the case of wind power with ease. In this case the 'privileged' group is the wind power opponents who are strongly motivated to organise and oppose wind power developments. The 'latent' group is the majority of the British public who Toke contends, by reference to opinion polls, are said to support wind power, including local people who support, or *do not oppose*, local development. This 'latent' group may have strong opinions but they will not have strong, direct benefits if their desired outcome is achieved, for this reason the costs of organising outweigh the perceived benefits, and, as mentioned above in the discussion of the tragedy of the commons, the rational supportive citizen will choose not to organise or form a group. As such minority, unrepresentative, interests can overpower the majority, representative interests.

Olson (1965) notes that pluralists have faith in the fact that pressure groups will inevitably balance each other out so that the result is that they provide accurate representations of the interests and attitudes of a society. However, he contends that this is a utopian idea with very little, or no, empirical evidence behind it. He therefore disagrees with the assumption that large, 'latent' groups will organise whenever the 'privileged' few become too vocal, or gain too much influence.

Olson concludes that in order for large groups to organise they must have some other form of incentives (*i.e.* financial), however, in purely political organisations this is an unlikely feature.

> An organization that did nothing except lobby to obtain a collective good for some large group would not have a source of rewards or positive selective incentives it could offer its members. Only an organization that also sold private or noncollective products, or provided

social or recreational benefits to individual members, would have a source of these positive inducements.
(Olson 1965: 133).

Hence, it is proposed that where large groups become organised around an issue they would typically have already existed as a group for some other purpose or function.

By reference to opinion polls, Toke (2002) contends that people in opposition to wind farms are generally more vocal, however those in support are more numerous. Whilst, as noted above, such statements are not necessarily proven, if this line of argument is accurate, a potential area of future research could be to examine ways of vocalising the supposed 'silent majority', and taking Olson's conclusions into consideration, one may look at existing groups and organisations within communities which could potentially act as campaigning bodies in support of proposed projects.

### *3.4.3 Ostrom*

Ostrom (1990), in reviewing the two above-mentioned theories, comes to more optimistic conclusions regarding community based natural resource management. Whilst many traditional theories of natural resource management, for example The Tragedy of the Commons, imply the need for top-down, centralised management, Ostrom recalls that there can be no one solution and that in many cases local communities are the most efficient, and skilled managers of resources.

Whilst Toke (2002) recounts Ostrom's theory to highlight the power of cooperatives and community-based management in generating support for projects, and in particular wind farm developments, in fact Ostrom's theory is far less prescriptive than the previous two mentioned. She does not suggest that any one approach to natural resource management is superior and instead notes that all approaches will ultimately lead to a mixture of successes and failures. Therefore she concludes that it is necessary to understand the various influencing factors which determine such successes and failures.

The crucial point to draw from Ostrom's argument is that one should not start with the assumption – as is inherent in the Tragedy of The Commons theory, and in Olson's theory of latent groups – that individuals are 'incompetent, evil, or irrational' but instead 'individuals have very similar limited capabilities to reason and figure out the structure of complex environments' (*ibid*: 25). As such individuals will evaluate situations and problems and choose rational action dependent on their previous knowledge, experiences, values and an assessment of the costs and benefits of action. Here Ostrom's argument can be seen to strike a

chord with that of Olson in that individuals are expected to perform a cost-benefit analysis to assess the rationality of organising around issues and interests. However Ostrom's theory allows for a greater degree of flexibility and agency on the part of individuals.

Similar to Hardin (1968), Ostrom (1990) observes that where individuals might organise around an issue related to a shared common resource or interest, all the benefits of their action will be shared between all other appropriators of the resource or interest, and where the costs may be high for individuals to participate or organise the end benefits would still be equal. Therefore in this situation it would not be rational for the individual to participate if they would still receive the same benefits from other people's actions. However, unlike Hardin, Ostrom does not suggest that this means that no-one will participate, instead she notes that there are complex mixes of ethical, social, psychological and other factors which may lead a person to organise/participate in apparently irrational ways.

Toke (2002) concludes that the key differences between Danish and UK uptake of wind power revolve around public perceptions of the technology and this in turn revolves around public involvement and participation. He notes that the Danish experience of wind power started out as a 'bottom-up' process of development, with strong incentives for local people to invest in wind power and form cooperatives. He contrasts this with the UK experience which is seen as a 'top-down' process of development dominated by external, distant and large companies. Toke suggests that where public support for wind power developments has been high in Denmark it is largely due to incentives available and the ability for members of the public to be actively involved and invest in projects – as such they perceive direct benefits from supporting wind power. Conversely, Toke argues, public support has been low in the UK since individual members of the public can see no direct or personal benefits from the developments which are perceived as benefiting only large, remote companies. He therefore concludes that:

> The British wind power industry needs to find ways of connecting up with the grass roots so that wind power supporters feel they have an incentive to argue for specific schemes. In this way the enthusiastic opponents of wind power schemes can be counterbalanced by enthusiastic supporters of the technology.
> (Toke 2002: 99)

Toke therefore suggests that there is great merit in finding ways of vocalising the apparent 'silent majority' who support wind power developments in order to create more representative or balanced debates around the issue. However, his paper is concerned only with the reasons why supporters are *not* vocal and does not consider the motivations of opponents. Furthermore, the aim of the paper appears to be to create a more hospitable public atmosphere

for wind power – it is presumed, without clear justification, that vocalising support for wind power developments is necessary, and replicating the state of wind power in Denmark would be desirable. Mobilisation of supportive movements is therefore seen as *good*, whereas the mobilisation of opposition movements is *bad*. The notion that movements of any sort might represent positive or constructive acts of democracy is not considered.

### 3.5 Experience Leads to Acceptance

It is frequently implied that greater experience of wind power leads to greater acceptance and consequently that negative opinions or reactions might be taken as reflections of ignorance or uncertainty. For example, Krohn and Damborg (1999) contend that local community acceptance of wind farms typically increases once construction is completed and the wind farm is operational. Further, a survey conducted by the Scottish Executive which examined local attitudes to wind farms in 'affected' areas found that whilst many people were concerned about issues related to the development of a wind farm in their local area, very few people actually experienced problems once it had been completed:

> Of those who lived in their homes prior to the construction, concerns about specific problems that might arise as a result of the windfarm do not seem to have materialised in many cases. Asked to reflect back on their views prior to the construction of the windfarm, people are less likely to say that problems have been caused by the windfarm than they are to say that they anticipated they might. Furthermore, while around half (54%) anticipated no problems over a range of issues associated with the windfarm development, as many as eight in ten (82%) say that there actually have been no problems
> (Scottish Executive 2003: 5.4)

There have been numerous studies (e.g. Krohn & Damborg 1999, Scottish Executive 2003, Warren *et al* 2005) which have concluded that 'the majority of people who live in a community close to a wind farm live quite happily with it' (Ebert 1999: 46), and perhaps more importantly that after the construction of a wind farm is completed much of the opposition typically fades away. Whilst this is usually reported to suggest that opponents' arguments are unfounded, and hence is used as a means of undermining opponents' legitimacy, there are a number of possible alternative explanations. For example, having been defeated people may feel that their opposition is futile, or that they are no longer able to oppose the wind farm further. Wolsink (2000) noted that individuals who do not have confidence in their ability to effect change are less likely to take action and this provides one possible explanation for the disintegration of opposition to wind farms once construction is completed.

However, within the literature it is frequently suggested that individuals who have had more experience of wind farms will also have more positive opinions of them. For example, it was

found that 'People with no specific experiences with wind power believe that noise is louder than those who actually live beside turbines' (Krohn & Damborg 1999: 955). Krohn and Damborg (1999) draw on an example from Denmark to further illustrate this point; they note that in the Danish municipality of Sydthy – where 98 per cent of electricity consumption is provided for by wind power – those people with more knowledge of electricity production and renewable energy were also more positive about wind power. Moreover, it was found that 'people living closer to the nearest wind turbine than 500 meters tend to be more positive about wind turbines than people sited further away from the turbines'. Furthermore, and somewhat surprisingly, it was noted that 'people who could see between 20 and 29 turbines tended to be more positive about wind energy than people being able to see only a smaller number of turbines'. One final point to be drawn from this example was that 'People who own shares in a turbine are significantly more positive about wind power than people having no economic interest in the subject' (Krohn & Damborg 1999: 956). Therefore, it appears that involvement with, and knowledge of wind power developments increases public support and positive attitudes for them, in the local area as well as in the general principle.

This is consistent with the findings of a study by Warren *et al* (2005) which examined community reactions to proposed and constructed wind power developments in two localities in Ireland and Scotland. The study focussed on local community perceptions in the Scottish borders around the (existing) Dun Law wind farm and the (planned) Black Hill wind farm, and in South-West Ireland in Cork and Kerry (both of which have two existing wind farms in close proximity).

In Scotland it was found that community perceptions were more positive around the existing wind farm than the planned one. Further it was noted, (through retrospective questioning), that whilst 65 per cent of respondents had not changed their attitudes since the Dun Law wind farm was constructed, 24 per cent had: 'Of the 24 per cent of people who altered their attitudes following experience of the windfarm, all but one became more positive' (*ibid*: 863). Warren *et al* (2005) therefore maintain that negative perceptions, and anxieties, appear to be more prevalent before a wind farm is constructed and are subsequently eased once construction is complete and communities experience the reality of a wind farm.

Similar results were found from the Irish examples where it was said that 'Of those supporting wind power nationally, 66 per cent initially opposed it locally, indicating that a NIMBY effect was widespread to begin with.' However, when the second wind farms were proposed in the same areas 'there was no statistically significant difference between attitudes

to wind power nationally and attitudes to the second wind farm, suggesting that the NIMBY effect diminished with time' (*ibid*: 864).

Furthermore, Warren *et al* (2005) observe that in both the Scottish and Irish examples those people living closest to the (existing) wind farms had the most positive perceptions, however, at the Black Hill site where the wind farm was not yet constructed the opposite was true. Therefore, in accordance with Krohn and Damborg (1999), Warren *et al* (2005: 866) conclude that 'opposition to windfarms arises in part from exaggerated perceptions of likely impact, and that the experience of living near a windfarm frequently dispels these fears'.

Whilst such findings may indeed reflect typical experiences with wind power, one should take care not to suggest that anxieties or opposition expressed towards proposed wind farms are somehow illegitimate or misplaced due to the expectation that they will be appeased once the wind farm is constructed. This would be a dangerous stance to take and could justify the marginalisation or disregard of opposition voices which must be allowed to be expressed if democracy is to exist. Moreover, as Ellis *et al* (2007: 520) contend, there is no clear relationship between knowledge and acceptance of wind power: 'Indeed, many objectors appear extremely well informed about these issues'.

Wolsink (2007a) has offered a more complex explanation of this same phenomenon. He argues that it is not simply that public acceptance increases after construction but rather that public opinion is 'U-shaped'. This 'U' shape represents the range of public opinion which changes over time in relation to a person's experience with wind farms: 'These attitudes range from very positive (that is when people are not confronted by a wind power scheme in their neighbourhood), to much more critical (when a project is announced), to positive again (some reasonable time after construction)' (Wolsink 2007a: 1197). However, he does not suggest that the return to a positive opinion is inevitable and instead proposes that this will only occur where 'the existing environmental impact is adequately dealt with, in the eyes of the local population.' As such the importance of good management on the part of the developers and positive community relations is highlighted since if problems occur, or damage is perceived to be done to the local community or environment, the return to a positive public opinion is unlikely to arise.

### 3.6 The Importance of Trust and Maintaining Credibility

Krohn and Damborg (1999: 959) argue that 'people in areas with significant public resistance to wind projects are not against wind turbines themselves,' but rather, 'they are primarily against the people who want to build the turbines'. They contend that in many cases

opposition to wind power developments arises as a result of detrimental or non-existent interactions with the developers or other central actors and lack of involvement of the local community in the planning processes. As such local people may become vocal objectors precisely because of a lack of opportunities to engage with the proposal and related issues. Similarly, Breukers and Wolsink (2007: 2738) contend that although 'Empirical research indicates that negative attitudes are based primarily on the perceived visual impact […] they may be reinforced by discontent with decision-making processes and the management of facilities. Local involvement, financially and in decision-making, appears to enhance support for wind schemes locally'.

Krohn and Damborg (1999: 959) maintain that

> a participative approach in the siting procedure has a positive effect on the public attitude towards the project, and thus leads to a decrease in public resistance. What matters is involvement of the local population in the siting procedure, transparent planning processes, and a high information level.

Similarly, Ebert (1999: 44) notes the importance of effective stakeholder management to ensure 'healthy community debate'. Without meaningful communication and interaction developers are said to be unlikely to gain the trust of local communities and the result may be that 'The public feel alienated from decision-makers, believing that industry puts profits over welfare [...] the more the developer can win public trust, the more likely that the developer will gets [*sic*] his/her development sited' (Upreti & Horst 2004: 62). Barry *et al* (2008: 75) found that within opposition texts there was 'a common theme of a lack of trust in government and regulatory agencies and wind energy developers and supporters. This varies from mild skepticism to outright mistrust of the public institutions involved in windfarm promotion or regulation and the motives and intentions of windfarm developers'. Bell *et al* (2005: 470) note;

> information will always be 'suspect' in a climate of mistrust. It is widely recognised that the public do not trust politicians, developers or even experts. Therefore, building trust among all parties involved in a wind energy siting process seems essential if we want people to take seriously the information that is provided to them.

Trust has become a central theme within the wind power literature, however, as will be demonstrated below, securing trust within wind power planning is not a straightforward matter.

### *3.6.1 Earning a Community's Trust*

The British Wind Energy Association (BWEA) advocate continued dialogue between developers and local communities, and consultation with all affected parties, throughout the assessment, planning, construction, operation and decommissioning of proposed wind power

developments (see BWEA 1994). This is largely to allay anxieties that the public may have relating to the proposed development, and as such takes the form of providing information and answering questions in ways which will reassure local communities. Two-way dialogue is said to be necessary, however this two-way dialogue has the clear purpose of one-way information whereby local communities are reassured by the developers and hence do not oppose the development. This might be perceived to represent building 'trust' in the relationship between the local community and the developer, however if this is the case it would be more accurately described as a 'false trust' since it is based on a manipulative intention to *remove* concerns rather than *address* them. Furthermore, such dialogue is unlikely to be sufficient to secure a community's trust when opposition to the development has, or is likely to form. As Bell *et al* (2005: 469) note; 'information will always be 'negotiated' by the public. Any information provided by developers or 'independent' experts will be evaluated and understood in the context of each individual's existing 'web of beliefs''. Scientific or technical reassurances, in particular, are likely to be met with high degrees of scepticism, rather ''lived experience', 'common sense', 'local knowledge' and tacit or 'practical knowledge' will all play an important role (alongside 'technical knowledge') in how people respond to information provided by proponents of wind energy developments' (*ibid.*: 470).

Therefore, earning trust requires more than just engaging with the local community in consultative exercises, rather the community must feel that they are being treated fairly and honestly and that their concerns or interests are being taken into consideration. The key question then becomes; what is required in order for the community to feel that they are being treated fairly? Moreover; is the required fairness merely procedural, or is it required to be of a material nature?

It has been suggested that the key to ensuring community acceptance of proposed wind power developments is in generating community benefits (particularly financial benefits) and providing financial incentives for local communities to support such developments (Toke 2005a). Toke (2005a) contends that local ownership of wind power projects is necessary to ensure local acceptance; he notes that 'In Denmark and Germany the wind industry readily acknowledges how widespread farmer ownership of wind power, cooperative shareholding, and the existence of local networks of voluntary activists and professional agents of the wind industry have generated a long term political sustainability for wind power programmes' (2005a: 53). He maintains that in order for the UK to obtain equal, or comparable levels of wind power development it is important to engender active community involvement in such projects. Similarly, Elliott (1999: 2) observed that;

> Local ownership is common elsewhere in Europe. For example, around 70% of the wind projects in Denmark are owned by local wind co-ops or "Wind Guilds". In addition, the rapid expansion of wind power in Germany, to around 3000MW so far (compared to around 300MW in the UK), has been enabled by local ownership schemes. Local ownership seems to have been a key factor in the low level of opposition in these countries: as the Danes say 'your own pigs don't smell'.

Toke has frequently (for example; 2002, 2003, 2005a, 2005b, Toke *et al* 2008), referred to the experiences of Denmark and Germany to highlight the need for greater community involvement in and ownership of UK wind power projects. Whilst he makes persuasive arguments to suggest that the higher rates of wind power development in Denmark and Germany are attributable to greater levels of community (primarily financial) involvement and ownership, he fails to consider crucial social and cultural differences between these countries and the UK. In particular, the notion of 'community' in such countries is experienced very differently than in the UK. As such it is likely that public involvement in activities, such as the planning and development of wind power projects, will naturally occur in very different ways compared to within the UK. Additionally, Bell *et al* (2005) note the importance of identifying which aspects of community involvement lead to community support:

> it may be important to distinguish the economic from the social and political effects of community ownership. The benefits of community ownership may have as much to do with local involvement in the development process as they do with the potential profits of ownership.
> (Bell *et al* 2005: 473)

The former DTI (2005) acknowledged differences between European countries in relation to wind power development, however, they maintained that the 'overseas evidence points to a need to make meaningful community benefits more routine and systematic in UK wind power projects if future rates of deployment are to grow' (DTI 2005: 7). The notion of 'community benefits' is an important consideration. Although, the experiences of Germany and Nordic countries such as Denmark may not be able to be replicated in the UK due to social or cultural differences, the provision of 'community benefits' (which are not necessarily the same as those present in other countries) is of some value and consequence. It is worth considering, then, what is meant by 'community benefits'.

Walker and Devine-Wright (2008: 497) have observed that; 'In the UK, the term 'community renewables' has recently become part of mainstream energy policy'. However, they note that there is little clarity over what this term actually means. In assessing the various ways in which the word 'community' has been used to describe renewable energy projects they found a wide variety of interpretations:

> Some interpretations were legally driven such that community projects were simply defined as ones led by organisations with a charitable status and without commercial interests. Some had a physical rationale so that community projects were ones that involved public buildings used by members of the community. Others stressed the importance of local people being involved in project development or having a financial stake in a project through cooperative share issues.
> (Walker & Devine-Wright 2008: 497-498)

Walker and Devine-Wright (2008) set out three viewpoints which broadly cover the different ways that the term 'community renewables' is interpreted and understood. These are as follows;

A. *Focus on processes*: according to this view the project must involve local people in its planning, setting up and even operation.
B. *Focus on outcomes*: this view is concerned more with the distribution of benefits resulting from the project (rather than whether local people participate within the project itself). Such benefits may take the form of jobs, revenue, local regeneration, educational resources etc.
C. *Flexible viewpoint*: according to this view 'people tended to be less concerned with whether or not a proposed project ticked the right 'community' boxes, but that it was actually going ahead and would lead to something productive and useful happening' (*ibid.*: 499).

As such the flexibility and ambiguity inherent within the term 'community renewables' is well illustrated and it is clear that this could be applied to a great number of diverse projects. It is therefore difficult to define a set of distinguishing characteristics for 'community' projects. Equally, this can lead to similar difficulty in setting out what form 'community benefits' should take.

The DTI's (2005) comparative study of European practice relating to community benefits associated with wind power development found that in the UK there is no standard approach to the nature or scale of community benefits by wind power developers. It is noted that payment into a 'community fund' is becoming standard practice but even this lacks a standard approach or standard measures for managing the funds. Furthermore, it was noted that the provision of a 'community fund', (or other community benefits), risks creating the impression that developers are attempting to 'buy consent' and as such does not serve to gain public acceptance but rather to heighten hostilities. Therefore, whilst it was said that such community benefits are in some instances perceived to influence planning outcomes, it was also noted that developers' concerns about being perceived to be trying to 'buy consent' are effectively serving to 'cap' the levels of financial benefit that are offered. Bell *et al* (2005: 473) observe that;

> A compensation strategy may run a particular risk of alienating people if either they are not offered what they consider to be enough or if their principles are not for sale […] payment can be seen as a bribe, especially when compensation is not proposed at an early stage but offered after a division between developers and opponents emerges.

The DTI study noted that in other European countries (especially Spain, Germany and Denmark) the issue of community benefits is not contentious in the way that it is in the UK. Community benefits were said to be 'built into the fabric of wind power development', and examples were given of job creation and tax benefits which are not similarly experienced in the UK. It was suggested that such community benefits have been a key factor in creating the higher levels of wind power development in these countries compared with the UK, however it was contended that such experiences are not directly importable.

Similar findings are reflected in a study of a former ship-building and coal mining community in North-East England (Jarrow) and its relationship with a local chemical industry plant (as reported in Irwin 2001). It was found that whilst some individuals defended the company in question by referring to its charitable role towards local schools and community groups:

> Such voices […] tended to be drowned by others who argued […] that the company must have something to hide – otherwise why would it give money away?
> (Irwin 2001: 104)

This study highlights the difficulties involved with establishing the appropriateness of community benefits – especially financial benefits. Although these may be given in order to appease the local community, in reality this may have quite the opposite effect.

Importantly the DTI (2005) study observes that there is no evidence to suggest that higher levels of community benefits offered by developers lead to higher levels of public acceptance or earlier planning approval for wind power developments in the UK. However, it is noted that poor or absent community liaison increases the likelihood of planning refusal at the local authority level and hence the need for developers to take the application to appeal. This suggests that local communities will respond better to *procedural* fairness, as opposed to *material* fairness. By this it is meant that in order for prospective developers to gain the trust of local communities it is not necessary, or even appropriate, to offer substantial material (i.e. financial) benefits, which may be perceived as bribes, but rather they ought to engender open debate and provide full and transparent information to the community. Since the issue is one of building trust any acts which might be perceived as bribery could have severely detrimental effects, whereas those which could be seen to allow meaningful participation of local community members might serve to create greater community engagement, and potentially community acceptance.

Breukers and Wolsink (2007) note that there are both instrumental and normative reasons for using participatory decision-making methods within wind power design and planning processes. Instrumental reasons include that; 'a certain degree of support and approval from actors with 'a stake in this locality' is needed [… and] conditional supporters – e.g., local residents or nature protection organisations, may accept a wind project when they have been given an opportunity to influence the design' (Breukers & Wolsink 2007: 2738). Secondly, they note that 'relevant stakeholders bring in their knowledge and experiences, which can improve the quality of the plan and design' (*ibid*: 2738). A normative reason for employing participatory approaches is said to be 'that it enhances the democratic legitimacy of both the process and the outcomes' (*ibid*: 2738).

### 3.7 A Critique of Participation

It has become almost commonsense knowledge that public participation in decision-making processes is *good*, and it is generally acknowledged that appropriate policies and developments are best-achieved through consultation and participation (Agrawal & Gibson 1999, Brown 2003a, Holmes & Scoones 2000, Kothari 2001). 'Participatory approaches [...] are justified in terms of sustainability, relevance and empowerment' (Cooke & Kothari 2001: 5). It is seen that by involving local people in decision-making processes the outcomes will better reflect their interests and needs and will therefore be met with greater compliance and acceptance by those affected, this in turn leads to more sustainable policy outcomes (Kothari 2001, Sandercock 1998). Participatory techniques are also regarded to serve an educational role wherein individuals benefit from each other's knowledge and are also exposed to 'expert knowledge' hence gaining a better understanding of their environment, (and associated issues). Equally, 'experts' involved in the process will learn from 'local knowledge' which in many cases may be more substantial and relevant. This, Brown (2003) argues, leads to the creation of 'fusion knowledge' which could potentially be of great value (such ideas will be discussed in more detail in the next chapter).

Due to various arguments such as those presented above, the concept of community involvement 'has grown in popularity with policymakers in the United Kingdom [...] It is seen as a remedy for many social ills, including social exclusion, an alleged reduction in social capital, and a mooted "crisis of democratic governance" reflected in low electoral turnout and distrust of government' (Goodlad *et al* 2005: 923). However, despite this widespread acceptance, participatory techniques have begun to receive considerably criticism (particular within the literature relating to development studies). Thus, whilst it is tempting to conclude that greater community participation in wind power planning and development is the

necessary solution to engender trust and fairness in the processes, one must also consider the limitations and dangers of participatory techniques.

Firstly, it is argued that participatory techniques encourage a simplistic view of communities which present 'them as homogenous, static and harmonious units within which people share common interests and needs' (Cooke & Kothari 2001: 6). Goodlad *et al* (2005: 924) note that 'communities of place do not constitute communities of interest and, for some, neither community associations nor deliberative institutions can be trusted to represent the diversity of local populations'. In the case of wind power developers, or planning officials seeking to uncover local attitudes and interests regarding a potential wind farm, it would be crucial to bear this point in mind so as to ensure that the eventual outcome best reflects the interests of the entire community and not just one segment.

There is a tendency within participatory techniques towards an over-reliance on deterministic, and over-simplistic, boundaries and dichotomous categories, (for example, groups are either powerful or powerless). Such dichotomies overlook the complex nature of communities and the many differing roles individuals may play within (and/or beyond) their community. By labelling all 'local' people as, for example, powerful or powerless one overlooks the differing power relations which exist *within* local communities (Agrawal & Gibson 1999). This means that those coming from outside the community are not aware of the complicated relationships which exist and fail to notice the many ways by which power is exercised. This can lead to further marginalization of minority, or less powerful, individuals or groups since their interests are presumed to be included despite being drowned out by those of more powerful community members. This strikes a chord with the work of Olson (1965) discussed above, whereby powerful, or 'privileged', groups are able to assert their interests above those of less powerful groups and yet the outcome is taken to be representative of the whole community. As such, by relying on over-simplified notions of 'community', participation has been said to 'reify' social norms and inequalities; 'participatory methods of enquiry simplify the nature of power and are thus in danger of encouraging a reassertion of power and social control' (Kothari 2001: 142).

Hildyard *et al* (2001) illustrate this point very clearly with reference to Joint Forest Management (JFM) in India. In this case Village Forest Communities (VFCs) were set up to 'ensure the participation of all sections of the village in deciding planting regimes'. However, in practice these VFCs were dominated by powerful social groups and men. Many households were not members, and 'In the majority of these cases, the non-members tend to be from the poorest families in the village' (p64). Thus the decisions taken and the policy outcomes

shaped by the VFCs were unsurprisingly in the interests of the already dominant village members, and of men rather than women. Clearly such outcomes do not empower local communities but rather allow greater power to be invested in those members who already hold power, whilst marginalised community members are further marginalised.

A second significant criticism of participatory techniques is that participation is seen to be intrinsically 'good' and consequently non-participation is intrinsically 'bad'; participants and local individuals or groups are treated as passive recipients of projects, and there is little consideration given to the active choices that individuals or groups make in choosing to participate or not. As Cooke and Kothari (2001: 9) comment; 'participatory approaches fail to recognize how the different, changing and multiple identities of individuals impact upon their choices about whether and how to participate'. However, an examination of reasons for compliance as well as non-compliance might prove fruitful to policy-making processes, and a better understanding of communities. In the case of wind power developments, understanding why people choose not to participate in consultative or participatory processes may uncover existing strong beliefs, attitudes or viewpoints, (as described in the Views of Scotland (2002) opponents' guidelines below), or alternatively it may be found that those who do not participate do not have strong feelings on the matter and hence have little interest in the outcomes of related decision-making processes. Whatever the reasons behind choices for (non-)participation the motivations are highly significant and should be of great interest to wind power developers as well as planning officials.

A further criticism centres around the fact that whilst participatory techniques are seen to be means of replacing top-down decision-making with more people-centred processes which will empower local groups, ultimately power remains with external, 'expert' institutions or organisations who define the terms and methodology of the process. 'Project actors are not passive facilitators of local knowledge production and planning. They shape and direct these processes. At the most basic level, project staff 'own' the research tools, choose the topics, record the information, and abstract and summarize according to project criteria of relevance' (Mosse 2001: 19). Project staff retain an enormous amount of power as they ultimately determine which information is gathered and how it is used or analysed, thus they are able to shape the outcome of the process (Kothari 2001). As such concerns are raised about the legitimacy of participatory processes. For example, where a developer consults a local community about a proposed wind power development the outcome can only truly be said to represent the interests of the community if they were allowed to lead and control the process, otherwise the developer, being in a position of power, is able to shape the process and

interpret the results as they see fit – or as fits their own interests (either consciously or unconsciously).

In such a case, participation serves to ease populist concerns and give local people the feeling of involvement and empowerment but ultimately little has changed. Participation serves a cosmetic purpose of legitimising projects and decisions which have already been decided, participants then 'become a ghostly presence within the planning process – visible, heard even, but ultimately only there because their involvement lends credibility and legitimacy to decisions that have already been made' (Hildyard *et al* 2001: 59).

Criticisms of participation are, however, balanced by many arguments in its favour. Goodlad *et al* (2005: 933) note that 'there are positive reports of residents being satisfied that they have been listened to and accorded their citizenship rights. However, they are most likely to reach this conclusion if they see a tangible outcome from their involvement as that is likely to be why they got involved in the first place'. In order to reach constructive and beneficial results the key goals of developers employing participatory techniques should be to develop and apply high levels of trust and transparency: 'building trust in the process and between different stakeholders takes time but is vital for the success of both process and outcome. Participants have to be confident that their views are heard and noticed, and decision-making and priority setting have to be transparent and accountable' (Brown 2003a: 91).

### 3.8 Further Potential Limitations on Participatory Techniques

Despite the potential merits of adopting participatory techniques in processes of wind farm planning and development in some cases it may be the local communities or individual members of the public, rather than the developers, who block such processes. Whilst it may be seen that by involving members of the public in the early stages of wind farm proposals, and incorporating their interests and concerns into the process, the public would benefit from more appropriate and better designed projects, in actual fact wind farm opposition groups have suggested boycotting such consultative/participatory processes (see for example Views of Scotland 2002).

Views of Scotland in their briefing note aimed at 'anyone living in an area which may be subjected to an inappropriately sited wind-driven power station and needs help to oppose the development' (2002: 1), suggest that 'If you are consulted, you may wish to consider whether to participate or not' (*ibid*: 4). The document paints a picture of wind farm planning procedures as a battleground wherein developers and opposition groups fight to retain and

grasp power and attempt to get one over on one another. This reflects the findings of Barry *et al* (2008) who observed that:

> Objector discourses also have recourse to the language of conflict, war and defense, reflective in part of the intensity of feeling around their opposition, but also evidence of a strategic deployment of an "us/them" narrative, one of the most powerful of rhetorical modes.
> (Barry *et al* 2008: 77)

Within the Views of Scotland document, members of opposition groups are discouraged from taking part in early consultative processes since 'any minor changes conceded during scoping may make it more difficult for your views to be given weight later' (Views of Scotland 2002: 4). As such it is seen to be more favourable to ensure that opposition views are not incorporated at early stages in order to have a better case against the development at the later planning committee and potential public inquiry stages. Interestingly, despite evasive tactics such as this it is advised that opposition groups maintain a constructive and reasonable image, for example at a potential eventual public inquiry the group must be presented as one which 'constructively engages in finding solutions to problems in a wide range of sectors' (*ibid*: 37).

The tactical nature of wind farm opposition, suggested through the Views of Scotland (2002) document, as well as a similar Country Guardian's advise sheet entitled 'How to Fight a Windfarm Proposal' (www.countryguardian.net/fight.htm), casts doubt over the legitimacy of individual objections to particular wind power planning applications. Country Guardian suggest that people living in an area where it is thought a wind power development is being planned, or has been proposed, should begin their opposition campaign by contacting national anti-wind farm organisations for help and advice:

> You do not have to re-invent the wheel. Many other groups have been through the fight already and can supply you with advice and information. Contacting them will save you both time and money.
> (www.countryguardian.net/fight.htm)

Similarly both the Country Guardian and Views of Scotland documents supply lists of standard objections which opposition groups may wish to employ (*ibid*., Views of Scotland 2002). The existence of standard or typical objections which may be employed by opposition groups in different locations, and the increasingly strong network of campaigning groups within which ideas, experiences and techniques are shared, points to a phenomenon whereby individuals or community groups might be perceived to object to wind power developments with little consideration for, or reflection on the particular merits or flaws of the particular proposal or site. On the one hand this helps to further refute the NIMBY paradigm since the opposition arguments and tactics are applied to all proposals and the language of the two documents is highly anti-wind power with no exceptions. On the other hand, the universal nature of the arguments and their widespread application mean that objections are not coming

out of concerns about the impacts or dangers of a particular proposal but rather from a dislike for wind power developments in general and this creates problems for the planning process. Whilst developers might attempt to mitigate and prove negligible negative local impacts, opponents will not be appeased since their objections are based in a very different context.

Further, since this opposition has formed instinctively rather than having come as a result of a certain piece of information or a particular event, the opposition group is fixed and will actively seek any potential further justifications for their position. This is evident from the Views of Scotland document wherein it is suggested that people seek out issues, problems or indiscretions which may make bad publicity for the developers (Views of Scotland 2002). As is made explicit through the Country Guardian document, opposition groups are encouraged to 'Embarrass the developer by publicising unpalatable truths' (www.countryguardian.net/fight.htm). From reading documents such as this it appears that a great deal of energy is spent debating issues which are not directly related to the physical impact of the proposed developments. For example, Country Guardian advises opponents to;

> Read all publicity material and propaganda put out by the developers and compare it to the detail contained in their application [...] Point out inconsistencies. Examine carefully all claims made about the creation of jobs or benefit to the local economy [...] Developers make a great play of "saving the world". Calculate and publicise the infinitesimal emission savings of the development – not in tonnes but in national percentage terms. Calculate and publicise the income to the developer [...] They are in it for the money: show how considerable that money is.
> (*ibid.*)

This further reflects the findings of Barry *et al* (2008) who noted that objectors sought to undermine the legitimacy of developers by highlighting their financial interests. Opposition arguments perceived that 'not only do windfarms represent the *industrialization* of local environments, but also the main benefits of this are private not public. This constitutes the *commercialization* of the environment in that it is for private profit that windfarm development takes place' (Barry *et al* 2008: 81). Barry *et al* also noted that in highlighting the financial interests of developers, opponents implied that these interests refuted developers' claims to be motivated by environmental factors – thus environmental and financial motives were perceived to be incompatible.

The most striking feature of the Views of Scotland and Country Guardian documents is their 'us-and-them' nature. The developers are set up as the opposition and the planning process and subsequent appeals are portrayed as battles where opponents must fight for their rights. The Views of Scotland document is said to be designed to help opponents 'through the maze of planning legislation and the pitfalls that lie in your path due both to the nature of the

planning process and to the efforts of developers to thwart your legitimate right to object to a proposal' (2002:1).

Developers are explicitly caricatured as devious, manipulative and ill-intentioned money-grabbers. This is made plain in one section of the Views of Scotland document which is entitled 'Some general observations' and consists of 'mock guidance to a developer', although it is noted that this 'may not apply in every case' it is said to be 'based on experience' (Views of Scotland 2002: 14). The language of this section is highly sensational and clearly designed to arouse anger in potential opponents. For example, stage one reads as such: '*Sneak* in a monitoring mast but do not engage locals in discussion [...] All you need is a planning application. Best do this in summer when people are away' (*ibid:* 14, emphasis my own). Further, stage eight, (the construction of the wind farm), reads as follows;

> This bit is easy. Build your power station. Don't worry too much about adhering to your Environmental Statement. By now most councils are glad that the furore has died down and will not look too closely at whether your turbines are the right height or in the correct position, whether you have carried out the mitigation measures you promised, whether construction waste has accidentally polluted the water courses or just how much collateral damage has been created by careless construction crews.
> *Note*: Despite promises made to the local community during earlier stages, you will usually find it cheaper to import labour and house it in caravans rather than pay money for local contractors or for bed and breakfast accommodation.
> (*ibid*: 15)

Such depictions of developers and their intentions clearly casts them as the 'bad-guys' and consequently suggests that opponents are the 'good-guys' who must fight for their beliefs and what is deemed to be *right*. 'Anti-wind industry objectors portray themselves not simply as defenders of valued local environments but also as grassroots defenders of the democratic process' (Barry *et al* 2008: 77). This is apparent in the last statement of this section of the document which reads;

> *Caution*: Your plans can be thrown off course at any stage by well motivated, intelligent and dedicated people from the local community. If someone realises that your fine words about the environment are merely there to disguise your quest for the last drop of profit then things could become sticky.
> (Views of Scotland 2002*:* 15).

The fight between developers and opponents is portrayed as an ongoing war in which objectors, (viewed to have a legitimate and honourable motive), must never cease to battle against developers, (who, in turn, are viewed to have far less honourable motives). Even if a local group loses their case against a particular local proposal they are urged to continue fighting; 'the developer may well have won. All you can do then is to publicise everything that the developer does that degrades the environment, and monitor noise levels and bird

deaths. You may have lost one of your hills, but every bit of adverse publicity for windfarms helps to win the war' (www.countryguardian.net/fight.htm).

This notion of a war, and the strongly held belief that developers are 'in it for the money' may create problems for developers wishing to engage in participatory or inclusive processes. Opponents who share the strong beliefs expressed through the two documents mentioned are unlikely to be open to consultation or compromise. This raises some important considerations: In order for local opposition to wind power developments to represent constructive expressions of democracy, they must *be constructive.* Where developers or planning officials and local community members engage with one another in debates about planning applications there is scope for constructive dialogue, compromises and social learning, however if local opponents to a particular development boycott such opportunities then they are blocking rather than partaking in democracy. Similarly, developers or planning officials can encourage or constrict the roles played by local community members through the opportunities that they present and the capacities which they allow. The notion of a war, demonstrated above, is likely to have arisen at least in part from the perception that developers are not willing to allow such opportunities and that they have little or no willingness to compromise or to take into consideration the particular views or concerns of local community members.

### 3.9 Social Learning

Where meaningful participatory approaches are taken the design and planning processes may be extremely constructive and beneficial for all parties involved. Just as experience of wind power has been argued to lead to more positive attitudes of the technology, so experience of wind power controversies, it has been suggested, could lead to better understandings of not only the particular technology but also the wider system in which it is located. Bunting (2004) argues that controversies, such as those surrounding wind power proposals, 'can expose not only the sociopolitical interests of protagonists, but also the contingency of technological change, and that we have choices about our technological future.' As such, by bringing these aspects to light such controversies 'offer an opportunity for greater public learning [...] Through controversies, society may learn not just about the specific technology under debate, but also about the system in which it is to be embedded' (Bunting 2004: 2). Therefore, controversies surrounding wind power planning applications should not be treated as unconstructive or destructive occurrences, but rather as potentially very constructive, beneficial opportunities for local communities, as well as wider society, to learn about energy production and related issues, and, as Bunting suggests, this could have enormous potential to change the way that members of the public view their relationship with electricity.

Bunting notes that where environmentalists respond to wind power opponents they do not address the technical concerns but rather rely heavily on their central argument – 'that the benefits of wind power – reduced greenhouse gas (GHG) emissions – far outweigh its detriments' (Bunting 2004: 2). However, wind power opponents are typically said to prioritise local concerns over (global) environmental benefits so, if this characterisation is true, such arguments effectively fall on deaf ears.

Further, Bunting (2004) suggests that processes of social learning linked to debates around wind energy could increase awareness and understanding not only of electricity supply issues, but also those related to demand. Thus, she anticipates that a shift in society's way of looking at energy and electricity could occur which could change the emphasis from energy production to energy efficiency, and potentially have a strong impact on emissions reduction and climate change mitigation.

### 3.10 Summary and Implications

There is an ever-expanding literature relating to community and individuals' responses to wind power developments. However, a key problem with the existing literature is its predominantly partial approach. The literature typically comes from an unreflectively and uncritically pro-wind position and sees the achievement of national targets for renewable energy development as a key goal. This position informs research questions, (and ultimately the conclusions thereof). This perspective also restricts possible understandings and explanations of individuals' or communities' attitudes or reactions towards proposed wind power developments: Given that commentators largely appear to regard objectors to wind power developments as inherently wrong or misguided they are unable to fully engage with, or appreciate the experiences and perceptions of objectors. Moreover, the majority of the literature clearly aims to understand opposition to wind power developments in order to inform policy or development practices so as to mitigate or avoid opposition in the future. This managerial approach means that there is little consideration of the merits of objectors' arguments or of their experiences (other than in discussions relating to how these experiences could be altered so as to secure greater support). Such an approach ultimately serves to severely limit our understanding of individuals' and communities' reactions to wind power developments, and prevents us from fully appreciating the realities of their experiences with the design, planning and development processes.

Furthermore, as was set out at the beginning of this chapter, much of the literature starts by attempting to explain the apparent contradiction that although the majority of the public are

supportive of wind power particular proposed developments are met with significant local opposition, however such statements are typically not backed up with meaningful proof. This chapter has highlighted how the literature frequently refers to opinion poll data to suggest that the majority of the public are supportive of renewable energy and wind power in particular. However, the literature does not explicitly detail the findings of such polls nor does it engage critically with this data. As such opinion polls are taken as providing 'facts' which need no further scrutiny or analysis, this is, however, a somewhat naïve approach to take. The following chapter will discuss further the limitations of such a positivist approach; however, here it is useful to draw attention to the ways in which the wind power literature maintains and perpetuates the conviction that the majority of the public support wind power without providing conclusive evidence of this phenomenon. Furthermore, it is important to acknowledge that this conviction is central to the vast majority of literature in this field and as such its maintenance is crucial to the various arguments which are made in relation to wind power opponents.

This conviction has played an especially central role within the simplistic characterisations of opponents and supporters which persist within the literature and portray each as being diametrically opposed to one another. Such accounts (for example Krohn & Damborg 1999) present caricatures of opponents as short-sighted and self interested and supporters as altruistic and seeing the bigger picture. These caricatures have been demonstrated to be unsophisticated and inaccurate. Barry *et al* (2008) and Ellis *et al's* (2007) studies are particularly useful for illustrating the countless different forms that both opposition and support can take and the similar concerns and interests which can exist between supporters and objectors. The literature has began to call for more nuanced and sensitive considerations of individuals' and communities' responses and attitudes towards wind power developments, however, the aim of understanding opposition in order to overcome it so as to progress towards national targets remains a key motivation in this field. As such the limitations set out above remain in place.

Given this managerial, and essentially manipulative, approach it is perhaps somewhat ironic that the literature consistently points towards the need for greater trust between developers and local communities. There is a growing emphasis on the need to employ participatory approaches, however, the intention is to engage with communities in order to appease them (rather than to facilitate democratic processes). As such the participation which is advocated within much of the literature may be cosmetic in nature – serving a legitimating purpose for projects about which the key decisions have already been taken. True participation must entail willingness on the part of the developers (or planners) to abandon their plans if the

participatory exercises point to that as being the appropriate course of action. Participation which exists merely to appease potential opponents is insufficient. In this line the criticisms and dangers of participatory techniques, outlined above, must be borne in mind.

Currently, the wind power literature is severely impeded by the strong and partial views underpinning it, and as a result accurate and impartial portrayals of individuals' or communities' experiences of wind power planning processes are lacking. This thesis cannot attempt to address issues such as whether or not wind power is an appropriate or necessary technology or whether Government energy policies are 'correct', as such it will not attempt to identify any particular arguments or points of view as being 'right' or 'wrong'. In this way it is hoped that the thesis will provide a much needed impartial account of the experiences of wind power opponents (as well as supporters and developers). It is not intended to identify ways in which objectors might be overcome or appeased – indeed this is not seen to be necessarily desirable – instead it is intended to faithfully and accurately recount the processes of planning wind power developments as they are perceived by different actors. Thus the key research questions are;

What is the reality of individuals' and communities' experiences?
What role do objectors play within planning processes?
What role does the planning process itself play?
Who possesses power within the processes?

As noted earlier in this chapter, there are conflicting accounts as to the precise role and influence of objectors within planning processes; much of the literature suggests that local objectors are key obstacles to meeting national renewable energy targets, however, it has also been suggested that the vast majority of wind power planning applications are, in fact, approved (especially within Scotland) (Toke 2005a, 2005b). In answering the research questions set out above, it is hoped that this research will go some way to identifying the true role played by local opponents to wind power developments. Furthermore, the thesis will illustrate the realities of individuals' experiences of the planning system. Hence the management of conflicting policy goals relating to renewable energy development and public engagement/participation within the planning system will be examined in order to uncover how such policy commitments are put into practice. Since a key limitation of the wind power literature relates to its (in)ability to understand individuals' or communities' experiences with wind power developments, the following chapter will outline the theoretical perspectives which will be employed within this research.

## 4.0 Defining a Theoretical Lens

### 4.1 Introduction

The previous chapter provided an overview of the literature related to public responses to wind power developments. However, it was noted that this literature provides only limited, and typically partial, understandings of individuals' or communities' attitudes and reactions to wind power developments. Therefore, it is felt necessary to take a more holistic and impartial approach to examining this subject. This chapter therefore sets out the theoretical lens(es) which will be used in this research. Whilst much of the wind power literature treats the issues associated with wind power development as though they were unique or exceptional, this research will suggest that they are representative of wider debates about science and technology in society.

This research is essentially concerned with how members of the public – lay people – interact with and react to scientific or technical developments (in this case a wind farm). This is a topic about which there exists a vast and highly interesting literature. Although it is not possible to embark on a comprehensive review of this literature, the chapter will summarise the main arguments found within the field of Science and Technology Studies (STS). It will be shown that science has long held a 'special' status within society, and particularly in relation to technical decision-making. However the STS literature challenges the basis of this 'special' status, and suggests that scientific disciplines and forms of knowledge are not significantly different from other disciplines or knowledges. Thus, science is not seen to be beyond scrutiny from either social scientists or lay publics. This then raises important questions as to the appropriate roles to be played by lay people (as well as experts) within decision-making relating to technical or scientific matters. Here it will become apparent that such debates are closely related to the central topic of this research. Notably the roles of 'lay expertise' and local knowledge will be considered and it will be shown that the inclusion of such alternative knowledges within technical decision-making is essential for ensuring democratic processes.

Thus, the STS literature provides a theoretical lens through which to view the planning and decision-making processes related to wind power development, and particularly the roles which are played both by experts and lay people. Additionally, this research aims to assess the power which is exerted within such processes. The chapter will therefore set out how the concept of power is to be understood within this research. It will be acknowledged that this is a concept which is open to many different definitions and interpretations. It is possible to interpret 'power' in very limited ways and hence to overlook numerous forms of 'covert' power which are exerted

within political processes. However, this research will aim to recognise and illustrate different levels at which power is exercised and the complexities of identifying the potentially multiple forms of power at play within decision-making processes. To this effect Lukes' Three-Dimensional View of Power is considered to offer a useful theoretical lens.

## 4.2 Challenging the Traditional View of Science

Traditionally science has been viewed as 'special' due to its particular methods and 'rigour' which were seen to set it apart from socially influenced activities. Popper (1959) famously contended that the special character of science lay in its use of hypotheses and theories which could be falsified. He contended that no amount of affirmative observations could definitively prove a hypothesis to be true, but that this could be falsified by just one finding which disaccorded with the hypothesis. He illustrated this point by arguing that the hypothesis that 'all swans are white' could not be proved definitively true by any number of sightings of white swans, but could be falsified by just one sighting of a black swan. Popper argued that this understanding of rigorous scientific method set 'pure' science apart from other forms of 'pseudo' science which were seen to be more flexible and subjective. However, as Yearley (2005) notes, this rigid idea of scientific method is not an accurate portrayal of actual scientific practice and later writers have adapted Popper's theory to allow greater levels of flexibility. As such the clearly defined distinction between 'pure' and 'pseudo' science set out by Popper is somewhat lessened. Since that of Popper many other theories have arisen to attempt to define why science is special, (for example; Merton 1973, Kuhn 1977), however such theories have faced considerable criticism and challenge by academics in the area of Science and Technology Studies (STS).

A key contribution of STS has been to highlight the many ways in which social factors and influences enter into scientific processes and practices. For example it is noted that observation and measurement, typically portrayed by positivist scientists as being objective, inevitably requires a degree of interpretation and that social influences enter into such processes at every stage – from the initial conception of problems or research questions, to the selection of methods or samples, to the recording and interpretation of results. For example, Latour and Woolgar (1979 [1986]) observed that whilst scientific practices are typically perceived to be well ordered and logical;

> The elimination of alternative interpretations of scientific data and the rendering of these alternatives as less plausible is a central characteristic of scientific activity. Consequently, the practicing scientist is likely to be as much involved with the task of producing ordered and

> plausible accounts out of a mass of disordered observations as is the outside observer. […] actual scientific practice entails the confrontation and negotiation of utter confusion.
> (Latour & Woolgar 1979[1986]: 36)

Furthermore, scientists must be trained to use the appropriate and accepted methods and this ultimately represents a social process whereby 'apprentice' scientists are inducted into the field, and inherit the necessary 'tacit knowledge'. This is well illustrated by Campbell (2003) who provides an interesting account of the 'socialization and enculturation' processes of graduate science students and argues that 'as with other social groups' these processes 'are an integral aspect of what constitutes science' (Campbell 2003: 898). It is shown that far from merely learning the technical skills necessary for conducting science, trainee scientists go through a social process whereby 'they become indoctrinated with an exceptionalist view of scientific enterprise that emphasizes the (mistaken?) impression that science is a highly stable field of human endeavour' (*ibid*: 923). Moreover, it is noted that a significant amount of scientists' daily activity is focussed on preparing the 'next generation' of scientists and this activity results in the new scientists contributing significantly to the accomplishment of the goals and objectives of the existing scientific community. Campbell contends that what makes this socialization process special is 'the fact that members of the scientific community expend great effort to make their worldview seem as natural as possible. In other words, as the socialization process continues it should become more and more difficult for the new member to see how things could be otherwise' (*ibid*: 900).

Explorations, such as this, of the realities of scientific practice have highlighted and illustrated the social nature of science and the similarities between science and other disciplines (such as the social sciences or even arts). Interestingly, whilst many take such examples as a means of contesting the 'special' status of science, Campbell (2003: 923) argues 'that the processes of interaction and interpretation, in fact, constitute the very integrity of science'. Likewise, Salk (1979[1986]) contends that:

> Science, in general, generates too much hope and too much fear […] If the public could be helped to understand how scientific knowledge is generated and could understand that it is comprehensible and no more extraordinary than any other field of endeavour, they would not expect more of scientists than they are capable of delivering, nor would they fear scientists as much as they do.
> (Salk 1979[1986]: 13)

Nevertheless, the 'special' status of science must be called into question if one acknowledges that social, cultural or personal factors enter into scientific decision-making or processes.

The traditional view of science suggests that science has authority because of its rigorous processes and methods, however, as Gieryn (1999: 27) contends, society cannot adequately understand what actually happens within science, instead: 'Epistemic authority is decided downstream from all that'. Gieryn (1999) argues that it is only after science leaves the laboratory and enters society in the form of claims to facts or knowledge or new innovations that it is given or denied credibility. It is not through the science itself, but rather the social or cultural positioning of science within society that science gains its authority and prominence. Thus, the achievements of science are social achievements – rather than direct results of 'objective' scientific practices.

Bloor's seminal work *Knowledge and Social Imagery,* first published in 1976, played an important role in refuting the notion that science was somehow 'special' or exempt from social inquiry. It promoted the examination and consideration of interactions between the cultural setting in which claims to knowledge are made and those claims themselves. He argued that; 'All knowledge, whether it be in empirical sciences or even mathematics, should be treated, through and through, as material for investigation' (Bloor 1976: 1). Bloor contended that up until that point while STS had examined the institutional and social contexts in which knowledge was located, knowledge itself had evaded examination. For example, he contended that whilst errors or mistakes within science routinely led to investigation and enquiry, 'successful' scientific practices and knowledge creation were treated as natural occurrences;

> The general structure of these explanations stands out clearly. They all divide behaviour or belief into two types: right or wrong, true or false, rational or irrational. They then invoke causes to explain the negative side of the division. Causes explain error, limitation and deviation. The positive side of the divide is quite different. Here logic, rationality and truth appear to be their own explanation. Here causes do not need to be invoked.
> (Bloor 1976: 6)

In this way knowledge and science were seen as essentially rational and hence studying these phenomena was irrelevant and unnecessary. This argument would however, serve to maintain the 'special' status of science. Thus, Bloor argued that a symmetrical approach to studying science and knowledge was needed – that is that the same forms of investigation should apply to both 'true' and 'false' beliefs and to successes as well as errors.

Bloor's (1976) book set out what was termed 'The Strong Programme' in the sociology of scientific knowledge (SSK) and central to this programme were four tenets which Bloor contended SSK should adhere to. These were;

1. 'It would be causal, that is, concerned with the conditions which bring about belief or states of knowledge […]
2. It would be impartial with respect to truth and falsity, rationality or irrationality, success or failure […]
3. It would be symmetrical in its style of explanation. The same types of cause would explain, say, true and false beliefs.
4. It would be reflexive. In principle its patterns of explanation would have to be applicable to sociology itself […] otherwise sociology would be a standing refutation of its own theories'.

(Bloor 1976: 4-5)

Interestingly, Bloor contended that sociology should as far as possible reflect the approaches and methods of science, he asserted that SSK should 'proceed as the other sciences proceed and all will be well' (*ibid*: 141). This is perhaps a curious approach to take given that a central aim of SSK is to challenge and question scientific practices and processes. On the one hand this approach serves to further challenge the 'special' status of science by demonstrating that it is not so different from the social sciences that its methods and approaches cannot be applied in this context. On the other hand, it may be taken to reaffirm the value and rigour of science. Bloor responds to such criticisms by stating:

> I am more than happy to see sociology resting on the same foundations and assumptions as other sciences [...] Really sociology has no choice but to rest on these foundations […] For that foundation is our culture. Science is our form of knowledge. That the sociology of knowledge stands or falls with the other sciences seems to me both eminently desirable as a fate, and highly probable as a prediction.
>
> (Bloor 1976: 144)

Bloor's work generated some fervent and angry responses from those who wished to guard the 'special' status of science. As Cooper (1999) commented, some critics of STS (and SSK in particular) found it to be 'advancing an unacceptable form of relativism, claiming that knowledge is a social construct, even that reality is a social construct, and therefore that all forms of knowledge are therefore in principle equivalent'. However, Bloor did not intend to contest the existence of knowledge or reality but rather to set these aside 'for analytic purposes' (*ibid*). 'Social processes are at work in the formation of all beliefs, and it is the job of the sociology of knowledge to examine the sociological aspects of those processes, not to judge whether or not the particular beliefs are "true"' (Gregory & Miller 1998: 65). Naturally this angered many within the

field of 'pure' science who felt that it was inappropriate to consider accepted scientific knowledge on a par with 'false' or unproven beliefs such as witchcraft or astrology.

### *4.2.1 Science Wars*

Such controversies have resulted in a heated and ongoing debate between proponents of STS and defenders of 'pure' science – this debate has been labelled 'Science Wars'. Gross and Levitt (1994) set out the key objections to STS in their book entitled *Higher Superstition: the academic left and its quarrels with science*. Here they express their aggravation at 'a particular breed of historians and sociologists of science' who are said to be 'spin[ning] perverse theories'( Gross & Levitt 1994: 43), and contend that natural scientists ('at least those with a sense of fair play' (*ibid*: 42)) typically treat those in other disciplines with professional respect. As such the discussion and critique of natural sciences by sociologists is seen as being inappropriate and even offensive. Furthermore, it is felt that by contending that social factors play a role in shaping science, or what is deemed to be accurate knowledge, STS is undermining and having a detrimental effect on the status of science. Proponents of STS, however, argue that there is no justification for guarding the privileged status of science and that no form of knowledge should be impervious to investigation. By examining the social processes taking place within science, sociologists are not denying that science can provide meaningful or valid outcomes which are unique to the discipline, but equally they are not pretending to be in a position to deem which 'facts' are true and which are false instead they can consider how such 'facts' become dominant and how knowledge is constructed and interpreted. In so doing it becomes apparent that knowledge is not a straightforward phenomenon which exists in a real and pure sense, but rather it is the result of social struggles and competition between conflicting knowledges.

Perhaps, one of the most enlightening insights to emerge from the field of STS is the frequency and level of disagreement and controversy which exists *within* scientific fields. Collins and Pinch (1993) provide a vast array of illustrative examples to show the contested nature of science and far from re-affirming the image of science as an objective body of knowledge and 'facts' they demonstrate that it is in actual fact a messy and confusing discipline which provides little certainty or clarity. Moreover, they show that the success or failure of particular scientists or theories depends less on the rigour or accuracy of their methods and far more on their levels of funding or financial and/or political support. As Jasanoff (2003: 393) notes:

> expertise is not merely something that is in the heads and hands of skilled persons, constituted through their deep familiarity with the problem in question, but rather [...] it is something acquired, and deployed, within particular historical, political, and cultural contexts. Expertise

> relevant to public decisions [...] responds to specific institutional imperatives that vary within and between nation states. Accordingly, who counts as an expert (and what counts as expertise) in UK environmental or public health controversies may not necessarily be who (or what) would count for the same purpose in Germany or India or the USA.

Thus: 'The contexts within which knowledge is produced are not simply an irrelevance or a matter of marginal historical interest (as 'text-book' accounts of science suggest). Instead, social, institutional and cognitive processes are central to the constitution of scientific understanding' (Irwin 2001: 75).

### 4.3 The Public's Relationship with Science

Hajer (1995) argues that within modern society knowledge has become centralised and policy and decision-making in almost all sectors is said to be dominated by experts with few people outside this elite group able to voice their opinions or influence outcomes. He contends that science has become an 'authoritarian force', which has had very negative consequences. The centralisation of knowledge has effectively removed democracy from science and policy, and for this reason Cohen (1997) argues that science and technology must be democratised. He (Cohen 1997) contends that without this democratisation the public will grow ever more sceptical and suspicious of science and related institutions (including political institutions) and thus these will lose their legitimacy.

Such a loss of confidence in science has been noted within the UK, where the House of Lords Science and Technology Committee (2000) stated that there is a 'crisis of trust':

> Society's relationship with science is in a critical phase. [...] On the one hand, there has never been a time when the issues involving science were more exciting, the public more interested, or the opportunities more apparent. On the other hand, public confidence in scientific advice to Government has been rocked by a series of events, culminating in the BSE fiasco; and many people are deeply uneasy about the huge opportunities presented by areas of science including biotechnology and information technology, which seem to be advancing far ahead of their awareness and assent. In turn, public unease, mistrust and occasional outright hostility are breeding a climate of deep anxiety among scientists themselves.
> (House of Lords 2000: 1.1)

Science is no longer celebrated or viewed as holding a privileged position within (or above) society, but instead: 'Scientific judgements may be routinely doubted and associated with vested interests. To say that something is 'scientifically proven' is now as likely to be voiced ironically as literally' (Yearley 2005: *xiii*).

Gregory and Miller (1998) have observed that the increasing scepticism of, and loss of deferential respect for, science did not go unnoticed by the scientific establishment. They noted that in the latter half of the twentieth century science came to be perceived to be 'under threat' since it was acknowledged that public acceptance of science was necessary for securing or maintaining research funds and support, as such 'scientists around the world began to wonder if the relationships between science and the public perhaps needed a little attention' (Gregory & Miller 1998: 3).

> As a play could not exist without spectators, so the grand narrative of progress through science and technology demands assenting publics to maintain its hold on the collective imagination, not to mention the purse-strings. Not only the credibility of science but the utility of the state's knowledge-producing endeavours must be repeatedly brought home to citizens.
> (Jasanoff 2005: 248)

The Public Understanding of Science (PUS) movement arose in response to this perceived threat to science. Essentially it was felt that in order to increase public acceptance or deference for science one need only 'improve' the public's *understanding* of science. 'Both public understanding of science and scientific literacy have been deemed to be "a good thing", and demands have been made – by scientists, politicians, and educators – for more of them' (Gregory & Miller 1998: *ix*). Ultimately this represents a deficit model and the central premise, therefore, is that in instances where the public is hostile to new technologies or scientific discoveries/innovations this is a result of ignorance or lack of understanding, and as such this can be 'corrected' through better dissemination of knowledge (Jasanoff 2005:250). Such a line of reasoning was reflected within the literature reviewed in the previous chapter, where many arguments have been made to suggest that public opposition to wind power developments reflects ignorance about wind power and that this opposition eases when members of the public have greater experience, or understanding of the technology (e.g. Krohn & Damborg 1999, Scottish Executive 2003, Warren *et al* 2005).

PUS has come to gain great prominence in recent decades, and as Jasanoff (2005) notes a vast array of scientific bodies have acknowledged and promoted the movement, however, she comments that the numbers of bodies taking up PUS and the activities that are entered into 'say less about how publics know things in contemporary societies than they do about the presumptions underlying scientists' (and secondarily the state's) expectations of what publics should know' (Jasanoff 2005: 252). PUS is typically studied through surveys which normally take the form of 'pop-quizzes' to test the public's awareness and attitudes about certain scientific issues. The results of such surveys have all too often appeared to demonstrate alarmingly low

levels of knowledge on the part of the public and hence indicate a need for more or better science education. For example, Jasanoff (2005: 253) recounts that in one survey respondents were asked whether the statement "Ordinary tomatoes do not contain genes, while genetically modified tomatoes do" was true or false. Out of all the respondents in Europe only about one third answered correctly (i.e. false). 'Findings like this have led many to conclude that support for GM products like the Flavr Savr tomato would have been higher if only people had known that all tomatoes contain genes' (*ibid*: 253). However, within STS surveys such as these have been widely criticised. It is noted that whilst the surveys highlight what the public does *not* know, they are not helpful at indicating what the public *does* know. As such the oft-quoted results of PUS surveys do not necessarily provide accurate or meaningful indications of the public's understanding or level of knowledge in relation to science, and, as demonstrated by Wynne (1995), have even, on occasion, produced contradictory findings.

Perhaps a more fundamental problem with the PUS model lies in its inherent bias: 'the quiz format necessarily assumes that scientists are in the right and that all that is in question is the extent to which the public has 'got' the right answer represented by scientific belief' (Yearley 2005: 118). The surveys do not offer the opportunity for respondents to give detailed responses or to express their opinions *vis-à-vis* particular scientific issues, nor do they portray people's varying interests or allow people to express alternative knowledges. Within PUS science 'is taken as unproblematic, universal and invariant, equally understandable in principle in all places and at all times. Failure to understand science then becomes a meaningful dimension of difference among individuals and communities' (Jasanoff 2005: 249). People are designated along a spectrum running from 'knowledgeable' to 'ignorant' but their real experiences with science are not taken into account. It is impossible to know whether an individual with a low score in fact disagrees with a particular area of science and hence refutes its validity, as opposed to simply being uninformed. Moreover, the underlying assumption that greater knowledge or understanding of science results in greater acceptance has not been proved. As Irwin (2001) observes the public receives scientific information and (conflicting) 'facts' from a wide variety of sources and as such 'understanding' is not a simple process through which individuals receive the 'correct' knowledge. In many cases increased knowledge of science, or scientific processes might in fact lead to lower acceptance, especially when this means that one becomes aware of competing and conflicting scientific theories or ideas. Certainly in the case of wind power there is an unusually high level of awareness about the science among certain members of the public but this has resulted in both support and opposition for the technology (Barry *et al* 2008). As Devine-Wright

and Devine-Wright (2006: 244) have observed: 'There is now a proliferation of diverse civic organisations openly contesting or supporting the legitimacy of government policy for renewable energy generally and wind energy particularly'.

For these reasons Jasanoff (2005: 250) suggests a need to 'move away from *a priori* assumptions about what publics should know or understand of science. Instead, we [ought to] pose the question, salient in any democracy, how knowledge comes to be perceived as reliable in political settings, and how scientific claims, more specifically, pattern as authoritative'. If one accepts the social, and at times political, nature of science and technology, then the study of society's relationship with science and technology becomes highly salient. As the public is said to be increasingly aware and sceptical of science so their relationships with it become more complex. Gone are the days where it was possible to conceptualise science as 'speaking truth to power', now science is seen as being influenced by political and social processes at its very core and as providing conflicting knowledges which may, in many members of the public's eyes, have little to do with 'truth'.

In response to the complex relationships between science and the public, Jasanoff (2005) suggests a new way of considering the public's relationship with science and technology through the concept of 'Civic Epistemology'.

> Civic epistemology refers to the institutionalized practices by which members of a given society test and deploy knowledge claims used as a basis for making collective choices. […] modern technoscientific cultures have developed tacit knowledge-ways through which they assess the rationality and robustness of claims that seek to order their lives; demonstrations or arguments that fail to meet these tests may be dismissed as illegitimate or irrational. These collective knowledge-ways constitute a culture's civic epistemology; they are distinctive, systematic, often institutionalized, and articulated through practice rather than in formal rules.
> (*ibid*: 255)

The concept of civic epistemology offers an interesting an insightful lens through which to consider public responses to particular scientific claims or innovations – and is particularly salient in the case of responses to wind power. Jasanoff (2005) suggests that individuals are able to question and challenge experts' claims and to present alternative knowledges based on their own experiences or expertise (which does not necessarily conform to the traditional notions of expertise or knowledge as they are conceptualised within scientific disciplines). A public's civic epistemology determines whether scientific claims are accepted as being rational or appropriate and where they are not the public will find alternative ways of conceptualising the issues and alternative knowledges with which to contest the science. Thus, communities faced with a

proposed wind power development will assess the developers' (or planners') claims in relation to their civic epistemology and where these do not fit will contest the claims by reference to their own existing sources of knowledge or experience.

### *4.3.1 Cumbrian sheep farmers contesting science*

A now famous case study by Brian Wynne (1992) stands out as having contributed to the understanding of lay roles in areas of contentious science. Wynne's study of Cumbrian sheep farmers affected by the fallout from the Chernobyl nuclear disaster illustrates the ways in which local people experience science and expertise and how their relationships of trust form and evolve, moreover it clearly demonstrates the value of local, lay knowledge which is typically given a marginal, if any, role within decision-making around science policy.

After the 1986 Chernobyl nuclear disaster sheep farmers in the Cumbria district of the UK faced tough restrictions on the movement and sale of their livestock due to radioactive contamination from the fallout. Initially these restrictions were intended to last three weeks and this message was confidently passed onto the farmers. Whilst the farmers were, to begin with, confident that the experts knew what they were doing, this confidence diminished as the three week period ended and the restrictions were extended for significantly longer periods of time. The farmers' perception of the experts and the science they used dramatically changed as they witnessed first hand the uncertainty of the 'facts' and the reality of their 'scientific' methods which in the field could be seen to be messy and uncertain but were later communicated to the public in the form of clear, unambiguous 'facts'. Wynne (1992) recounted how the farmers lost trust in the experts and the 'facts' that they provided, but nevertheless chose to believe them because they had no choice and no alternative.

However, Wynne's study highlights the strengths of local knowledge and the ways in which this was more appropriate and adequate than that of the experts. Given the proximity to the Sellafield Nuclear Plant, 'the farmers in the locality had long experience of the ecology of sheep exposed to (radioactive) waste. […] The scientists, however, were reluctant to take any advice from the farmers' (Collins & Evans 2002: 255). For example, at one point the scientists decided to enclose two groups of sheep in pens on a certain area of the hillside and to treat the areas with different levels of bentonite in order to examine its effect on the levels of contamination in the sheep. The farmers recounted that they had known that this experiment would not work since the sheep were not used to being in an enclosed environment and therefore this alone would have a detrimental

effect on their condition hence making valid findings impossible. The experiments were subsequently abandoned, but, tellingly, the farmers' arguments were never explicitly acknowledged.

The reality and implications of the restrictions imposed on the sheep farmers appeared to be imperceptible to the scientists and experts responsible for them. Farmers complained that the experts made unrealistic or impractical suggestions as to solutions to the farmers' problems and as such it was clear that they did not understand the situation or its potential ramifications.

> Much of this conflict between expert and lay epistemologies centred on the clash between the taken-for-granted scientific culture of prediction and control, and the farmers' culture in which lack of control was taken for granted over many environmental and surrounding social factors in farm management decisions. The farmers assumed predictability to be intrinsically unreliable as an assumption, and therefore valued adaptability and flexibility, as a key part of their cultural identity and practical knowledge. The scientific experts ignored or misunderstood the multidimensional complexity of this lay public's problem-domain, and thus made different assumptions about its controllability.
> (Wynne 1996: 67)

### *4.3.2 Public engagement*

Wynne (1996) has been critical of a large section of the STS literature in saying that whilst it views the public as being sceptical and reflexive with regards to science and technology it does not attribute meaningful agency to the public. He contends that whilst much has been written to illustrate the contested nature of science and technology and the loss of public trust, the dichotomous categories of experts and lay people have been maintained so that there is little or no consideration of the potential roles of lay people to shape and create knowledges or of their ability to develop their own meaningful knowledges independent of expertise. Furthermore, it is suggested that by maintaining this dichotomous boundary it is considered that lay people will only contest science when controversial issues are brought to their attention from *within* the discipline – i.e. by experts – this denies lay people the ability to make their own judgements about the merits of science:

> According to this widespread view, expert systems have unmediated access to nature hence peddle only natural knowledge, whilst lay publics are epistemically vacuous, and have only the emotional wellsprings of culture and ephemeral local knowledges.
> (Wynne 1996: 76)

This belief persists despite increasingly frequent commitments to public engagement or participation with science and technology, as Rowe *et al* (2005: 331) note within 'contemporary democratic societies [there is a] growth in enthusiasm within policy circles for public "engagement" or "participation" as a means of approaching certain difficult issues like the

management of risks'. This is borne out within the work of Irwin (2006: 299) who observed that 'talk of public dialogue and engagement has become increasingly commonplace in Europe – with the UK, previously criticized for its narrow reliance on sound science and administrative caution, a prominent example'. He contends that much of the language and thinking of STS has been adopted within policy on the assumption that increased public engagement or consultation on scientific and technical matters would lead to greater acceptance of technical change. This position resonates strongly with the deficit model described above in relation to PUS. However, Rogers-Hayden and Pidgeon (2007: 245) contend that 'Such processes [of public dialogue and engagement] have in many respects overtaken attempts to promote increased public understanding of science and greater science literacy through more traditional science communication methods'. Nevertheless, whilst it is possible to be optimistic that 'At least on a superficial reading, the 'old' reliance on committees of technical experts has been augmented by 'new' talk of 'science and society' and even the most science-centred government report is incomplete without a section on 'public engagement'' (Irwin 2006: 300) Irwin contends that the old problem of expert and lay statuses within policy-making and engagement processes remains.

He (Irwin 2006: 309) observes that recent policy announcements have included both commitments to public engagement and openness as well as to 'longer-established notions of sound science […] typically, one part of a document adopts the language of re-building trust while another is committed to an established economic and technical agenda'. Such apparently contradictory commitments are clear within the new Scottish planning bill (discussed in chapter two) which aims to speed up decision-making and allow quicker investment decisions whilst also 'strengthening the involvement of communities' and 'reflecting local views better' (Scottish Executive 2005c).

While it is clear that there is a growing policy emphasis on public engagement relating to science issues Irwin questions the meaning and implication of this commitment. In his examination of the UK Government's public dialogue relating to genetically modified (GM) agriculture, he noted that 'the UK Government offered no guarantee during the exercise that it would act upon the report' (Irwin 2006: 313). Furthermore, it was noted that this public dialogue was part of a broader debate about GM which also involved (though not exactly simultaneously) economic and scientific strands of debate. 'It would appear that the construction of public debate, economic and scientific reviews as three separate strands inhibited the possibility of transparent public

engagement in 'technical' analysis or of public discussion openly reflecting upon technical issues raised by the other streams' (*ibid*: 313).

In common with the argument of Wynne (1996), Irwin (2006) remarks that initiatives such as this, whilst claiming to represent meaningful public engagement and a greater commitment to incorporating lay views into decision- and policy-making actually re-establish the expert-lay dichotomy:

> The conventional wisdom generally remains that public and expert opinions should not be confused, but kept separate within decision-making processes (thus indicating once again that talk of the old deficit theory's demise is decidedly premature).
> (Irwin 2006: 315)

### *4.3.3 'Lay expertise'*

Epstein's (1995) work on lay AIDS treatment activists is very pertinent here. Epstein's case study demonstrated how a group of lay people were able to present themselves as 'credible' and hence contribute to knowledge construction in the highly scientific area of biomedical research. However, the important point to take from this research is that the 'credibility' which they attained did not come through scientists adapting their usual methods in order to incorporate lay views, but rather through the activists themselves adapting their approach and ways of communicating in order to be accepted and taken seriously by scientists. Collins and Evans (2002) suggest that this is an approach which could benefit other lay groups, for example they state that; 'the Cumbrian farmers might well have had more success in their dealings with the scientists [...] if their concerns were mediated by a Greenpeace scientist [...] such a person may have been able to phrase the problem in ways more familiar to the scientists, making it more credible (or less resistible)' (Collins & Evans 2002: 256). Such arguments imply that it is lay people who need to change or adapt if they wish to be taken seriously by experts, the notion that lay people might have valuable contributions to make themselves, and hence that experts should proactively endeavour to access this knowledge-base is denied. The onus is on lay people to be flexible and learn new styles of communication, despite the fact that it is expert knowledge which currently has a privileged status and position within society.

This notion can be seen to stem from a belief that technical decision-making is an expert domain. However, much persuasive literature exists to argue that lay people very often have their own expertise which can be of great value and relevance in technical decision-making. For example, in a study of the public's understanding of new genetics Kerr *et al* (1998) concluded that due to their

various forms of 'lay expertise' it is more useful to think of lay people as being expert in, as opposed to ignorant of, the potential impacts of genetics on their lives. Similarly, Rowe and Wright (2001) in an evaluation of empirical studies into expert and lay judgements of risk concluded that there was no proof to suggest that experts' judgements were more accurate or significantly different from those of the public. As Wakeford (1998: 12) notes; 'citizens have shown themselves to be highly capable of understanding complex scientific and technical information'. This is well illustrated by considering the important role members of the public play as jurors in courtrooms:

> Contrary to what might be expected from surveys highlighting apparent public ignorance [of] science, most studies of even the most highly technical court cases have shown citizens able to deal with technical issues at least as well as the judges. [...] Studies comparing the decisions reached by jurors compared with that reached by judicial experts found that the same verdicts were reached in 75-80% of cases. Crucially, this proportion did not change in complex as opposed to less complex cases.
> (Wakeford 1998: 13)

Similarly, Sandercock (1998) contends that lay people should play greater roles within planning processes due to their considerable and highly valuable local knowledges. She contends: 'To know a city is to know its streets, we might say. And who knows those streets better than those who live in them and use them? Who knows the needs of a village better than the villagers?' (Sandercock 1998: 79).

Irwin (2001) contends that knowledge should be viewed more as a process than a fixed entity and as such that it is intrinsically bound up with social and cultural factors. It 'is not readily separable from wider cultural understandings and everyday experience. [… and it] should not be taken to imply a static or fixed category (a body of facts) but rather a *process* of sense-making within particular social and personal contexts' (Irwin 2001: 96, emphasis in original). As such, a simple dichotomy of experts and lay people is inappropriate and unable to do justice to the vast array of different forms of relevant expertise and knowledge which exist not only on the part of experts but also of lay people. Moreover, the maintenance of a dichotomous view of expert and lay knowledge or understandings serves to remove members of the public from many important areas of decision-making in which they could potentially play valuable roles.

### 4.4 Defining Expert and Lay Roles

This chapter has so far highlighted two key points from the STS literature; firstly that science is neither infallible nor immune to social influences, and secondly that lay publics are not passive receptors of knowledge and information but instead actively shape and create their own

knowledges based on a variety of experiences and social/cultural influences. These two points have important implications for how scientific or technical matters are perceived and conducted. Given that science is recognised as being fallible and subject to social or cultural influences its 'special' status beyond (or above) society is unable to be justified – science must be considered as open to scrutiny and debate. Moreover, given that members of the public possess the ability to engage with scientific knowledge or enquiry and that they may possess their own highly relevant 'lay expertise' members of the public – lay people – are clearly appropriate, indeed necessary discussants within such scrutiny and debate.

In accepting the two points that have been made here, some fundamental questions are raised as to the appropriate roles of both lay people and experts. Whilst much of the STS literature has pointed to the breaking down of the hegemony of science and has highlighted the social factors and uncertainty which play key roles within science it has so far not created a significant change of thinking in the way that the roles of lay people are conceptualised in important areas of policy- or decision-making. As such experts remain central. This is considered a problem since;

> it is a kind of violation of the conditions of rough equality presupposed by democratic accountability. Some activities, such as genetic engineering, are apparently out of the reach of democratic control (even when these activities, because of their dangerous character, ought to be subject to public scrutiny and regulation) precisely because of imbalances in knowledge, simply because 'the public', as a public, cannot understand the issues.
> (Turner 2001: 123-124)

Turner (2001: 127) contends that 'expert knowledge masquerades as neutral fact, accessible to all sides of a debate; but is merely another ideology'. However, it is prioritised within policy based on its supposed objectivity and disinterestedness. Turner questions this 'special' status of expertise since 'the liberal state is supposed to be neutral with respect to opinions'. He contends that, whilst religion is *excluded* from politics because of its 'special' status, the 'special' status enjoyed by science means that it is given special consideration, and is even subsidised by the state; 'the state not only protects and subsidizes science, it attends to the opinions of science, which is to say it grants science a kind of authority, and reaffirms this authority by requiring that regulations be based on the findings of science or on scientific consensus, and by promoting the findings of science as fact' (*ibid*: 124).

> The true ideological basis of liberalism is thus hidden: it is really what is *agreed to be fact*, and what is agreed to be fact is, some of the time, the product not of open debate but of the authority of experts […] so liberal regimes are no less ideological than other regimes; rather the basis of liberal regimes in ideological authority is concealed under a layer of doctrinal self-deception.
> (Turner 2001: 127)

Thus, the centrality of expertise to decision- and policy-making is so engrained within society and politics that it will take a lot more than apparent commitments to 'public engagement' to create a meaningful role for lay knowledge. Moreover, what this meaningful role should be, or whether it should even *be* at all remains an area of debate. Collins and Evans (2002: 269) maintain that 'it would be disastrous to solve the Problem of Legitimacy by dissolving the distinction between expertise and democracy'. They (Collins & Evans 2002: 239) contend that sociologists have focussed so much on demonstrating the ways that scientific knowledge is *like* other knowledge, that they are no longer able to say why or how it is *different* from other knowledge; 'Sociologists have become so successful at dissolving dichotomies and classes that they no longer dare to construct them'. As such they propose to do just that. They identify two waves of STS and propose a third wave which they dub 'The age of Expertise' (*ibid*: 250). In order to illustrate their argument it is worth summarising the 'waves' which they identify.

> To simplify outrageously, let us say that there was once what seemed to many to be a golden age before 'the expertise problem' raised its head. In the 1950s and 1960s, social analysts generally aimed at understanding, explaining and effectively reinforcing the success of sciences, rather than questioning their basis.
> (*ibid*: 239)

Under the first wave of STS the 'special' status of science was not challenged and as such the roles of experts and lay knowledges were not matters of debate; 'it was inconceivable that decision-making in matters that involved science and technology could travel in any other direction than from top down' (*ibid*: 239).

> What is shown under Wave Two is that it is necessary to draw on 'extra-scientific factors' to bring about the closure of scientific and technical debates – scientific method, experiments, observations, and theories are not enough.
> (*ibid*: 239)

The second wave is said to have run from the early 1970s onwards (and continues today). This wave was one of 'social constructivism'. This essentially focuses on the formation of scientific consensuses and 'knowledge', and has served to break down dichotomies of experts and lay people and to the challenge the hegemony of science.

The third wave proposed by Collins and Evans is not intended to replace the second wave (as the second replaced the first) but rather is intended to complement and build on it.

> The aim is to approach the question of who should and who should not be contributing to decision-making in virtue of their expertise. Crucially, rights based on expertise must be understood one way, while rights accruing to other 'stakeholders', who do not have any special

> technical expertise, must be understood another way. Stakeholder rights are not denied, but they play a different role to the rights emerging from expertise.
> (*ibid*: 249)

Thus, Collins and Evans propose recreating, at least partial, boundaries between experts and lay people and acknowledging a 'special' role and status for science and expertise. They contend that given all that has been learnt within the second wave that expert and political rights would be much more balanced than they were previously under the first wave. 'The bottom line advocated by [Collins and Evans], then, is that there can be too much as well as too little public involvement in technical decision-making, and we need better conceptual tools with which to determine how much is 'just right' in any given situation' (Jasanoff 2003: 390).

Inevitably, Collins and Evans' argument provoked critical reactions from many within the field of STS (for example Jasanoff 2003, Wynne 2003, Rip 2003). Jasanoff's (2003) criticisms centred around three key problems identified within their argument:

> (1) a misleading characterization of the relevant science studies literature; (2) a misconception of the foundations of expertise in the public domain; and (3) a misunderstanding of the purposes of public participation in contemporary democratic societies.
> (Jasanoff 2003: 391)

Crucially, Jasanoff (2003) contends that Collins and Evans set out to answer the 'wrong' question; 'They asked: 'Should the political legitimacy of technical decisions in the public domain be maximized by referring them to the widest democratic processes, or should such decisions be based on the best expert advice?'. However Jasanoff contends that; 'The issue [...] cannot be formulated in these simple either-or terms. We need both strong democracy and good expertise to manage the demands of modernity, and we need them continuously'. She therefore, suggests that the more appropriate questions to ask relate to 'how to integrate the two in disparate contexts so as to achieve a humane and reasoned balance between power and knowledge, between deliberation and analysis' (*ibid* : 398).

Similarly, Wynne (2003) contends that Collins and Evans;

> embed the presumptions of the prevailing epistemic culture, reproducing narrow definitions of public meaning as if they are objective and natural. Their approach thus deletes any social and epistemic questions about how public meanings, issue-framings and definitions of the focus and framing of 'proper' knowledge, are established and presumptively imposed. By default, they thus subscribe to and reinforce a questionable partisan version of these questions rather than reflect upon them, or raise possible alternatives and their different implications.
> (Wynne 2003: 408)

Furthermore, he contends that their assumption that 'real' expertise *exists* 'impl[ies] a return to the First Wave' (Wynne 2003: 403). As such it is argued that in setting aside the 'Second Wave' of STS Collins and Evans largely fail to see the depth and complexity of issues examined here. They assume that 'the most powerful argument for wider lay participation in expert decision-making is [...] that the public possesses some mysterious reservoir of lay expertise that is equal to the knowledge of scientists' (Jasanoff 2003: 397). However, they therefore fail to consider a number of more pressing motivations, for example that within democratic societies all decisions should be as far as possible public decisions, or that public engagement serves important roles in 'test[ing] and contest[ing] the framing of issues that experts are asked to resolve' (*ibid.*: 397). Furthermore, without the participation or scrutiny of the public, expertise could be used to perpetuate unjust points of view and to bestow too much power on the institutions within which the expertise is constituted (*ibid.*). Additionally, public participation can ensure that expertise conforms to cultural standards for the production of reliable knowledge – that it is in accordance with the given culture's civic epistemology (*ibid.*).

Collins and Evans fail to consider the diversity of roles which lay people can play, and multiple rationales for promoting greater participation. They presume that it is possible, and importantly also beneficial, to identify boundaries between experts and lay people, as such their 'form of realism seems to demand unconditional surrender to dominant, often scientistic, frames of meaning' (Wynne 2003: 413).

This represents an ongoing and challenging debate within the field of STS. Although it is widely accepted that lay knowledge is valuable and ought to play a role within decision-making processes, the extent of what this role should be or how it could be facilitated remains a subject of debate. This has clear and pressing implications for planning theory. As Rydin (2007) notes planners must struggle with the dilemmas of including multiple and non-traditional forms of knowledge in ways which will enable practical and decisive outcomes. Rydin follows Collins and Evans' line of thinking in aiming to distinguish between knowledge claims which are based on expertise and others which are ethical or experiential. Importantly, she suggests that these ought to be treated differently within planning processes. However, others such as Sandercock (1998) suggest that lay knowledges ought to form key considerations within planning and that planning must move away from traditional, modernist ideas of knowledge and expertise:

> There are different kinds of appropriate knowledge in planning. 'Art or science' is the wrong way to phrase the question. Which knowledges, in what situations, is more to the point. Local communities have experiential, grounded, contextual, intuitive knowledges, which are manifested

> through speech, songs, stories, and visual forms […] rather than the more familiar kinds of planning 'sources' […] Planners have to learn to access these *other ways of knowing*. (Sandercock 1998: 30, emphasis in original)

Sandercock therefore emphasises that the planning system itself must become more responsive and accommodating to alternative knowledges and must strive to reflect these in its processes and outcomes. This thesis will examine how this works in practice.

## 4.5 Defining Power

Much of the STS literature essentially relates to relationships of power and particularly how the maintenance of boundaries between expert and lay knowledge has served to maintain and reinforce the power of decision-making elites. The concept of power is highly salient to this research; much of the literature reviewed in the previous chapter pointed to the importance of public participation and empowerment (in relation to aspects of a wind farm's design and development) in shaping individuals' and communities' attitudes towards proposed developments. Ellis *et al* (2007: 521) contend that 'the key issues facing wind farm development are not 'objective' policy blockages, but clashes of values related to inter alia, governance, technology, landscape aesthetics, issues of participation and power inequalities'. As such it is important to consider what power entails and how it may be experienced.

Power is a concept which is interpreted in a vast number of different ways and importantly 'both its definition and any given use of it, once defined, are inextricably tied to a given set of (probably unacknowledged) value-assumptions which predetermine the range of its empirical application' (Lukes 1974 [2004]: 30). Haugaard (2002: 2) contends that;

> the uninitiated might be forgiven for thinking that all instances of political power, or social power, may be reducible to one concept but, unfortunately, this is not the case [...] There will never be a single concept of either political or social power because each usage takes place within local, tacit or explicit, theoretical systems.

There is a vast array of different theories which attempt to define or explore the concept of power. In particular, political theorists have long attempted to set out where power is found or experienced and as such who possesses it. This chapter cannot possibly consider all the relevant literature on this topic, instead three key theories will be discussed in order to highlight the reasons for choosing one in particular as a useful theoretical tool for this research.

Firstly, Dahl (1961) offers a relatively simplistic, but pleasingly optimistic view of power. His conception of power considers it to be present where A gets B to do something which B would

not otherwise do. As such, power is visible in overt conflicts and decision-making arenas; he contends that power can only be identified through 'careful examination of a series of concrete decisions' (Dahl 1958: 466). Thus, he is concerned with power where it is actually exercised, and does not consider 'power resources, which are only potential power' (Haugaard 2002: 6). In order to identify how power was experienced and whether power elites existed Dahl conducted a study of one community (New Haven). His approach in this study was to;

> determine for each decision which participants had initiated alternatives that were finally adopted, had vetoed alternatives initiated by others, or had proposed alternatives that were turned down. These actions were then tabulated as individual 'successes' or 'defeats'. The participants with the greatest proportion of successes out of the total number of successes were then considered to be influential.
> (Dahl 1961: 336)

His view is optimistic since the conclusions he reached suggested that there was no single power elite, instead democracy was seen to be the result of competition between power elites. He acknowledged that it may only be a minority in any society which votes or actively participates in politics, however, he suggests that those who do participate will represent a broad range of interests and ultimately will reflect the majority. Such a pluralist view is intended to inspire confidence in modern politics and democratic institutions, however Dahl's conception of power has been the subject of significant criticism.

The second theory of power to be discussed here is that of, Bachrach and Baratz (1970) who build on and critique the work of Dahl (and other pluralists). They argue that the pluralists' view of power 'unduly emphasizes the importance of initiating, deciding and vetoing' (Bachrach & Baratz 1970: 6). They acknowledge that not only does A exercise power over B when A makes B do something that they would not otherwise do, but A can also exert power over B through institutional means. Such means limit the scope of political processes and hence can be used to achieve aims which are in the interests of A. An example of this would be if A were to set the agenda for a decision-making process so that B's interests or concerns were not included.

As such Dahl's approach to identifying power through overt conflicts and decisions is unable to account for more subtle forms of power which are exercised in institutional contexts and particularly through agenda-setting. Bachrach and Baratz (1970) contend that there is a need to consider not only decision-making processes but also processes of 'non-decision-making' which is:

> a means by which demands for change in the existing allocation of benefits and privileges in the community can be suffocated before they are even voiced; or kept covert; or killed before they

> gain access to the relevant decision-making arena; or, failing all these things, maimed or destroyed in the decision-implementing stage of the policy process.
> (Bachrach & Baratz 1970: 44)

The third theorist to be discussed here is Lukes (1974[2004]). Lukes offers a critique of both Dahl and Bachrach and Baratz's work. Dahl's theory provides an example of what Lukes (1974 [2004]) described as the *one-dimensional view of power*. This view is essentially concerned with power as it is exercised in formal institutions and made visible through overt conflicts and decision-making outcomes. Bachrach and Baratz's theory fits what Lukes refers to as the *two-dimensional view of power*. Lukes (1974 [2004]) observes that the two-dimensional view recognises the role of power in formal decision-making, but also within informal settings and in less visible activities such as agenda-setting. Conflict according to this view can be covert as well as overt, but importantly conflict remains a crucial element in the exercise of power:

> [if] there is no conflict, overt or covert, the presumption must be that there is consensus on the prevailing allocation of values, in which case nondecision-making is impossible.
> (Bachrach & Baratz 1970: 49)

Lukes' key contribution is in critiquing both the one- and two-dimensional views by noting the limited understandings of power that they present. In particular he contends that neither conflict (whether overt or covert) or decision-making (and nondecision-making) are necessary for power to be exercised:

> Decisions are choices consciously and intentionally made by individuals between alternatives, whereas the bias of the system can be mobilized, recreated and reinforced in ways that are neither consciously chosen nor the intended result of particular individuals' choices.
> (Lukes 1974 [2004]: 25)

Lukes (1974 [2004]) therefore proposed a *three-dimensional view of power* which took into consideration not only how power is exercised within conflicts but also the role of power to prevent conflicts through shaping people's interests and beliefs. 'To put the matter sharply, A may exercise power over B by getting him to do what he does not want to do, but he also exercises power over him by influencing, shaping or determining his very wants' (Lukes 1974[2004]: 27). In this way neither decisions nor conflict are necessarily required in order for power to have been exercised. According to the three-dimensional view, power is exercised in many ways which are not easily observed – even to the persons upon whom power is exercised.

Lukes (*ibid.*: 29) summarises the three views of power as such;

*One-Dimensional View of Power*

Focus on (a) behaviour

(b) decision-making

(c) (key) issues

(d) observable (overt) conflict

(e) (subjective) interests, seen as policy preferences revealed by political participation

*Two-Dimensional View of Power*

(Qualified) critique of behavioural focus

Focus on (a) decision-making and nondecision-making

(b) issues and potential issues

(c) observable (overt or covert) conflict

(d) (subjective) interests, seen as policy preferences or grievances

*Three-Dimensional View of Power*

Critique of behavioural focus

Focus on (a) decision-making and control over political agenda (not necessarily through decisions)

(b) issues and potential issues

(c) observable (overt or covert), and latent conflict

(d) subjective and real interests

The three-dimensional view of power leads to a more complex understanding of the concept. Consequently one must consider not only evidence of power within decision-making outcomes but also in decision-making processes and the ideological views underpinning these processes. In relation to this research, it may be relatively simple to assess whether objectors to wind power developments possess power according to the influence they exert on planning outcomes, but it is also essential to determine which forms of covert, or latent power are being exercised by, or upon, objectors within the planning process. Here strong connections with the STS literature are found.

In particular, the maintenance of the 'special' status of science can be viewed as an exercise of power according to the three-dimensional view. Essentially the STS literature discussed above

has attempted to break down the hegemony of science and hence reduce the power which science and expertise currently possess. However, if this 'special' status is not challenged and science and scientific claims to knowledge remain safeguarded from criticism then their current privileged position in (or above) society will be maintained. This may mean that where the role of lay knowledge within decision-making processes is constricted, individuals (and society generally) will not challenge the hegemony of scientific knowledge but rather will accept it as inevitable or natural.

> is it not the supreme and most insidious exercise of power to prevent people, to whatever degree, from having grievances, by shaping their perceptions, cognitions and preferences in such a way that they accept their role in the existing order of things, either because they can see or imagine no alternative to it, or because they see it as natural and unchangeable, or because they value it as divinely ordained and beneficial?
> (Lukes 1974 [2004]: 28)

Thus, much of the work being conducted within STS can be seen to represent direct challenges to the covert power essential to maintaining the status quo within decision-making institutions. An aim of this research will, then, be to identify not only who are powerful actors in terms of their influence on decisions, but also what forms of covert or latent power are exercised within the processes of planning a wind farm.

Of course, it is important to note that Lukes' three-dimensional view of power is not without its criticisms (see for example; Hayward 2006, Morriss 2002, Shapiro 2006). In particular, it has been contended that 'his posited third face of power defie[s] the possibility of scientific evaluation on the grounds that it depend[s] on unobservable real interests' (Shapiro 2006: 146). The practical value of Lukes' theory has been questioned given that the three-dimensional view is seeking to observe something which is by definition covert or unobservable. Furthermore, critics have questioned whether it is ever possible to identify what an individual or group's 'real interests' are. There have been few empirical studies conducted to test the practical value of Lukes' theory (however, one strong example is Gaventa (1980) who examined power relations in a Central Appalachian mining community). Therefore, Shapiro (2006) has called for further empirical work to be done to test the limits or relevance of the three-dimensional view of power. Thus, this PhD represents a valuable opportunity to test the relevance (or otherwise) of Lukes' theory.

## 4.6 Summary and Implications for this Research

The review of the STS literature included in this chapter (although it is far from being comprehensive) has highlighted the need not only to question the nature of science and expertise but also the roles of lay people and their understandings/experiences of science and knowledge. The STS literature has demonstrated that science has long been guarded against scrutiny since it has held a 'special' status and has been viewed as being apart from society and immune to social influences. However, as was illustrated in this chapter, STS theorists have drawn attention to the many ways in which social influences enter into science and hence have refuted its 'special' status. As a result it is argued that science should not be impervious to scrutiny and analysis and should not be guarded against criticism. Science is therefore not viewed to be fundamentally different from other disciplines (such as social sciences or the arts) and is recognised as being subject to social/political influences and interests.

Perhaps more important, however, is the argument that the public is capable of engaging with science and possesses its own knowledges independent of those of experts. Furthermore, the public is able to question and evaluate science and scientific claims based on their own knowledge, experience or 'lay expertise'. Therefore, given that science is not viewed as providing clear, definite answers - as 'speaking truth to power' – and that the public are not viewed as passive receptors of knowledge, important questions are raised as to the appropriate roles of both scientific experts and the public - or lay people. If one acknowledges the existence of 'lay expertise' then it must also be acknowledged that there are valuable roles for lay people to play within decision-making or areas of conflict – conflicts can not be viewed merely as expert conflicts. The more difficult questions centre around how and to what extent lay people can play roles and what role should appropriately be left to experts?

Since neither experts nor lay people can realistically be viewed as possessing complete and unquestionably accurate knowledge on any subject, neither should be viewed as more important or better able to provide the 'truth'. It is more reasonable to assume that accurate knowledge and the best possible decisions can only be reached through incorporating and considering the widest possible range of views and knowledges. This conclusion is backed up by the concept of 'lay expertise' which suggests that far from being ignorant, lay people have potentially very valuable and relevant expertise of their own which, if incorporated, could be extremely beneficial to scientific or technical decision-making.

As was discussed above, policy documents now place increasing emphasis on the need for public engagement in scientific matters and as such it appears that the arguments of STS have been recognised and responded to. However, as Irwin (2006) contends, to date the implications of this emphasis have been disappointing. Commitments to public engagement may well be commitments in words alone and there is a need to change not only the rhetoric, but also the culture which underpins policy, and the views of those who create and implement policies. Here, the concept of power is highly salient. Public engagement is often referred to in terms of empowerment or democratisation, however, in line with Lukes' three-dimensional view of power, it is essential to consider the many different forms of power which may be at play. Giving lay people the power to participate does not mean that other forms of power are not being exerted so as to control the outcomes of this participation.

Chapter two highlighted the existence of commitments to public engagement within planning policy – and renewable energy planning policy in particular. Public engagement is described as being of great importance to the planning process and is a key concern within the recent Scottish planning bill, however it is questionable, given the pro-development approach of the planning system and the commitment to increasing renewable energy, how meaningful such pledges are in practice. In particular one must question how responsive the planning system is to lay views which challenge its pro-renewables conviction. This chapter has so far implied that the best decisions can only be taken by considering and incorporating *all* views equally (regardless of their basis in expertise or scientific enquiry), as such a planning system which is committed to public engagement should not treat any particular source of information favourably and should endeavour to consider all knowledges (whether they be expert or lay) equally. This does not mean that all forms of knowledge should be treated as the same; clearly different approaches are needed to assess the relevance or significance of lay knowledge and that which is based on scientific expertise. However neither should be given more or less consideration or prominence within the decision-making process, and certainly not before they have had the opportunity to be fully articulated and evaluated.

This, then, forms a key concern of this thesis. The research is concerned with members of the public's experiences with the planning system and proposed wind power developments. Their role within the planning processes and the influence which they have is a key element of this. The thesis therefore considers which forms of knowledge are dominant within the planning process and to what extent this incorporates the views of members of the public/local community.

Moreover, it will assess what role and influence is given to both lay and expert knowledge and whether either one is favoured over the other. As such the extent to which the planning system's commitments to incorporating the views of the public are reflected in practice will be highlighted. Lukes' three-dimensional view of power will be employed in order to assess the different forms of power which may be exercised within planning processes. Thus the research will aim to identify not only where power is exerted in obvious forms (i.e. through overt conflict or decision-making) but also in more subtle ways (i.e. through agenda-setting or the shaping of people's beliefs and interests).

## 5.0 Methodology

### 5.1 Epistemology

Before discussing the research design and chosen methods it is important to outline the epistemological position which underpins this research. This is important since it influences the methodological decisions which have been made and informs the design of the research question and aims.

The research stems from an interpretivist world view. This position is best described by contrasting it with a positivist perspective. Positivist researchers maintain that they aim to uncover 'facts' or 'truths' which are objectively real and that the same results would be found if the research was carried out by a different researcher. They therefore advocate using the approaches of natural science within the social sciences in order to conduct value free ('objective') research (Bryman 2001). However, it has been argued that positivism is inappropriate for the social sciences, as Schutz (1962:59) notes;

> The world of nature as explored by the natural scientist does not 'mean' anything to molecules, atoms and electrons. But the observational field of the social scientist – social reality – has a specific meaning and relevance structure for the beings living, acting, and thinking within it. […] The thought objects constructed by the social scientist, in order to grasp this social reality, have to be founded upon the thought objects constructed by the common-sense thinking of men living their daily life within the social world.

Thus, whilst positivist approaches might be considered appropriate for research within the natural sciences it does not allow for the necessary consideration of people's own views of their worlds. Moreover, as discussed in chapter four, the idea that any research – including that found within the natural sciences – can ever be 'value free' or 'objective' is highly contestable.

A positivist perspective is undesirable and highly inappropriate for this research. Positivism is considered too rigid and constricting to allow for a meaningful examination of social phenomena. Instead an interpretivist approach, in rejecting positivism, allows for a more complex and responsive investigation of social phenomena which ultimately better reflects the realities of social experience.

Interpretivism is said to have been largely influenced by the theoretical tradition of hermeneutic phenomenology. This tradition is the coming together of two theoretical ideas; firstly hermeneutics which is said to be directly in contrast to positivism since whilst positivism would attempt to *explain* behaviour, hermeneutics attempts to *understand* behaviour (Bryman 2001).

Secondly, phenomenology is concerned with how individuals understand the world around them, and further how researchers can reduce the impact of their own preconceptions on the research. Bogdan and Taylor (1975: 13-14) comment that; 'The phenomenologist views human behaviour […] as a product of how people interpret the world […] In order to grasp the meanings of a person's behaviour, *the phenomenologist attempts to see things from that person's point of view*' (emphasis in original). Taken together these two theoretical positions allow for an epistemological position which is in direct contrast to positivism, and which provides the means by which to look at the world in order to understand people's experiences of it, rather than to explain causes and effects in narrowly defined ways.

It is felt that an interpretivist approach was essential for this research. In order to understand community responses to and experiences with wind power developments (and developers) one must first attempt to understand the worlds in which such communities exist and how the individuals concerned experience and interpret these worlds. A positivist approach would not allow the necessary degree of flexibility which is needed to reflect the realities of social lives. Moreover, positivism overlooks the role of the researcher within the research. An interpretivist approach, however, acknowledges the important, and active roles played the researcher. This is of great significance since 'an adequate conceptualisation of the social world has to include the activity of researching it; the researcher is not simply observing from a position of detachment' (Cooper 2001: 11).

Furthermore, interpretivism implies an inductive approach which allows the findings to more accurately reflect the views and experiences of those being researched. This approach is described by Gilbert (2001: 19) as 'the basic technique for moving from a set of observations to a theory and is at the heart of sociological theory construction'. Positivist approaches largely utilise deductive approaches in that collected data is used to test a pre-defined theory and hypothesis. By contrast, inductive approaches allow for the creation of theories *from* the data (Bryman 2001).

Thus, through using an inductive, interpretivist approach the research can evolve and find ways of reflecting the experiences and perceptions of those being researched. Furthermore, the theories which are created as a result of the research will have emerged from the research process and findings and as such will have greater validity than if a positivist, deductive approach had been taken. Such an approach would have meant that pre-determined theories were tested, and subsequently verified or falsified through the research but these theories would have been created

*before* the research topic was fully understood or conceptualised. As Gilbert (2001: 19-20) notes; 'induction is the technique for generating theories and deduction is the technique for applying them'. Hence, an interpretivist, inductive approach is preferred so as to maintain a reflexive and responsive research design, and to ensure that the research findings accurately and faithfully reflect the experiences and perspectives of the community and individuals being researched.

## 5.2 Methodological Approach

**Table 5.1: Some common contrasts between quantitative and qualitative research**

| **Quantitative** | **Qualitative** |
|---|---|
| Numbers | Words |
| Point of view of researcher | Point of view of participants |
| Researcher distant | Researcher close |
| Theory testing | Theory emergent |
| Static | Process |
| Structured | Unstructured |
| Generalization | Contextual understanding |
| Hard, reliable data | Rich, deep data |
| Macro | Micro |
| Behaviour | Meaning |
| Artificial settings | Natural settings |

(taken from; Bryman 2001: 285)

In accordance with the interpretivist epistemological position expressed above, it was decided in the earliest stages of this project that the research would use entirely qualitative methods. It is felt that qualitative techniques enable a more balanced and faithful picture of the many different and often complex views that needed to be explored. It was felt that using quantitative techniques would inevitably constrict the research and limit the scope of the findings (for a summary of some of the key contrasts between quantitative and qualitative research, see table 5.1). It was very important that the research provided sufficient detail so as to enable an accurate understanding of the complex nature of the subject and a qualitative approach is far better suited to 'exploring in much greater depth the nature and origins of people's viewpoints' (Easterby-Smith *et al* 2002: 3). Further, qualitative approaches enable a greater degree of flexibility and responsiveness in the research design. This was deemed to be necessary since the precise nature of the research

problem was anticipated to change and evolve as the research progressed, and whereas this would be likely to cause problems if quantitative methods were being used, a qualitative approach enabled reflection on these changes and allowed the research approach and aims to adapt so as to fully capture the important interests and concerns being expressed.

Given the criticisms of the existing wind power literature outlined in chapter three it was of great importance that this research did not come from a partial starting point. As was contended in chapter three a major shortcoming of the literature is its managerial rationale. This research aimed to move away from such a position and to achieve an understanding of individuals' and communities experiences which was not shaded by any biases or preconceptions. Following the inductive approach outlined above, it was important that there were no pre-determined ideas of what was expected to be found. Hence the evolution of the research design through flexible methods was an important and essential component of the methods.

## 5.3 Methods: General

The original research design involved a series of (two) case studies which would examine, retrospectively, the reasons and motivations behind both positive and negative community reactions to wind power developments. A third, and final, case study was then intended to be conducted on a 'live' case and would thus provide an opportunity for the research findings and evolving hypotheses to be tested on an ongoing project. However, as will be noted below, the first case study (due to issues of access and timing) was in fact a live case study, and it was decided that this was sufficient to base the research on a single case. The reasons for abandoning the original research design will be discussed in this section.

Case studies were felt to be necessary and appropriate since they offered an opportunity to look in depth at how and why communities react to proposed projects in particular ways, and how such proposals become controversial. Moreover, Bryman (2001: 47) has noted that 'Some of the best-known studies in sociology are based on this kind of design'. A case study is a detailed investigation of a particular phenomenon or occurrence in context (Hartley 2004, Punch 2005, Yin 1994):

> the case study aims to understand the case in depth, and its natural setting, recognizing its complexity and its context. It also has a holistic focus, aiming to preserve and understand the wholeness and unity of the case.
> (Punch 2005: 144)

This is a very important point; one of the key distinguishing characteristics of case study research is that it focuses on the context in which the phenomenon under study is found. In this way the issue being studied is examined in its natural environment rather than in isolation and therefore the case study considers subjects in a very real sense.

Yin (1994: 6) demonstrates how case studies can be effective means to answer questions which 'deal with operational links needing to be traced over time, rather than mere frequencies and incidence'. He provides an example, which bares important resemblances to this research, where a case study approach is deemed appropriate;

> If you were studying "who" participated in riots, [or campaigns opposing wind farms] and "how much" damage had been done, you might survey residents, examine business records (an archival analysis), or conduct a "windshield survey" of the riot area. In contrast, if you wanted to know "why" riots [or opposition to wind farms] occurred, you would have to draw upon a wider array of documentary information, in addition to conducting interviews
> (Yin 1994: 7)

Hartley (2004) notes that case studies allow for, and indeed are best served by, inductive approaches. She advises that researchers conducting case studies should attempt to develop theoretical frameworks during the research process in order to make sense of the data, and these can simultaneously be tested and adapted throughout the research process. She asserts that 'Case study research design is therefore flexible, in that it is able to adapt to and probe areas of planned but also emergent theory' (Hartley 2004: 324).

As noted by Bryman (2001), a key concern with case study research design is in ensuring external validity. Punch (2005: 145) also notes that: 'A common criticism of the case study concerns its generalizability'. Whilst Bryman concludes that;

> It is important to appreciate that case study researchers do not delude themselves that it is possible to identify typical cases that can be used to represent a certain class of objects, whether it is factories, mass media reporting, police services, or communities. In other words, they do *not* think that a case study is a sample of one.
> (*ibid*:50, emphasis in original)

Hartley (2004:331) comments that 'case studies need to focus on analytical generalization […] In other words, the generalization is about theoretical propositions not about populations.' Therefore, the representativeness of the case study is not necessarily of paramount importance:

> whether a case study should even seek to generalize, and claim to be representative, depends on the context and purposes of the particular project. Generalization should not necessarily be the objective of all research projects, whether case studies or not.
> (Punch 2005: 146)

Within this research analytical generalisation was aimed for (rather than representativeness). This was achieved through the use of multiple methods (discussed below) and also through comparing the findings of the case study with those of other similar studies from the field of STS (see chapter twelve).

Nevertheless, it is acknowledged that by using multiple (i.e. two or more) case studies in order to make comparisons or assess the influence of designated variables, researchers are better able to ensure external validity in their research design (Yin 1994, Eisenhardt 1989). Hartley (2004: 326), with reference to research in organisations, outlines the pros and cons of adopting either single or multiple case study research designs:

> In single case studies, the challenge is to disentangle what is unique to that organization from what is common to other organizations […]
> Multiple case studies can be valuable, although attention needs to be paid to the quantity of data which must be collected and analysed […] The choice of case studies is particularly crucial in multiple-case design, to ensure illuminating contrasts and similarities across the contexts and processes.

This was a key consideration in the design of the research project. It was originally felt that the use of multiple case studies presented a valuable opportunity to create external validity for the research and resulting theories, however it was later decided that the costs (in relation to time and resources) associated with doing more than one case study outweighed the benefits that would be gained (i.e. potential contribution or the ability to generalise) - such considerations will be discussed further below. The final research design therefore involved what Yin (1994) has termed a Type Two case study. Yin's four types of case studies are outlined in figure 5.1.

**Figure 5.1: Four types of case study research designs**

| | Single-case designs | Multiple-case designs |
|---|---|---|
| Holistic (single unit of analysis) | **TYPE 1** | **TYPE 3** |
| Embedded (multiple units of analysis) | **TYPE 2** | **TYPE 4** |

(Source: Yin 1994: 39)

According to Yin's (1994) typology case studies are defined as one of four types based on whether they use a single or multiple case design and on what level of analysis ('holistic' or 'embedded') they use. The distinction between single and multiple case designs is fairly straightforward: in a single case design one case study is looked at, whereas in a multiple case design two or more case studies are examined and typically the research will aim to uncover either key similarities or differences and then to generalise from these.

The distinction between 'holistic' or 'embedded' case studies refers to the units of analysis under investigation. A holistic case study will examine the whole case as one unit of analysis whereas an embedded case study is broken down into multiple units of analysis:

> even though a case study might be about a single public program, the analysis might include outcomes from individual projects within the program […] In an organizational study, the embedded units also might be "process" units – such as meetings, roles, or locations. […] the resulting design would be called an *embedded case study design*. In contrast, if the case study examined only the global nature of a program or organization, a *holistic design* would have been used.
>
> (Yin 1994: 41-42, emphasis in original)

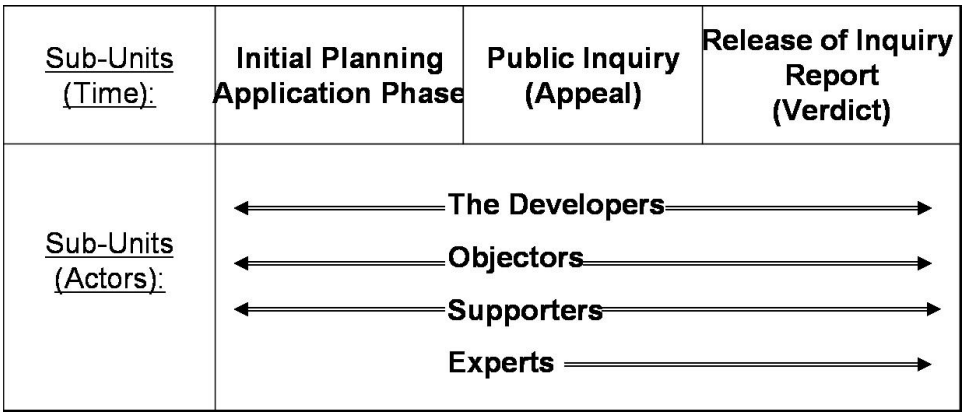
Therefore, embedded case studies are able to make comparisons between different units within the case.

Type One within Yin's typology is a *Holistic Single Case Study*. In this design one case study is examined at a somewhat general level, (i.e. it is not broken down into smaller units of analysis). It is worth pointing out that this is quite a vulnerable research design: since it is a single case study it is not possible to generalise and the researcher cannot compare or contrast it with another case. Furthermore, since it uses a holistic unit of analysis it is not possible to make comparisons between different aspects within the case and so it is very hard to arrive at definitive conclusions about how the observed phenomena have come about. For these reasons a Type One case study was not appropriate for this research.

Type two is an *Embedded Single Case Study*. Again this is based on a single case study but in this type the case study is broken down into more than one unit of analysis. Therefore the researcher can compare and contrast different aspects of the case and; 'The subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case' (Yin 1994: 44). The examination of 'embedded' units was considered essential for this research. Since the case study would involve a number of different actors with very different perspectives and interests a single unit of analysis would have been unable to do justice to the many (often

conflicting) viewpoints and experiences which needed to be explored. As depicted in Figure 5.2, within the case study the 'embedded' units took the form of different actors (for examples, the developers and objectors) but also different stages in the planning application process (for example, the initial planning application phase and subsequent appeal). As such considering the different units of analysis *within* the case enabled a clearer understanding of the case as a whole.

**Figure 5.2: Sub-units within the case study**




Importantly, Yin warns that in this type of case study one must remember to consider both the macro and the micro level and the relationships between these two levels. He (Yin 1994: 44) notes that: 'A major [pitfall] occurs when the case study focuses only on the subunit level and fails to return to the larger unit of analysis'. Therefore within Type Two case studies it is important to retain an element of the holistic view in order to understand how the embedded units fit into the bigger picture of the case study. This consideration was built into the design of the case study, and the case study chapters within this thesis (chapters six to eleven) set out the findings in relation to both particular sub-units but also to the case as a whole.

Types Three and Four are multiple case studies; in each of these types more than one case would be examined in order to find similarities or differences. This design is often considered to be more robust than single case designs since it enables the researcher to make generalisations based on the findings. However, in order to generalise from the conclusions the case studies must be selected very carefully and they must be representative of the population to which the findings will be generalised. Within this research the challenges of establishing a representative sample were considered to be great. Each community faced with a planning application for a wind farm would have its own unique social, cultural and political (as well as physical or geographical)

characteristics and identifying common variables (or particular meaningfully different variables) would be a highly complex and demanding task. It was unlikely that even with three case studies that one would be able to state with confidence that the findings were representative or could be generalised to wider experience of planning wind farms.

Furthermore; 'the conduct of a multiple-case study can require extensive resources and time beyond the means of a single student or independent research investigator' (Yin 1994: 45). A major problem with Types Three and Four case studies is that they require significant resources. As will become clear through this thesis, the case study was examined in considerable detail and it is this detail which leads to the key contributions of the research. If a multiple case design had been used this depth and level of detail would not have been possible: 'When generalizability is a goal, and we are focussing on the potential common elements in a case, it is necessary for the analysis of the case study data to be conducted at a sufficient level of abstraction. The more abstract the concept, the more generalizable it is' (Punch 2005: 147). Since the contribution and value of this research comes through its depth and detail it was decided that a single case design was most appropriate and would lead to the most insightful findings.

The particular case study was selected since, as will be apparent in chapter six, it appeared to provide an excellent example of where a local community group had had a significant effect on the outcome of a wind power planning application. At the time that I began researching this case study it had been rejected by the local authority (after a long and protracted process, which is discussed in more detail in chapter six), and was due to be determined by public inquiry within a few months. Furthermore, since there had been no obvious objection from any statutory consultees and planning officials had recommended approval of the application there were strong indications that it was the local opposition group's involvement that had had the greatest impact on the outcome of this planning application up until the point at which I began researching it. As such, it was decided that this presented a valuable opportunity to gain access to a rich body of data.

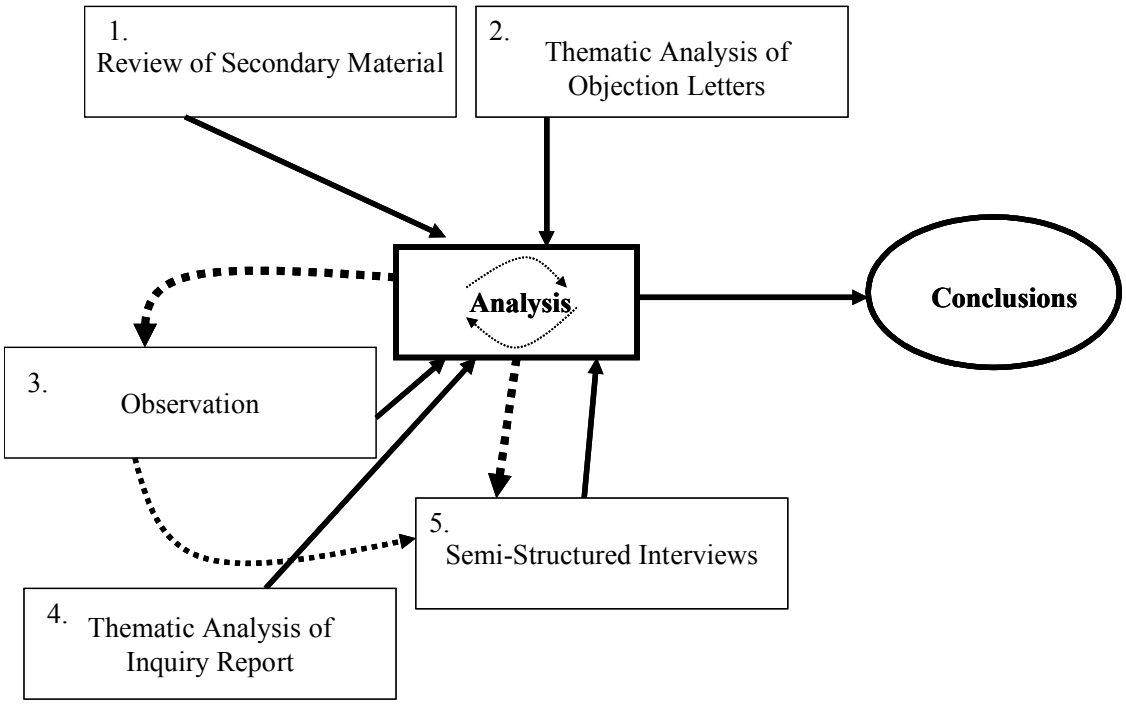
Indeed access was a key consideration; through my collaborative funding arrangements with Scottish and Southern Energy I had contact with key individuals working on this project and hence had direct and unrestricted access to the views, opinions and experiences of the developers. This greatly facilitated the process. Much of the extant literature refers to the actions of developers (for example in advocating greater openness); however, it typically does not engage

with these actors and does not consider how the planning processes are perceived by developers. The case study therefore represented a 'Revelatory Case'. Yin (1984) describes this as coming about when the investigator has an opportunity to study something which has previously been inaccessible. As such, the case study provides valuable new insights.

## 5.4 Methods: Data Collection

In order to gain an accurate understanding of the multiple and divergent factors behind individual and community responses to wind farms a variety of methods needed to be employed. As Gillham (2000: 2) notes, within case studies; 'No one kind or source of evidence is likely to be sufficient (or sufficiently valid) on its own. This use of multiple sources of evidence, each with its strengths and weaknesses, is a key characteristic of case study research'. As such it was felt necessary to employ various methods and strategies and to allow a degree of flexibility in the research process so as to enable the research to pursue unforeseen areas of interest as they arose. In order to illustrate the different methods employed, the following sections will describe the approach taken during the case study.

**Figure 5.3: The research process**




It is important to note that each of the methods used were not conducted in isolation from one another. Figure 5.3 illustrates how the methods fed into and informed one another. The initial

stages – the review of secondary material and thematic analysis of objection letters - uncovered a significant amount of data and enabled a background understanding of the issues and the arguments that were being made in relation to the proposed development. Furthermore, since I had reviewed material which had been written by the developers, the planners, the media and members of the public, I gained a sense of the many different perspectives on the case. As such this stage provided a strong introduction. The next stage was a period of observation. This was crucial to the case study and built on the first stage by providing a comprehensive understanding of the debates and issues, and also firsthand experience of people's reactions. The penultimate stage was a thematic analysis of the eventual inquiry report. This was conducted in order to evaluate how the decision-maker's rationale and perspective compared with that of the objectors and developers. Finally I conducted a series of semi-structured interviews. The analysis of the data collected through the review of secondary material, thematic analysis of objection letters and observation at the inquiry informed the selection of interviewees and also the design of the interviews. The initial interviewees were selected based on who I had identified as being key actors during the observation stage, and the questions which I asked were informed by the data which had been uncovered through each of the previous stages. Therefore each stage of the case study reflected and built on the previous stages.

Consequently, if any individual method – or research stage - had been omitted the case study would have been severely weakened. It is the combination of these different methods which has led to interesting and valuable findings. No single method could have uncovered the insights and level of detail which this combination achieved. The findings from each of these individual stages are outlined in chapters seven to ten, however they are discussed and analysed together within chapter eleven. Therefore, whilst the particular findings from each stage are discussed separately, it will become clear that their significance or value cannot be fully appreciated unless they are considered together. Indeed in many cases, due to the organic nature of the research design, the data is so inextricably interlinked that separating it or attempting to understand it in isolation would be meaningless and somewhat artificial.

### *5.4.1 Review of Secondary Material*

The initial stage of the case study involved reviewing secondary material relating to the planning application. This was an important stage since it enabled me to gain a preliminary understanding of the case before entering the field. It must be noted that this preliminary understanding was very incomplete and I was aware that the impressions that I was getting from the available literature

were likely to contain biases and inaccuracies. As such the review of secondary material was conducted cautiously with an awareness that it would not provide the 'truth' but rather enabled insights into the different arguments that were being made and stories that were being told in relation to the case.

As noted by Punch (2005) documents can provide a rich source of data, and equally there are a vast number of documents available, and of relevance to social researchers. Different forms of documents provided very different perspectives on the planning process and proposed development. The documents reviewed were (references for each of the documents are given in Annex 1):

- Press releases from the developers' website
- Two reports by the local council's Head of Development Control Committee
- A report summarising the objection letters (prepared on behalf of the developers)
- Press reports (located both in print and online)
- The local MSP's newsletter
- Literature disseminated by the local opposition group

Thus, the documents were written for various different audiences and whilst certain documents were highly technical others used 'every-day' – and at times even emotive or sensational – language (for example the press reports). As Macdonald (2001: 196) notes, all official documents 'are produced in a socially acceptable form that seems to those involved to give a 'reasonable' account of their actions'. However, such accounts cannot be considered as 'objective' but rather are socially produced in line with norms and expectations:

> a text, taken in isolation from its social context, is deprived of its real meaning. This is provided by a socially-situated author and audience who are necessary for the text to have any meaning at all.
> (Macdonald 2001: 207)

As such whilst the review of secondary material provided a background understanding of the case, it was not considered to provide 'facts' or 'truth'. The press reports, in particular, were extremely helpful in gaining an overview of the various different stages within the planning application process and the reactions of (certain) local community members. However, it was clear that such reports could not be considered to be free from biases or errors. Macdonald (2001) contends that such errors can come through various means. An example of such a means is distortion;

> which may stem from the preferences of the proprietor or editor, or from the journalist producing the copy. On the other hand, it may arise at source, as when an account of events is given by a politician who was participant in them, or when a journalist relies on an organisation's press releases. Yet again it may arise inadvertently from the actions of a sub-editor who changes the meaning of an item in the process of compressing it into the space available, or who conveys an erroneous impression in the search for a punchy headline.
> (Macdonald 2001: 199)

Without having experienced the events about which I was reading it was impossible to know whether, or how, biases were present within the reporting. Therefore, although the findings of the review of secondary material have been incorporated within chapter six (which provides the background to the case), they have not been relied upon. Rather they represent one voice which in conjunction with the findings from other stages (*i.e.* observation and interviews) outlines how the planning application process and the proposed development were perceived and experienced.

In these early stages I also had discussions with representatives of the developers and gained insights into their perspective of the planning application and process. These discussions along with the review of the secondary material gave me an initial impression of the case, however I realised that having not spoken to local community members at this point this initial impression was highly partial. Nevertheless, this stage was an important point in the case study research and prepared me for the subsequent stages.

### *5.4.2 Qualitative Thematic Analysis of Objection Letters*

In order to identify the key issues of objectors to the proposed wind farm a qualitative thematic analysis of all the objection letters retained on file by the local planning authority was carried out. This method is described as; 'probably the most prevalent approach to the qualitative analysis of documents' (Bryman 2001: 381). It serves to encode qualitative data in systematic ways so as to identify themes and patterns (Boyatzis 1998). Importantly, in keeping with the inductive approach of this research, within qualitative thematic analyses the themes and patterns emerge from the data:

> Observation precedes understanding. Recognizing an important moment (seeing) precedes encoding it (seeing it as something), which in turn precedes interpretation. Thematic analysis moves you through these three phases of inquiry.
> (Boyatzis 1998: 1)

Bryman (2001: 381) notes that whereas 'Quantitative content analysis typically entails applying predefined categories to the sources', qualitative thematic analysis allows 'greater potential for refinement of those categories and the generation of new ones'. However, this means that careful

attention has to be paid to the identification of themes and creation of 'codes' so as to ensure that they accurately reflect those present within the data. The process of coding qualitative data has been described as 'both the first part of analysis, and part of getting the data ready for subsequent analysis' (Punch 2005: 199). As such whilst the codes 'emerge' from the data, the researcher inevitably plays a key (subjective) role.

A total of 700 objection letters were analysed. It should also be noted that there were an additional 22 letters of support recorded by the council, however due to their small number these were not included in the analysis. To begin with, a small selection of letters was reviewed in order to create a preliminary set of codes. The nature and role of codes are described by Punch (2005: 199) as such:

> Codes are tags, names or labels, and coding is therefore the process of putting tags, names or labels against pieces of the data. The pieces may be individual words, or small or large chunks of the data. The point of assigning labels is to attach meaning to the pieces of data

The initial set of codes was later broken down into categories of objection, for example; 'Environmental Degradation' or 'Wind Power Technology'. In this case a 'code' was defined as a classification of a specific, recurring objection, for example 'Visual Impact'. Though the exact words or phrase of the code name were not necessarily repeated in the objection letters they describe a theme or concern which is represented by the code name. For example, 'Cumulative Impact' was attributed for a total of 551 objections, however the instances where this occurred varied greatly with one letter citing 'actual and proposed proliferation of wind power stations across the Scottish countryside' and another more specifically stating 'The cumulative impact of this proposal and that at X is unacceptable over large areas of [local region]'. As noted by Boyatzis (1998: 4):

> A theme may be identified at the manifest level (directly observable in the information) or at the latent level (underlying the phenomenon).

An 'objection category' was defined as a group of codes with a related theme or topic. For example, 'Wind Power Technology' consists of a wide variety of concerns and objections which all centre on the same topic, namely issues and problems with wind power technology. Defining categories was problematic since many codes could feasibly fit in more than one category – for example 'Visual Impact' which lies in 'The Wind Turbines' category may also have fitted within 'Environmental Degradation' which contains 'Scotland has unique beauty' and 'The area is beautiful/unspoilt/peaceful/a wilderness'. In a case like this, decisions had to be made regarding the most suitable categories for each code and this was done through discussions and deliberation

with my supervisory team. This deliberative process was long and involved considerable revision of codes and categories. However, the final set of codes and categories represents unanimous agreement.

In the case of 'Visual Impact' and whether this code was most appropriately located in 'The Wind Turbines' or 'Environmental Degradation' debates focussed around the precise ways in which the code was found within the objection letters. Visual impact may, quite reasonably, be interpreted as being centrally a matter of environmental degradation, however for the purposes of this analysis it was considered that this code fitted most appropriately within the category of 'The Wind Turbines' – since this category covers issues which relate directly to the physical presence of the wind turbines themselves. As such whilst all the issues raised in the objection letters are inevitably in some way associated with the wind turbines, this category contained objections which directly referred to the turbines and their physical presence. Thus the objections contained in this category were distinct from others which typically related to consequences of the turbines' presence or to issues relating to the location, community or policies associated with the proposed development, and other more abstract aspects of the development – but *not* to the turbines themselves.

Thus, the creation of codes and their positioning within particular categories is grounded in the ways in which they were asserted within the objection letters and does not necessarily relate to how the issues they represent are understood within the wind power literature. This is considered important since, as Boyatzis (1998: 33) notes:

> The researcher can unintentionally hasten the process of confusion, obfuscation, and distortion by using labels that, instead of sticking close to the raw information and its own language, form, and style, reflect what the researcher wants the theme to be.

Once the preliminary set of categories and codes had been established, the full set of objection letters were accessed at the council offices, and an initial review of these led to a revised set of objection categories and codes. At this stage many new codes were created and old ones were merged. As Punch (2005) notes, the process of coding data goes through various stages, and early (largely descriptive codes) are replaced with more interpretive or refined codes which are based on a higher level of inference.

Once a full set of codes had been established, all the letters and proformas were analysed and inserted into an Excel database according to the coding of the objections they contained. At this

stage it was still necessary to add some new codes, therefore, the complete set of codes did not exist until after all the objections had been inputted into the Excel database. A total of 132 codes were identified, grouped in 12 categories of issues, as shown in table 5.2 (a full list of codes is included in Annex 2).

**Table 5.2: Categories of Objection**

| Code | Categories of Objection Issues |
|---|---|
| **A** | The wind turbines |
| **B** | Wind power technology |
| **C** | Traffic and roads |
| **D** | Tourism |
| **E** | Ornithology |
| **F** | Impact on individuals/families |
| **G** | Archaeology |
| **H** | Environmental degradation |
| **J** | Planning process |
| **K** | Community fund |
| **L** | Renewables policy |
| **M** | Other |

The findings of this analysis are discussed in chapter seven and have also been published as a paper (Aitken *et al* 2008).

### *5.4.3 Observation*

In March 2006, when the public inquiry began, I commenced the observation part of the research. The inquiry ran for three weeks in total (although with several delays meaning that it did not finish until July 2006). During this stage data were collected both from the evidence and cross-examination which played a significant part in the public inquiry process, and also through observations of, and conversations, with local community members attending the inquiry, and additionally with representatives of the developers and numerous 'expert' witnesses.

Observation provided an invaluable tool for this research. The idea behind this method is to 'allow the observer to study first-hand the day-to-day experience and behaviour of subjects in particular situations, and, if necessary, to talk to them about their feelings and interpretations' (Waddington 2004: 154). It provided the opportunity to gain an understanding of the realities of

the case, which would not have been possible through interviews or laboratory style research. By observing this key moment in the planning application process and immersing myself in the public inquiry proceedings I became part of the case and as such understood it far more intimately. This is an important feature of observation, as Waddington (2004:155) notes: 'One key distinguishing feature of the method is that the observer's own experience is considered an important and legitimate source of data'.

Much of the literature on observation refers to 'Participant Observation' wherein the researcher makes observations whilst also playing an active role in the research setting. My own approach to observation, however, did not involve significant participation and therefore I would not consider it 'Participant Observation'. It is nevertheless worth considering the level of participation which I did undertake. There are many different typologies created to explain the different roles taken on when conducting participant observation (for example Spradley (1980) refers to Complete, Active, Moderate or Passive participants). Waddington's (2004) typology is easily grasped and relevant to this research. He acknowledges different degrees or forms of participant observation and types of participant/observer that the researcher can become through the research. These are

1. 'The *complete participant*, who operates covertly, concealing any intention to observe the setting;
2. the *participant-as-observer*, who forms relationships and participates in activities but makes no secret of an intention to observe events;
3. the *observer-as-participant*, who maintains only superficial contacts with the people being studied (for example, by asking them occasional questions); and
4. the *complete observer*, who merely stands back and 'eavesdrops' on the proceedings.'

(Waddington 2004: 154)

During the observation stage of my research I took on different participant/observer roles in relation to different groups. For example, since I had an existing relationship with the developers and had good access to them and, indeed, was staying in the same accommodation as them during this stage, I could be considered to have taken on the role of *participant-as-observer* with representatives of the developers. This meant that for the majority of the time (*i.e.* during inquiry proceedings) I was merely observing them, however in more relaxed settings (for example meal times) I would engage in discussions with them and ask for their reflections and opinions on the day's events (and equally I was often asked for my own reflections – to which I attempted to give minimal and impartial responses). However, in relation to members of the opposition group

during this stage I was a *complete observer*. I made contacts with some members of the local community who were not intimately involved with the opposition group, however it did not feel appropriate, or indeed comfortable, to become involved with the opposition group at this stage since there was a great deal of suspicion and ill-feeling between members of this group and representatives of the developers and I was aware of the possibility of making people uneasy if I were seen to be discussing details of the inquiry with both parties.

Importantly, I attempted at all times (both in relation to the developers and members of the local community) to minimise the impact that my presence had on the actors and events I was studying. As such, I would not consider myself to have been a participant but rather an observer (although it must be acknowledged that there would inevitably have been times where my presence had an effect on the actors or events I was observing).

By being present throughout the inquiry I gained invaluable insights into the ways in which this proposal had affected the local community and how they were reacting to it. However, since I had closer connections with representatives of the developers than the local community, or opposition group members, my view of the case at this stage inevitably remained somewhat partial. Nonetheless, this connection with the developers was extremely valuable. Through my collaborative association with the developers I had unrivalled access to their perspective and was able to shadow them throughout the process. As Waddington (2004: 155) notes 'Research settings inevitably vary in the extent to which they are open or closed off to public scrutiny, and sometimes incorporate private or 'backstage' regions which researchers may be especially keen to investigate'. Having access to the 'backstage' perspectives and activities of the developers was an invaluable opportunity to understand their experiences and perceptions, and I feel that it was necessary to take full advantage of this access. However, for the reasons outlined above, this meant that I did not feel able to attempt to gain access to the 'backstage' regions of the opposition group. This could potentially have been seen to bias my research, however I feel confident that my later communication with members of this group and the interviews which I carried out (discussed below) compensated for this initial bias. As noted by Spradley (1980), it is often useful to begin researching a situation or group of people as a 'passive' observer but later engage in more communication or foster relationships with the individuals concerned.

The findings of the observation phase of the research are discussed in chapter eight.

### *5.4.4 Qualitative Thematic Analysis of the Inquiry Report*

The analysis of the objection letters discussed above provided insights into the nature of objections – both their methods and contents. However, in order to understand better what influence these objections had had it was necessary to carry out a second qualitative thematic analysis, this time looking at the official inquiry report.

The inquiry report was the document in which the outcome of the appeal was published. It was written by the reporter from SEIRU who oversaw the public inquiry and then decided the outcome. The report contained a description of the planning application including the details of the proposed development and its history within the planning system. It then went on to review the evidence which had been given at the public inquiry, and finally summed up this evidence and the reasons behind the reporter's decision to uphold the appeal. The analysis carried out at this stage aimed to highlight which issues were prioritised within the decision-making process. By measuring the length of discussion dedicated to different topics or issues it was possible to gain a sense of the relative consideration which was given to each subject.

The findings of this analysis are discussed in chapter nine.

However, it must be noted that such measurements alone cannot straightforwardly be taken as representations of which issues were seen as more important, for example they cannot illustrate the reporters' reasons for considering certain topics in more depth than others. Nevertheless, when considered alongside the analysis of the objection letters they provide insights into the different priorities found within the planning process. Whilst the differences in length of discussion for different topics are illuminating, this factor alone is not sufficient to draw meaningful conclusions regarding the decision-maker's rationale or approach. Therefore, chapter eleven contains a consideration of these two analyses alongside each other and considers how the issues were discussed both within the report and the objection letters (*i.e.* what language was used and which aspects of an issue were seen to be important by different parties). In this way differences in how the issues are perceived by different parties are highlighted, and clearer insights are gained into which issues – or aspects of issues – were most influential within the eventual decision-making process. (This discussion is also presented in Aitken *et al* 2008).

### *5.4.5 Semi-Structured Interviews*

After the public inquiry concluded there was a break of several months before the verdict was announced in the report. During this time I began interviewing, (although the timing of interviews meant that several were in fact conducted after the publication of the report). As noted by King (2004: 11) 'The goal of any qualitative research interview […] is to see the research topic from the perspective of the interviewee, and to understand how and why they came to have this particular perspective'. This was certainly the purpose of the interviews carried out in this case study.

Following the interpretivist epistemological underpinning of the research, the interviews were semi-structured and flexible in design. Within semi-structured interviews;

> the interviewer asks major questions the same way each time, but is free to alter their sequence and to probe for information. The interviewer can thus adapt the research instrument to the level of comprehension and articulacy of the respondent, and handle the fact that in responding to a question, people often also provide answers to questions we were going to ask later.
> (Fielding & Thomas 2001: 124)

This is seen to reflect the interpretivist position since, whilst in positivist research 'The researcher's concern is to obtain accurate information from the interviewee, untainted by relationship factors', in qualitative research, such as this, the researcher 'believes that there can be no such thing as a 'relationship-free' interview. Indeed the relationship is part of the research process, not a distraction from it. The interviewee is seen as a 'participant' in the research, actively shaping the course of the interview rather than passively responding to the interviewer's pre-set questions' (King 2004: 11). Therefore, interviews based on an interpretivist epistemology should be flexible so as to accurately reflect the interests and experiences of the interviewee.

In this case the semi-structured nature of the interviews allowed a great deal of flexibility in responses, and enabled interviewees to discuss in some depth the issues which were most relevant to them personally and to express in their own words what their concerns, interests and opinions were. As Fielding and Thomas (2001: 126) note the objective of semi-structured interviews 'is that the discussion should be as frank as possible'. As such it was necessary to conduct the interviews in ways which were appropriate for each individual interviewee. This meant adapting the language used in questioning and also the approach taken (for example; a more formal approach was taken when interviewing an MSP, and employees of the developers, compared to members of the local opposition group). Therefore, whilst the same key issues were covered in each interview allowing comparison and enabling analysis there were vast differences in the

nature and length of interviews, (with the shortest being just under half an hour and the longest needing to be spread over two interviews which in total lasted approximately four hours).

The design of the interviews was shaped in part through observations that had been made in the previous stages of the case study, as well as data collected through the review of secondary material and analysis of objection letters. Annex three is an example of an interview guide which I took into the interviews. It should be noted that this was different for the different interviews due to the varying roles or positions of the interviewees in relation to the case. For example the questions asked to a member of the local opposition group were not appropriate for a planning expert who had been contracted by the developers. Equally the interview guide evolved throughout the time that interviews were being conducted:

> The development of the interview guide does not end at the start of the first interview. It may be modified through use: adding probes or even whole topics which had originally not been included, but have emerged spontaneously in interviews; dropping or reformulating those which are incomprehensible to participants or consistently fail to elicit responses in any way relevant to the research question(s).
> (King 2004: 15)

As Fielding and Thomas (2001: 133) note the interview guide does not need to be rigid or provide a fixed structure for interviews:

> The idea is to have a list of things to be sure to ask about. […] Remember, the non-standardised [semi-structured] interview tries to be a guided conversation, and the bit of paper you hold is only a guide.

Within this research the interview guide consisted of a list of key topics to be discussed and in some instances several sub-headings within these topics. As such it served as a reminder of all the areas that must be covered but did not dictate the precise order or wording of questions. Therefore, each interview was structured differently and was responsive to the particular interviewee.

Eleven interviews were conducted in total, (with ten interviewees). A snowball sampling technique was employed, this is described by Bryman (2001: 98) as such;

> With this approach to sampling, the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contacts with others.

I initially contacted a selection of potential interviewees who I had identified as key actors during my observation at the public inquiry and then contact was made with other relevant parties who were suggested by these interviewees. It is acknowledged that this approach cannot lead to a

representative sample, however, this is not deemed to be a serious problem within this research. Indeed, as Arber (2001: 62) notes: 'Using a probability sample is often unrealistic for small-scale or qualitative research'. Moreover, Punch (2005: 187) contends that:

> Qualitative research would rarely use probability sampling, but rather would use some sort of deliberative sampling [...] sampling in a deliberate way, with some purpose or focus in mind.

The approach taken is close to that of Theoretical Sampling advocated by Glaser and Strauss (1967) whereby the aim is not to establish a representative sample, but rather to select respondents who will be most beneficial to developing theories:

> To say that one samples theoretically means that sampling, rather than being predetermined before beginning the research, evolves during the process. It is based on concepts that emerged from analysis and that appear to have relevance to the evolving theory.
> (Strauss & Corbin 1998: 202)

It was important to interview a variety of people involved with, or affected by, the proposed development so as to capture the multiplicity of viewpoints, concerns and interests that were experienced and expressed. Therefore, my sample included interviewees who were both in favour of, and in opposition to, the proposal, and whose interests were both professional and personal. Arber (2001: 63) notes that:

> An advantage of snowball sampling is that it reveals a network of contacts that can itself be studied. A potential problem is that it only includes those within a connected network of individuals.

It is certainly true that those interviewees who were suggested by previous interviewees were all well-connected either with the opposition group or the developers. However, the research is primarily concerned with the experiences of those who were directly involved with, or affected by the planning application, as such the snowball technique was very effective at establishing contact with these individuals. Furthermore, the snowballing technique was used from two starting points (reflecting the developers and objectors) and this meant that it was successful in gaining a good range, and even split of interviewees representing different interests and positions in relation to the proposed development.

Whilst concerns might be raised that since this is a form of non-probability sampling one cannot ensure external validity, and that one cannot make claims to a representative sample, this is not considered a key concern for this research. It was felt to be more important to examine, in detail, the experiences and perceptions of key actors representing different viewpoints and perspectives relating to the case rather than to attempt to represent any particular population or community.

The objective in selecting interviewees was to collect a range of different viewpoints, not to conduct a representative survey of the local area.

It is felt that a further advantage of this technique was that it secured a greater response rate (particularly from individuals connected with the local opposition group). Through my presence at the public inquiry during the observation stage, I had come to be associated with the developers and many local opponents to the proposed development treated me with considerable suspicion. However, by interviewing a key figure within the opposition group, and gaining their trust I secured greater access to other opponents. Since my requests to interview other local opponents came through this individual potential interviewees were willing to participate. This reflects Arber's (2001: 63) observation that snowball sampling is 'useful when the potential subjects of the research are likely to be sceptical of the researcher's intentions'.

**Table 5.3: Categories of Interviewees**

| | **Personal** | **Personal with Professional Interest** | **Professional** | **Professional with Personal Interest** |
|---|---|---|---|---|
| **Supporter** | 1 | 1 | 3 | 0 |
| **Objector** | 2 | 0 | 1 | 2 |

The interviewees are summarised in table 5.3. Throughout the thesis the interviewees have been classified as either 'personal' or 'professional' and either 'supporters' or 'objectors'. 'Professional' indicates that the individual's involvement with the proposal comes through their work – for example as a consultant, a politician, an 'expert' witness at the inquiry or as a representative of the developer – 'personal' indicates that the individual's involvement is related to their non-professional lives – for example because they live in the area. The classification as either 'supporter' or 'objector' relates to the individual's position regarding the proposed wind farm. The following is a description of each of the interviewees:

1. **Personal Objector1**: A local resident who objected to the proposal.
2. **Professional with Personal Interest Objector1**: A retired employee of a national body (which was a statutory consultee) and also a local resident in the area. This individual objected to the proposal and gave evidence as an 'expert' on behalf of the opposition group at the inquiry.
3. **Personal Supporter1**: A local resident who actively supported the proposal.

4. **Professional Supporter1**: A consultant who was employed by the developers to help with their case at the public inquiry.
5. **Professional with Personal Interest Objector2**: A local MSP who objected to the proposal. Also a local resident.
6. **Professional Supporter2**: A high-ranking employee of the developers.
7. **Professional Supporter3**: An employee of the developers closely associated with the project.
8. **Professional Objector1**: An advocate (lawyer) employed by the local opposition group to represent them at the public inquiry.
9. **Personal with Professional Interest Supporter1**: The farmer, and local resident, on whose land the proposed development would be constructed.
10. **Personal Objector2**: A local resident who played a key role within the local opposition group.

The findings of the interviews are discussed in chapter ten.

## 5.5 Methods: Recording Data

### *5.5.1 Observation*

Accurate recording and storage of data in the observation and interview stages was of great importance. During the observation stage a detailed diary was kept which contained extensive notes of daily proceedings (i.e. those of the public inquiry – including evidence and cross-examination), of conversations which I had with members of the public, those attending the inquiry or representatives of the developers and interesting or relevant pieces of conversation between others which had come to my attention. The diary also kept track of my own feelings and impressions relating to the case, the proposed development and the different actors that I had encountered.

> Of equal importance to the task of analysing field data is the process of critical self reflection, or *reflexivity*, that is considered such an essential feature of participant observation. Here the researcher is required to consider the various ways that the character of the data may have been affected by such factors as the sensitivity of the research issues, their own individual identity and the quality of interaction between themselves and their respondents.
> (Waddington 2004: 157)

I endeavoured at all times to remain aware of my own feelings relating to the case and to record instances where I felt that personal biases were developing. For instance, there were occasions where I felt that my closeness to the developers made it difficult to distance myself from their

arguments and perspective and hence I found myself instinctively disbelieving those of the opposition group. Equally, there were times where I felt sympathy for the opposition group and even guilt about my connection with the developers. This was particularly true after instances where witnesses acting for the opposition group at the public inquiry had been subjected to brutal cross-examinations by the developer's advocate. By recording and reflecting on such instances I was able to acknowledge this and move on from it, moreover it forced me to take a critical and reflective approach and to try to see the case from all the different actors' viewpoints. Furthermore, I actively tried to make myself both believe and disbelieve every argument that was put forward in order to understand all positions.

> Some degree of researcher bias is not only inevitable in studies of social conflict, but can also prove extremely *beneficial* to the study; […] whilst a researcher's presence is bound to impact on his or her data, it is preferable to address the possible effects head on than to merely pretend – as positivists do – that research can be carried out in a social vacuum.
> (Waddington 2004: 162)

These considerations were also important in the interview stage, where, although the previous research stages had informed my design of the interviews and choice of topics to include, and also led to the formation of my own preconceptions, it was important to be aware of my own biases and as far as possible to remove these from the interview questions and analysis.

Within the observation diary I tried as far as possible to record conversations or inquiry debates in the language in which I had first heard them. This was important since 'the moment you begin writing down what you see and hear, you automatically encode things in language' (Spradley 1980: 64). Thus retaining as much as possible of the original language facilitated easier, more faithful reflection on the events later. During the first week of the inquiry I took detailed notes of all the evidence presented, and as far as possible noted down verbatim quotes. However, it quickly became apparent that maintaining this level of detail was not feasible. This was in part due to the fact that the inquiry debates became increasingly technical, but mostly because the process of taking these detailed notes was physically and mentally exhausting. Daily observation activities began at 7am around the breakfast table with representatives of the developers, continued through up to ten hours of inquiry proceedings and did not finish until after dinner and evening discussions with the developers (which was rarely before 11pm). As such there were up to 17 hours of observation each day, over a period of several weeks.

Furthermore, taking such detailed notes of the evidence within the inquiry meant that I could not pay sufficient attention to the behaviour and responses of individual people (who were not giving

evidence). However, as the inquiry progressed the observation activities felt more natural and I had a clearer picture of which aspects of the inquiry were most important to note and in how much detail. As Spradley notes (1980: 35):

> Doing participant observation quickly immerses the ethnographer in a large amount of primary data. It is not uncommon for undergraduates who conduct research for only a few hours a week to compile ten to fifteen pages of fieldnotes each week. Ethnographers who spend several hours each day doing participant observation will have proportionately larger amounts of field data. Every now and then, during a field project, you need to climb a very tall tree and gain a broad perspective on how far you have come, what tasks lie ahead, and which direction you should take.

Therefore, after the first week my observation notes took the form of a 'condensed account' (Spradley 1980), whereby I noted down all major events, topics of discussion and observations on the atmosphere or mood of individuals. I also included some verbatim quotes where these seemed particularly interesting or relevant. When I had time to reflect further on the inquiry events (some evenings, but mostly at the end of each week) I wrote 'expanded accounts' (i*bid*) of the events and also made reflective notes within my fieldwork diary.

### *5.5.2 Interviews*

The interviews were recorded using a digital voice recorder – as such a pure record was kept of the interviews (rather than notes which could have risked incomplete or partial recording). As Fielding and Thomas (2001: 135) advise;

> if you are conducting non-standardised [semi-structured] interviews, you will be joining in the conversation too, and without recording you will inevitably lose data as well as have to engage in a very stilted and peculiar interaction as you pause every few utterances to write down what the person says.

Using a digital voice recorder was beneficial, compared to a more conventional Dictaphone, since it was possible to upload the interview recordings directly onto my laptop and to save multiple copies (*i.e.* on the hard drive and also on a portable memory device).

However, on one occasion a technical glitch with the voice recorder meant that an interview could not be recorded, and on another the length of the interview exceeded the memory capacity of the recorder, as such on these occasions comprehensive and detailed notes had to be taken. It was important to be prepared for such unfortunate events and so I attended all interviews with the means for taking notes should it be necessary. Moreover, it could not be presumed that interviewees would be happy to be recorded (and it would not have been ethical to do this covertly) so all interviewees were asked before the interview formally began whether they would

be happy to be recorded – and as it turned out no one objected to this. This consideration and its implications for 'informed consent' are discussed in more detail below (section 5.7).

The benefits of recording the interviews as opposed to taking notes were clear. Since I was not distracted by the need to accurately note down every word that was said, or sentiment that was expressed during the interviews I was able to engage more fully with the interviewees. Despite the presence of the digital voice recorder, this enabled a more relaxed and conversational style of interviewing which I feel led to interviewees giving fuller, unguarded responses. It also meant that since I was not occupied with note-taking I was able to observe more closely the mannerisms, gestures, facial expressions or body language of the interviewees, which gave further insights into the ways that they felt about the topic being discussed. Furthermore, this pointed to areas to follow up or to probe deeper.

## 5.6 Methods: Data Analysis

Following the interpretative epistemological position outlined above a qualitative and inductive approach to data analysis was chosen since it was seen to provide a holistic means of examining the data. Whereas more quantitative approaches may make data analysis more straightforward by imposing an external structure on the data, by using a qualitative approach 'the structure has first to be derived from the data' (Easterby-Smith *et al* 2002: 122). As a result of employing this approach the research does not aim to provide clear, objective or definite conclusions but rather to be 'faithful to [the] views of respondents' and therefore preserves the ambiguities and contradictions which are an inevitability of the research (*ibid*: 118).

> Data collection and analysis are developed together in an iterative process in a case study
> (Hartley 2004: 329)

> With participant observation, data analysis is seldom a 'one-shot' process. More typically, it involves a dialectical procedure, known as 'sequential analysis' or 'analytic induction'
> (Waddington 2004: 156)

The above two quotes relating to data analysis in case study and observation research, reflect the data analysis process which was undertaken in this research. As was illustrated in figure 5.3 above, there was no single point when analysis of the data *began*, rather this was happening from the first moment that data was collected. This is in keeping with advice given by Spradley (1980: 33-34) who noted that when conducting observation; 'You need to analyze your fieldnotes after

each period of fieldwork in order to know what to look for during your next period of participant observation'.

The inductive process meant that since the research did not serve to test or prove a theory or hypothesis, theories were continually emerging, evolving, and being dismissed or built upon throughout the data collection stages. Such theories informed, and simultaneously were shaped by, my experiences at the public inquiry, my observations of different actors, my interview questions and the consideration of the responses given to these. Similarly, there was no point when data analysis formally ended. Even as I wrote up the findings and discussions thereof, new ideas and theories were continually emerging. It is a key feature of interpretivist research that there are not seen to be any 'right', or concrete answers – rather the data could be interpreted in an almost infinite number of ways. The purpose of my data analysis therefore was not to draw out a 'true' meaning or develop a framework or theory based on 'fact', but rather to demonstrate the varying, and conflicting messages, narratives and discourses which were expressed throughout the research and to illustrate the ways by which different actors experienced and perceived a common experience.

A key challenge was pulling together and making sense of the vast body of data which had been collected. As commented by Fielding and Thomas (2001: 137); 'Key to successful qualitative analysis is the need for the researcher to become thoroughly familiar with the data'. Reaching this point of familiarity took time and considerable effort. The interviews were listened to numerous times, and detailed notes taken thereof. The observation diaries were read and re-read frequently and the reviewed secondary material was also re-visited on numerous occasions. From revisiting each of these sources of data numerous times over a period of several months key themes emerged within and between each and I eventually reached a point where I felt thoroughly familiar with the data, and was then able to identify key patterns and themes.

The data from each individual method was considered separately and then analysed together. The thematic qualitative analyses of the objection letters and inquiry report were discussed above. A narrative account of the public inquiry was written based on the findings of the observation. The interviews were systematically analysed to identify themes and issues. Within each of the interviews topics and sentiments were identified and coded (these codes were then inputted into an Excel database). As suggested by Fielding and Thomas (2001: 137): 'Themes and concepts that [were] identified and coded in one interview [were] then compared and contrasted with (any)

similar material in the other interviews'. As such the Excel database was used to identify common themes, as well as areas of agreement and disagreement among interviews. This analysis was very useful for gaining an overview of the interviews.

When each of the separate bodies of data were then taken together a fuller picture of the phenomenon under investigation was achieved. Furthermore, as will become clear through chapters six to eleven, key themes emerged consistently through each of the methods. As such this provided evidence of triangulation (Denzin 1970) – and hence demonstrated the internal validity of the research.

Triangulation is described by Denzin (1970: 310) as coming about through the use of 'multiple observers, theoretical perspectives, sources of data, and methodologies'. However, as noted by Bryman (2001), the term is used to describe a variety of instances where more than one method or approach is used in order to compare findings and (where these are consistent) to gain greater confidence in the results. Thus, whilst the original research design aimed to secure external validity through the use of multiple case studies, the single case model is seen to have demonstrated internal validity through triangulating the findings of the various different methods used.

### *5.6.1 A Narrative Approach to Data Analysis*

A key concern in analysing the data has been to remain faithful to the views expressed by various different actors (interviewees as well as those observed at the public inquiry). The approach employed has therefore aimed to present the findings in an honest and impartial way, with as little interpretation as possible. Whilst my own experiences within this case study have inevitably shaped and influenced my perspective on the research, the findings presented here remain as close as possible to how they were originally presented to me. As such, they represent a faithful account of the case as seen through the eyes of different actors involved.

It was decided that the data should be presented in a narrative format so as to represent the voices of multiple actors and to tell the stories of different groups and individuals as they were told to me through the research. This approach is considered to allow a more holistic consideration of the data, and moreover is felt to be fitting for the nature of the data. Since much of the data (particularly that uncovered through the observation and interview phases) has what Punch (2005)

describes as ‘a storied character’ thinking about it in this way is very useful. Punch (2005: 217) notes that this approach ‘can enable us to think creatively about collecting and interpreting data’.

The initial process of assimilating the various data streams involved writing the story of the planning application according to each of the different voices (found in official documents, objection letters, observations of the inquiry and interviews) and then attempting to pull these divergent voices together. As such analysis focussed on identifying areas of agreement and disagreement within narratives relating to the case, and hence pointed to the various ways in which the planning application process was perceived and experienced. This process reflects the observations of Spradley (1980) in relation to ethnographic research:

> The last major task in the research cycle occurs toward the end of a research project. However, it can also lead to new questions and more observations. Writing an ethnography forces the investigator into a new and more intensive kind of analysis. Those who begin their writing early and when they can still make observations will find that writing becomes part of the research cycle.
> (Spradley 1980: 34)

Thus the process of writing up the research findings was itself a key part of the data analysis. Writing up the findings forced me to evaluate, and re-evaluate many different aspects of the data and to reconsider these from different perspectives. This in turn led to greater and fuller understandings of the data and its implications. The result is therefore a thesis which is at times confusing, at times contradictory but as far as possible is balanced and honest.

## 5.7 Ethical Considerations

Hartley (2004: 325) notes that a key benefit of case study research is that ‘the trust which develops over a period of time between researcher and organization members means that gradually information may be provided which would not be given to the researcher in a one-off interview’. Similarly Waddington (2004: 162) comments that: ‘One of the most advantageous reasons for using this [participant observation] approach is that it promotes the development of confidence and trust between the researcher and his or her respondents – all the more so if the latter have reason to assume that the former is sympathetic towards them’. This research clearly benefited from such growing relationships of trust, for example, representatives of the developers who agreed to be interviewed were happy to speak to me since they had met me during the public inquiry and associated me with the developers.

However, this trust raised ethical challenges and dilemmas. Whilst I personally grappled with the desire and need to keep biases and preconceptions out of my research, I was simultaneously

aware of the advantages (which Waddington (2004) points to) of giving the impression of being sympathetic to the arguments or positions of particular interviewees or others involved in my research. Representatives of the developers were aware of my funding arrangements and connections with the company, hence there was little need to discuss this except for by answering occasional questions. Equally, however, this meant that the majority of these individuals presumed that my personal perspective on the case matched that of the company. For ethical reasons I never intentionally deceived anyone but by the same token I did not make explicit my own views (it ought to be acknowledged that even if I had wanted to, this would have been difficult given that my personal opinions relating to the case changed on a daily – sometimes even hourly – basis!).

Whilst representatives of the developers generally presumed to know my own perspective relating to the case, and hence asked very few question, members of the local community, and particularly those involved with the local opposition group were somewhat more inquisitive. Again I never intentionally deceived anyone and always answered any questions which were put to me fully and truthfully, however where questions were not asked I did not volunteer information relating to my funding arrangements or connections with the developers. During the public inquiry stage this did not cause many problems since most people closely connected to the opposition group appeared to regard me with suspicion but otherwise paid me little attention. Other community members spoke to me and took an interest in my research but did not ask any probing or sensitive questions. However, when I later contacted people to invite them to take part in interviews I received some initially hostile and sceptical responses. To those who asked I fully disclosed the nature of my funding arrangements, but stressed the impartial, academic nature of my research. It was clear that this information was subsequently passed between members of the opposition group, however I believe that at least one objector who was interviewed was not aware of this information. During these interviews, although I never expressed an opinion, I portrayed myself as sympathetic and understanding, and feel that through doing so I gained the trust and confidence of the interviewees and this in turn led to fuller, more honest responses.

Whilst I maintain that this image which I projected of myself was necessary to secure the rich data which I obtained, it clearly raises ethical concerns. Although I was always confident that there was at no time any intention to deceive, or manipulate participants in the research, on occasion I felt apprehensive that individuals may feel differently if they had more information

about my funding arrangements. This raises the issue of 'informed consent' – a concept which has been labelled; 'a linchpin of ethical behaviour in research' (Bulmer 2001: 49).

Bryman (2001: 481) describes 'informed consent' as meaning 'that prospective research participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study'. It might be argued that certain interviewees may not have been happy to participate in the research if they had known about my funding arrangements, however, it could equally be argued that if they knew my true personal motivations behind the research (which were simply to uncover and reflect the multiple realities of the case) they would have been happy to contribute regardless of my connection to the developers. This was an area of some dilemma but it was decided that whilst no information would be intentionally withheld and any inquiries or questions would be responded to openly and honestly, my funding arrangements would not be explicitly discussed unless they were enquired after. Personally I felt confident that this was an ethical position since I knew that my research would not be unduly influenced by connections to the developers and that through my substantial, critical self-reflection I had minimised potential biases within my research. Bulmer (2001: 52) acknowledges that such dilemmas are often present within sociological research:

> Lying by sociologists to gain access to data is rare, but misrepresentation has been more common, though still unusual. The extent to which the sociological researcher has an obligation to tell the unvarnished truth has been much debated […] there are many situations in which it is not possible to be completely open to all participants, and sometimes a full explanation of one's purposes would overwhelm the listener. So it is recognised that there are degrees of openness and concealment possible in social research.

Due to such dilemmas it has been particularly important when analysing and writing up the data to faithfully portray the views expressed by participants, and to reflect critically on any prejudices or biases which may be present in my own mind. This has at times been challenging and required a great deal of self-reflection, however I feel confident that the resulting thesis provides an impartial and holistic account of the case study which is fair (being neither entirely positive nor entirely negative) to all the actors concerned.

Further ethical challenges related to deciding which, or how much material to include in the final thesis. As noted by Fielding and Thomas (2001: 126), within semi-structured interviews 'the questioning techniques should encourage respondents to communicate their underlying attitudes, beliefs and values, rather than a glib or easy answer. The objective is that the discussion should be as frank as possible'. In this respect the interviews were extremely successful. Whilst some

interviewees were initially wary, in all cases they quickly opened up and began to share a great deal of detail about their experiences and feelings relating to the planning application. In many cases this led to very personal and emotive discussions, and often included personal – or even malicious – comments about other individuals. Similarly, during the observation stage, when I stayed in the same hotel as representatives of the developers, I was present during many conversations relating to events or individual people at the inquiry. Such conversations were typically humorous and served to bond representatives of the developers over their common perspective in relation to the case. However, they also typically included highly personal critiques of individuals associated with the local opposition to the wind farm. The emotive, personal and often malicious material uncovered in the interviews and observation is on the one hand fascinating and revealing, but on the other hand delicate and potentially harmful to individuals concerned. For this reason, whilst it is instructive to acknowledge the personal and emotive connections which are made by both 'personal' and 'professional' individuals, it is not felt necessary to include details of such comments within the thesis.

> Participant observation represents a powerful tool for invading other people's way of life. It reveals information that can be used to *affirm* their rights, interests and sensitivities or to *violate* them. All informants must have the protection of saying things "off the record" that never find their way into the ethnographer's fieldnotes.
> (Spradley 1980: 22, emphasis in original)

Although the sensitive material in this case was provided freely and openly, it is still felt that it would not be ethical to include it within the thesis. There are instances within chapter ten where such comments are alluded to, but otherwise it is felt that discussing such personal matters is unnecessary.

However, due to the way in which the planning application was perceived, it is inevitable that much of the data is personal in its nature. Therefore measures have been taken to protect the identities both of the individuals making such comments and also those about whom the comments were made. In order to respect the trust which participants placed in me it was deemed necessary to anonymise both the individuals involved and also the case as a whole. It would have been insufficient to anonymise the individuals and identify the location or other details of the proposed wind farm since many individuals concerned (for example, key players in the opposition group, or the landowner) would be easily identifiable if the wind farm was named or located. Therefore, the names of the wind farm and nearby towns and roads have not been included in the thesis.

## 5.8 Summary

The key considerations in designing the methods for this research were that they needed to be flexible, able to adapt to unforeseen developments and they needed to allow an impartial consideration of the events and actors involved. Furthermore, they needed to enable insights into highly subjective, at times emotive, and complex issues. These considerations, along with my epistemological stance, are the main reasons why a qualitative approach was chosen. It is felt very strongly that a quantitative approach would not have been able to do justice to the many divergent and fluid views and experiences which were articulated throughout the research.

The chosen methods differed from the original research design (which involved multiple case studies), however, the decision to use a single case study was extremely beneficial. Whilst this meant that the research could not make claims to representativeness it also meant that the case study could be examined in considerably more detail and hence provided greater insights into the realities of the planning application experience. The evidence of triangulation which will be apparent within chapters seven to eleven enables confidence in the internal validity of the research design. Similarly, the comparisons between this case and others within the field of STS (discussed in chapter twelve) suggest that the findings may well reflect broader experience. Hence, although the details of the case may not be representative the theories which I derive from it are applicable to other studies.

Whilst the research raised a number of ethical dilemmas (as discussed above) the methods used were appropriate for the research topic and context. The multiple methods and responsive research design enabled a highly detailed examination of a wind power planning application and the ways in which it was experienced and perceived by a wide range of actors. The following chapter will provide the background to the case, chapters seven to ten will outline the findings of each of the individual methods and these findings will then be discussed together in chapter eleven.

## 6.0 Case Study

### 6.1 Introduction

This chapter draws on the findings of the review of secondary material relating to the case (*i.e.* press coverage and official planning documents) as well as the observation and interview data to provide an overview of the history of the case. The chapter will discuss the different stages through which the case passed and will identify the key actors involved in each stage. Subsequent chapters will then discuss in more detail the findings of each particular phase of the case study research (*i.e.* chapter seven: the qualitative thematic analysis of objection letters, chapter eight: observation, chapter nine: the qualitative thematic analysis of the inquiry report and chapter ten: the interviews).

This case study examines a planning application to build a wind farm, consisting of 16 turbines in a rural area of central Scotland. The turbines were to provide 2MW of power each, meaning that the total output of the wind farm would be 32MW. The selected site was situated between two small towns with the largest being seven miles away and having a population of 1700, the smaller of the towns was located approximately three miles away. If constructed the wind farm would be expected to cover an area of around 450 hectares, with the individual turbines standing at 67 metres high and with blade diameters of 80 metres, (thus, having a total height of 107 metres). Each turbine would require a reinforced concrete foundation which was anticipated to be 16 by 16 metres in area and one metre in depth. The turbines would be arranged 300 metres apart in a pattern which was said to closely follow the contours of the hillside. The development would also require access roads, an anemometer mast to monitor wind speeds (this would be 67 metres in height) and a control building with electricity substation. The wind farm would have an operational life of 25 years after which time it would be decommissioned (Development and Control Committee Report 1).

The planning application, due to its size (under 50 MW), was originally to be determined by the local authority, however, as will become clear below, its progress through the planning procedure was by no means smooth and ultimately this resulted in an appeal by the developers with the application eventually being determined through a public inquiry. Since the original planning application procedure and subsequent public inquiry involved different actors and were in many respects perceived quite differently by the interviewees they will be treated as two discrete stages in this chapter.

## 6.2 The Planning Application Stage

### *6.2.1 The key actors*

The key actors during the planning application stage which were identified through my review of secondary material and interview data are listed below (in no particular order);

a) The developers
b) The local authority
c) Statutory consultees
d) The local community
e) The local media

#### 6.2.1.1 The developers

The developers in this case are said to be one of the largest energy companies in the UK (Developer Material 4), with a ten per cent share of all UK electricity generation (Developer Material 5). Further, they are reported to be the largest generator of renewably sourced energy in the UK (Misc. Document 3), owning and operating around 50 per cent of the UK's renewable energy schemes (Developer Material 5). The company's first wind farm began generating electricity in 2002 and at the time of this research they were said to have 160MW of consented wind power. (Misc. Document 4).

#### 6.2.1.2 The local authority

Since the proposed development would be less than 50MW it fell within the local authority's remit. It was therefore the local council who had the power to grant or refuse planning permission for the wind farm and thus at this stage they held considerable power. However, in discussions with representatives of the developers it was suggested that the council also had strong interests which may have been responsible for shaping the outcome of the planning process. Despite a significant number of wind farm proposals in the area, the region had no wind farms (either in existence or with planning permission) at the time that this planning application was in progress. Accusations were therefore made that the council was taking an 'anti-wind power' stance.

#### 6.2.1.3 Statutory consultees

Statutory consultees are consulted at an early stage in wind farm planning applications, typically they will be involved in pre-application discussions with the council and the developer and will serve to point out any serious concerns and indicate whether they would be likely to object should the application be lodged. They are also then involved in the Environmental Impact Assessment

(EIA) process. These consultees are regarded as experts in significant areas relating to the proposed development; for example, Scottish Natural Heritage (SNH), the Royal Society for the Protection of Birds (RSPB) or the Ministry of Defence. In this case there was no substantial opposition put forward from any of the statutory consultees: This might reasonably have been taken as a good sign for the developers. SNH did initially respond with a conditional approval and sought some modifications of the plan, however they were later said to be satisfied that their conditions had been met and did not object to the development (Development Control Committee Report 1, Development Control Committee Report 2).

#### 6.2.1.4 The local community

The local community must be considered as significant stakeholders since they would be likely to feel the effects of the development more keenly than any other (human) group. However, determining who the local community is is problematic, and it became more than apparent that it was not possible to speak of *one* local community, but rather one must consider a range of different groups within the community each with their own perspectives, concerns and interests. Whilst there was a clear negative local public response to the application I am unable to assert whether this was representative of the wider community. However, the local opposition was considerably more vocal than local support and this public response (whether or not it was representative) clearly had a considerable impact on the planning application process, (as will be demonstrated later).

Interviewees gave conflicting impressions of who the 'relevant' local community was. The proposed development would sit within the boundaries of two different community councils, and whilst one was anticipated to feel the impacts of the construction phase (i.e. through construction traffic) more keenly, the other was anticipated to have more long-term impacts (i.e. visual impact). In the early stages it is alleged that the developers engaged more with the first community council who were said to have been anticipating financial benefits from the wind farm, however local people in the second community council area argued that they ought to have been the recipients of such benefits and that they had a bigger stake in the development. One interviewee (Personal Objector2) living in the second community council area stated that the people in the first area 'don't even use the hill' – the implication being that the development was not so relevant to them. Similar arguments were made with reference to people living in the towns compared to those living in the glen. It was felt by many that people living in the towns were not part of the relevant local community and should not be considered stakeholders,

however, it was simultaneously felt that these people were apathetic and it was asserted that they did not know or care about the proposal, but that they *should*.

#### 6.2.1.5 Local media

The local media are potentially highly influential having the power to both inform and sway local opinion in various ways. In this case it would appear that the local media (particularly newspapers) focussed predominantly on opposition to the wind farm and criticisms of the proposed development and developers. Most interviewees noted dissatisfaction with the local media, for example there were comments about the poor quality reporting, the high cost of local newspapers and the political associations of editors.

### *6.2.2 The Planning Application Experience*

This section will attempt to describe the process through which the planning application passed. In writing this section I am relying on accounts given during the interviews as well as those in the local press. It is important to note that there are many inconsistencies in these accounts and often there is no consensus, not only about why or how certain things occurred but also when. As such this section represents an attempt to piece together conflicting information and accounts faithfully, and wherever possible to acknowledge more than one perspective on the events or developments mentioned.

#### *Early stages*

The original identification of the site for this proposal took place some six years before it eventually reached the stage of a determination through public inquiry. At this initial stage it was one of a 'portfolio of sites' throughout Scotland, and as part of this 'portfolio' it was scrutinised to see if there were any likely problems - referred to as 'showstoppers' by Professional Supporter2. At this stage everything was said to appear to be 'ok'. The developers entered into discussions with the landowner (who had previous awareness of wind farms, having been contacted by other developers in the past), through these discussions an agreement was reached. A variety of technical studies were carried out to assess the feasibility of the site and to anticipate any likely problems – this included wind resource assessments, studies of transport possibilities and potential sites for borrow pits. There were also on-going meetings with statutory consultees throughout this stage to establish whether they had any concerns.

Once it was decided that a planning application would be submitted, the developers conducted an EIA. This involved detailed studies of the likely impacts on numerous areas including archaeology, birds, ecology, traffic, landscape, hydrology and others. The EIA is intended to be an objective study highlighting any potential impacts of the development, however as pointed out by several objectors the objectivity of the EIA is seriously questionable given that it is paid for by the developers and conducted with the specific purpose of gaining planning permission.

During the EIA process the statutory consultees were consulted but it was said that no serious issues were raised – Professional Supporter3 observed that they received one single request for more information (from Historic Scotland) which they responded to.

*Relationships were initially positive and constructive*

Certain members of the local community were consulted at this early stage, however, according to local people's accounts, it appears that publicity was kept to a minimum. Personal Objector2 recalled how they 'found out by accident' when they saw an announcement of a planning application for an anemometry mast. This individual went on to become an objector, however, at this time they had contacted the developers and were very impressed when the project manager and 'his boss' came 'hot foot' to see them and explain the application. This individual stated that they thought this was excellent. Professional Supporter3 also recalled this early meeting and similarly noted that 'on the face of it *x* seemed positive'. It appears that at this stage, although there was perhaps fairly little community engagement, the communication which occurred was positive and constructive. However, this later broke down.

Similarly, Professional Supporter2 and Professional Supporter3 noted that at this stage communication with the council's planning officers was positive and constructive – but this also broke down later. It was commented that through this consultation exercise the developers ought to have been able to predict what the planners' report would say, and if there were any concerns these should have been raised so that the developers had a chance to address them before the planners' report was written. In this case, Professional Supporter2 and Professional Supporter3 noted that all their communication with council officials indicated that there were no problems with the proposal, however in June 2004 (four years after the original site identification) 'for no apparent reason' communications broke down. The developers were then dismayed to find that the planners' report recommended refusal of the proposal. Professional Supporter2 commented that they thought it had been interfered with or influenced at the political level, and Professional

Supporter3 speculated that the council did not want to pass the application and therefore had obstructed it by not asking for further information and then determining that there was insufficient information. Similarly Personal Supporter1 noted that it seemed that the head of planning had taken the approach that he did not need to complete all the necessary work because the proposal would not be passed anyway.

The planning application was formally lodged in 2003 (three years after the site was originally identified), and negative community feeling had already formed by this point. Professional Supporter3 commented that 'elements of public feeling' first reached the developer's awareness in 2002 when they met with the community councils – this was said to be a mixture of positive and negative, however the negative feeling was described as being 'more vocal'.

Professional with Personal Interest Objector2 noted that when they were originally informed about the proposal (by the developers) they did not anticipate that it would become a major issue and were not concerned, however, once it got out into the public domain (through the developer's communication with certain people, and through other people seeing activity on the hill) public opposition formed, and this particular individual came to take on a key role. There were several similar accounts by interviewees of individuals who initially were not concerned about the proposal, or who were even in favour of it, later becoming strong objectors.

*The opposition group forms*

The increase in negative perceptions of the proposal must, at least in part, have been a result of the opposition campaign group which formed. Through interviews with representatives of this group it appeared that one of the main reasons that the group had formed was due to frustrations with the council's handling of the application. Personal Objector2, who was strongly involved with the group, commented that whilst they were happy with the communication that the developers had engaged in, they were extremely frustrated with the community council who were supposed to be the conduit between the local authority and the community. It was maintained that the council did nothing to ascertain public feeling and there was no consultation exercise. The campaign group therefore formed in order to disseminate information to the community. It was asserted by more than one interviewee connected with the group that the group's purpose was not to influence or change people's opinions but rather to give them information and allow them to make up their own minds. However, Personal Objector2 commented that a major problem was that the majority of people were 'apathetic' and did not get involved.

*The Environmental Statement*

Once the planning application was lodged members of the public had 28 days to respond, this was a source of aggravation for some objectors, one of whom (Personal Objector2) commented that it would take 28 days for a 'normal person' to study the environmental statement (ES) – which was the output of the EIA. This appears to have provided a serious obstacle to public comprehension of the proposal. Copies of the ES were made available in two larger towns beyond the immediate area, and within one of the local towns the ES was available in the post office which was described as being small, dark and difficult to access. Further, members of the public were not allowed to take the ES out of the building, hence studying it in detail was not made easy. It was possible to buy a copy of the ES but this was prohibitive since it was said to cost £100. A representative of the campaign group requested an electronic copy from the developers but this was denied – this refusal appears to have contributed severely to the formation or hardening of a negative perception of the developers. Personal Objector2 recounted positive experiences with other developers who had sold copies of their ES on CD for £15 and subsequently offered free amendments – it was felt that the developer's denial of an electronic ES was a deliberate attempt to prejudice their opposition.

*Letters to the council*

In order to raise awareness of the need to express public concerns, the campaign group produced a leaflet, which was said to be based on the ES (although it was later challenged by representatives of the developers). Along with the leaflet, a proforma card was provided to facilitate responses to the council. This proforma card has been severely criticised by supporters of the proposal, however those responsible for it maintain that it merely gave people's concerns and allowed the option to tick particular concerns and also to add their own concerns – indeed it was also used by some supporters to express their interest or lack of concern regarding the proposed development. The result was that the local authority received an unprecedented number of objection letters. The exact number is ambiguous since there have been varying reports, however the most reliable figure seems to be approximately 700 in total. For many people this volume of letters was very surprising, however for those who had previous (professional) experience of wind farm applications it was described as unexceptional. Further, whilst for objectors it certainly appeared to represent something highly significant in relation to public opinion, supporters pointed to the high percentage of proforma letters as a reason to invalidate the high numbers.

All supporters who were interviewed stated that they felt that the number of letters was not significant since the bulk of these were proforma cards; Personal Supporter1 and Personal with Professional Interest Supporter1 noted that the cards had been given to people staying in local bed and breakfasts who were asked to sign them and send them back, similarly it was alleged that employees on a large estate owned by a key player in the opposition group were each given multiple cards and told to get their family members to sign them. There were suggestions that the campaign group had been using coercive tactics in order to generate the maximum number of representations to the council against the proposal – however this is an accusation that representatives of the group strongly deny.

Similarly, members of the campaign group refuted the validity of letters of support which were sent to the council. It was stated by Personal Objector2 that the representations made in support of the proposal were 'disappointing' and did not provide valid arguments in favour of the proposal – it was noted that merely stating that you *do not object* to a proposal does not equate support in planning terms. This is one of several examples of where local, lay people demonstrated strong interests in and sound understandings of planning procedures and policy.

*A crowded meeting*

The planning application was meant to be determined at a meeting in August 2004, and it was reported by one newspaper that 'more than 700 people, including protestors, representatives from the council and the developers […] crammed into […] City Hall to discuss the plans' (Media Report 1). Personal Objector1 noted that all the council would have needed to do was to request all those in favour of the proposal to put their hands up and they would have discovered that three-quarters of the people there were against the proposal. This is something that was not done, and it appeared that many local people (opposing the proposal) felt that their views were not taken on board. According to several accounts, this meeting generated and exhibited strong feelings in members of the public who attended. Personal with Professional Interest Supporter1 recounted a local objector (who they knew well) telling one of their family members that they 'had a nerve' to show their face at the meeting. It was said that people were 'wound up into a bit of a frenzy' at the meeting. Personal Supporter1 stated that a lot of falsehoods were put forward by people opposing the development, moreover it was alleged that the developers were given no opportunity to correct these falsehoods.

It is interesting that whilst 'personal objectors' recounted that they felt their views were not taken into consideration at the meeting, 'personal supporters' felt that the meeting was dominated by objectors and that the developers were forced to 'play up hill fairly'.

Representatives both in favour and opposed to the proposal were given the opportunity to speak, however whilst supporters of the proposal alleged that the meeting was dominated by representatives of the opposition campaign group, Personal Objector2 expressed displeasure at the fact that it was a spokesperson in favour of the development that 'got the last word'.

*Minded to Approve*

Since the planners' report had recommended refusal of the application it may have seemed likely that this would be the outcome, however the councillors determined that they were 'minded to approve' the application subject to certain issues being addressed. There were many conflicting accounts of what actually happened, or what was actually said and several years later it continues to be a source of disagreement and dissatisfaction. Professional Supporter3 stated that the developers must have made a 'strong case', however other people have given quite different and less legitimate reasons for this confusing outcome.

Two interviewees (Personal Objector1 and Personal with Professional Interest Supporter1) were of the opinion that the proposal had actually been approved. With Personal with Professional Interest Supporter1 postulating that it may have been 'twisted' later to 'minded to approve'. Professional with Personal Interest Objector1 suggested that the decision had been pre-determined and was not related to what had taken place at the meeting. Personal Objector2 pointed to other political matters which had left councillors 'very subdued' as a reason for the 'shocking' outcome. It was said that the decision was effectively made by two people – the local councillors for the two community councils most affected by the proposal. It was argued that one of these councillors was anticipating financial benefits for their own area and hence was in favour of the proposal. A different reason for the councillor's support was given in a newspaper which said that the councillor argued that if the proposal were to be refused it would inevitably go to appeal and be approved by the Scottish Executive, thus placing it beyond local authority control. It was said that the councillor in question therefore proposed a motion to 'defer a decision and allow the energy company to address some of the concerns raised'. It was then said that this motion received unanimous backing (Media Report 2). However, in interviews there was less mention of unanimous backing and most people attributed the outcome to one particular local

councillor. Personal Objector2 described this second local councillor as a 'new kid on the block' since they were relatively new to local politics and lacked experience of planning decisions. It was argued that the councillor wanted to set the proposal aside, and seconded the first councillor believing that this was a motion to defer (not approve) the proposal. What ensued was a great deal of confusion, and it is alleged that the second councillor visited a lawyer for advice, however they did not attempt to correct their 'mistake' at a committee which ratified the meeting one month later – allegedly in order to 'save face'.

This disarray of conflicting accounts and the confusion about what actually happened appears to be largely attributable to the lack of minutes, or official notes of the planning meeting. This is a point which was raised in several interviews and which caused a great deal of exasperation for people who felt that such an important and controversial issue required accurate and detailed notes of the process and of what each party said. This lack of official records contributed to a significant dissatisfaction and frustration with the local authority by all parties.

The 'minded to approve' determination meant that the planning application remained unresolved and a second planning meeting had to be scheduled. Originally this was to take place several months later, however it was deferred due to the fact that additional environmental information from the developers had been made public too late for the legal requirement which states that people must have 28 days to respond to new information. Therefore it was concluded that 'any decision taken before then would "not be legally competent"' (Media Report 6). Consequently, the second planning meeting was deferred until January of 2005.

*The Community Council withdraws support*

In the meantime, one of the two local community councils held a public vote to gauge the community's attitude towards the proposed development. The community council had originally been supportive of the application and distributed a leaflet outlining their position in relation to the proposal along with ballot papers asking; 'Do you support the community council's position on *X* windfarm?' (Media Report 3). However, it was reported that out of a population of 1700 people only 112 responses were received, and further the results demonstrated a split vote with 62 votes against and 50 in favour (Media Report 5). There are many possible explanations for this low rate of participation, not least the ambiguity of the question asked. However, the result was deemed to be sufficient reason for the community council to withdraw its support for the proposal.

*The planners change their position*

At the second planning meeting in January 2005 (five years after the initial site identification) the planners' report this time recommended approval of the planning application, (although with a significant number of conditions attached to this approval). This advice was reported in the press 'to fly in the face of the [local council] structure plan, the eastern area local plan and the council's own Wind Energy policy guidelines' (Media Report 7). However, Professional Supporter3 noted that this change of position had come about because the conditions which were set earlier had been met and the statutory consultees who earlier had concerns were now satisfied the developers had met the instructions from the first planning meeting and there were therefore no reasons for the planners to object. Considering the planners' report from an altogether different perspective, Personal Objector2 contended that the earlier 'minded to approve' determination had stripped the planners of their ability to address any of the issues that had apparently been dealt with – it was said that they were left with a 'skeleton' to deal with, and were pressurised politically.

*The second meeting and refusal of planning permission*

The council was said to adopt quite a different approach at this second meeting compared to the previous one. Personal Objector2 commented that the council had received significant criticism after the first meeting where it was noted that they said nothing besides two speeches, therefore at the second meeting they had engaged in a little bit of debate – although this was described as 'not terribly intelligent'. It was suggested that the council had become aware of the way they may be perceived especially due to the fact that there was a press presence.

This awareness of how they might be perceived is contended to have had a significant impact on the proceedings and outcome of the second meeting. Professional with Personal Interest Objector1 felt that the councillor who it is alleged seconded the 'minded to approve' motion accidentally, was in a 'bit of a tizz' having been the subject of considerable pressure from the campaign group. It was suggested that the councillors were becoming scared of 'people power' and worrying about their re-election prospects.

The same councillor who had (allegedly accidentally) seconded the 'minded to approve' motion at the first meeting, this time proposed a motion to refuse the application which the other councillors backed. This appears to have been a surprising outcome for everybody regardless of

their own views. Personal Objector2 commented that it was 'quite extraordinary', and Professional Supporter2 stated that they were 'genuinely bemused' by the outcome.

The main reason given for the refusal of planning permission was a perceived threat to the local water supply. This proved to be a highly salient issue in the local press and provided a strongly emotive (if not necessarily substantive) argument against the proposal. For example, the convenor of Scottish Wind Watch was quoted as saying; 'These turbines presented a real threat of depriving many residents of possibly the most fundamental essential of human life – access to a safe and secure water supply' (Media Report 11, Media Report 13). These grounds for refusal have been widely criticised, with Professional Supporter2 asserting that there was no solid evidence regarding impacts, and moreover that this was an issue which could have been resolved through planning conditions. Similarly, Professional with Personal Interest Objector1 acknowledged that refusing the application on such 'weak grounds' left the council in a difficult position to defend.

The refusal of planning permission was widely reported as a 'victory for people power' (Media Report 11) with headlines such as 'People power blow for wind farm', (Media Report 12) and 'Scottish campaigners hail victory' (Media Report 13). Personal Objector1 described their reaction to the decision as 'relief', while Personal with Professional Interest Supporter1 stated that they were 'fuming' not because it was refused but because it was refused after lots of people spoke at the meeting to make 'knowingly false statements'.

*An appeal was inevitable*

However, every interviewee commented that they thought an appeal was inevitable. For example, Professional with Personal Interest Objector1 stated that the developers would have expected to have been given planning permission and that they thought they were 'home and dry'. Professional Objector1, reflecting on wider experience of wind farm planning applications, commented that very few developers walk away from a proposal when planning permission is refused. Likewise, Personal Supporter1 said that it was quite clear within minutes that they would appeal.

Whilst everybody appears to have fully expected an appeal to occur, it was a long time before this was actually lodged. Personal with Professional Interest Supporter1 said that they knew there was going to be an appeal but were surprised that it took so long. Personal Objector2 recalled that the

developers had waited until practically the last day of the allowed six month period before announcing their appeal. During this time it seems that the last of the constructive or positive relationship that had previously existed between the representatives of the developers and certain members of the local community entirely disintegrated. It was felt that this long delay allowed the developers to prepare themselves for the appeal whilst simultaneously denying the local opposition the opportunity to do likewise. Knowing that an appeal would take place Personal Objector2 contacted the developers to ask once again for a copy of the ES electronically so that they might begin preparing for the appeal, however they stated that they did not get a good response and the representatives of the developers had claimed that no electronic copies of the ES existed – a claim which Personal Objector2 strongly disbelieved. Further, they then also refused to give the campaign group copies of the appeal documents, which were eventually provided by the Scottish Executive. Examples such as these demonstrate occasions where the developers appeared insensitive or inconsiderate towards local objectors and it was felt that they were intentionally prejudicing them since it made preparations for the appeal incredibly difficult.

Professional Supporter1 argued that the six month period between the refusal of planning permission and the lodging of an appeal was used by the developers to develop their strategy as to how they would move forward. They originally intended the appeal to be carried out through written submissions and therefore were preparing lengthy documents.

*Written submissions*

A decision was taken to appeal the planning decision by written submissions, this was in the interests of the developers since, as was noted by Professional Supporter1, it was cheaper and quicker and would avoid the full adversarial process of a public inquiry. It was deemed to be appropriate since the reason for refusal was on a particular narrow ground (the threat to the water supply). However, the prospect of not having a full public inquiry caused an outcry and was labelled ‘a scandalous denial of democracy and an attempt to sweep vital environmental issues under the carpet rather than having them aired in public’ (convenor of Scottish Wind Watch, cited in Media Report 18). The fact that the appeal would be decided on written submissions generated a great deal of anger within the local community and it was said that about 250 people wrote to demand a public inquiry (Media Report 20). One interviewee who recalled writing a letter for such a purpose (Professional with Personal Interest Objector2) said that they had felt very strongly that it should have been dealt with through public inquiry because it was such a controversial issue and all opinions needed to be heard. Professional Objector1 commented that

written submissions provided a perfectly satisfactory means for determining simple cases such as disputes over extensions to houses, but was entirely inappropriate for a case such as this one.

For many people in the local community a public inquiry was desired since it represented a forum where people felt confident that their views would be aired and treated fairly; this seemed necessary after all the confusion and contradictions of the planning application process. There was therefore a great deal of relief and satisfaction when, in September 2005, it was announced that the appeal would be carried out by means of a public inquiry.

## 6.3 The Public Inquiry Stage

### *6.3.1 The key actors*

The key actors during the public inquiry stage which were identified through the observation and interview data are listed below (in no particular order);

a) The reporter
b) The appellants (the developers)
c) The opposition (the local authority)
d) The relevant third parties (the local opposition group)
e) The advocates
f) The expert witnesses
g) The local media

As in the earlier stage, I will now discuss each of these actors in turn. In this section I will also include observations made during the inquiry process before interviews had been conducted.

#### 6.3.1.1 The reporter

At the inquiry a reporter from the Scottish Executive Inquiry Reporters Unit (SEIRU) was appointed to oversee and adjudicate the proceedings and evidence. In effect the reporter had the role of judge and jury at the inquiry, being in charge of the proceedings and maintaining order throughout and then assessing all the evidence and determining the outcome.

#### 6.3.1.2 The appellants (the developers)

The developers had the role of appellants in the inquiry since it was them who lodged the appeal and hence were making the case for the earlier planning decision to be overturned. During the inquiry they presented a solid and unified team, they appeared smart, well-organised and very

confident. Each morning of the inquiry the developers' team arrived in a (often large) group and usually later than everyone else, within five minutes of the beginning of inquiry proceedings, as such their entry was very powerful. Often the number of people representing the developers on one day outnumbered the members of public in the hall.

Within the local community, the developers appear to have been largely perceived to have near infinite resources. This was seen to have enabled them to hire the best team of experts and consultants and an advocate who one member of the public described as being 'clearly shit-hot'. Within interviews it was suggested that they had 'bought' expertise and valuable opinions through financial means as opposed to the merits of their case.

The developers appeared to see the process of wind farm development as tried and tested and moreover as simple. They were confident of their chances and confident that the merits of their case far outnumbered those of their opponents, as such they saw themselves as the experts and the opposition group comparatively as non-experts.

6.3.1.3 The opposition (the local authority)

Since it had been the local authority who had refused planning permission for the development they were the official 'opposition' at the inquiry, however despite this they took a backseat at this stage. There was very little consistency in their representation and often they were not represented by an advocate or solicitor. During the inquiry they only presented two expert witnesses and one 'non-expert' witness (the councillor who was widely held responsible for the refusal of planning permission). They typically only had one representative present per day (and this was usually a different person from day-to-day), this is in sharp contrast with the developers who typically had between five and seven representatives (four of which were present *every* day).

From discussions with members of the community during the inquiry it appeared that people were frustrated with the council and did not trust them to serve their interests. After the councillor gave evidence (regarding her role in refusing planning permission) members of the public expressed their clear disappointment, referring to her as 'diabolical' and suggesting that she was 'just trying to appease everyone'. One lady commented; 'I don't trust her at all – *not at all!*' The general sentiment seemed to be that members of the council, and especially this councillor, had let down the community and that they did not care about 'the people'.

The council having refused planning permission and in part caused the inquiry to come about might have been perceived to have a responsibility, or at least a strong rationale to defend their position but they did not do this and instead left it up to the third party opposition group. The council's representatives appeared fairly relaxed throughout the inquiry, perhaps due to the fact that the power to decide the outcome had been taken out of their hands. During the proceedings the council representative often appeared to be bored and not paying attention (even dosing). They very rarely asked questions of witnesses and typically when they did this was only to clarify minor points. However, it became clear on the day of closing submissions that the developers intended to claim expenses from the council should they have won their case – for this reason, and since they ought to have been aware that this was a possibility, one might have expected the council's representatives to have mounted a stronger defence.

#### 6.3.1.4 The relevant third parties (the local opposition group)

The local opposition group were given relevant party status and hence were allowed to present their case with witnesses at the inquiry. In the absence of a strong opposition from the council they formed the main opposition at the inquiry and played a key role.

The sentiment of the group during the inquiry, as expressed by one member, was as such; 'we are hoping, but not hopeful'. It was felt that this was a 'David and Goliath' situation and that the group was up against not only the developers but also the Scottish Executive. Similarly, an individual associated with the group told me that they felt it was a shame for the expert witnesses who represented the group since they did not have the same resources as the developers and could not afford to pay their witnesses for as much time, therefore it was felt that their witnesses were comparatively ill-prepared and disadvantaged. This is a theme which also came up in several interviews with objectors, who commented on the strained resources of the group and the difficulty of finding experts who were prepared to give evidence for free.

#### 6.3.1.5 The advocates

The public inquiry was an adversarial process, with witnesses giving evidence and then being subjected to (sometimes lengthy) cross-examination by advocates. As such the advocates played a key role. Each 'side' had an advocate – although that of the council was rarely present. At many points in the inquiry objections to a line of questioning resulted in complicated legal and procedural arguments and members of the public became frustrated that discussions were turning to confusing legal points which distracted from the issues and seemed irrelevant to their concerns.

It is interesting to note that whilst 'personal' interviewees appear to have been troubled by the adversarial nature of the inquiry, 'professional' interviewees were not. It is worth bearing in mind that aspects such as this which are considered perfectly acceptable by 'professionals' involved in public inquiries are not seen in the same way by local people who experience the planning process from an entirely different perspective.

#### 6.3.1.6 The expert witnesses

For each topic discussed at the inquiry the developers presented one 'expert' witness, as did the local opposition group on all except five topics ('Energy Policy and Need', 'The Project', 'The EIA Process', 'Archaeology' and 'Peat Land Ecology'). The council presented only two 'expert' witnesses. The bulk of the inquiry was taken up with evidence from these experts and subsequent cross-examinations. Typically each of the experts presented their 'summary precognition' (which outlined their position regarding the topic) and were then cross-examined. Unsurprisingly the experts representing the developers and those representing the local opposition group presented contradictory evidence, (or at least presented their evidence so that it provided contradictory conclusions and implications).

The legitimacy of expert witnesses was a key theme running throughout the inquiry and much of the cross-examination (especially by the developers' advocate) focussed on discrediting expert witnesses personally. Without exception the developers' advocate attempted to demonstrate that each of the opposition group's expert witnesses were less qualified or appropriately experienced than the expert giving evidence on the same topic for the developers. This was a strong, and in many instances discomforting, pattern in the cross-examination of the opposition's witnesses, and something which was raised repeatedly by 'personal' interviewees who expressed frustration that considerable time and energy was wasted attempting to discredit individuals instead of considering and debating the evidence they presented.

#### 6.3.1.7 The local media

Since the majority of the local community were not directly involved in the inquiry proceedings the local media provided an important means of informing people about what was happening. Further, if they accessed information about the inquiry solely or predominantly through such mediums the ways in which the local media presented the information could have had a significant effect on the way that it was interpreted and ultimately on public opinion and attitudes.

Therefore it is valuable to consider how the local media covered issues relating to the public inquiry so as to understand the picture that was painted and how this would have been received by the public.

During the inquiry the media did not have an obvious presence. Representatives of a local newspaper were present on no more than two or three occasions, and on these occasions for no more than an hour out of any one day. The inquiry was covered in at least four newspapers but coverage was not extensive or consistent throughout the inquiry.

The developers took a decision before the inquiry commenced not to engage with the media or comment on the proceedings or project whilst it was ongoing. This was stated on their website in a press release which outlined their case and reasoning for going to appeal. The local opposition group took a different approach, and (whilst associated interviewees commented on their poor coverage in the local media and the media's apparent bias in favour of the developers at this stage) they appeared to actively engage with the local media throughout the inquiry. When members of the press did attend the inquiry they invariably spoke with or interviewed representatives of the local opposition group, however there was no similar engagement with representatives of the developers. This one-sided information had inevitable consequences for the inquiry coverage. For example, after one particular witness gave evidence on behalf of the local opposition group it was reported in one local newspaper as having been a great success for the opposition group, however representatives of the developers asserted that they did not feel that this witness had presented a sound or persuasive argument. The press received and represented the opposition group's perception of the day's events but this did not represent the developers' perception.

It is likely that the developers chose not to engage with the press so as to avoid inaccurate or potentially regrettable statements being (mis-)represented in the press, however by doing so they also gave up the opportunity to refute or challenge statements made by their opposition. This ultimately led to one-sided media coverage of inquiry proceedings.

Several interviewees asserted that they felt the local media was biased (interestingly this was asserted by interviewees who were both supporters and objectors and in each case the bias was felt to be towards the 'other side'), and also lazy. This sense of laziness came from the fact that on more than one occasion the local press covered inquiry proceedings without attending, and this

led to inaccuracies which were more than evident to those who did attend. For example, on two consecutive days one local newspaper reviewed the evidence given by particular witnesses as though it had already happened but a day before it actually had. It seemed that the journalist had accessed summary precognitions and a timetable of witnesses but did not know that the inquiry was not running according to schedule. Whilst this may have been a fairly innocuous mistake, it angered members of the opposition group some of whom used it as an example of the press' deceitfulness. There was a great deal of commotion amongst members of the opposition group on the first day that this occurred, with more than one person taking the article to the SEIRU reporter, and several people also making accusations that the developers were 'feeding information to the local press'.

The media were clearly used but also mistrusted by members of the opposition group. However, no party involved in the inquiry was content with the press and all sides appeared mistrustful of them and the accuracy of their reporting. Whilst this did not seem to be of much concern or significance to 'professional' interviewees it was treated very seriously by 'personal' interviewees. This is at least in part due to the fact that members of the opposition group felt unable to compete with the resources and in particular the PR department of the developers and hence felt the need to be watchful of the local press. Nevertheless, locally at least, the opposition group appeared to be far better connected with and represented by the media.

### *6.3.2 The Inquiry Process*

The details of the inquiry process, (for example the issues which were addressed) will be discussed in more detail in chapter eight, however a brief overview is given here. The inquiry was intended to run for four weeks, (with a one week break before the last week), between the 20th March and 13th April 2006. However, the actual inquiry dates, due to illnesses and consequent timetabling dilemmas, spread over a three month period meaning that there were some breaks in proceedings, and the closing submissions were presented on the 5th July.

Whilst it is normal procedure for public inquiries to be structured so that the appellants (in this case the developers) present their evidence first, followed by the opponents (in this case the council) and then lastly the third parties (in this case the local opposition group), it was decided that this inquiry would take a somewhat unusual approach and instead adopt a topic-by-topic structure. This meant that the inquiry timetable was organised so that all parties' witnesses on any particular topic gave evidence on the same day (or two consecutive days) and hence cross-

examination enabled the evidence to be easily compared and contrasted. This approach seemed to be appreciated by all parties and various positive reflections were made on this.

The first day of the inquiry considered 'Energy Policy and Need', 'The Project' and 'The EIA Process', hence it provided the background to the project and the approach that had been taken by the developers so far. On this day there were only witnesses on behalf of the developers – no contradictory evidence was presented. The opposing parties were very quiet and there was very little cross-examination which meant that three witnesses were able to give evidence within the first day (which, according to representatives of the developers, was most unexpected). The lack of cross-examination on this first day, particularly on the issue of 'need' created problems for the opposition group later in the inquiry when they were no longer able to contest this area since it had previously been 'dealt with'.

The rest of the first week covered the following topics; 'Transport and Road Issues', 'Socio-Economic and Tourism Issues', 'Archaeology' and 'Landscape and Visual Impact'. The second week covered; 'Noise', 'Ecology/Ornithology', 'Hydrology/Hydrogeology', 'Peat Land Ecology' and 'Planning Policy'. The third week was largely reserved for third party witnesses and a site visit. However, complications in re-structuring the inquiry timetable meant that this last week was split up with the site visit taking place on a separate date and the remaining witnesses (predominantly third parties) giving evidence over three days either side of a weekend.

### 6.4 The Outcome

The reporters' verdict was officially released in a report from the Scottish Executive towards the end of September (approximately three months after the inquiry concluded). The report, which ran to 74 pages (including annexes), outlined the reporter's reasons for allowing the developers' appeal (*i.e.* granting planning permission for the proposed development). In addition to allowing the appeal, the reporter also upheld the developers' claim for costs, meaning that the local authority was responsible for covering the developers' costs at the inquiry.

Naturally all 'supporters' who were interviewed reacted positively to the report. It was described as 'absolutely fantastic' and a 'victory'. Professional supporters asserted that they had been confident that they had presented a solid case at the inquiry and ought to have been successful and as such the verdict was not a big surprise, (although it was frequently stated that they could not have been 100 per cent sure of this before the report came out). Professional Supporter2

stated that they would have lost faith in the process if the outcome had been any different. Furthermore, it was felt that the granting of costs vindicated the developers' position, and in particular confirmed their claim that they had been treated unreasonably by the local authority during the earlier planning application process.

Objectors, whilst being disappointed and in some cases annoyed by the report, generally did not claim to be surprised by the outcome. Several objectors commented that they were annoyed that the reporter appeared to have dismissed many important concerns too easily and paid them scant attention. Whereas Professional Supporter1 noted positively that the report had quickly focussed on the key, determining issues, for objectors this was seen not as a positive aspect but rather as demonstrating laziness or a lack of consideration of valid points of argument (this will be discussed further in chapter ten).

## 6.4 Summary

The history of the planning application was fraught with delays, confusions and complications. Different actors' perceptions of the process were at times entirely different and this has meant that piecing together the history of the case has not been straightforward. This chapter has, however, attempted to provide an overview of the case and also different actors' perspectives on it. Subsequent chapters will address particular aspects of the case in more detail. The following chapter, in setting out the findings of the qualitative thematic analysis of the objection letters, will provide greater insights into the objections of opponents to the planning application.

## 7.0 Findings: Qualitative Thematic Analysis of Objection Letters

### 7.1 Introduction

As noted in the previous chapter, the proposed wind farm provoked an unprecedented number of objection letters to be sent to the local authority. Therefore in order to fully understand the community's reaction to the proposed development it is important to consider the nature of individuals' (as well as the opposition group's) objections. To this effect a qualitative thematic analysis of all the objection letters retained on file by the local planning authority was carried out. A total of 700 objection letters were analysed in order to identify key themes and issues raised by those in opposition to the proposed development.

Whilst the emphasis of this study is primarily on local community experiences it must be noted that objection letters were sent from individuals residing far from the local area, (including for example, the Netherlands, Australia and Kenya). Nevertheless, just over three-quarters (76%) of the objection letters came from addresses within the same postcode area as the proposed wind farm site (*i.e.* with the same first two letters in the postcode). It should also be noted that there were 22 letters of support recorded by the council, however due to their small number these have not been included in this analysis.

Of the 700 letters included in this analysis, 536 were proforma cards, 51 were proforma letters and the remaining 125 were individual letters. The proforma cards, as described in the previous chapter, were created by the local opposition group and contained a list of objections which individuals could tick and also invited objectors to write additional comments (an illustration of this proforma card is shown in figure 7.1). The proforma letters were copies of one letter which had been circulated and sent to the council with multiple signatures. The individual letters were unique and written by individuals or families (although they typically raised similar issues and often used similar language).

As was discussed in the methodology chapter, through the process of a qualitative thematic analysis a total of 132 themes were identified. These themes were then grouped into 12 categories of issues, as shown below.

**Categories of Objection Issues**

a. The wind turbines
b. Wind power technology

c. Traffic and roads
d. Tourism
e. Ornithology
f. Impact on individuals/families
g. Archaeology
h. Environmental degradation
j. Planning process
k. Community fund
l. Renewables policy
m. Other

The categories contained between 1 and 23 issues, with the average number of issues per category being 10.

**Figure 7.1: Example of the Proforma Card**

**Planning Application Ref. No.** [redacted]

**Proposed development for the erection of a 16 turbine wind farm and ancillary works at** [redacted]

**I would like to register my objection to the above proposal for the following reasons:**

- **Visual Impact** – domination of unspoilt landscape by out of scale turbines which will be visible from parts of [redacted], many [redacted] hills, [redacted] and even [redacted] plus potential cumulative impact from [redacted] in [redacted].
- **Environmental Impact** – almost certain irreversible damage to protected peat bog area including threat to diminishing wildlife habitat and damage to the protected [redacted].
- **Ornithological Impact** – loss of ground nesting sites plus crucial moorland feeding ground and danger of bird strikes particularly to protected species eg. Ospreys and Hen Harriers.
- **Archaeological Impact** – destruction of unexcavated battle site and ancient monuments.
- **Access and Construction Traffic** – damage, destruction and danger caused by large heavy loads on inappropriate access route through [redacted] and risk to the road infrastructure and bridges.
- **Tourism and jobs** – long term negative economic effects due to reduction in visitor numbers.
- **Other** – eg: television interference, damage to water supply, reduction in house prices etc.

Please add other concerns and/or delete any concerns you do not consider important.

Name and Address:

Signature

Connection with Area (local resident, visitor etc)

## 7.2 Overview of Findings

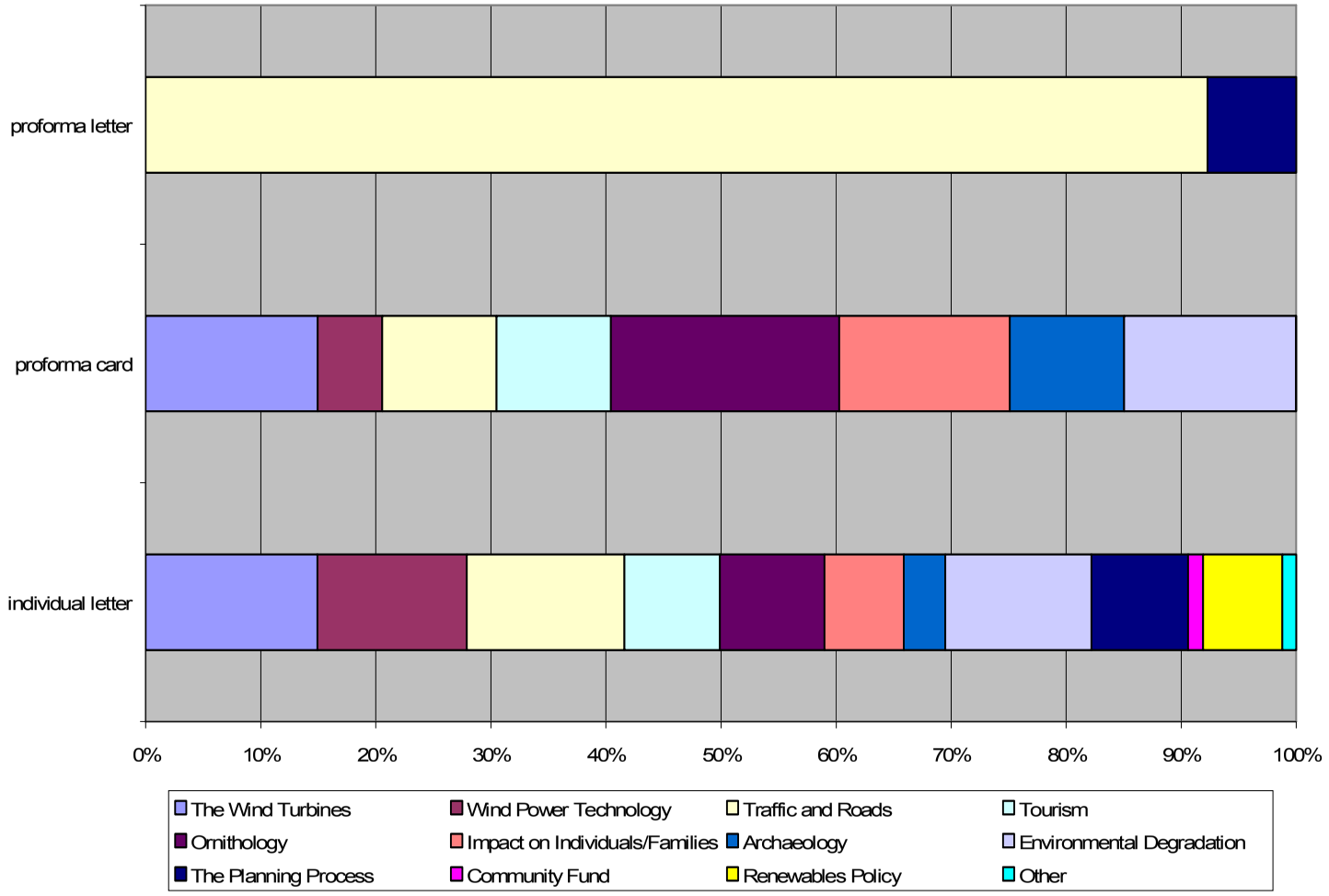
Table 7.1 provides an overview of the prevalence of particular categories of objection issue within the objection letters. It is important to note that the numbers are much higher than the total number of letters since each issue raised is the unit of analysis and letters typically referred to many issues. From this table it is apparent that a wide range of issues was raised and that these were reasonably evenly distributed. However, 'Ornithology' is mentioned the greatest number of times, followed by 'Traffic and Roads' and 'The Wind Turbines'.

**Table 7.1: Frequency of categories of issues within objection letters**

| Theme | Number of mentions | % of total mentions |
|---|---|---|
| Ornithology | 2228 | 17.97 |
| Traffic and roads | 1814 | 14.63 |
| The wind turbines | 1749 | 14.11 |
| Environmental degradation | 1729 | 13.95 |
| Impact on individuals or families | 1671 | 13.48 |
| Tourism | 1153 | 9.30 |
| Archaeology | 1105 | 8.91 |
| Wind power technology | 716 | 5.78 |
| Planning process | 138 | 1.11 |
| Other | 69 | 0.56 |
| Community fund | 12 | 0.10 |
| Renewables policy | 11 | 0.09 |

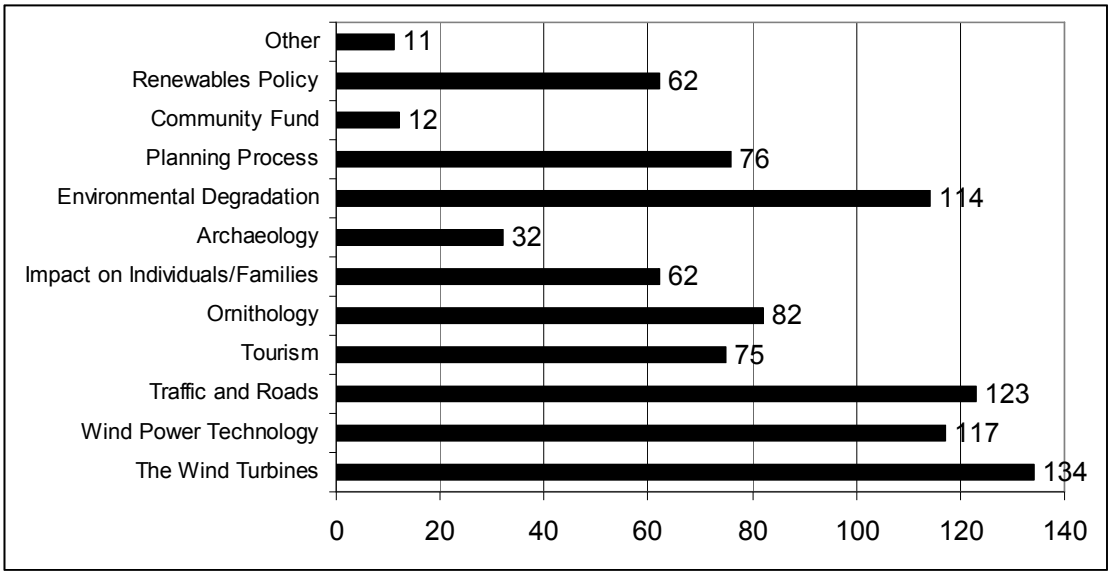
It is interesting to consider whether the method of objection had any effect on the nature of objections. As is shown in Figure 7.2, there are observable differences in the issues raised within individual letters, proforma letters and proforma cards.

**Figure 7.2; Differences in frequency of mentions for each category according to objection method**



7.3 Individual letters

**Figure 7.3: Frequency of objection issues within individual letters**




As can be seen from figure 7.3, within the individual letters a wide range of issues was raised and there was no one clearly dominant category of objection issue. The most prevalent category was 'The Wind Turbines' (15%), followed by 'Traffic and Roads' (14%), and 'Wind Power Technology' and 'Environmental Degradation' (both 13%). Interestingly, 'Ornithology', which was the most dominant category overall was mentioned comparatively few times (9%).

Within the category of 'The Wind Turbines' 40% of mentions (in individual letters) related to 'Visual Impact' and 19% to 'The Scale/Size of the Structures'. This reflects Wolsink's (2000, 2007a, 2007b) argument that visual impact has the strongest influence on individuals' attitudes towards wind farms.

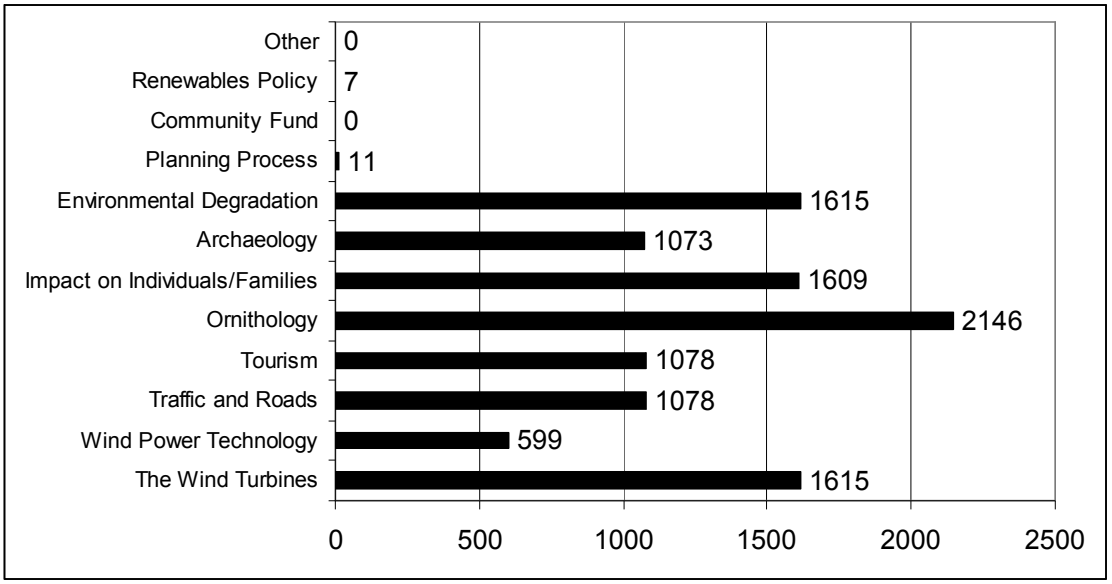
7.4 Proforma cards

As illustrated in figure 7.4, the proforma cards included a wide range of objection issues, but the order in which they were ranked was different from within individual letters. 'Ornithology' was mentioned most often (19%), followed by 'Impact on Individuals/Families', 'The Wind Turbines' and 'Environmental Degradation' each of which received 15% of the total mentions.

Given that proforma cards made up the vast majority of objection letters (77%) they had a clear impact on the pattern of objection issues. For example, some 96% of all mentions related to

ornithology were found within proforma cards – as such without the local opposition group's campaign, of which the cards were a product, this category of objection is unlikely to have been a major issue within objection letters.

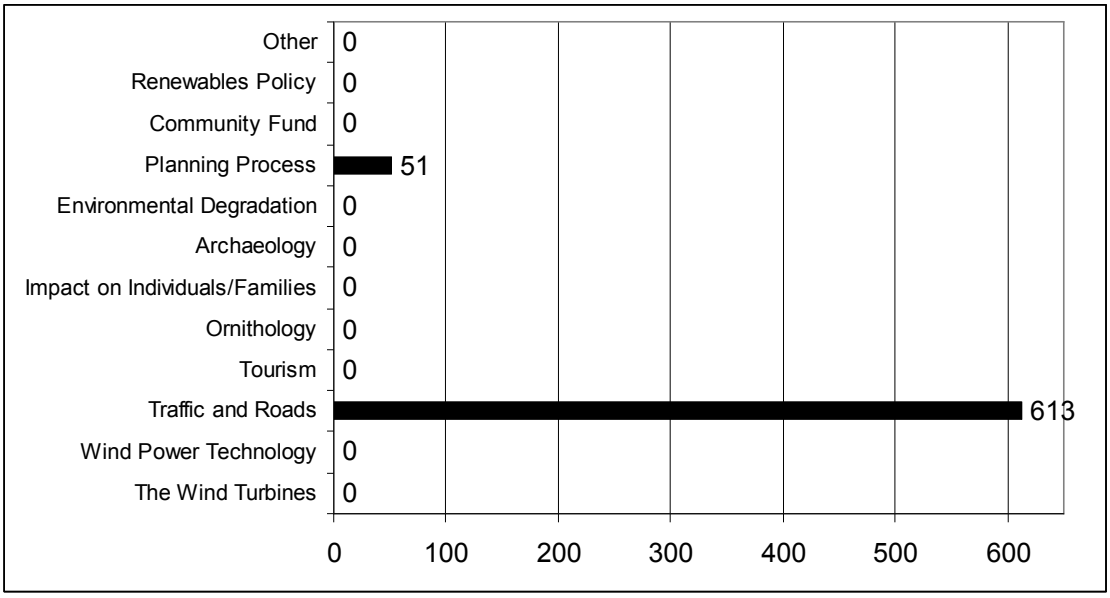
**Figure 7.4: Frequency of objection issues within proforma cards**




'Ornithology' (which was not notable within individual letters) was clearly dominant within proforma cards. It may be that whilst individuals were concerned about various other issues, they were not deemed robust enough by the campaign group who favoured less subjective issues (i.e. potential impact on birdlife). As Barry *et al* (2008) and van der Horst (2007) have noted, opponents to wind power developments are often aware of the potential to be branded a NIMBY and therefore will seek to avoid being portrayed as such. Issues relating to 'Visual Impact' or the (in)appropriateness of the size of turbines may be viewed as matters of taste and personal preference, whereas if an endangered species of bird (such as osprey) is likely to be negatively affected by the development this may be viewed as more legitimate and less questionable grounds of objection. As Toke (2005a: 1528) observes; 'one should be wary of associating such linguistic judgements (which are made to fit in with planning law) with 'real' factors which will motivate people to oppose wind power schemes'. Thus the proforma card circulated by the campaign group represents a set of issues which have been chosen and worded in a certain way based on knowledge of planning processes and policy.

7.5 Proforma letters

**Figure 7.5: Frequency of objection issues within proforma letters**




Finally the proforma letters provided a very different set of preferences. As demonstrated in figure 7.5, the proforma letters referred to only two categories: 'Traffic and Roads' accounted for 92% of all mentions within the proforma letters, and the small remainder (8%) of mentions referred to the 'Planning Process'.

7.6 Summary

In summary, analysis of the letters appears to suggest that whilst issues relating to ornithology may have been construed to represent 'safe' objection matters, the true concerns of opponents are far broader and appear to be more concerned with the physical nature of the turbines (their visual presence in the landscape and their size), as well as to fears about the impact on local traffic and roads. This analysis will be considered in relation to the qualitative thematic analysis of the inquiry report (discussed separately in chapter nine) in chapter eleven.

## 8.0 Findings: Observation

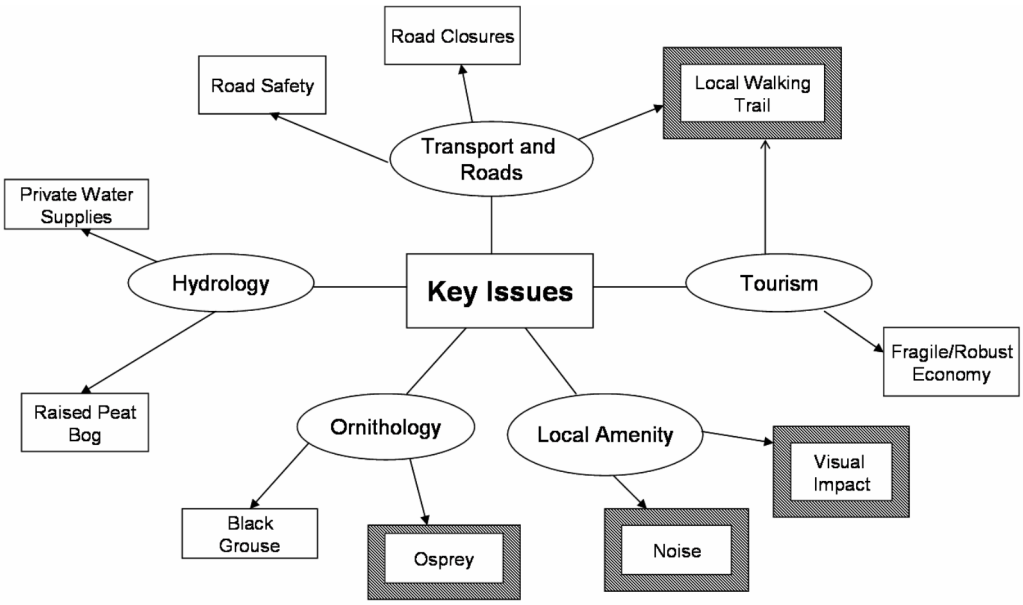
### 8.1 Introduction

The observation phase of the case study was conducted at the public inquiry. I was present throughout the inquiry and this chapter illustrates the key themes which emerged from my observations. The diary which was kept during the observation phase details the evidence which was given on each day of the inquiry and also how this was responded to by members of the public and representatives of the developers. As such this chapter will highlight which topics were central to the inquiry proceedings and also how these topics and the evidence presented were perceived by different actors at the inquiry (as well as by myself as an observer).

Although the purpose of this chapter is to highlight the findings of the observation phase, it will at times also be useful to draw on reflections which were made within interviews in order to fully and accurately explore actors' perceptions of inquiry issues.

### 8.2 The Key Issues at the Public Inquiry

**Figure 8.1: Key issues at the public inquiry**




The different topics which were discussed at the inquiry were outlined in chapter six. This chapter will now discuss in more detail the topics which, based on my observations, were considered to be the main issues at the inquiry. These issues are shown in figure 8.1 which also illustrates where concerns became important in more than one area. Those highlighted with a border are

those which I believe came to be of crucial significance during the inquiry proceedings. Each of these key issues will now be briefly discussed in order to outline the central debates of the inquiry.

### *8.2.1 Transport and Roads*

Transport and roads were discussed very early in the inquiry proceedings, (on the second day), however references to perceived dangers or risks relating to this topic continued to arise until the very end of the inquiry – particularly in third party opposition evidence. On day two of the inquiry evidence was given by 'expert' witnesses representing both the developers and the local opposition group relating to the likely impact of construction and maintenance traffic required for the construction and operation of the proposed wind farm on local roads, traffic and amenity.

The main issues discussed were the need for road alterations and closures during or prior to the construction process, and the ability of abnormal loads carrying turbine components to navigate the route – particularly their ability to negotiate certain corners. Another point which raised much debate was the disruption that would be caused to a local walking trail which had recently been the recipient of council investment.

Whilst the opposition group's expert witness contended that the works required to make the road suitable for the necessary abnormal loads would inevitably require significant road closures and consequently disruption to local users, the expert giving evidence on behalf of the developers asserted that he did not perceive that there would be more than three or four road closures of no more than a couple of hours each. Neither witness would accept the other's argument and the ensuing debate led to complicated and technical arguments which left the majority of the members of the public attending feeling confused and alienated from the discussion. The general sentiment amongst members of the public who were in attendance was that 'of course' there would be significant disruption; technical arguments did nothing to alleviate the concerns of those appealing to commonsense and local knowledge.

This was again the case with discussions relating to the ability of abnormal loads to navigate a corner in the road by a local church. Concerns were raised about damage that would be caused to the church wall. The opposition group's expert referred to diagrams of the route which clearly showed that it was impossible for the abnormal loads to get around the corner without colliding with the wall. However, his counterpart stressed that the diagrams should not be taken at face

value and that they did not take into account the mechanisms of the vehicles which made the corner feasible despite its apparent impossibility. This again, inevitably, led to highly technical arguments and it was suggested by the developers' advocate that the opposition group's witness was ill-qualified and therefore unable to comprehend the issue properly. The opposition group's witness repeatedly argued that he was only presenting evidence based on the information provided in the diagrams and documents, whereas the developers' advocate and witness argued that this was insufficient.

Consequently, the debate was far-removed from lay people wanting to understand the issue in terms of its impact on their life and locality. Much of the cross-examination by the developers' advocate focussed on discrediting the opposition group's expert as a witness and on showing him to be inept to understand the evidence presented by the developers' expert witness. Thus the capacity of members of the public with even less, or no, expertise to understand and evaluate the debate may have been perceived to be negligible. The implication was that only experts – and moreover only experts with very particular skills and training – could fully understand or engage with the issues.

A third point of contention was the impact of road works, and movements of abnormal loads on a local walking trail. This walking trail crossed the proposed transportation route at more than one point and hence concern was raised for the safety and enjoyment of walkers using the trail. This was naturally contested by the developers' representative and debate ultimately turned to the importance and significance of the walking trail – which is something which became a major source of disagreement in later discussions regarding tourism (as will be illustrated below).

### *8.2.2 Tourism*

Tourism was discussed on the second and third days of the inquiry. As already mentioned the local walking trail became a major issue within this topic. The importance and relevance of this walking trail was the main issue of debate. The trail had existed for some time but had only recently received considerable investment by the council and was being promoted as a tourist attraction. It was a matter of some contention as to how many people actually made use of the trail and how significant it was to the local economy.

The witness giving evidence on behalf of the local opposition group suggested that the local tourism industry was significant for the local economy but was highly vulnerable and many

businesses had failed or were failing. He therefore suggested that the walking trail presented a new opportunity to regenerate the local tourism industry. He saw this opportunity as threatened by the proposed wind farm development since it would be visible from several points along the trail and would therefore ruin the 'wild' landscape and the sense of being in a remote, non-industrial area.

Conversely, the developers' witness contended that the local tourism industry was robust and resilient to changes in the landscape. He had carried out a study of local tourism-based businesses and cited the findings of this to back up his assertion. The opposition group's witness had also carried out a similar study and much of the cross-examination focussed on contrasting the two witnesses' methods and approaches. Whilst the developers' witness' study had focussed on a fairly wide area and only included one business in the nearest town, the opposition group's witness' study focused more narrowly on businesses within ten kilometres of the proposed wind farm. Hence his findings reflected the feelings of those who were most likely to be affected whereas those of the developers' witness reflected the wider community – it is therefore important to note that both may present important findings which do not necessarily contradict the other. The cross-examination, however, attempted to present the two studies as being directly in opposition to one another and as being 'right' or 'wrong'.

The opposition group's witness' approach was criticised since he openly noted that many of the people he contacted were not aware of the proposal, or at least its detail, therefore he had 'informed' them before asking for their opinion or concerns. It was noted that by 'informing' them about the proposal he potentially also biased the outcome of his study by presenting his own account which may have been coloured by his own preconceptions.

This was an example of where the cross-examination of a witness acting on behalf of the local opposition group focussed more on discrediting the witness personally, than on debating or contesting the evidence that they presented. As such it was another occasion where members of the public were not informed by the debate but rather became annoyed by the approach of the developers.

### *8.2.3 Local Amenity*

Two issues which were central to the topic of local amenity were noise and visual impact. These were both major and highly contentious issues at the inquiry. Noise was discussed on days six

and seven of the inquiry with witnesses presenting evidence on behalf of the developers, the local opposition group and, for the first time, the council. Visual impact was discussed on days four and five, with evidence being presented by witnesses acting on behalf of the developers and the local opposition group. It is worth discussing these two issues separately, in order to highlight the key concerns and arguments that were put forward.

#### 8.2.3.1 Noise

Discussions relating to noise were highly technical and difficult to follow. The central concern was over the potential noise which would be created by the turbines once the wind farm was in operation. Whilst it was maintained by the developers that there would be no noise of an unacceptable level there was much criticism of the methods that they had employed in assessing background (existing) noise levels in preparation for the ES. Representatives of the opposition group suggested that potentially serious errors were made when conducting a study of noise levels at nearby properties, and consequently that the actual background noise levels would be significantly lower than those reported by the developers in the ES. Thus, any new noise introduced by the wind farm would be of greater significance than the developers' study acknowledged.

During cross-examination of witnesses the focus was predominantly on methods and approaches to assessing noise levels rather than on the noise levels themselves or potential noise that may be caused by the turbines. There was much debate about the appropriateness of ETSU-R-97 (the officially accepted framework for measuring acceptable noise levels from wind farms) as a means of assessing noise levels at wind farms sites, in comparison to a different framework (BS4142) which had been adopted by the council in their assessment of local noise levels. Subsequently debate ensued regarding interpretations of ETSU-R-97 and BS4142 and the (in)appropriateness of each method.

Throughout the course of this debate members of the public were growing increasingly restless, and many unrelated conversations started up in the public seats. The majority of people appeared to be utterly bewildered and bored by the proceedings. The discussion of the topic was couched in highly technical language and the issues were incredibly difficult to follow without a previous understanding. For this reason I feel that the majority of people present at the inquiry were unable to remain attentive throughout the proceedings relating to this topic, and more importantly, were unable to grasp the significance or relevance of the debates.

In interviews Personal Objector2 expressed resentment at the fact that so much emphasis had been placed on the methods – as opposed to the results – of the noise assessments. In this individual's view either method could be argued to be correct or better than the other but that was not the pressing issue for the inquiry.

#### 8.2.3.2 Visual Impact

The debates surrounding the issue of visual impact again focussed primarily on process and expertise of witnesses rather than the evidence itself. The local opposition group's witness was subjected to a gruelling eight hour cross-examination by the developers' advocate who appeared to be aiming to thoroughly discredit him as a witness. Some six of those hours dealt only with his qualifications and credentials as opposed to the substance of his evidence. Through such methods the boundaries of what was to be considered legitimate knowledge were clearly signalled and the perceived importance of expert knowledge, (along with the perceived inadequacies of lay knowledge), was highlighted. The comparatively diminutive amount of time which was devoted to his actual evidence can be viewed as an attempt to minimise the weight which it was to be accorded.

As will be highlighted in chapter ten, within interviews Personal Objectors used this as an example of where the developer's advocate's approach was inappropriate and excessively brutal. It became clear that the treatment of this particular witness angered local objectors. Personal Objector2 recounted that:

> "at the end of it [the witness] actually said to me; I'm terribly sorry that I've come all the way up here from Wales and I haven't been able to discuss landscape!"
> (Personal Objector2)

However, in conversations with representatives of the developers at the inquiry the witness' long experience of giving evidence (which they regarded to be unsound) in opposition to proposed wind farm developments across the UK was referred to and it was suggested that he 'got what he deserved'.

Where cross-examination did focus on the evidence that was being presented, the attention was on the tools employed in assessing likely visual impact. The photomontages which had been produced by the developers for the ES were heavily criticised by the opposition group's advocate and witness, who deemed them to be unrealistic. However it was argued by the developers'

witness and advocate that photomontages were not intended to be understood as exact representations of the proposed development and that their limitations must be recognised. It was stated that landscape professionals would use them in conjunction with other tools and bearing in mind multiple factors. The implication was that without necessary expertise or training one could not appropriately interpret the photomontages, and that one could not simply consider them as representations of the proposed development (as a lay person may be forgiven for doing). The result was that an issue which might have been expected to be comprehensible to a lay person, and particularly local people familiar with the landscape, was firmly positioned as one which could only be understood by experts or those with adequate training. Lay people concerned for their local landscapes were left feeling belittled and bemused.

Whilst a complex debate was conducted regarding threshold and degrees of significance, one point that was made very strongly by the developers was that *all* wind farms will *always* have a significant visual impact, but that this must be weighed against the benefits. The aim then was not to avoid but rather minimise the visual impact. Interestingly, visual impact was always referred to in these terms – as something to be avoided or minimised. It was not suggested at any time that one might want to accentuate a positive visual impact, and it is unclear how such a suggestion would have been responded to.

### *8.2.4 Ornithology*

Ornithology was discussed firstly by an expert witness on behalf of the developers on day seven of the inquiry, and then much later on days twelve and fourteen by two separate witness acting on behalf of the local opposition group, one regarding Ospreys and the other regarding Black Grouse. Whilst other species of birds were also mentioned osprey and black grouse dominated discussions around ornithology. The arguments which were made in relation to these two species will therefore now be outlined.

#### 8.2.4.1 Osprey

Osprey are a protected species and therefore their presence around the proposed development site was an important issue and one which was given much consideration. Particular attention was given to the flight paths of the osprey which, it was argued by the opposition group's witness, commute between their nesting grounds to the west of the site and a feeding ground. This route would require the birds to fly across the proposed wind farm site. The validity of this assertion and the precise commuting behaviour of the birds was therefore of great importance. The debate

which took place surrounding this issue attempted to clarify the collision risk should the turbines be erected in this location. Further, the significance of collisions which may occur was also debated.

Much of the data referred to regarding osprey flight paths came from the opposition group's witness' own personal records of bird activity in the area during a period of more than 35 years. During the EIA process he had been conferred with and had offered his records to the consultants conducting the study. He was consequently deemed to be a 'competent ornithologist', and was described as such in the ES in which his records were made use of. However, during the inquiry, although the developers' representatives continued to refer to him as a 'competent ornithologist', less weight was given to his records. For example, the developers' expert witness noted that his approach had not been systematic and that the majority of his sightings were at one time of the year, notably during the Summer when he stayed in his holiday home from which the observations were made. Further, it was noted that his records could not be attributed considerable significance due to the limited number of entries, and that there was not enough data to assert the significance of the declared route. Indeed, in his own evidence he confirmed that over the period of more than three decades in which he had recorded his observations he had 57 osprey records, but many of these were in different locations. From his records he considered there to be 24 entries that were relevant to this case. It was therefore suggested that the significance of this must be seriously scrutinised when one considers that this is far less than one per year.

Further, whilst he contended that out of the 24 relevant sightings 18 had been flying north or northwest (across the proposed site) and of these 16 had been carrying fish, the developers' witness argued that ospreys typically nest close to feeding grounds to minimise commuting and therefore contested the suggestion that osprey would regularly travel across the site. He suggested that, from his own study, evidence implied that osprey were staying close to their feeding grounds and not leaving the area, and further he contended that if the opposition group's witness' argument was correct one would expect there to be a great deal more activity across the site. It was noted that the statutory consultees (namely Scottish Natural Heritage, and perhaps more significantly the RSPB) officially agreed with the position of the developers' witness and had not objected to the proposal. This seemed to be an important point, however those in opposition to the development appeared to feel that they had a strong case in relation to osprey and that this was an area in which they could 'win' the argument. Osprey were described in terms which portrayed

them as noble, majestic and valuable birds, any risk to the species was considered to be unacceptable no matter how small that risk was. Therefore the developers with their measured responses were unable to appease the opposition on this issue.

#### 8.2.4.2 Black Grouse

Black grouse, whilst clearly thought of with a great deal of fondness by members of the local community, did not appear to elicit the same kind of passionate arguments and sentiment that osprey did. Nonetheless, the black grouse is a protected species whose population is said to be in decline and consequently its presence at the proposed development site was deemed to be a serious consideration. The developers' witness spoke of the Black Grouse Management Plan which would be implemented should the development proceed. This habitat management plan was said to be of benefit to a number of species but specifically the black grouse. It was argued that black grouse are known to respond well to such programmes and that the project could therefore be of benefit to, rather than to the detriment of the local population.

Whilst the opposition group's witness did not contest the argument that black grouse respond well to habitat management programmes he did challenge the research which had been carried out in order to assess the local population. He noted that the ES had omitted certain leks (sites where males display in order to attract females) and more importantly had not provided any information regarding the location or activity of black grouse other than at leks. This appeared to be a serious omission. It was contended that by monitoring just the lek sites no information was gathered regarding the distribution of birds outwith the lek sites and that the area of range of (particularly female) birds had not been taken into consideration. He contended that the findings noted in the ES were the result of only 36 hours of observation and that this was entirely insufficient to assess the local populations and consequently the likely impact of the proposed development.

The significance and potential value of the proposed habitat management plan appeared to be an important consideration. Nobody contested the assertion that black grouse are known to respond well to such plans, however the opposition group's witness pointed out that this could only be of real benefit if there was no simultaneous negative impact on the species by the construction and presence of the wind farm. Since he had not carried out his own study in the area, and could not state with confidence what impact the development would have on black grouse populations, he appealed to the precautionary principle as a reason for refusing the planning application.

### *8.2.5 Hydrology*

Evidence relating to hydrology was presented on day eight of the inquiry with expert witnesses representing the developers, the local opposition group and the council. Further, the local councillor who was largely held responsible for the earlier 'minded to approve' fiasco and gave evidence at the inquiry, also addressed the issue of hydrology (since she had refused the planning application based on these grounds) in her evidence given on the same day.

One might have expected a strong argument from the opposing parties on this topic since it was given as the reason for refusing planning permission, and consequently effectively was the reason that the inquiry occurred. However, there was little by way of a persuasive case against the developers' position on this matter (least of all from the council). The council's expert witness had been commissioned to conduct an independent assessment of the potential hydrological impacts of the development. However, his report (and evidence at the inquiry) concluded, in accordance with that of the developers' witness, that there were no likely significant impacts on the local water supply from the proposed development. He therefore stated that, although he would advocate continued monitoring of water quality, he saw no reason to refuse the planning application based on grounds relating to hydrology.

Within interviews Personal Objector2 expressed anger that this witness had given evidence to support the proposal whilst representing the opposition:

"I did wonder why have you bothered to turn up, I mean that was my attitude to him. I really- you know, at the end of the day I thought why didn't you just decline – why did you bother? What are you doing here, sort of idea, if you're meant to be defending the council, what are you doing?"
(Personal Objector2)

It was suggested that this witness had given evidence supporting the proposal since he was employed by a government body and as such was supporting government policy promoting wind power. However, from discussions with supporters of the proposal, it was apparent that they saw this evidence as a clear indication of the weakness of the council's position and also that of the local opposition group.

The local councillor who also represented the council stated that she had elected to refuse planning permission based on fears that the local water supply would be adversely affected by the construction and presence of the wind farm. She was pressed as to why she, as a member of the council, had commissioned an independent report and then disregarded its findings. Her defence

was that doubts remained in her mind, and she asserted that the report 'raised more questions than it answered', (for example; who would carry out monitoring of the water quality, and who would be responsible if it was affected?). However, this left the council's advocate in the strange and uncomfortable position of defending two parties with opposing positions.

The opposition group's witness contended that the construction and continued operation of the wind farm posed a serious threat to groundwater and also the integrity of a raised peat bog. He argued that groundwater in the area was particularly vulnerable to contamination by pollutants and suggested that there was a real risk of this from mineral oils and hydrocarbons which would be stored and utilised onsite throughout the life of the wind farm. This, he argued, posed a serious threat to local private water supplies and the highly valued peat bog. Further, he contended that studies conducted on behalf of the developers in preparation for the ES were vitally flawed and inadequate. In particular, he noted that the risk assessment which had been carried out was almost entirely qualitative and maintained that a quantitative assessment was essential. However, in his evidence and under cross-examination the developers' witness laboured the point that he was confident that he could not have done anything more in assessing the potential hydrological impacts. He maintained that his study was complete and as detailed as was possible.

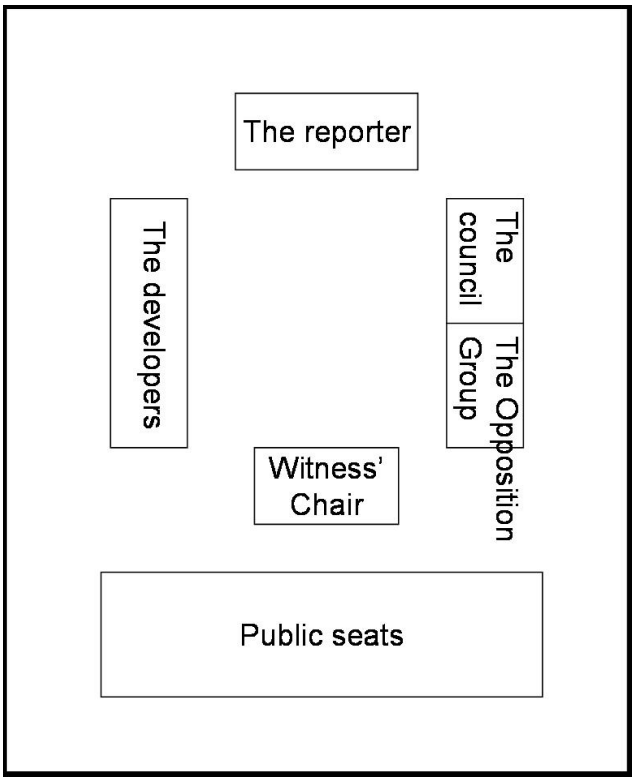
As was the typical approach, the developers' advocate's cross-examination of the local opposition group's witness focussed on discrediting him as a witness, and questioning his legitimacy in giving evidence in this area. He was pressed as to whether he felt that he was better placed than the two other expert witnesses giving evidence on this topic, and it was suggested that his evidence was not sufficient to counter that presented by the expert witnesses presenting evidence both for the developers and the council.

### 8.3 Reflections on the Public Inquiry Experience

The inquiry was a long and gruelling endeavour. The topics discussed were typically highly technical and the nature of the legal debates meant that they were constructed firmly as expert issues. Thus for lay people attending the inquiry (including myself) the task of attempting to understand and engage with the debates was arduous. However, it was clear that the advocates – who by and large dictated which aspects of an issue were discussed and how – were not concerned with making the issues comprehensible to anyone other than the reporter (this was particularly true of the developer's advocate). Additionally, the room in which the inquiry took place was set up in such a way as to position members of the public as no more than an audience.

Figure 8.2 is a representation of the inquiry setting. The public seats were positioned behind the witness' chair and as such it was often difficult for those sitting within these seats to hear what was being said by the witness. Moreover, it was not possible to see the witness' face or any documents which were referred to. The reporter – nor any other actor – made no attempt to summarise or explain evidence in such a way as to make it comprehensible to the individuals in the audience. Members of the public were therefore not made to feel like meaningful or significant actors within the inquiry.

**Figure 8.2: The inquiry setting**




Public attendance at the inquiry varied but generally numbers were low and consisted of the same very small group of people (the landowner, two local objectors and myself). This meant that my own presence at the inquiry was highly visible and I was acutely aware of my 'outsider' status as well as the curiosity (and at times suspicion) that my presence invoked.

The local opposition group had appealed for maximum attendance and issued notices of days that might be of particular interest to members of the public – this is most likely why numbers increased significantly on days when third party opposition witnesses were giving evidence.

Several people who did attend regularly commented that it was a shame that attendance was so low, however it was also acknowledged that the long days and the uncomfortable and cold venue combined with complicated and in many cases boring discussions were off-putting factors. Further, since the inquiry was running on weekdays in the daytime many people would have been unable to attend due to work commitments. This at least partly explains why the majority of people who did attend the inquiry were over the age of retirement.

For those who did attend, the inquiry appeared to become quite a community event. It presented an unusual and novel activity for many people in the local community. For some it became a source of entertainment: In interviews Professional with Personal Interest Objector1 described public inquiries as 'little bits of theatre'. It also appeared that new friendships and links were made within the local community (at least between people of the same argument *vis-à-vis* the proposed development). Many topics of conversations which were entirely unrelated to the wind farm were discussed amongst members of the public. Furthermore, one local objector told me that they had become familiar with certain people who they had never previously met or spoken to despite having lived in the area for several decades. Lunch times, in particular, often appeared to be social occasions with people eating together in large groups. Personal with Professional Interest Supporter1 commented that one thing which they appreciated about the inquiry was the humour and civility that it brought which was seen to 'slacken off tensions'. This was described as a very positive aspect since the local community would continue to exist after the public inquiry had finished and it was desirable that people should be able to get along with one another. However, this civility between members of the community is yet another contentious area and, as will be discussed in chapter ten, the wind farm planning application is seen by many to have been a highly divisive matter within the local community.

## 8.4 Summary

The observation phase of this research was highly valuable; it enabled otherwise unobtainable insights into the realities of the planning process. The first-hand experience of the public inquiry meant that I gained a far fuller understanding of individuals' (whether supporters or objectors) perceptions and experiences. Furthermore, by experiencing the process myself (as a lay person) I was able to gain an appreciation of how this was perceived by community members. Individuals' accounts of the planning process (both the initial planning application phase and subsequent public inquiry) will be outlined in detail within chapter ten. The following chapter sets out the findings of the thematic analysis of the inquiry report.

## 9.0 Findings: Qualitative Thematic Analysis of the Inquiry Report

### 9.1 Introduction

The official inquiry report, in which the verdict was published, contained an overview of the arguments which were made in relation to different topics at the public inquiry. In reviewing the summary provided by the SEIRU reporter one cannot claim to be reading an objective account – although it is portrayed as such – but rather the report represents one person's account of what was said and of what was important or relevant to note. Nevertheless, or perhaps due to this fact since it was written from the perspective of the decision-maker, it is instructive to consider the relative attention which is given to each of the topics.

This chapter provides an overview of the length of discussion dedicated to different topics within the inquiry report. The length of discussion is measured in numbers of pages, however, it is important to note the limitations of this overview. There may be many different reasons behind the differences in lengths of discussion – for example the perceived complexity of the arguments or the significance of the subject – and this overview cannot identify the reasons why certain topics were addressed in more (or less) depth. In order to provide a more insightful examination of the report, chapter eleven will consider the language which is used to describe different topics and the significance which the reporter appears to have attributed to each of the topics. By comparing this with the language used in objection letters it will be possible to gain an impression of the extent to which the topics covered in the inquiry report reflect those that were salient in objection letters and throughout the planning process.

However, this chapter aims to very briefly set out the contents of the inquiry report and thus to illustrate (albeit in a somewhat crude fashion) the relative attention which is paid to different topics.

### 9.2 The Structure of the Inquiry Report

The inquiry report takes the form of a letter addressed to the planning consultants acting on behalf of the developers (copies were however sent to all 'interested parties' from the inquiry). The reporter's decision to uphold the appeal is stated within the first paragraph and the subsequent report sets out to explain this decision.

After the opening two paragraphs – where it is stated that the appeal is to be upheld – there follows a section entitled 'Site and Surroundings' in which the reporter details the physical

location of the proposed development. Next the report outlines the details of the proposal, and the reasons given by the local authority for refusing planning permission.

There then comes a lengthy section entitled 'Extracts from Government Guidance and Local Policies' which includes summaries of NPPG6, PAN45, PAN56 (Planning and Noise), Habitat and Birds Directives, the local council Structure Plan, the area Local Plan, and local Supplementary Guidance for Wind Energy Proposals.

Following that there is a section which outlines the responses which were received from statutory consultees during the initial planning application stage. Then a summary of the arguments which were made at the public inquiry – the topics covered within this section are outlined below. Within this section the report takes a topic-by-topic approach (as the inquiry had done) and sets out the arguments that were made by each of the actors who gave evidence in relation to the topics.

Subsequently, the report includes a very brief (one paragraph) section which aims to summarise the number and content of objection letters received by the local council. This section lists six areas of concern which were not addressed elsewhere in the report. These are:

- loss of television reception;
- lack of economic viability;
- lack of economic justification;
- waste of public money;
- intermittent operation;
- lack of global benefit.

Importantly, this section does not attempt to give any form of overview of the issues raised in letters which were covered elsewhere in the report. Furthermore, this section makes no mention of the form which objection letters took (*i.e.* proformas, individual letters, proforma letters) or of the frequency of particular objections.

The report then includes a very short section summarising the letters of support which were received by the local council.

The final section is entitled 'Conclusions' and includes a summary of the topics covered at the inquiry and outlines the reporter's own position in relation to each of these topics. As such this section sets out the reporter's reasons for upholding the appeal. The topics which are covered within this section will be outlined below.

Finally, the report has three annexes. Annex one outlines the 46 planning conditions which were attached to the upholding of the appeal. Annex two provides a set of guidance notes related to the noise conditions, and annex three relates to water monitoring.

9.3 Report of Topics Covered at Inquiry

**Figure 9.1: Number of pages dedicated to each topic within the official inquiry report's overview of topics covered at the inquiry**

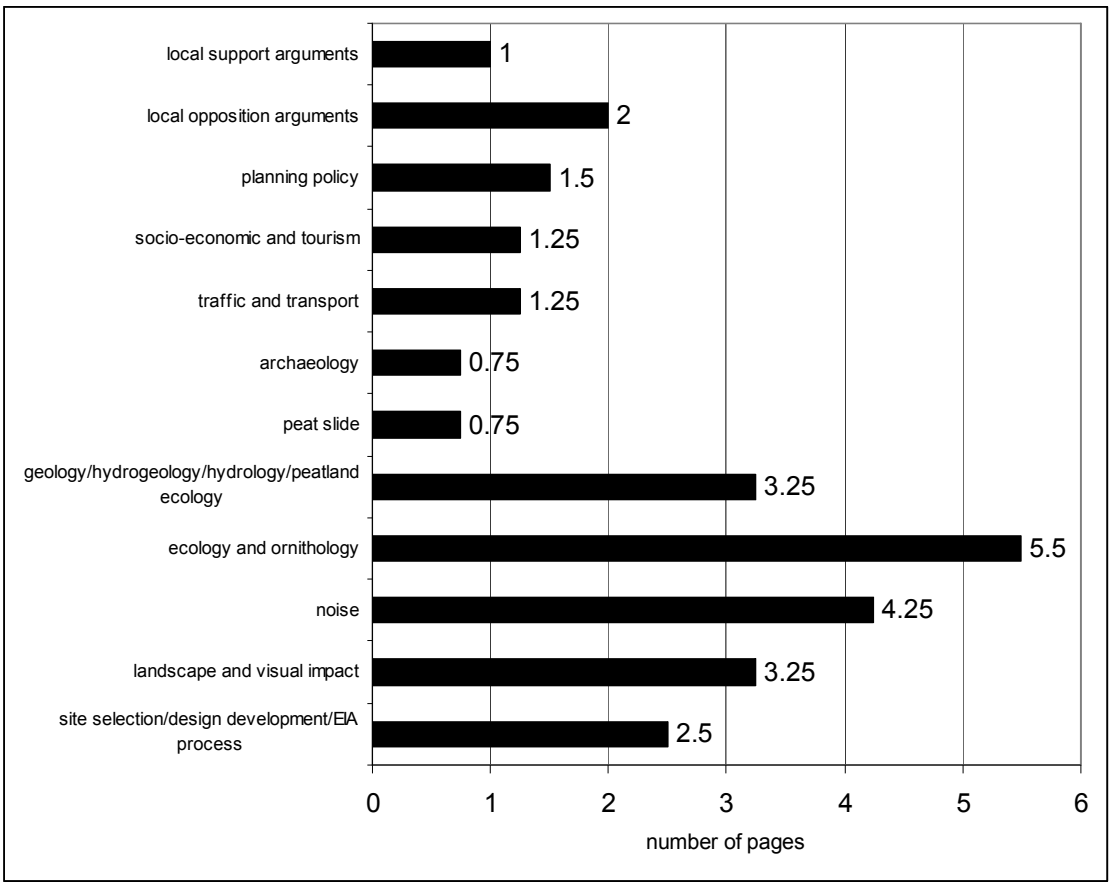


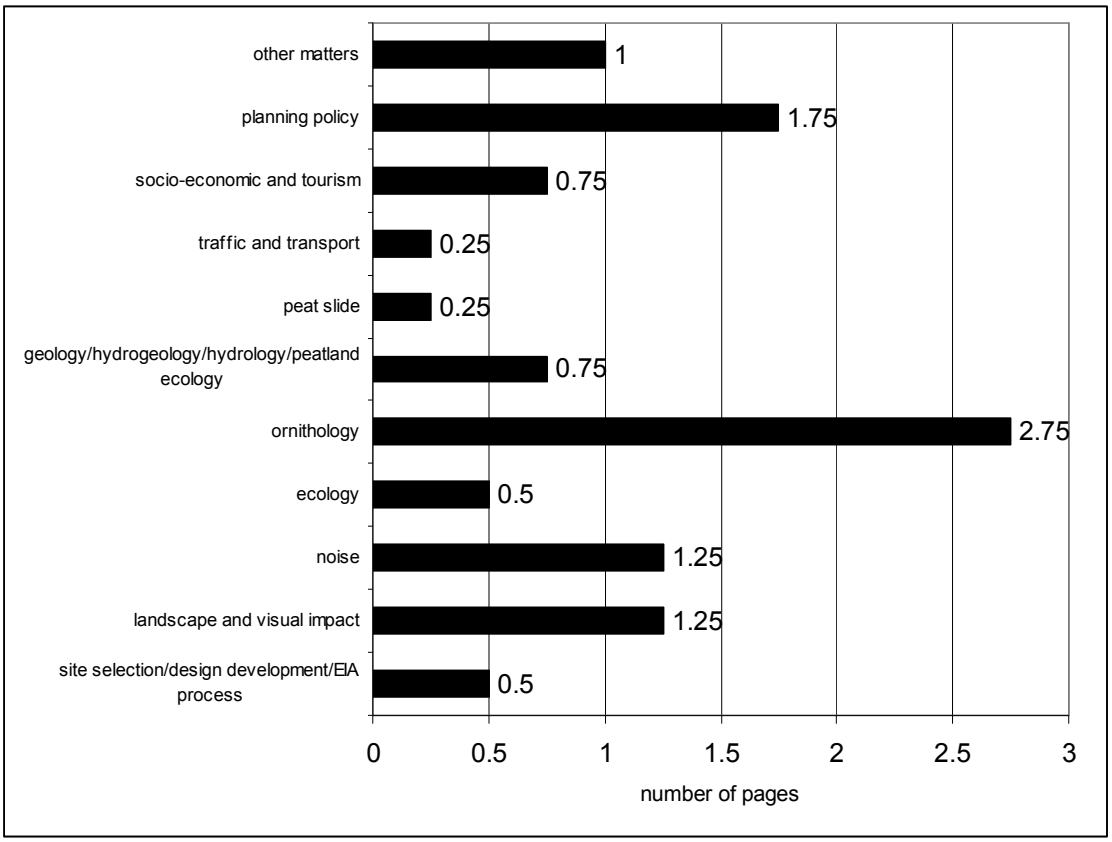

Figure 9.1 shows the number of pages which were dedicated to providing an overview of each of the topics covered at the inquiry. Whilst this does not tell us anything about the content of what was summarised the differences in length of discussion between different topics is at times

striking and may be taken to highlight which topics were deemed most important, relevant or complex.

'Ornithology' was covered at considerable length compared with all other topics. The topic covered in the second-most detail was 'noise', followed by 'landscape and visual impact' and 'geology, hydrogeology, hydrology and peatland ecology'. Thus, as with my own observations of the inquiry (outlined in chapter eight), the topics which were given most consideration only partly reflected those which had been most central within the objection letters (as set out in chapter seven). Most notably 'Traffic and Transport' was covered in comparatively little detail, whereas 'Traffic and Roads' had been a key issue within the objection letters.

9.4 The Reporter's Conclusions

**Figure 9.2: Number of pages dedicated to each topic within the conclusions of the official inquiry report**



The final section of the inquiry report reviews the topics covered at the inquiry and outlines the reporters' position thereof, thus explaining how the decision to uphold the appeal was reached. As in the previous section the topics addressed in this part of the report are covered in varying depth, and it is clear that some issues are given greater consideration than others (see figure 9.2).

Within this section issues relating to ornithology are discussed at considerable length compared to all other topics (taking up 2.75 pages compared to the average of 1 page per topic). Equally striking is that 'Planning Policy', which was not a notable issue within either objection letters or evidence at the inquiry, is discussed in the second-most detail (1.75 pages). This is in addition to an earlier section of the report (mentioned above) which contained some 10 pages relating to renewable energy policy (both national and local). Thus, there was a clear emphasis on policy within the justification for upholding the appeal.

It must be acknowledged that 'Landscape and Visual Impact' and 'Noise' (two major issues in the individual objection letters) were discussed in some detail within this section of the report. However, 'Traffic and Transport' which was a key issue within the objection letters was considered within the very short space of a quarter of a page.

## 9.5 Summary

From reviewing the lengths of discussion for each topic, it appears that the inquiry report pays considerably more attention to certain topics (*i.e.* Ornithology and Planning Policy) than others (such as Traffic and Transport). However, the lengths of discussion alone cannot be taken as an indication of which topics were deemed most salient by the reporter, instead one must also consider *inter alia* the language used. For this reason, chapter eleven will look in more detail at how the topics were discussed and will compare this to the treatment of issues within objection letters.

The following chapter, in discussing the findings of the semi-structured interviews will also present interviewees' (both supporters and objectors) reflections on the inquiry report.

## 10.0 Findings: Interviews

### 10.1 Introduction

This chapter provides an overview of the key themes identified within the interview data. The semi-structured nature of the interviews meant that there was a great deal of diversity in the range of topics which interviewees addressed. It is felt that the flexible nature of the interview design was instrumental in facilitating the rich body of data which emerged. However, this chapter will, as far as possible, set out the areas of agreement and disagreement uncovered in relation to key topics about which all (or nearly all) interviewees provided responses.

A key strength of this research is felt to be its holistic approach and, in particular, its consideration of events and experiences from a range of perspectives. Thus, throughout this chapter attention will be paid to how different actors (*i.e.* 'personal' and 'professional' interviewees, or objectors and supporters) interpret and perceive the same phenomena.

Throughout the chapter tables will be used to summarise interviewees' responses, perspectives or opinions on particular issues or topics. Whilst the headings included within these tables do not represent verbatim quotes they illustrate the sentiment expressed by interviewees. The tables are therefore intended to provide overviews of the responses given. Direct quotes will be used in order to provide more accurate and detailed accounts of interviewee responses.

The chapter will begin by outlining interviewees' reflections on the initial planning application stage, and secondly on the public inquiry stage. It will also summarise interviewees' reflections on various key actors (which were identified through the observation phase of this research). The chapter will then discuss interviewees' reflections on the roles of expert and lay knowledge – a theme which emerged strongly in many interviews. The chapter will summarise interviewees' reflections on the outcomes of the process (both their responses to the upholding of the appeal, and other social outcomes). Finally the chapter will set out interviewees' responses to the challenge of selecting one change which they would make to the planning system based on their experiences.

### 10.2 Reflections on the Initial Planning Application Stage

"[…]you felt the playing field was definitely, you know you were playing uphill fairly."
(Personal with Professional Interest Supporter1)

"[…] during the whole wind farm campaign we only had one public meeting to try and balance the other side. They had had the whole planning process, they had had, you know, they had hogged the community council with their presentations, there was never another side put forward, they had had their exhibitions etcetera, and we only had one meeting […]"
(Personal Objector2)

In various different ways the initial planning application stage (when the local council were responsible for determining the outcome), was widely perceived to have been 'unfair'. All interviewees, regardless of their position in relation to the planning application, at some point in the interviews (and in most cases repeatedly throughout the interviews) expressed dissatisfaction with the planning process, and particularly the local council's handling of the application. Some of the clearest examples of this are illustrated in table 10.1.

**Table 10.1: Examples of comments representing the view that the early planning application process was unfair**

| | Interviewees |
|---|---|
| **The early planning application process was unbalanced** | **a)** Professional Supporter2, **b)** Personal with Professional Interest Supporter1, **c)** Personal Objector2 |
| **References to undemocratic or illegitimate local politics** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Professional Supporter2, **d)** Personal with Professional Interest Supporter1, **e)** Personal Objector2 |
| **Inappropriate meetings or negotiations between developers and council** | **a)** Personal Objector1 |

It is interesting to note that both objectors and supporters felt that the process was unfair, and as such there is no suggestion that this dissatisfaction has arisen out of particular individuals' 'defeat' in the planning system. It must, however, be borne in mind that all parties experienced a certain amount of 'defeat' within the planning application process; the objectors with the initial council determination of 'minded to approve', and the developers with the eventual refusal of planning permission.

### *10.2.1 Communication*

One point on which supporters and objectors disagreed was the level of communication and consultation which was entered into in the early stages. As can be seen from table 10.2, whilst supporters suggested that there had been a great deal of communication about the proposal, objectors commented on the *lack* of communication.

**Table 10.2: Examples of comments relating to the amount of communication about the proposal.**

| **THERE WAS LOTS OF COMMUNICATION** | |
|---|---|
| | Interviewees |
| **There was lots of communication between the council and the community.** | **a)** Professional Supporter2 |
| **The community council was good at keeping people informed in the early stages.** | **a)** Personal Supporter1 |
| **The developers conducted lots of consultation.** | **a)** Professional Supporter3 |
| **There were ample opportunities for lay people to get their views heard.** | **a)** Professional Supporter1, **b)** Professional with personal Interest Objector2 |
| **THERE WAS A LACK OF COMMUNICATION** | |
| **There was a lack of communication about the proposal.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Personal Objector2 |
| **Poor consultation from council.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector2, **c)** Personal Objector2 |

As the following two quotes highlight, supporters felt that both the developers and the community council had communicated adequately with the local community.

"On any planning application it's important, depending on what size it is, to have a dialogue and take on the views of the local community. Now [the developers] did this here, they had exhibitions, they had meetings, they spent a lot of time and effort on that, so I've got no, there's no criticism of them in that regard."
(Professional Supporter1)

"They [the local community council] were quite good, back in the early stages with, you know, keeping people informed. Both via the local, kind of independent newspaper that's produced and also they were sort of inviting the public to come along to their meetings as well, to hear, because at the time [the developers] were attending some of the meetings and telling them about their proposals."
(Personal Supporter1)

Conversely, the following quotes from objectors demonstrate the conviction that there was a lack of communication about the proposal during the early planning application stage.

"What worries me is people aren't being informed and being given a choice, you know, their right to a choice, and being given all the information."
(Personal Objector2)

"There was one community meeting, and I stress that; there was *one*. And that was after the planning proposal had been put in, and as far as I can recall probably after objections had to be

put in as well, which is totally unsuitable. […] a lot of people up until that point didn't really know anything about it. You know, and that's not fair. You know, if you're having a major development like that trying to come into the area then I think that everybody should be aware and the community council didn't put out any notices, any information for people. They set up a website but they've still got to consider there's a lot of elderly people, a lot of other people who don't have computers, they did nothing to reach these people."
(Personal Objector1)

However, two interviewees (Professional Supporter2 and Personal Objector2) contended that regardless of the extent of the communication this failed due to the fact that people were not willing to listen. For example, it was noted that:

"There was a meeting, I think it was just after it went in for planning […] where they put up just the visual material, and had the environmental impact assessment, well the environmental statement […] and the documents that had gone in for planning and there were a couple of people from [the developers] there to ask, you know, to answer questions, but it was just, you know sitting in the hall for a day. […] but, again, the average local person is so apathetic they didn't realise that this was a sort of con- public consultation, that you could go, and I don't know – [the developers] probably have the numbers – I don't know how many people actually turned up at the hall during the day, […] a few people, but not, not that many."
(Personal Objector2)

### *10.2.2 Criticisms of the Council*

"I just think that that- you just wonder – you know that is scary these people are making decisions on behalf of the people in this area and they're not taking their job seriously and I don't think they're fit to-. That's why the public inquiry was technically, a fai- supposedly a fairer process because we knew our councillors were so bad that they weren't qualified to make a decision on a wind farm – they knew nothing about it, they didn't understand it, they didn't even understand the fundamentals of the planning process let alone anything else. I think that was particularly bad."
(Personal Objector2)

**Table 10.3: Examples of criticisms that were made about the council.**

| | Interviewees |
|---|---|
| **Council decisions were taken privately.** | **a)** Professional with Personal Interest Objector1, **b)** Professional Supporter3 |
| **The council responds to pressure.** | **a)** Professional Supporter2 |
| **I am unhappy with the council (or the council's handling of the application).** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Professional Supporter1, **d)** Professional Objector1, **e)** Personal with Professional Interest Supporter1, **f)** Personal Objector2 |
| **There is a lack of minutes/records of meetings/discussions.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Objector2 |
| **The council is a shambles in relation to renewable energy.** | **a)** Professional Supporter1, **b)** Professional with Personal Interest Objector2 |
| **The council let us down.** | **a)** Personal Objector1, **b)** Personal Objector2 |

With regards to the initial planning application stage, the vast majority of complaints or criticisms expressed by interviewees related to the council's handling of the application. A selection of some of the criticisms made about the council is summarised in table 10.3.

In relation to the council, the level of agreement between objectors and supporters, and between 'personal' and 'professional' interviewees is noteworthy. Not one interviewee provided a positive account of the council.

The one noticeable difference of opinion illustrated in table 10.3 relates to the council's response to local objectors. Two Personal Objectors recounted that the council had 'let them down' for example commenting that:

"That is [the council] the people we are relying on to look after the area for us and, eh, it leaves a lot to be desired."
(Personal Objector1)

Conversely, Professional Supporter2 criticised the council for responding to pressure from objectors. As such whilst these objectors felt that their views or interests were not taken on board, or responded to by the council, Professional Supporter2 considered that the council had done exactly that, and moreover had done so to an unreasonable extent.

Professional Supporter2 also stated that they felt that lay people had been too influential in the initial planning application stage. Further, and in common with Personal with Professional Interest Supporter1, they expressed disappointment at what they considered to be the 'corruption' of the planning system by objectors' claims. It was commented that:

"I have to be careful what I say because I couldn't prove it, but I, *I* was suspicious, […] that they [the council] were, […] almost choreographing the planning meeting for [the opposition group], […] it seemed [the opposition group] knew what was going on before [the developers], that may be that [the opposition group] had the ear of the council, or they were certainly in there breathing on them and I think that that was really apparent in that you got ten councillors voting for it and suddenly it's eight against and two for it at the next meeting after [the opposition group] had obviously had a bit of a go at them."
(Personal with Professional Interest Supporter1)

### *10.2.3 Reflections on the Level of Opposition within the Community*

Interviewees provided very mixed assessments of the significance of the level of opposition to the proposed development. In general, as shown in table 10.4, objectors regarded the level of opposition to be more significant than did supporters. Moreover, 'professional' interviewees

(including those in opposition to the development) typically regarded the level of opposition as less significant than did 'personal' objectors.

**Table 10.4: Reflections on the Level of Opposition within the Community**

| COMMENTS TO SUGGEST THAT LEVEL OF OPPOSITION WAS NOT SIGNIFICANT | |
|---|---|
| | Interviewees |
| **Wind farms in general attract significant opposition.** | **a)** Professional with Personal Interest Objector1, **b)** Professional Supporter1, **c)** Professional Supporter3, **d)** Professional Objector1 |
| **In comparison to other wind farms it was a small number of objections (letters).** | **a)** Personal Supporter1, **b)** Professional Objector1 |
| **I was not surprised at the level of opposition.** | **a)** Personal Supporter1, **b)** Professional Supporter1, **c)** Professional Supporter2, **d)** Professional Supporter3, **e)** Professional Objector1 |
| **Level of opposition was a result of the opposition group's campaign.** | **a)** Professional with Personal Interest Objector2 |
| **Objection letters were (predominantly) proformas (i.e. result of campaign).** | **a)** Personal Supporter1, **b)** Professional Supporter1, **c)** Professional Supporter3 **d)** Personal with Professional Interest Supporter1 |
| **Community feeling was mixed, but opposition was more vocal.** | **a)** Professional Supporter3 |
| **COMMENTS TO SUGGEST THAT LEVEL OF OPPOSITION WAS SIGNIFICANT** | |
| **I was surprised at the level of opposition.** | **a)** Professional with Personal Interest Objector2 |
| **The level of opposition is significant.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Objector2 |
| **The majority of the local community are opposed.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Professional with Personal Interest Objector2 |

Supporters routinely pointed to the large number of proforma objection letters to suggest that the level of opposition was not significant in terms of local public opinion but rather indicated the strong influence which the opposition campaign group possessed. Moreover, Personal Supporter1 and Personal with Professional Interest Supporter1 both suggested that the campaign group had used illegitimate tactics (*i.e.* coercion) in order to secure a large number of objection letters. For example, it was stated that:

> "all they wanted to do was have a big blast of a campaign to say we've got nearly 700 people objecting to it. Well, it was all proforma stuff that they were asking people to send back, […] when I went to the meeting it was quite obvious that they were getting whoever owned the bed and breakfast establishment up there, it wasn't a case of if you were staying they said, you know, can you sign the visitors' book, it was, by the way, oh, we're going to get wiped out there's a

wind farm coming, can you sign this please. […] when you devise that there are ten people that work on [particular local] estates and they were told by the way go and get all your family to fill these in, and all of a sudden that ten people that had been given five cards each […] you've got quite a number of objectors on paper."
(Personal Supporter1)

"I know a man who works at [particular local estate] he was given four proformas with first class stamps on them and told; you know what to do with this [...] I think that went with all the personnel on [X] estate."
(Personal with Professional Interest Supporter1)

Personal Objector2 strongly refuted claims that the opposition group were using illegitimate tactics in order to generate maximum opposition:

"There was no canvassing, no persuasion, no nothing. […] the response to the leaflets was completely independent – people did that independently, they had the choice of ignoring them, ripping them up, they didn't have to do anything. And I don't think that that campaign can be criticised. It was successful, and it showed that people did have concerns."
(Personal Objector2)

Numerous interviewees noted that within the planning system it is typically only objectors who become involved (commented by: Professional Supporter1; Professional with Personal Interest Objector2; Professional Supporter2; Professional Supporter3; Personal with Professional Interest Supporter1). For example, one interviewee noted that:

"It's typical of the planning process, I mean who's ever written and said Mr X along the road is putting up a fantastic conservatory I hope you pass it. It doesn't happen. You'll say God: that's terrible! and maybe half a dozen will say that: take it away"
(Personal with Professional Interest Supporter1)

The implication was that there existed a 'silent majority' who were in favour of, or were neutral towards the proposed development. However, Personal Objector2 argued that the perceived existence of a 'silent majority' should not hold any weight within the planning process:

"We have a funny democracy in this area, if you don't get what you want as a politician you turn round and you say that you represent the silent majority. Now that is not- that doesn't go with me. If people- we live in a democracy and if you don't voice your opinion, or vote, you're not heard – you do not count […] there's no excuse for two things; one is ignorance and the other one's apathy and basically if people do not put up their hand, tick the box, do whatever's relevant at the time under our democratic system they are not counted as far as I am concerned."
(Personal Objector2)

Besides the volume of objections, supporters also refuted the significance of opposition through other means. For example, Professional Supporter1 contended that many objection letters included particular objections which challenged government policy and hence were not valid. Furthermore, Professional Supporter2 asserted that even if the majority of people were against the

development that should not have an influence on the planning outcome if those people's objections are not based on valid grounds.

Objectors, on the other hand, pointed to high levels of public apathy and the difficulty of getting people involved in democratic processes (this was noted by Personal Objector2, and Professional with Personal Interest Objector1).

> "In general there's a lot of public apathy around, and people say; Oh aye, I don't think that's a very good idea, but they're not going to do anything about it because they don't have an avenue to […] I've run many public consultations on things like national parks, and you know public policy consultations […] for a national consultation you're doing pretty well if you get 400 […] that's the level of apathy […] so I think the 700 responses reflects something quite significant."
> (Professional with Personal Interest Objector1)

As such it was felt that the number of objection letters received by the council represented a very significant level of opposition. Furthermore, three interviewees (Personal Objector1, Professional with Personal Interest Objector1, Professional with Personal Interest Objector2) recounted that council meetings at which the proposal was discussed were 'packed'. Hence implying that the public were very interested in (or more accurately concerned about) the proposed development. Conversely, Personal Supporter1 contended that the majority of people at the meetings were only there out of interest (as opposed to having a strong opinion about the planning application).

The 'personal' interviewees who had become most actively involved in supporting or opposing the planning application all contended that they represented the majority. Personal Supporter1, Personal with Professional Interest Supporter1 and a Personal Objector2 each maintained that they had received very positive responses from members of the local community when they had engaged in activities (*i.e.* by writing letters to the local newspapers, or holding meetings). In particular, Personal Supporter1 and Personal Objector2 both recounted how their actions had been celebrated by community members and that they were confident that they were representing the majority.

### *10.2.4 Reflections on the Opposition Campaign Group*

It is perhaps inevitable that supporters referred to the local opposition campaign group in negative terms. Table 10.5 demonstrates the variety of criticisms that supporters made of the group.

The following quotes demonstrate that supporters criticised the group for a number of reasons, for example, their approach, the basis of their arguments and the extent to which they represented the wider community.

"they were raising things and it was just like the standard handbook of how to object to a wind farm."
(Personal Supporter1)

"The way I perceived the anti campaign was that it really was based on trying to spread misinformation, scare tactics essentially to get people on side with them, and I think that the key thing for me was that they were bullies, they were employing bullying tactics"
(Personal Supporter1)

"There were three or four fairly wealthy endowed gentleman and an activist, and one or two vociferous characters, but although they made a lot of noise I think it has been apparent that they don't speak for the whole community, they say do"
(Personal with Professional Interest Supporter1)

**Table 10.5: Criticisms of the Opposition Campaign Group made by Supporters**

| | Interviewees |
|---|---|
| **They were bullies/used scare-tactics.** | **a)** Personal Supporter1 |
| **Their case was based on personal attacks.** | **a)** Personal Supporter1 |
| **They were manipulative of the public (i.e. through misinformation).** | **a)** Professional Supporter2 |
| **They were hostile/venomous.** | **a)** Personal Supporter1, **b)** Personal with Professional Interest Supporter1 |
| **There were very much a minority.** | **a)** Personal Supporter1, **b)** Personal with Professional Interest Supporter1 |

Objectors, however, were more sympathetic towards the group. It was contended that objectors are generally well-informed (Professional Objector1) and that they struggle with limited resources (Professional Objector1 and Personal Objector2). Furthermore, as was illustrated in table 10.4, objectors typically perceived the majority of the local community to be opposed to the proposed development, and as such the opposition group was considered a legitimate actor.

### *10.2.5 Justifying Personal Action*

Within the interviews 'personal' interviewees typically offered reasons, or justifications for becoming involved with the planning application (either in support or opposition). It is striking to note that the explanations given by opponents and supporters are largely the same. As can be seen from table 10.6 the most common explanations centred on the need to provide good information

and refute what were perceived to be false claims. Amongst 'personal' interviewees who were actively involved with the planning application there appears to be a concern with protecting democracy and ensuring that the public has opportunities to make informed decisions. This is illustrated through the assertion made by several interviewees (Personal Objector1, Personal Supporter1 and Personal Objector2) that they did not expect everyone to agree with them and that people are entitled to their own opinion:

"I don't mind people asking questions, I don't mind people who feel that their opinions aren't the same as yours. You know, it would be a funny world if we all agreed about things."
(Personal Objector1)

"I've never said that people aren't entitled to object, you know, they are entitled to object, we live in a democracy"
(Personal Supporter1)

**Table 10.6: Personal Interviewees' Motivations for Becoming Involved**

| | Interviewees |
|---|---|
| **I was motivated to act in order to clear up misinformation.** | **a)** Personal Supporter1, **b)** Personal with Professional Interest Supporter1, **c)** Personal Objector2 |
| **Aimed to counter false claims.** | **a)** Personal Supporter1, **b)** Personal Objector2 |
| **I was motivated by the idea (not money).** | **a)** Personal with Professional Interest Supporter1 |
| **We have to stick up for ourselves and our environment.** | **a)** Personal Objector1 |
| **I have struggled to afford my home – not going to have it taken away.** | **a)** Personal Objector1 |

### *10.2.6 Reflections on the Refusal of Planning Permission*

Both objectors and supporters, and 'professional' and 'personal' interviewees stated that they had been surprised by the council's decision to refuse planning permission, (this view was expressed by: Personal Supporter1; Professional Supporter3; Professional Objector1; Personal with Professional Interest Supporter1 and; Personal Objector2).

Given the earlier 'minded to approve' determination it appears to have been widely expected that planning permission would be granted. One interviewee commented that they expected the second planning meeting to be merely a formality:

"we thought it was more or less dotting the t's, I mean dotting the i's and crossing the t's"
(Personal with Professional Interest Supporter1)

When the councillors ultimately voted to refuse the application this interviewee stated that:

"I was fuming. Not because it was pa- refused, but because it was refused after a lot of people stood up and made false – knowingly false statements - and that really got me going. It was as if I was chained up and somebody was throwing eggs at me! It really was dreadful."
(Personal with Professional Interest Supporter1)

Professional Supporters referred to the surprise refusal as a shocking, or bemusing occurrence:

"we were obviously disappointed, but I think we were genuinely bemused, because there was no apparent logic to, to their process in as much as they had completely disregarded their previous decision."
(Professional Supporter3)

Furthermore, Professional Supporter2 perceived it to be an indication of a corrupt local planning system and the existence of inappropriate political factors within the decision-making process.

Conversely, Personal Objector1 and Professional with Personal Interest Objector1 portrayed this refusal as a vindication of the opposition campaign group's case:

"I thought it was terrific, and I thought it was a vindication so to speak for the campaign group."
(Professional with Personal Interest Objector1)

However, despite the fact that objectors saw the refusal as a vindication of their arguments, it was widely felt (by both objectors and supporters) that the refusal was made on weak grounds – and that this ultimately resulted in a weak opposition case at the public inquiry, (this view was expressed by: Professional with Personal Interest Objector1; Personal Supporter1; Professional Supporter2; Personal with Professional Interest Supporter1 and; Personal Objector2). For example, it was commented that:

"it left them in an awful weak position up there because they took this decision, and I just don't know how it happens, how they got to this position of opposing it on such weak grounds as water supply which isn't of substance at all – it's of concern, big concern if you're, if it's your water supply, but [the developers] could go up there and drill a bore hole for each of these people until they got water, you know, and it would still be cheap in relation to- So it's not a serious issue."
(Professional with Personal Interest Objector1)

"I knew all the way along that private water supplies are not going to stop something because you can always mitigate them. You know, you can build a 50 mile viaduct or, you know storage tanks or whatever. You can actually mitigate, somehow you can do water collection systems, you can do whatever. Money can buy water, right? It can mitigate a problem."
(Personal Objector2)

"whilst the hydrology issue is a reason to object, it's not a reason to reject the scheme."
(Personal Supporter1)

### *10.2.7 Reflections on Appeal*

The appeal appears to have been widely seen as an inevitability:

"we knew that [the developers] would come back and object, uhm, so we didn't sit on our laurels we just started getting things together. We weren't prepared to be beaten into submission by a multi-national company."
(Personal Objector1)

"I think we knew in the run up to that meeting that even if the officials, even if rather the councillors rejected it that [the developers] would appeal, and what I think made that more likely was the way that it was handled, because, you know, had it been the case that at the original meeting where the officials had recommended rejection and the councillors had then rejected it, [the developers] may well have appealed but that wasn't a foregone conclusion. But given the way it was handled I think it became a foregone conclusion that they would appeal."
(Professional with Personal Interest Objector2)

Table 10.7 summarises some of the comments which illustrated this conviction.

**Table 10.7: Comments illustrating the perceived inevitability of an appeal**

| | Interviewees |
|---|---|
| **We couldn't walk away, we had to appeal. [developers]** | **a)** Professional Supporter2 |
| **Very few developers walk away after refusal.** | **a)** Professional Objector1 |
| **An appeal was inevitable.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Personal Supporter1, **d)** Professional with Personal Interest Objector2, **e)** Professional Supporter3, **f)** Personal Objector2 |

Despite the fact that the refusal of planning permission had been viewed by objectors as a vindication of their case, there was significant optimism (on all sides) that the appeal would provide an opportunity for all views to be heard and considered. Table 10.8 highlights the level of optimism expressed by individuals on both sides of the argument.

**Table 10.8: Comments expressing optimism about the appeal**

| | Interviewees |
|---|---|
| **Appeals give opposition a platform to air their grievances.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Supporter1 |
| **Appeals give an opportunity to get everything out.** | **a)** Personal Supporter1, **b)** Professional with Personal Interest Objector2, **c)** Professional Supporter3, **d)** Professional Objector1, **e)** Personal with Professional Interest Supporter1, **f)** Personal Objector2 |

## 10.3 Reflections on the Public Inquiry

In contrast to the optimism discussed above, reflections on the actual inquiry process were considerably more negative. Objectors considered the inquiry process to have been 'unfair' for a

number of reasons, which, as can be see from the summary provided in table 10.9 as well as the following quotes, largely centred on a conviction that the process favoured the developers.

"a local community cannot match a multi-national corporation, and their resources, it's impossible. So it is- it's David and Goliath."
(Personal Objector2)

"Third parties start well behind the, you know- well before they get to square one. They're presented with what is a well worked-up proposal, and they're supposed to start from a standing start and work to somebody else's timetable to produce a meaningful response."
(Professional Objector1)

"I think the problem with the inquiry – and it's a problem in many ways with all inquiries – is that it's very much an unequal contest because the developers there, the developer clearly has very extensive resources, can employ a legal team, they employed the QC and a junior solicitor to back up, plus the expert witnesses. As against the objectors who are having to find from their own pockets money to employ lawyers and expert witnesses. So it was a very unequal battle."
(Professional with Personal Interest Objector2)

**Table 10.9: Comments to suggest that the inquiry process was unfair**

| | Interviewees |
|---|---|
| **The inquiry was unequal in terms of resources available to the developers and the opposition group.** | **a)** Professional with Personal Interest Objector2, **b)** Professional Supporter3, **c)** Professional Objector1, **d)** Personal Objector2 |
| **Campaign groups don't have money for expert witnesses** | **a)** Professional with Personal Interest Objector1, **b)** Professional with Personal Interest Objector2, **c)** Personal Objector2 |
| **Ad homonym attacks [in cross-examination] work in favour of developers** | **a)** Professional with Personal Interest Objector1, **b)** Professional with Personal Interest Objector2 |

In contrast, supporters largely felt that the inquiry process had been 'fair' and that no party or argument had been favoured or advantaged:

"they [the developers] are well resourced, but the point was made at the inquiry that that doesn't matter. All the parties have an equal say, and it's all down to natural justice at the end of the day."
(Professional Supporter1)

"I think the best thing [about the inquiry] was that it was a forum at which everyone was given an equal and fair chance."
(Professional Supporter3)

Table 10.10 highlights some of the comments which expressed the sentiment that the inquiry was fair.

**Table 10.10: Comments to suggest that the inquiry process was fair**

| | Interviewees |
|---|---|
| **Unequal resources don't give one side an unfair advantage – it is based on the merits of the case.** | **a)** Professional Supporter3 |
| **Inquiries (in general) are fair, objective.** | **a)** Professional Supporter3, **b)** Personal with Professional Interest Supporter1, **c)** Personal Objector2 |
| **Inquiries are equitable/fair/down to natural justice.** | **a)** Professional Supporter1, **b)** Professional Supporter3, **c)** Personal with Professional Interest Supporter1 |
| **There was ample opportunity for everyone to express their views.** | **a)** Professional Supporter1, **b)** Professional Supporter3, **c)** Personal with Professional Interest Supporter1 |

A key area of disagreement within the interviews relates to the extent to which all parties could fully express their views. As noted in table 10.10, supporters contended that there had been ample opportunity for everyone to express their views within the inquiry. However, two interviewees (Personal Objector1 and Professional with Personal Interest Objector1) recounted that views which were expressed at the inquiry had to be tempered in order to comply with inquiry rules and norms of procedure:

"yes; it was a chance to air your views, but your views had to be very tempered and cut down because at the end of the day I'm not an expert, you know, I can research things, I can look things up but at the end of the day I'm not an expert […] it's very difficult, you've got to be able to talk about something that you can justify or you can argue about"
(Personal Objector1)

Furthermore, it was stated that some things which people wanted to discuss at the inquiry were not brought up since the concerned parties did not feel knowledgeable enough:

"there's probably an awful lot of things that people didn't discuss that they didn't feel that they were perhaps knowledgeable enough in but they still were very concerned about issues. So no, I don't think you get the full story"
(Personal Objector1)

Conversely, supporters complained that the opposition campaign group had caused the inquiry to consider many irrelevant or unnecessary topics (noted by: Professional Supporter1; Professional Supporter2; Professional Supporter3; Personal with Professional Interest Supporter1):

"there was a lot of, a lot of topics which probably needn't really have been dealt with in much detail, if at all."
(Professional Supporter3)

"Now, we get going with this inquiry, [the opposition group] come up with a QC at £250 an hour I believe and everything is wheeled out. […] they were clasping at straws the whole time, I mean it was like someone repelling an invader and you picked up another stone and throw it at them; so you've thrown the visual impact, and then you pick up noise, and then you pick up water

supplies, and then you pick up peat bogs and it went on and on and they never mentioned fairies but they almost got to that stage."
(Personal with Professional Interest Supporter1)

This argument is linked to an assertion that the inquiry was regrettable since it wasted a lot of time and money. Supporters felt that the opposition campaign group, by raising issues which were perceived to be irrelevant or unnecessary, extended the length of the inquiry and ultimately this meant increasing the amount of money which was spent on it:

"it rankled that I believe they [the opposition group] had, by the end of the inquiry they had spent £90 000. It pains me that they can waste money like that, when [local town] could have had a wonderful hall, or that money could have done something in [local town] as a tourist project to help rev up the tourist industry […] we've got lots of other things to spend money on, to spend it on that which was really quite negative, it's a sorry state of affairs."
(Personal with Professional Interest Supporter1)

Objectors also lamented the amount of money which was spent on the inquiry, however, they typically referred to the large amounts of money spent by the developers and the poor defence mounted by the council which ultimately meant that they were liable to pay the developers' costs. As such objectors considered the inquiry to have wasted a great deal of public (tax-payers') money, largely as a result of the council's perceived ineptitude. For example, it was commented that;

"I certainly expected them [the council] to defend their reasons for refusal of the planning application and in fact they didn't […] it is actually thanks to her [the councillor who gave evidence] that costs were awarded against the council and I personally object to that, I would like to be able to sue her, because I think she's cost us – you know the population of this area – potentially, we obviously don't know the amount at the moment, but- it's got to be decided by court, I would say somewhere in the region of half a million pounds. And we as council tax payers will have to pay that money, and people like my son will be deprived of services from the council because they'll be short of money – or even more short of money than they normally are!"
(Personal Objector2)

## 10.4 Reflections on Key Actors

### *10.4.1 The Reporter*

The reporter was the only actor to be described in almost exclusively positive terms. Table 10.11 highlights some of the positive comments which were made about the reporter.

It is interesting to note that although there is widespread praise for the reporter the bases of this praise are varied and in some instances could be perceived to contradict one another. For example, the reporter is commended for being 'pleasant' and for having;

"a bit of a sense of humour which helped to maybe relax some of the witnesses"

(Professional Supporter1)

However, he is at the same time also praised for being;

"a serious person, he wasn't in the least light-hearted, which is quite difficult for three weeks, to remain solemn for three weeks is, you know, quite difficult, but he did"
(Professional Objector1)

**Table 10.11: Positive comments about the reporter**

| | Interviewees |
|---|---|
| **The reporter had a tough job.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Objector2 |
| **The reporter was methodical.** | **a)** Professional Objector1, **b)** Personal Objector2 |
| **The reporter was fair.** | **a)** Personal Objector1, **b)** Personal Supporter1, **c)** Professional Supporter1, **d)** Professional Supporter2, **e)** Professional Supporter3, **f)** Professional Objector1, **g)** Personal with Professional Interest Supporter1, **h)** Personal Objector2 |
| **The reporter was pleasant.** | **a)** Personal Objector1, **b)** Personal Supporter1, **c)** Professional Objector1, **d)** Personal Objector2 |
| **The reporter had a sense of humour.** | **a)** Professional Supporter1 |
| **The reporter was very knowledgeable.** | **a)** Professional Supporter3 |
| **The reporter was serious/solemn.** | **a)** Professional Objector1 |

The only negative comments about the reporter suggested that at times he was not as tough as he could have been (noted by: Professional with Personal Interest Objector1; Professional Supporter3; Personal Objector2). For example, it was said that:

"I didn't think the reporter there was as tough as he should have been on containing some lines of questioning, particularly the ad homonym attacks, you know like [opposition group's landscape witness], he should have just said after an hour of that: thank you [to developer's advocate] I think I understand exactly where you're coming from, perhaps we could move onto the evidence."
(Professional with Personal Interest Objector2)

### *10.4.2 The Council*

"The representatives of the council during the inquiry were absolutely, I would say, about the worst in the whole world! […] The pits. The worst. I don't know what to say, I mean, really really bad. And also no coordination with us at all, no communication with us. Not willing to- we should have been working together on the same side. Absolutely useless. Totally useless, I mean unbelievably useless. […] Terrible. Absolutely shocking."
(Personal Objector2)

In sharp contrast to the reporter, there were no positive accounts given of the council at the inquiry. A summary of the criticisms made about the council is given in table 10.12

**Table 10.12: Criticisms of the council at the inquiry**

| | Interviewees |
|---|---|
| **The council made little effort.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector1, **c)** Personal Supporter1, **d)** Professional Supporter3, **e)** Professional Objector1, **f)** Personal with Professional Interest Supporter1, **g)** Personal Objector2 |
| **The council was only interested in defending themselves (i.e. against costs), not concerned with case.** | **a)** Professional Supporter2, **b)** Professional Supporter3, **c)** Personal with Professional Interest Supporter1, **d)** Personal Objector2 |
| **The council relied on the opposition campaign group.** | **a)** Personal Objector1, **b)** Personal with Professional Interest Supporter1, **c)** Personal Objector2 |

### *10.4.3 The Advocates*

Asking interviewees to reflect on the advocates' role within the inquiry elicited some emotive and fervent responses. Whilst the developers, the council and the local opposition group were all represented by an advocate at the inquiry, the responses given related more or less exclusively to the advocates representing the developers and the opposition group (since the advocate for the council was rarely present at the inquiry). The responses given therefore related to two particular individuals and were at times very personal.

#### 10.4.3.1 The Developer's Advocate

**Table 10.13: Comments made about the advocate representing the developers**

| **POSITIVE COMMENTS** | |
|---|---|
| **The developer's advocate…** | Interviewees |
| **… was sensitive.** | **a)** Professional Supporter3 |
| **… was professional/first-class.** | **a)** Professional Supporter1, **b)** Professional Supporter2, **c)** Professional Supporter3, **d)** Professional Objector1 |
| **… was fair (compared to others)** | **a)** Professional with Personal Interest Objector1 |
| **NEGATIVE COMMENTS** | |
| **… focussed too much on credentials.** | **a)** Professional with Personal Interest Objector2, **b)** Personal Objector1 |
| **… was fair but I didn't appreciate the ad homonym attacks.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Supporter1 |
| **I didn't like the developer's advocate.** | **a)** Personal Objector1, **b)** Personal Objector2 |

Table 10.13 summarises the comments that were made about the advocate representing the developers. It is interesting to note that all the positive comments included in this table come from 'professional' interviewees, whereas the negative comments are primarily from 'personal' interviewees. This perhaps suggests that the advocate's approach fitted with a 'professional' view of how things ought to be conducted but not with the 'non-professionals' view or expectations. For example, one 'professional' interviewee described the developers' advocate as:

"very professional, very well-prepared, thought through her questions, had a good background understanding of everything, which was part of the preparation. And she- she was also sensitive to the situation, as well. And I thought she was, whilst at times quite lengthy, she- she did a professional job."
(Professional Supporter3)

Conversely, a 'personal' interviewee described the same advocate as:

"like a bloody female werewolf […]I think she was vicious, but I don't think there should be rewards for that, you know, to be quite honest. […] I don't think it's necessary to behave like that, and I didn't like the tactic of personally undermining our expert witnesses – I thought that was wrong. They're there to give their expertise and that should be what's discussed and not trying to trick them out with questions in the way that they were doing. [...] But that's the game I guess."
(Personal Objector2)

One particular aspect of the developers' advocates' approach that was disliked by objectors was the length of time that was often spent on cross-examining the opposition group's witnesses. For example, Personal Objector2 commented that:

"I'd prefer to not wait three hours for a question, I would rather just ask it, you know, number one and get it out of the way, rather than build up and try and crucify somebody. I don't think- you did feel this is not a public inquiry into a planning issue, this is a murder, you know, I'm going to put my hands up and say: I did it I did it, I'm so bloody bored shitless with you, you know, with your bad questioning. I think she took far too long to get to the points that she wanted to get to. I think it was totally unnecessary."
(Personal Objector2)

#### 10.4.3.2 The Opposition Group's Advocate

In comparison to the positive comments relating to the developer's advocate those given in relation to the opposition group's advocate were decidedly more lukewarm. For example, the developer's advocate was described as 'professional' and 'first-class' whereas the opposition group's advocate is said to have done:

"I suppose from a professional point of view, a reasonable job"
(Professional Supporter1)

However, the criticisms that are made of the two advocates are strikingly similar. For example, whilst the developers' advocate was criticised by Personal Objector2 for being 'vicious' and attacking witnesses personally, Personal Supporter1 described the opposition group's advocate as such:

"I mean good grief, he's, you know he is who he is. He's arrogant, he's officious, he's vicious."
(Personal Supporter1)

**Table 10.14: Comments made about the advocate representing the local opposition group**

| **POSITIVE COMMENTS** | |
|---|---|
| **The opposition group's advocate…** | Interviewees |
| **…did a reasonable job.** | **a)** Personal with Professional Interest Supporter1, **b)** Professional Supporter1 |
| **… was fair.** | **a)** Personal Objector1, **b)** Professional with Personal Interest Objector2, **c)** Personal Objector1 |
| **NEGATIVE COMMENTS** | |
| **… was poor** | **a)** Professional Supporter2, **b).** Professional Supporter3 |
| **… had prepared a standard show with certain witnesses** | **a)** Professional Supporter3 |
| **… used bully-boy tactics** | **a)** Personal Supporter1 |

Within the interviews both advocates were at times described as being overly brutal during cross-examination. For example, Personal Objector2 referred to the developer's advocate as 'crucifying' opposition witnesses, and Personal Supporter1, referring to the opposition group's advocate's questioning of the landowner, commented that:

"it was quite clear the minute that he [the landowner] stepped up that he was nervous and I just thought, well, [the opposition group's advocate] that's his style he's a bully-boy, that's his tactics […] but I just thought to myself, I just thought if there was ever a case for getting up and saying; look get back in your box and leave this poor man alone"
(Personal Supporter1)

However, wherever an interviewee levelled this criticism at an advocate it was the one which represented the opposite position to their own, and typically these interviewees did not consider the same to be true of their 'own' advocate.

Interestingly, whilst 'personal' interviewees frequently referred to the adversarial nature of the inquiry and their experiences of cross-examination as intimidating, 'professional' interviewees contended that the inquiry was not too adversarial:

"The inquiry was not too adversarial from that point of view. It had its moments, but it was generally conducted in a very civil way, whereas some inquiries can get very adversarial; so, I would note that point"
(Professional Supporter1)

#### 10.4.3.3 The Advocates Generally

Overall, mixed impressions were given of the role or legitimacy of advocates within the public inquiry. Professional Objector1 contended that lawyers bring a valuable dimension to public inquiries:

> "that dimension is principally an ability to see the wood for the trees, to single out the important points and to press them, or to question them in a way which leaves them resolved to somebody's satisfaction"
> (Professional Objector1)

However, this viewpoint was not shared by all interviewees. For example, it was asserted that:

> "it would be wonderful if lawyers could be kept out of the process, absolutely. This is the weak bit of the whole thing. But there's a lot of money at stake for the developers and they insist on having legal-"
> (Professional with Personal Interest Objector1)

Likewise, Personal Supporter1 argued that the legal debate within the inquiry was unnecessary. Furthermore, Personal Objector1 and Personal Objector2 both maintained that the cross-examination was intimidating and brutal. These two interviewees both contended that some people do not participate in inquiries due to the intimidating nature of cross-examination.

An alternative perspective was demonstrated by Personal with Professional Interest Supporter1 who stated that they found the lawyers entertaining.

### *10.4.4 The Developers*

> "I'm not saying [the developers] did anything wrong with the consultation process, because I think they did try. I think, you know, they did what was required of them, and I don't think, I think they were quite frustrated. But they come into a community to try and do their […] they do what they can, but very very, quite difficult. I think they made a few errors in befriending certain people, and doing certain things, but I think that actually as far as the process is concerned they did what was required of them."
> (Personal Objector2)

The above quote highlights the sentiment expressed by most interviewees that the developers had acted appropriately and legitimately during the early planning application stage. They were said to have managed the project well (noted by: Professional Supporter1; Professional with Personal Interest Objector2; Personal Objector2), and moreover were deemed to have been open, fair and sympathetic towards the local community (noted by: Personal Supporter1; Professional Supporter1; Professional with Personal Interest Objector2; Personal Objector2). For example, it was commented that:

"one thing that you must applaud them on is that they did have this open book policy, you know that, everything was out, there wasn't any sort of hidden secrets that were going to pop out, nasty surprises. Everything was out, the public meetings, you know, some of the questioning was really really dire […] but they dealt with it sympathetically, because obviously some issues were very important to some people however daft they may well have sounded to other people, but they dealt with them sympathetically, and I think, sort of, professionally."
(Personal Supporter1)

In relation to the initial stage there were no significant differences in the accounts of the developers given by objectors and supporters. However, it is interesting to contrast these accounts with those of the developers at the public inquiry. In relation to the public inquiry stage, whilst supporters remain positive about the developers, objectors are significantly more negative. A summary of the comments made about the developers is given in table 10.15.

**Table 10.15: Comments made about the developers at the inquiry**

| **POSITIVE COMMENTS** | |
|---|---|
| | Interviewees |
| **The developers were well-managed.** | **a)** Professional with Personal Interest Objector1, **b)** Personal Objector2 |
| **The developers were professional/kept themselves to themselves.** | **a)** Personal Objector1, **b)** Personal Supporter1, **c)** Professional Supporter2, **d)** Professional Supporter3, **e)** Personal with Professional Interest Supporter1 |
| **NEGATIVE COMMENTS** | |
| **Developers at inquiries are all much the same: serious, uncompromising.** | **a)** Professional Objector1 |
| **The developers treated the local community badly.** | **a)** Professional Objector1, **b)** Personal Objector2 |
| **Negative comment about the developer's presentation (i.e. clothes/cars)** | **a)** Personal Objector2 |

The majority of interviewees considered the representatives of the developers to have been acting professionally at the inquiry:

"they just conducted themselves in a sympathetic and professional manner, I'm sure that they must have been totally despondent at times the way things had worked out. But I think, again, that really they we-, I've got no criticism of them really […] certainly at the inquiry, I think they just- you know from what I saw they were in attendance and they were doing what they needed to do."
(Personal Supporter1)

"During the inquiry, they just kept to themselves as far as I was aware – you know they'd say hello or what have you, but they just kept to themselves, or to their supporters."

(Personal Objector1)

Whilst this was seen as a positive comment by supporters, Personal Objector2 clearly meant it as a criticism, saying also that they were 'in it for the money' and that they 'didn't care' about the community or local area. The representatives of developers were perceived to be doing their jobs, and this at times resulted in them appearing insensitive to the local community.

As demonstrated in table 10.15, criticisms of the developers were not simply related to their case at the inquiry or to their behaviour but also to their presentation:

"the sweeping in of the four-wheel drive vehicles, well that's enough to make you sick, isn't it. I mean that was totally unnecessary, and if people really believed in saving the world you don't go around in gas-guzzling cars like that. And also the number of cars they were arriving in, from the same hotel and in their city slicker suits and you know. And we were just – I started dressing down and wearing my hiking boots and things, you know, because I thought, we're, you know, we're just here, this is us, we live here, you know. It made it look as if they didn't really understand the effect that this thing was going to have on us. They had no sympathy at all, I mean it's all about money and that's it, you know. Money and government pressure, I presume they'd say government pressure on them. And basically, they didn't really care. They didn't care about, you know, the health of the people here, our wellbeing or the way that we might love the land that we live in: they couldn't care a shit, they really couldn't."
(Personal Objector2)

It is interesting to note how aspects of the developers' presentation, for example their 'city-slicker' suits, are used as illustrations of the 'outsider' status of the developers. Furthermore, this is taken as evidence that they did not understand, and were not sympathetic towards the local area or community. Moreover, wind power development is perceived to be justified by environmental arguments, and as such the environmental credentials of individuals representing the developers are scrutinised. Where these individuals exhibit non-environmentally friendly behaviour (*i.e.* driving 'gas-guzzling cars') this is perceived as refutation of the underlying justification for the development.

The developers were also described as being serious and uncompromising. One interviewee commented that such characteristics were typical of wind farm developers generally:

"They all appear much the same, I mean they all appear with a legal team, rows of men and women in suits, they're by and large somewhat inflexible, uncompromising, serious, lot of money rides on it […] so it's absolutely understandable that they would take, they would take it seriously. However, I don't detect much inclination to compromise in any respect and I do detect- I do detect an antagonism amongst wind farm developers to anyone who dares to ask questions about any aspect of the development, there is a smugness, sometimes bordering on arrogance which you don't generally see in other forms of developers."
(Professional Objector1)

### *10.4.5 The Local Opposition Group*

Unsurprisingly, supporters were primarily negative about the local opposition group, whereas objectors were primarily positive. Table 10.16 summarises the comments made about the opposition group at the inquiry.

**Table 10.16: Comments made about the opposition group at the inquiry**

| **POSITIVE COMMENTS** | |
|---|---|
| **The opposition group…** | Interviewees |
| **… were well organised.** | **a)** Professional Objector1 |
| **… put together a respectable case.** | **a)** Professional Objector1, **b)** Personal Objector2 |
| **… were well prepared for the inquiry.** | **a)** Professional Supporter1 |
| **… did well (considering resources)** | **a)** Professional with Personal Interest Objector2, **b)** Personal Objector2 |
| **NEGATIVE COMMENTS** | |
| **… consisted of unreasonable people.** | **a)** Personal Supporter1, **b)** Professional Supporter1, **c)** Personal with Professional Supporter1 |
| **… were vicious.** | **a)** Personal Supporter1, **b)** Personal with Professional Interest Supporter1 |
| **Their presentations were emotional/little basis in fact/based on personal opinions.** | **a)** Professional Supporter2, **b)** Professional Supporter3, **c)** Personal with Professional Interest Supporter1 |
| **… didn't have a professional approach.** | **a)** Professional Supporter3 |
| **Their representatives were professional objectors – just one more wind farm.** | **a)** Personal Supporter1, **b)** Professional Supporter2 |
| **… referred to standard objections.** | **a)** Personal Supporter1, **b)** Professional Supporter2 |
| **… were undermined by contradictions in evidence (produced by lay witnesses).** | **a)** Professional Supporter1 |
| **… could have done things better.** | **a)** Personal Supporter1, **b)** Professional Supporter1 |
| **… raised issues beyond policies guidelines.** | **a)** Professional Supporter2 |
| **… consisted of lay people.** | **a)** Professional Supporter3 |

It is interesting to note that many of the criticisms levelled at the opposition group relate to their 'lay' status. For example, Professional Supporter3 stated:

"whilst obviously they are lay people, they didn't exhibit the same professional approach as others in the way that they conducted themselves, which I don't think- which I don't think helped."
(Professional Supporter3)

Those criticising the opposition group felt that they ought to have been more professional. Thus it is implied that a lay approach is inappropriate for the public inquiry setting.

Objectors did not deny the lay status of representatives of the opposition group, and acknowledged that this presented a significant challenge:

"The problem is that local groups like that, they're running on emotion, and the- somehow, and the adrenalin's made by emotion, but when it comes to the public inquiry you have to actually set the emotion aside and try and make it a more rational process and get as much help as possible to make sure the arguments you are employing are as robust, meritorious as you can make them."
(Professional with Personal Interest Objector1)

The opposition group was perceived to have been faced with a number of other challenges as well. For example, it was noted that the group consisted of a very small number of people (noted by: Personal Supporter1; Personal with Professional Interest Supporter1 and; Personal Objector2). Furthermore, the inquiry was an expensive endeavour and the group did not have equal resources with the developers. It was, however, noted that the group managed to raise a significant amount of money locally (noted by: Professional with Personal Interest Objector1; Professional Supporter1; Professional with Personal Interest Objector2 and; Personal with Professional Interest Supporter1). This was seen by one interviewee to be inappropriate and even distasteful:

"this very small band of, sort of, hard core objectors had, you know, this wealthy backer who was basically, sort of, obviously financing the whole lega- legal fight on their behalf. […] I thought they would probably have gained more sympathy, if there was sympathy to be given, if they'd probably just stood up themselves as poor blighted locals whose lives are going to be changed forever if this scheme goes ahead rather than wading in with size ten boots […] I thought that was totally out of perspective, really for what it was."
(Personal Supporter1)

This highlights a contradiction in supporters' criticisms of the group. The opposition group is on the hand criticised for not having a professional approach, and on the other hand is also criticised for employing a professional lawyer rather than acting as 'poor blighted locals'. As such there is some ambiguity over the perceived appropriate approach for local opposition groups to take.

There are notable similarities in the criticisms made of the opposition group by supporters, and the criticisms of the developers made by objectors. As illustrated in table 10.16, the opposition group were perceived to rely on 'standard objections' and to be represented by 'professional objectors' who saw this case as 'just one more wind farm':

"the individuals that are involved in that group […] are, you know, they're, a couple of them are almost what I would term professional objectors really. You know, the wind farm's just, that's just another thing in their path."
(Personal Supporter1)

However, the conviction that this case represented 'just another thing in their path' to objectors was mirrored in assertions that the developers were represented by 'professional supporters':

"they [representatives of the developers] were the usual kind of group of hired guns, when you start to go to these public inquiries you start to see the same faces […] these people are appearing regularly […] these are people that are just on a roll going from public inquiry to public inquiry."
(Professional with Personal Interest Objector1)

"they're in it for the money, they are appointed commercially and they don't, they don't care. And also they have real conflicts because they're, probably, you know they were desperate to get the next job from [the developers], most of them, and, you know, they're performance or long-term jobs […] basically they were trying to impress, you know, their performance at our inquiry […] depended on them getting the next job."
(Personal Objector2)

Many of the comments that were made about the opposition group related to one particular individual who was considered to be central to the formation and running of the group. Whilst very personal negative comments were made by Professional Supporter1 and Personal with Professional Interest Supporter1, objectors spoke of this individual with a great deal of admiration. For example:

"I think in many ways [X] has done an excellent job because [the council] weren't coordinating things, they weren't looking at things and really if we hadn't had [X] it would have been very difficult for everybody who was like-minded to have some sort of voice and get it all put together. […] it is very difficult that an inquiry should have to rely on somebody in the community working so bloody hard that she just about made herself ill. You know, and I applaud her, you know, at least she's sticking up for the community which is more than [the council] have."
(Personal Objector1)

"I thought [X] did a terrific job, really terrific. You know, you've- people underestimate how difficult it is sticking your head up above the parapet in a ru- in a rural area like that, […] [X] doesn't put her head above the parapet she stands on it!"
(Professional with Personal Interest Objector1)

## 10.5 Reflections on the Roles of Expert and Lay Knowledge

Within interviews the roles played by, and allowed for, expert and lay knowledges were highly salient issues. Objectors felt that lay evidence was not influential (noted by: Professional with Personal Interest Objector2 and Personal Objector2):

"Frankly, you know, I just don't know how much weight that evidence had to be honest, because, […] issues that were being raised, you know things like tourism and impact on traffic had already been tested to destruction in the earlier sessions when we'd had expert witnesses, so I'm just not sure that had really much influence."
(Professional with Personal Interest Objector2)

Different views were expressed by supporters and objectors as to the value which lay evidence had within the inquiry. For example, Professional Objector1 noted that:

"you can see that an experienced expert may well have, you know, all the technical answers and all the knowledge about how, for example birds will respond or how the noise issue will develop. What experts can never bring though is the local dimension, public feeling, the way in which tourists behave in a neighbourhood."
(Professional Objector1)

Conversely, Professional Supporter3 asserted that:

"inevitably the expert witnesses are going to have more baring on the ultimate outcome than the lay people, unless they- unless they can come up with some fundamental practical aspect which is apparent to all."
(Professional Supporter3)

It was widely perceived that experts played a central role in the inquiry (noted by: Professional with Personal Interest Objector2; Professional Supporter1 and; Personal Supporter1):

"I think in many ways that was the crux of the inquiry, was, you know, the ability of the advocates to produce expert witnesses to back their case whose credentials were defensible as against the witnesses that [the opposition group] were able to produce, and I think that was the, that really was the key issue."
(Professional with Personal Interest Objector2)

"If you ask me what I think one of the worst things is about inquiries, I think it's the pre-eminence given to experts. You often hear people with a scientific qualification say; this a matter for experts, the public can't understand. [pause] Wrong! Sorry – trying not to use any strong language! But that's wrong, the public's well-informed, the public knows where it lives, the public knows what works in its neighbourhood, people should listen to the public more."
(Professional Objector1)

Moreover, objectors felt that there was too much emphasis on who was an expert, rather than the evidence which experts presented (noted by: Professional with Personal Interest Objector1; Professional Objector1 and; Personal Objector2):

"I just think it's unnecessary to actually win something by adversarial means which are essentially undermining people personally, and I think that is criminal, I don't think that is very clever at all, I really don't. It's cringe making."
(Personal Objector2)

"the developers were trying to prove that we were not proper expert witnesses, I just think that that's false that that needs to be challenged at public inquiries. Action groups cannot produce expert witnesses, you know, they haven't got the money to […] I think the whole business of evidence should be simply treated as is the evidence relevant, meritorious and presented with integrity, these are the three tests that one ought to be applying […] that should be the test, it's not whether you're an expert witness, it's whether your evidence has merit, is relevant and is done with integrity, nothing else counts – or should count."
(Professional with Personal Interest Objector1)

More fundamental criticisms were directed at the nature of expertise itself. Objectors and 'personal' supporters expressed scepticism about the supposedly objective nature of expertise. It was felt that the expert evidence presented at the inquiry was very subjective (noted by: Personal Objector1; Personal with Professional Interest Supporter1 and; Personal Objector2):

"There's two ways to view it; yes you can have experts to back up your point of view, but it's all very subjective […] you get into a turmoil of not actually knowing who to believe […] because a lot of scientists, a lot of researchers are being paid and you don't know how much of that is being paid to tell them exactly what they want to hear."
(Personal Objector1)

Numerous interviewees drew attention to the fact that the expert research was paid for, and hence that it was not objective (noted by: Personal Objector1; Professional with Personal Interest Objector1; Personal Supporter1; Personal with Professional Interest Supporter1 and; Personal Objector2). Reflecting on the role of expert evidence within the inquiry, one interviewee commented:

"I thought it demonstrated that you can buy an opinion"
(Personal with Professional Interest Supporter1)

Throughout the interviews objectors referred to pieces of cross-examination which had pitted one witness' evidence or approach against another. This style of cross-examination was considered to have been unhelpful and unconstructive. For example; the cross-examination of the opposition group's landscape witness focussed largely on the methods of assessment which the witness had used, and in particular the developers' advocate aimed to show the opposition group's witness' approach to be inappropriate (especially compared with that used by the developers' witness). However, it was contended that:

"Logically [the opposition group's witness'] method of five points is actually, could be argued, as being just as valid, if not more valid - because you've got a central point and you can go on either side of it – to have only four points of significance you've got two that are in the middle and not

on either side, and, you know. But also, the method of significance was actually put forward by the la- the Institute of Landscape Architects, it's their own little way, why do we have to accept that, it hasn't gone to the- you know, I don't know why it has to be the accepted, I don't understand, it's not been proved as better than the other one, if you see what I mean"
(Personal Objector2)

As was noted within the observation chapter, the developers' advocate's approach within cross-examination very often centred on highlighting how the opposition group's witnesses had deviated from accepted forms of knowledge or inquiry. It is interesting therefore to note that local interviewees (particularly objectors) displayed a considerably more flexible interpretation of knowledge, and did not subscribe to the view that 'correct' knowledge could only come through accepted methods of inquiry.

However, despite being critical and sceptical of the nature of expertise, objectors clearly perceived a need to present their own case through 'expert' language and tools. Professional Objector1 contended that:

"because so much of the material is technical it requires technical analysis, even something as ordinary as landscape assessment, well I say ordinary but of course landscape architects don't think it's ordinary, you know it's approached very technically so it needs a technical response, it needs a professional response."
(Professional Objector1)

Personal Supporter1 complained that:

"all of sudden they [members of the opposition group] became instant experts, they were instant experts on everything from planning law to hydrology to you name it"
(Personal Supporter1)

However, Personal Objector2 recounted the difficulty experienced in trying to employ expert witnesses and hence acknowledged that it had been necessary for local people to take on the role of experts on certain key topics. Two interviewees (Professional with Personal Interest Objector1 and Professional with Personal Interest Objector2) recounted how they *became* 'experts' in order to help the opposition group's case at the inquiry. As such the individuals concerned researched and covered the necessary topics (those for which the opposition group had been unable to secure expert representation). From the interviews it appears that this research was conducted seriously and thoroughly:

"in terms of preparation I suppose I was resting heavily on what I knew already. I did a- some frantic searches round websites just to catch up on a wide range of things and talked to a good number of people, former colleagues on the phone, I did a lot of speaking to people who are involved in the business just to make sure I was up the level on the learning curve and not missing something fundamental. I also conducted a number of interviews with people up the glen

[…] so I did quite a lot of personal preparation even though I know the area quite well […] did quite a lot of background preparation, a lot of which I never used."
(Professional with Personal Interest Objector1)

Objectors routinely spoke of themselves as lay people, and several interviewees pointed out that they (either as individuals or the opposition group as a collective) were not experts (noted by: Personal Objector1; Professional with Personal Interest Objector1 and; Personal Objector2). As such objectors were very aware of their lay status and reflected on this as a key challenge that they faced within the public inquiry stage. However, they did not consider this to illegitimate their case.

Conversely, as was shown in table 10.16 above, supporters often referred to the lay status of the opposition group's representatives as a way of criticising the group and its case at the inquiry. This further highlights the perceived importance of expertise – particularly on the part of 'professional' supporters.

## 10.6 Outcomes

The majority of interviewees (on all sides) contended that they were not surprised at the outcome of the inquiry (*i.e.* that the appeal was upheld) (noted by: Personal Supporter1; Professional Supporter1; Professional Supporter2; Personal with Professional Interest Supporter1; Professional with Personal Interest Objector1 and; Professional Objector1).

**Table 10.17: Comments showing inquiry outcome as vindication of supporters' case**

| | Interviewees |
|---|---|
| **The inquiry showed opposition witnesses to have no substance.** | **a)** Professional Supporter2, **b)** Personal with Professional Interest Supporter1 |
| **The inquiry proved false arguments to be wrong.** | **a)** Professional Supporter1, **b)** Professional Supporter2, **c)** Professional Supporter3, **d)** Personal with Professional Interest Supporter1 |
| **Winning the expenses claim vindicated our case.** | **a)** Professional Supporter1, **b)** Professional Supporter2, **c)** Professional Supporter3 |
| **The council's poor stance/approach was proved by the inquiry verdict.** | **a)** Professional Supporter1, **b)** Professional Supporter2, **c)** Professional Supporter3 |
| **The expenses claim demonstrated the bad approach of the council.** | **a)** Professional Supporter1 |

In a similar way to how the original refusal of planning permission was viewed by objectors (as vindication of the opposition group's case), supporters described the outcome of the inquiry as a

vindication of their case. Table 10.17 summarises the comments which demonstrate this viewpoint.

The granting of the expenses claim, in particular, was seen as an indication of the legitimacy of the developers' case, and conversely the illegitimacy of that of the opposition group and council. However, Personal Objector2 viewed the awarding of expenses in a somewhat different way:

"I actually feel that it was a political thing anyway, I think it's a warning to all local authorities. I think it was being used as that and I think there's pressure from up high, you know, they were waiting for one like this to do it. […] It's going to be interesting to see if there are more claims […] it will be very interesting to see if that's now created a precedent and it's actually a warning, I think it did go out as a warning shot to all local authorities in Scotland, because this thing's so political: You dare otherwise you might have to pay, you know. You dare turn down any more planning applications, you know, this is what might happen."
(Personal Objector2)

In this way the upholding of the appeal, and the awarding of costs against the council is not perceived as an indication of the particular merits of either parties' case, or of the appropriateness of the proposed development. Rather, Personal Objector2 contended that there were external, political factors which played important roles in the reporter's decision. Other interviewees also expressed some scepticism about the independent nature of the inquiry and the extent to which the reporter took his decision based on the evidence which had been presented. For example it was stated:

"you just wonder how, how much the Government- whether it's just one man gone up there to do a fair, or whether he got breathed on as though get on up there to [local town] and have a look at this thing and pass it unless you find a damn good reason not to. I don't know how it works, I'm suspicious of the latter maybe, I don't know."
(Personal with Professional Interest Supporter1)

### *10.6.1 Reflections on the Inquiry Report*

It is interesting to note that although the reporter was described in positive terms by all interviewees, the report which he produced did not illicit such unanimous praise. Table 10.18 demonstrates that whilst supporters were pleased with the report, objectors considered it to be flawed in a number of respects.

Throughout the interviews objectors mentioned various topics which they contended would never be influential in a reporter's decision. Each of these topics were, however, felt to be significant by the interviewee mentioning them. For example, Professional with Personal Interest Objector1 contended that the impact on tourism 'fails to make any progress at any of these inquiries', and Personal Objector2 asserted that economic and tourism matters are 'never going to win any of

these arguments'. Similarly, it was argued by Personal Objector2 that the subject of archaeology will never be influential in determining a wind power planning application, unless there is an 'absolutely amazing monument right in the middle' of the proposed site. Additionally it was said that hydrogeology was not a topic that would 'win a case' (Personal Objector2).

**Table 10.18: Reflections on the Inquiry Report**

| **POSITIVE COMMENTS** | |
|---|---|
| | Interviewees |
| **The inquiry report is fair.** | **a)** Professional Supporter1, **b)** Professional Supporter2 |
| **NEGATIVE COMMENTS** | |
| **I am disappointed with inquiry report.** | **a)** Professional with Personal Interest Objector1, **b)** Professional with Personal Interest Objector2, **c)** Professional Objector1, **d)** Personal Objector2 |
| **The reporter looks for safe decisions – anchor points.** | **a)** Professional with Personal Interest Objector1 |
| **The report overlooks tourism issues** | **a)** Professional with Personal Interest Objector1 |
| **The reporter placed a lot of emphasis on renewable energy policy.** | **a)** Professional Objector1 |

Professional with Personal Interest Objector2 expressed disappointment that the inquiry report had dismissed concerns relating to traffic, impact on wildlife, impact on bird life and impact on water supplies too easily. Professional Objector1 lamented that the ornithological evidence had been dealt with rather 'cursorily'.

Professional Objector1 also noted that the reporter placed significant emphasis on policy guidelines and that matters of policy appeared to be key within the decision to uphold the appeal. Further, Professional with Personal Interest Objector1 commented that:

> "the reporters are looking for safe anchor points on which to hang their decisions and the strongest anchor points are the ones which are in planning legislation and also in nature conservation legislation and these will continue to dominate at most public inquiries."
> (Professional with Personal Interest Objector1)

Thus, objectors do not perceive the outcome of the inquiry to reflect the issues which were raised, or arguments which were made by the opposition group. Whilst all interviewees had been positive about the reporter during the inquiry process, objectors typically did not feel that he had been impartial or rigorous in coming to his decision or preparing the report.

On the other hand, supporters perceived the report to be fair and adequate:

"I think the report gives a very fair and accurate representation of the proceedings and I think in the conclusions that are drawn by the reporter, you know, he focuses in quite quickly on what he sees as the key issues, the determining issues."
(Professional Supporter1)

"In some cases the report will say well on this side, you know, on the one hand this on the other hand that and on balance this. Whereas in this case it's, it's not really, you can say on the one hand this but there doesn't generally appear to be much on the other hand, it's not really even a que- a case of balance it seems to be, I would say, without exception for each issue a cut and dry decision, shall we say."
(Professional Supporter3)

### *10.6.2 Lasting Effects*

When asked whether they expected the experiences of the planning process to have a lasting effect on the local community interviewees gave mixed responses. Supporters were largely more optimistic and said that they did not expect a lasting negative effect (noted by: Personal Supporter1 and Personal with Professional Interest Supporter1):

"there's no long-lasting divisive effect that's broken up members of the community, it's not gonna have any, there's actually there's only going to be plusses on the business side, and again from the tourist perspective, I think what you've got to balance is that ok you may get one or two people who shudder at the thought of driving up passed and think good grief what's this doing here, but I think that you'll get as many people coming up to be there, you know to go up and look at it."
(Personal Supporter1)

Objectors, however, anticipated a lasting divisive effect within the community. Professional with Personal Interest Objector1 and a Professional Objector1 both contended that there would be a lot of angst which would remain within the community. For example, when asked whether they anticipated that there would be a long-lasting negative effect on the local community one interviewee responded:

"Oh yeah; unquestionably. I think- In my experience nothing divides a community more quickly than a proposed wind farm."
(Professional Objector1)

Furthermore, Personal Supporter1, Personal with Professional Interest Supporter1 and Personal Objector2 recounted that the proposed development had had a divisive effect within the community:

"Divisive; that's the one word for the wind farm. Whether they are efficient, or produce electricity, one thing's for sure they're divisive, well in the wrong place, maybe even in the right place. I don't know."
(Personal with Professional Interest Supporter1)

"they [members of the opposition group] just walk on the other side of the street [from me]" (Personal Supporter1)

Personal Objector1 stated that as a result of the experiences of the planning application there were certain individuals within the community who they would 'watch like hawks' from then on.

However, it was largely expected that the opposition towards the development would fade away (noted by: Professional with Personal Interest Objector1; Personal Supporter1; Professional Supporter1; Professional with Personal Interest Objector2, Professional Supporter3 and; Personal with Professional Interest Supporter1). Professional Supporter3 expected that only a 'hard core' of objectors would remain.

Professional with Personal Interest Objector1 and a Professional Supporter1 both stated that they were confident that the development would go ahead without any major problems. Furthermore, Personal Supporter1 expected there to be positive effects associated with the development. These were anticipated through the creation of a community fund and also through educational opportunities associated with renewable energy.

The community fund was a controversial issue within interviews. Personal Supporter1 was very positive about the potential for the community fund to benefit the local community and said that they hoped to have an input into the management of this. However, Professional with Personal Interest Objector1 was sceptical that the fund would actually benefit the local community, and speculated instead that the money might be used in the city where the council headquarters were located, in which case it was felt that it would be used for 'more polished granite in the streets of [city]'.

Professional Objector1 and Personal Objector2 both commented that the promise of a community fund amounted to an attempt to 'buy' planning permission and it was therefore seen as a bribe. However, Professional Objector1 also noted that all the developers could do by means of compensating the local community was offer money.

### *10.6.3 Personal Outcomes*

A number of interviewees mentioned that their involvement in the planning process had had effects on themselves personally. For example, Personal Supporter1 stated that the process had

strengthened their beliefs, Personal with Professional Interest Supporter1 recounted that it had made them more interested in 'green' issues, and Personal Objector1 stated that their involvement in the opposition to the development had boosted their self esteem and confidence.

However, Personal Objector2 recounted that the process had been exhausting and stressful. Additionally, the physical work involved in organising the opposition campaign was said to have led to injuries and illness.

### 10.7 How Would you Change the Planning System?

Reflecting on their experiences interviewees were asked what they would change if they could make one change to the planning system. The answers given are as follows:

- Cut the lawyers out (Professional with Personal Interest Objector1)
- Introduce a cooling off period, or period of immediate review after planning decisions are made contrary to officials' recommendations – to allow scrutiny of decisions taken at local authority level (Professional Supporter1)
- Change national planning guidelines - create 'preferred areas' (Professional with Personal Interest Objector2)
- Remove political interference – no direct or indirect contact between members of planning committee and officials (Professional Supporter2)
- Remove/reduce possibility for decisions to be taken on an uninformed basis – either officer decision rather than council, or have an independent chair (like a reporter) in council meetings to steer members as to how they 'should be thinking' (Professional Supporter3)
- Make it more user-friendly and less formal – reduce requirement for everything to be in written form, and the need for hard copies of all documents/evidence (Professional Objector1)
- Bypass local authority and go straight to the Scottish Executive (Personal with Professional Interest Supporter1)
- Make things more independent - environmental statement should be conducted by an independent party, and the statutory consultation process needs to be changed (Personal Objector2)

Each of the changes suggested by supporters implies a move away from local level decision making and towards a more centralised planning system. For example, it is suggested that council decisions should be scrutinised when they do not accord with officials' recommendations, and that they ought to be overseen by an independent chair. Supporters therefore suggest removing power from local decision-making institutions.

Objectors, on the other hand, prioritise making the planning system more 'user-friendly', for example, by removing the role of lawyers who are perceived to be intimidating and at times brutal. Additionally practical elements such as the need to present evidence in written form and to have hard copies of all evidence are seen to disadvantage local opposition groups who have neither the resources nor the experience of developers.

The changes in national planning guidelines and to the EIA and statutory consultation processes, suggested by Professional with Personal Interest Objector2 and Personal Objector2, point to the perceived need for greater clarity, certainty and objectivity within the planning system.

Thus, the changes suggested by objectors and supporters both imply that the planning system is currently flawed, however, the flaws which are identified are very different. Objectors' suggested changes imply that local opposition groups are disadvantaged within the planning process, whereas supporters' suggested changes imply that local decision-makers are able to make 'uninformed' decisions and are susceptible to local political pressures. Objectors, therefore, suggest the need for greater empowerment of local actors, whilst supporters suggest moves away from local level decision-making.

## 10.8 Summary

The interviews uncovered a number of salient issues related to different actors' experiences with the proposed development and the planning system. Given their different positions and motivations, it is perhaps unsurprising that there exist significant differences of opinion between objectors and supporters and 'personal' and 'professional' interviewees. It is therefore interesting to draw attention to the few areas where agreement amongst all (or nearly) all interviewees existed.

The key areas of agreement are:

- The early planning application process was unfair.

- The council handled the application badly (within the early planning application process, but also later at the public inquiry).
- Individuals were optimistic about the opportunity to present their case at a public inquiry.
- The reporter was viewed positively.

These areas of agreement highlight the fact that the early planning application process was viewed as having been flawed and that all interviewees had been dissatisfied with this stage (particularly with the council's handling of the application). This explains (at least partly) the optimism that was conveyed when thinking about the opportunities that the inquiry would engender. Actors on all sides welcomed the inquiry as a means of clearing up misunderstandings or perceived inaccuracies which had persisted within the early planning application stage. This optimism about the public inquiry as a fairer forum is mirrored in the positive accounts given of the reporter. The contrasts between reflections on the decision-makers in both stages (the council and the reporter) are stark and noteworthy. Whilst the initial decision-makers are widely and comprehensively criticised, the inquiry decision-maker is well-liked and respected.

Another area of (partial) agreement is found in the assertions made by all interviewees that there was political interference in the planning process. Representatives of all positions contended that, at one point or another, decision-makers had been inappropriately influenced by political factors. Supporters (particularly 'Professional Supporters') considered the council's refusal of planning permission to have highlighted the existence of corruption and political interference within the local planning system. Objectors, on the other hand, believed that the inquiry reporter had given undue consideration to national renewable energy policies, and further speculated that he had been subjected to pressures from the Scottish Executive.

As such, whilst each side viewed their victories as vindications of their arguments, and hence as having been achieved based on the merits of their case; they considered their defeats to have come about due to inappropriate political factors.

Many areas of disagreement centred on different actors' perceptions and interpretations of the inquiry process. For example; whilst 'professional' interviewees considered the inquiry not to have been too adversarial, and portrayed the advocates as acting reasonably and professionally, 'personal' interviewees expressed resentment at the fact that the inquiry had been dominated by inappropriate, and overly brutal cross-examinations. Similarly, whilst supporters considered the

inquiry to have been largely fair, objectors considered it to have been a 'David and Goliath' situation in which they were severely disadvantaged.

Further key disagreements related to the roles of experts and lay people within the inquiry. Supporters considered it to have been an inevitability that experts would have had the greatest influence within the inquiry, whereas objectors questioned and challenged this assumption. Supporters criticised the opposition group for being unprofessional and being represented by lay people. Conversely, objectors pointed to the potential value of lay knowledge and simultaneously to the fallibility and subjectivity of expert knowledge.

Through various ways such as this, interviewees constructed the planning system (and particularly the public inquiry) in different ways based on their own interests and experiences. Typically, supporters constructed the public inquiry as being the domain of experts, and as achieving fair objective outcomes based on impartial, scientific inquiry. According to this view lay people were inappropriate, unqualified actors whose participation served to divert the inquiry from considering the key issues alone. As such the public inquiry in this case was perceived to have been hijacked by illegitimate actors.

In contrast, objectors constructed the planning system as requiring democratic processes which ought to have engendered the full participation of all interested parties. According to this view experts did not necessarily merit a special position within planning processes, and their knowledge was not considered to be unquestionably superior to, or more accurate than that of local, lay people. As such the public inquiry in this case, with its perceived emphasis on expertise and credentials, was seen to be inadequate and undemocratic.

## 11.0 Case Study Discussion

### 11.1 Introduction

Chapters six to ten have highlighted a number of areas of interest and highly salient issues emerging from the case study. This chapter will address these issues more explicitly and draw out what are seen to be the significant aspects thereof. It will be shown that, in various ways, the planning process served to sideline lay knowledge and as such to limit the influence or power of local objectors. Further, it will be shown that this process (as opposed to its outcome or the physical development) may have had negative (and perhaps lasting) effects on the local community. As such there are seen to be 'social costs' of such processes.

This chapter will illustrate how the role of the local opposition campaign group evolved over the course of the planning process, how local people experienced the process and how this changed their perceptions both of the process and the actors involved. It will be shown that whilst in the early stages local objectors were influential and able to affect the course of the planning application, later the most influential actors were experts and lawyers. Moreover, it appears that the single most influential factor within the final planning process and determination was national policy. This is a point which has serious implications for the role which lay objectors can play. All in all it will be shown that the power which the local opposition campaign group had was restricted to being able to delay the final outcome, but did not stretch to being able to influence what that outcome was.

The chapter will also revisit some of the key debates within the wind power literature in order to assess how the data relate to them. This research has provided many valuable insights into the realities of wind farm planning and it will be shown that such insights challenge the dominant theories within the wind power literature.

### 11.2 Changing Priorities of Arguments

The prioritised topics throughout different stages of the planning process clearly changed and were re-ordered. From reviewing individual objection letters (discussed in chapter seven), it appears that initially the key concerns of opponents to the proposed development related to its visual presence and other aspects associated with the physical erection of the turbines. However, objections which were more organised (*i.e.* those expressed through proforma cards) focussed predominantly on more tangible, less subjective potential negative impacts – *i.e.* that endangered species of birds may be negatively affected either through collision with turbines or damage and/or disturbance to their habitats. This highlights the fact that local objectors were aware of the need to structure their opposition in response to planning policies and guidelines in order to be effective. As was shown in chapter ten, objectors perceived

certain issues (notably, policy and legislation relating to nature conservation) to hold more weight than others (for example, socio-economic, tourism, or hydrology issues were not considered influential).

**Table 11.1: Prioritised issues within objection letters, the inquiry report's summary of evidence and the inquiry report's conclusions**

| SOURCE | 1st PRIORITISED ISSUE | 2nd PRIORITISED ISSUE |
|---|---|---|
| **Individual Objection Letters** | The Wind Turbines (*i.e.* visual impact and size) | Traffic and Roads |
| **Objection Letters (overall)** | Ornithology | Traffic and Roads |
| **Inquiry Report – Summary of Evidence** | Ecology & Ornithology | Noise |
| **Inquiry Report - Conclusions** | Ornithology | Planning Policy |

The topic of ornithology remained a key concern throughout the inquiry, as reflected in the inquiry report. This may be taken as an indication of the success of the local opposition group to structure their campaign around salient issues. However, as shown below, ornithology was treated in very different ways as the planning process progressed, and ultimately the reporter's considerations barely reflected the concerns of the opposition group.

The second main issue in objection letters (both individual and overall) was 'Traffic and Roads' and it is therefore striking that this received comparatively little consideration within the inquiry report. What is equally striking is the importance of policy (both planning policy and renewable energy policy) within the inquiry report, and the influence that this appeared to have over the outcome. It must be acknowledged that the appeals process exists in order to assess proposed developments in accordance with existing policies and guidelines (O'Riordan *et al* 1988, Wynne 1982). However, such pre-existent policies are not permitted to be questioned or challenged at the public inquiry, and as such have an 'untouchable' status. In this way policy and local issues are kept separate despite the fact that they are intrinsically interconnected. This is an important point with significant implications which will be discussed below.

The analyses of objection letters and the inquiry report identified some key topics relating to the planning application; notably the physical presence of the turbines, ornithology, traffic and roads, and policy. In order to highlight the evolving nature of the topics and the role or

influence that they had throughout the planning process, it is worth considering each of these topics in more detail. Previous studies (i.e. Devine-Wright and Devine-Wright 2006, Woods 2003) have demonstrated how different groups can interpret aspects of wind power (for example issues relating to intermittency, or to the 'fit' of a wind farm within particular landscapes) in different ways so as to support their own position (i.e. in favour or opposition to wind power). In this line, it is particularly interesting to note the ways in which different issues are conceptualised by different actors (i.e. by individual objectors compared to the inquiry decision-maker).

### *11.2.1 The Wind Turbines*

> Despite what we are told it is impossible for 16 turbines to be sited in an open moorland landscape and not prove to be a monstrous blight on the landscape which will be hated by local inhabitants as well as visitors to the area.

> As tourists, which I have always considered to be important to Scotland, we come to see the unspoilt countryside, not hills covered in unsightly monstrosities. I can't believe that any Scotsman, proud of the country defended with such vigour by the likes of Wallace and Bruce would willingly blight the land in such a manner.

Visual impact was a key issue within the individual objection letters. The above quotes are just two examples of the passionate and emotive language which was used in relation to this issue. A great deal of use was made of metaphors and symbolic language, for example in saying that the turbines would 'scar the landscape'. Typically the 'industrial', 'man-made' nature of the turbines was emphasised in contrast with the perceived 'unspoilt' nature of the existing landscape. This resonates with the findings of Woods (2003) where it was observed that:

> Letters and statements from anti-wind farm campaigners speak of the landscape being disfigured, ruined, cruelly desecrated, abused, raped and sacrificed. […] The incompatibility of the wind farm with the 'unspoilt', 'natural' landscape is conveyed by the repeated description of it as an 'industrial' development, representing the wind farm as being 'out of place'.
> (Woods 2003: 281)

However, this language and sentiment is in stark contrast to that used within the expert evidence given at the public inquiry, and within the inquiry report. For example, in reviewing the evidence given on behalf of the developers the report summarises that:

> Although, in common with any windfarm development, there would be some significant effects on landscape and visual amenity in localised areas close to the appeal site, these would affect a very limited number of receptors and be restricted in geographic extent.

Similarities between the language used to describe the visual impact of the proposed development within objection letters and that used in the above extracts are hard to find. The 'monstrous blight on the landscape' has become a typical wind farm development affecting

only a limited number of 'receptors'. The language used within the inquiry report's account of the developer's evidence is clinical and quantitative, suggestive of an objective, 'scientific' approach. However, since the appearance of a landscape is essentially a matter of aesthetics, it might reasonably be taken as a matter of taste and opinion and not as something which can be quantified and measured.

Equally important to note is the acknowledgement that any wind farm development would create significant effects on the landscape and visual amenity. This up-front acceptance that there will be a (negative) visual impact effectively diminishes the significance of objectors' arguments that the development should not be allowed for this reason. Whilst individuals writing objection letters expressed their concern that the development would be visually intrusive, this was taken as an accepted 'fact' within the expert evidence. Moreover, this is stated within policy on the matter, as is noted within the inquiry report's conclusions:

> As is acknowledged in NPPG6, any windfarm is bound to have landscape and visual impacts to some degree and it is impracticable to screen such developments [...] I am satisfied that the landscape and visual impacts of the scheme would be limited and appropriate to the location, in accordance with PAN45, subject to conditions to control the appearance of ancillary elements of the scheme.

As such, the emphasis is not on whether the development might be acceptable to members of the local community or others who visit the area, but rather whether it is acceptable in accordance with policy and guidelines.

A similar situation is found in relation to noise. Where the arguments summarised in the inquiry report relate mainly to different methods and sets of standards which have been used to assess background noise levels, and 'acceptable' additional noise levels (as might be created by the wind farm). In justifying his preference of the developers' approach the reporter once again refers to national policy on the matter by stating that:

> PAN45 is quite clear in its support of the latter approach [taken by the developers]. ETSU-R-97 is intended to strike a balance between the protection of windfarm neighbours and placing restrictions on windfarm development. By its use of BS4142, the council, supported by [the local opposition campaign group], seeks to ignore that balancing aspect and is therefore acting contrary to national advice without justification.

As will be discussed below, this heavy and consistent reliance on policy and national guidelines creates obstacles to the expression of local, objectors' concerns and interests.

### *11.2.2 Ornithology*

Concerns relating to ornithology were significant within all stages of the planning process. However, the issues which were addressed varied across the process stages. For example of the 2228 comments relating to ornithology in the objection letters only nine (0.4%) referred

explicitly to Black Grouse, whereas this species of bird was the subject of considerable debate at the public inquiry, as discussed in chapter eight and reflected in the inquiry report. Within the objection letters the single species of bird which was mentioned most often was Osprey (with 546 mentions), closely followed by Hen Harrier (with 539 mentions).

The evidence given at the inquiry relating to ornithology was, however, concerned more or less exclusively with two bird species – Osprey and Black Grouse. In reviewing this evidence the inquiry report discusses the arguments relating to Osprey within 25 paragraphs, those relating to Black Grouse in 8 paragraphs and those relating to other species of birds in merely 1 paragraph. Equally in the concluding pages of the report the section dealing with ornithology consists solely of an 8 paragraph discussion relating to Osprey and 5 paragraphs relating to Black Grouse.

Thus whilst the objection letters had mentioned numerous bird species (including for example, owls, geese and plovers) the evidence which was considered at the inquiry focussed far more narrowly on just two species of birds. Moreover, whilst the objection letters frequently cited concerns that birds might be killed due to collision with the turbines (547 mentions related to 'Physical harm from the turbines') the majority of the discussion of issues relating to ornithology within the inquiry report's conclusions focused on whether osprey flying over the proposed development site (and hence at possible risk of collision) originated from the nearby Special Protection Area (SPA). The inquiry report notes that osprey residing within the SPA must be accorded extra protection, thus if the birds flying over the proposed development site originate from this area it could be grounds for preventing the development from going ahead.

References to osprey, or to risk of birds colliding with turbines within objection letters demonstrated that people were concerned about the possibility of birds being killed or injured as a result of the development. The sentiment often expressed in relation to osprey was that if even one bird was killed due to the development that was one bird too many. However, the sentiment is quite different within the inquiry report where the impression given is that the potential for birds to be injured or killed is only of concern if the birds are protected species coming from a special area of conservation. This highlights the peculiar notion that, despite the fact that all ospreys are members of a protected species, the lives of those which come from an SPA are of greater value than those living elsewhere.

As with visual impact and noise, the inquiry report considers issues relating to ornithology in terms of their policy or legislative relevance, which is very different from the way that the

issues were viewed by the authors of objection letters. Equally, by changing the focus from whether birds are likely to be injured or killed by the development to whether birds which might be injured or killed come from the SPA, the inquiry has served to remove the significance or relevance of objectors' concerns. Just as it was taken as an assumption that negative visual impact would occur, so it appears to be taken as an assumption that birds may be at risk of collision, but by moving the focus away from the likelihood of this occurrence concerns thereof are made less legitimate.

### *11.2.3 Traffic and Roads*

> Construction of wind turbines would scar the land, not just by their presence, but by the road widening and perhaps bridge strengthening, which would be required to facilitate their construction. The effect of heavy construction traffic could be devastating to your local roads and their normal users.

> It is blatantly obvious that [village name] will suffer as a result of the increased construction traffic and the associated disruption and that some local businesses will lose trade.

Issues relating to perceived negative effects on the local roads and traffic during the construction phase of the development were major issues within the objection letters, however, this topic was summed up and dismissed within a quarter of a page (one paragraph) in the inquiry report's conclusions. Thus it appears that a topic which was of great concern to objectors was given little consideration within the inquiry.

As can be seen from the above two quotes from objection letters, those opposing the development referred to commonsense to suggest that local villages, and the businesses and people therein, would be negatively affected by the construction of the wind farm. Objection letters frequently made reference to individuals' past experience of using the local roads and their own intimate knowledge of the proposed transportation route to suggest that it was inevitable that transporting large turbine components on the necessary size of vehicle would cause significant disruption and damage. Moreover, as illustrated in the first quote above, concerns were raised not only that the transportation would not be possible or would cause damage, but also that if road alterations were carried out in order to facilitate construction traffic that the character of the road would be lost. As such, it is not just issues of negative impacts on local transport or even of physical damage being caused by the construction traffic, but also anxieties over losing the inherent value of the road which are expressed within objection letters. This value assigned to the road is unquantifiable and comes from highly subjective, even emotive, assessments based on individuals' experiences of using the road. In many instances it appears that the value which parts of the road hold comes precisely from the fact that they have not changed for many years, thus alterations to these parts of the

roads (i.e. widening or strengthening narrow bridges) is a direct threat to what is deemed important to the character of the road.

The expert discussions of transport and roads at the inquiry, and summarised in the report, focussed on more quantifiable aspects for example the ability of long vehicles to negotiate a particular corner of the road and the safety measures which would be put in place to ensure that accidents did not occur. The inquiry report stresses that the developers would have the means to ensure that the construction phase took place with minimum disruption, and as such it was acknowledged that some road alterations would need to be carried out.

Thus, as far as the inquiry is concerned the relevant questions relate to whether or not it is physically possible for the construction traffic and turbine components to travel to the development site. So long as there is no significant likelihood of accidents then it is deemed acceptable, moreover 'localised road alterations' are considered necessary and acceptable aspects of the development. Local concerns over the character of the road are not considered within the inquiry report. Consequently, it appears that this topic represents another area where the inquiry did not consider the nature of local people's objections and did not engage with objectors' real concerns. Instead the inquiry focussed on objectively measurable issues which could be proved through technical assessments and 'expertise', and stayed away from subjective issues such as the character and value which the road possessed for local people.

However, it should also be acknowledged that despite the prominence of traffic and roads issues within objection letters, not all objectors shared a concern over this issue. For example, within interviews one objector noted that:

> I place no weight on all of this stuff about will, wi- the transport up the roads and congestion and all that. I just regard that as irrelevant, but of course it's important to people who are emotively connected – but I've seen wind farms in Wales up roads you thought how on earth did they get anything up here, much tougher roads than that- they'll get the stuff there, and it will be a local nuisance but it's not a big issue – but they will do their best to help that along
> (Professional with Personal Interest Objector1)

It must be acknowledged that many individuals' objection letters may have contained concerns which are more representative of the issues which were raised by the opposition group, or which were being discussed publicly, rather than which particularly concerned them personally. Of course, it is not denied that there was considerable local concern about the construction traffic and its impacts on the local roads and area, however, one must not overlook the potential for issues to become salient through their adoption by the opposition campaign, (for example, traffic and roads issues were central to the proforma letter which was circulated).

### *11.2.4 Policy*

The inquiry report included a ten page section (before the review of evidence) about renewable energy policy (both national and local). Further, and as has been made clear in the above discussion, throughout the inquiry report policy and legislation were frequently referred to in reaching conclusions with regards to different topics covered within the inquiry. Thus policy had an unmistakably influential role within the inquiry and a primary focus of the reporter was to establish whether or not the proposed development accorded with national policy on renewable energy development. Furthermore, from the above discussion it is evident that this emphasis on being in accordance with policies overshadowed the need to fully reflect the interests and concerns of the local community.

In this way policy and local issues were kept separate, and moreover objectors – predominantly local people – were prevented from engaging with policy matters. Policy was seen to be uncontroversial and questioning it was both inappropriate and unnecessary.

> The task of the [reporter] is to apply existing and well known policies to particular local facts. Judgements have to be made but the purpose of the inquiry is not to evaluate the policies themselves.
> (O'Riordan et al 1988: 51)

However, Wynne (1982) notes that inquiry outcomes not only reflect or respond to existing policies but also shape future policy. Thus, whilst public inquiries are formally expected to serve the purpose of implementing policy objectives without challenging or debating the policies, where the development in question is of more than local significance the policies become problematic and controversial (Wynne 1982). He contends that the details of policies cannot be kept apart from issues related to their local application. Individual energy developments have implications for future policy and technology development. Inquiry outcomes therefore not only implement policy goals but also shape how these are interpreted, developed and implemented in the future. Thus the policy – not only the 'local facts' – ought to be considered within the public inquiry. Wynne (1982) argues that such issues can be easily overlooked where the subject of a public inquiry is a conflict between local private interests and where representatives of the state can act as 'impartial arbiters' (*ibid*: 54). However, where the subject is of national significance and the topic of key government policies (as renewable energy is) then the impartiality of the state becomes questionable and the policies governing the inquiry process require closer scrutiny.

Despite the influential role that policy played within the inquiry, this was the only topic which could not be challenged or questioned. National policy relating to renewable energy was

'untouchable' and its merits were taken for granted. As such the inquiry operated under a set of presumptions which included that the targets set for electricity produced from renewable sources were appropriate and that meeting these was of great importance, and moreover that wind power was an appropriate technology suitable for deployment within Scotland. However, these were not necessarily presumptions which all parties agreed with – indeed many interviewees (objectors) were highly critical of national renewable energy policies. This was addressed in the following excerpt from the inquiry report:

> As the parties were advised in advance of this inquiry, challenges to the merits of government policy are outwith the remit of the inquiry. I take no account of such comments as were made on the merits of government energy policy.

Through this 'untouchable' status policy became an omnipotent justification for upholding the appeal, and importantly this is an accepted fact within planning policy and appeal guidelines (O'Riordan *et al* 1988). Clear boundaries exist as to what is acceptable and admissible within the inquiry and arguments which fall outside of these boundaries are simply dismissed. However, such boundaries do not exist naturally but rather are constructed and reinforced within each inquiry (Wynne 1982). Furthermore, inquiries maintain legitimacy by creating the illusion of being objective 'fact-finding' exercises, however, this illusion conceals a number of subjective value-judgements which are necessary in order to reach a decisive outcome (O'Riordan *et al* 1988, Wynne 1982). Indeed, the very act of determining which issues are to be included within the inquiry debate and which are irrelevant or inappropriate requires subjective judgements and interpretation of policies. As set out in the Scottish Town and Country Planning Appeals Rules (1997) 'any evidence may be admitted at the discretion of the appointed person [i.e. the reporter]' (19:6), yet such subjective judgements are concealed behind a veil of supposed objectivity.

Wynne (1982) contends that public inquiries represent exercises in social control. This implicit role of the appeals process is identified in the ways by which the public's contribution and role is controlled and restricted, and by the requirements placed on participants within the inquiry. They are required to present their evidence in specific ways, using a particular type of language and addressing a problem which has been deliberately defined in narrow terms (Wynne, 1982). Individuals must express themselves in accordance with accepted knowledge and by reference to certain types of 'facts'. As discussed in chapter ten, interviewees acknowledged this a key challenge for local opposition groups, who are essentially lay people. The challenge of presenting a 'professional' case, based on 'expert' arguments and scientific inquiry is very demanding for lay groups without significant (financial or professional) resources.

The unquestionable nature of policy within public inquiries can also be seen as a means of restricting the range of possible arguments that participants can make and further as defining a set of 'rational' assumptions underpinning the inquiry. Consequently, individuals (or types of evidence) that challenge or deviate from this set of assumptions can be easily disregarded. In this case the 'untouchable' status enjoyed by the UK's renewable energy policy meant that the 716 comments within the objection letters which referred to issues relating to 'Wind Power Technology' as a whole (for example as being unnecessary, inefficient, inappropriate, unreliable or overly subsidised) would have been viewed as opposing national policy and as such were not able to be expressed within the inquiry. The evidence of any inquiry participant who attempted to raise such issues would have been straightforwardly dismissed.

### 11.3 Power of the People… or Power of Experts?

In the early stages of the planning application process, local community members (as with all interviewees) were frustrated by the planning process and expressed very vocally their discontent with the local authority who were seen to have seriously mishandled the planning application. However, lay community members did appear to have a voice, and to be able to make that voice heard within the planning process, and moreover they appear to have had an influence. Given the lack of formal objections from any statutory consultee, and the 'minded to approve' determination of the council, the local opposition campaign group appear to have played a key role in influencing the decision to refuse planning permission for the proposed development. There was truth in the local press reporting of a 'victory for people power'. This is in accordance with the findings of a study which found that the attitudes of people living in the immediate vicinity of proposed wind power developments (in England and Wales) strongly influenced decisions taken at the local authority level (Toke 2005b). However, this 'people power' was somewhat diminished in the subsequent public inquiry process.

As noted by all interviewees, it was widely perceived to be inevitable that the developers would lodge an appeal if planning permission was refused. Given the considerable sums of money involved in planning the wind farm, and the years which had already been spent preparing the planning application, it was to be anticipated that if the proposal was not approved at the local authority level that there would be an appeal. As such it is within the appeals process that power is assigned.

As discussed in chapters six and eight, the public inquiry was an adversarial event, the bulk of which was taken up with evidence from expert witnesses and subsequent cross-examinations by lawyers representing the developers and the local opposition group. Expertise and credentials were very important within the public inquiry and cross-examination of witnesses

(especially by the developers' lawyer) typically focussed on discrediting those of the opposite side. Without exception the developers' lawyer attempted to demonstrate that each of the opposition group's expert witnesses were less qualified or appropriately experienced than the expert giving evidence on the same topic for the developers. This was a strong, and in many instances discomforting, pattern in the cross-examination of the opposition's witnesses. Through such methods of cross-examination the boundaries of what was to be considered legitimate knowledge were clearly signalled and the perceived importance of expertise was highlighted.

The efforts which were made to discredit witnesses illustrate the importance of expertise to the inquiry. It was clearly felt, at least by representatives of the developers, that credible experts provided reliable evidence and hence that the credibility of experts should be of great concern. However, this meant that whilst the inquiry had come about largely as a result of community members' – lay people's - concerns and apprehensions, the inquiry itself was not focussed at this level. Issues were discussed by recourse to expert opinion and knowledge, and debates invariably called upon complicated technical or specialist information which was incomprehensible to members of the public.

### *11.3.1 Silencing the 'Lay' Voice*

As was noted in chapter ten, within interviews objectors contended that the inquiry had not given the full picture since objectors' inputs had been constricted by requirements to back up their assertions with proof or expertise. Within the inquiry, whilst there were opportunities for lay knowledge to be expressed, participants were routinely reminded of the lack of expertise which underpinned this knowledge. Lay witnesses (who mostly gave evidence towards the end of the inquiry) consistently raised issues which had previously been discussed by expert witnesses, however, the developers' lawyer would typically respond to this by noting that the issue had previously been discussed by an expert and hence implying that it had been dealt with. In this way technical matters were constructed as being in the domain of experts and lay perspectives were treated as little more than an irrelevance. Lay knowledge was overlooked wherever an expert voice had something to say – and especially if the lay voice did not concur with that of the lawyer's position.

However, it is important to note that the content of the expert and lay knowledges was different, and one did not necessarily cancel out or contradict the other. Typically, expert evidence would focus on the chances of a certain impact or effect occurring should the wind farm be built, whereas lay evidence was more concerned with questions relating to what would happen *if* that effect *did* occur. This sentiment was made explicit in the evidence of one

lay opposition witness whose precognition contained a series of fourteen questions. These questions did *not* contain; 'Will the water quality or supply be affected?' 'Will Black Grouse be affected by noise and disruption?' or 'Will tourism in the area be affected?', but rather, '*What if* water quality or supply in the area is affected?', '*What if* the Black Grouse are affected by noise and disruption?' and '*What if* tourism in the area is affected?'

As such local people would not be convinced by scientific probabilities of whether or not a certain impact would occur, but were instead concerned with who would be held accountable and what the long-term consequences would be *if* it did occur. This point highlights the potentially complementary nature of expert and lay knowledges, and that neither one should be seen as entirely sufficient on its own. However, through concealing (or perhaps in order to conceal) the existence of subjective judgements, the inquiry favoured questions of probability over those relating to accountability and the two viewpoints were considered as oppositional. Subjective or conditional questions of 'what if…' were considered unnecessary or irrelevant given that the inquiry was only concerned with what would *actually* happen as predicted by expert assessments and calculations. Such an approach ultimately favoured the developers whose team of experts were, by and large, better versed in the lingo of scientific, objective enquiry.

### *11.3.2 No Consensus – No Flexibility*

Given that it was clear that the experts representing the developers and those representing the opposition group would not reach agreement on any of the topics which were being addressed it may have seemed appropriate to incorporate alternative knowledges. Since there was no consensus of opinion then one might have expected that additional voices would be welcome in the debate. However, this was not the case and there was little opportunity for lay people to contribute their own knowledge – or 'lay expertise' - which in many cases may have been significant.

This is a point which resonates strongly with the work of Brian Wynne relating to Cumbrian sheep farmers affected by the fallout from the Chernobyl nuclear plant (discussed in chapter four). The conflict between the flexible and uncertain worldview held by local community members and the comparatively rigid, certain worldview of experts described by Wynne (1992) is evident within the case study.

For example, during the inquiry, one local objector recounted discussions that they had with representatives of the developers regarding riding horses on the roads during the construction phase of the development (when it was anticipated that there would be significant abnormal

loads being transported). From discussions with the developers it appeared that the expert responsible for overseeing the transport and roads element of the project treated this as a straightforward matter. It was initially suggested that they contact the developers when they planned to ride their horses on the road so as to check if there would be any abnormal loads that day. However, the individual concerned maintained that this was not a practical solution. Their choices of when they rode their horses were already restricted by time constraints such as work, and other issues such as the weather and daylight hours. Furthermore, on some occasions riding the horses was not a carefully pre-planned activity which would allow one to check arrangements with a commercial developer before going out.

Another suggestion which was deemed ridiculous by this objector but which was taken to represent a helpful and constructive proposition by the developers was that they could use passing places in the road which would be wide enough for two large vehicles to pass by one another. The individual concerned found this idea ludicrous when considering the reality of being in an enclosed space with a large, unusual vehicle passing and potentially another behind and being on a skittish horse which might bolt or otherwise spook. As was commented later in interviews:

> if I have a young horse at the time you know I don't want to be met with traffic like that, you know and I certainly don't want to be- find myself in a lay-by with one of the big loads coming up, traffic behind me and a horse that's terrified and doesn't know where to go, where do I end up? On top of a car.
> (Personal Objector1)

This is an example of where technical solutions which might appear perfectly reasonable and practicable on paper or even a computer simulation, when translated into real life situations can present unquantifiable and important risks, dangers or unintended consequences. Here is where local knowledge and perspectives might provide valuable insights.

Similarly, the public inquiry provided some very explicit examples of members of the public contesting expertise – having evaluated it in line with their 'civic epistemology' (Jasanoff 2005) - and relying on lay knowledge to dispute the claims of scientific or technical expertise. Moreover, on several occasions lay knowledge was employed to challenge the methods which had been used by the developers in assessing different aspects of the development site.

The background noise assessments which were used to calculate the existing noise levels and hence the acceptability of any additional noise from the wind turbines were criticised by individuals who had been present during the assessments and who felt that technical equipment which had been located on their land was not appropriately deployed. Whilst the experts referred to official legislation on the matter, lay people recounted that they had

witnessed the setting up of noise assessment equipment and contended that it was not done in the way that the developers claimed.

Local community members also argued that the water survey which had been conducted to assess the vulnerability of the local water supply (which ran off the hillside and was relied upon in local households and for livestock) was done at a time when there were abnormally high water levels due to a period of heavy rain. Local people recounted occasions in the past where the water had been in shortage. Thus it was suggested that the developers' assessments showed the local water supply to be far more resilient than was actually the case. As one interviewee commented:

> We do have a water problem in this area and ok we're not Africa or whatever but we do have a borehole problem, and, you know, a lot of rural areas in Scotland do have water problems (Personal Objector2)

These are just two of many examples of instances where local community members assessed 'the rationality and robustness of claims' through their 'tacit knowledge-ways' and 'dismissed as illegitimate or irrational' those 'demonstrations or arguments that fail[ed] to meet these tests' (Jasanoff 2005: 255). Thus, local lay knowledge was used to contest the expert arguments being put forward. Such examples also demonstrate that there existed potentially valuable lay knowledge - 'lay expertise' - which had been accumulated over many years and was particular to the local area. However, this knowledge did not have an influential role within the public inquiry which favoured highly technical expert knowledge based on short-term assessments of the locality but years of experience in other locations or laboratories. Thus, expert knowledge was constructed as relevant and central in such a way as to limit the role of lay knowledge within the planning process.

### 11.4 Networks of Expertise

As noted in chapter ten, many interviewees (objectors) felt that the inquiry process favoured the developers since they had been able to hire a team of legal advisers and expert witnesses to deal with every topic that was addressed. However, the local opposition group, it was asserted, did not have the same level of resources and consequently were represented by a small number of experts but mostly by 'enthusiastic amateurs'. Such 'enthusiastic amateurs' were inevitably taken to pieces under questioning by the developers' lawyer. Chapter ten highlighted that several interviewees (objectors) felt that expert witnesses acting on behalf of the developers were, in most cases, very experienced and well-rehearsed, and as such more 'novice' witnesses (who typically represented the local opposition group) were placed in a difficult situation. Professional with Personal Interest Objector1 commented that they had given evidence at another inquiry after this one and that they felt they 'did better' there after

having already experienced the procedure once. As such it was felt that experience is advantageous within the inquiry.

However, it must be noted that all sides of the argument, including that of the local opposition group, were represented by some highly experienced witnesses. Thus, the construction of expert knowledge as central to the inquiry (and the implications that this had for lay knowledge) was in part a result of the actions of the opposition group itself. Experts representing both the developers and the local opposition group had typically represented the same side of the argument in many previous inquiries. For example, one particular expert witness acting on behalf of the local opposition group stated that they had been involved in approximately 200 wind farm cases and presented evidence in opposition to wind farm proposals at some 44 inquiries. Similar examples of highly experienced experts representing the developers were given during the interviews.

To a sceptical observer this raises serious questions regarding the specificity of the evidence to this particular case since it appears that experts (on both sides of the argument) have taken a blanket approach to wind farm developments and therefore that their evidence does not necessarily relate to the particular details of the individual proposal and location.

Within the case study there were instances where an advocates' approach to cross-examination was clearly based not only on the evidence that a particular witness was presenting but rather on their pre-existing knowledge – or even relationship – with that witness. For example, the gruelling eight hour cross-examination of the opposition group's landscape and visual impact witness was justified by representatives of the developers through claims that 'he had it coming'. The advocate aimed to thoroughly discredit the individual as a witness based on his long history of giving evidence at public inquiries rather than specifically on his evidence at *this* inquiry.

A very interesting point which became more than apparent through discussions with representatives of the developers and also through many of the interviews was that there exist networks of expert witnesses, legal professionals and campaigners. Such individuals are familiar with one another and work alongside each other in different combinations on similar projects around Scotland, as well as the rest of the UK. This observation raises the possibility that public inquiries involving the same, or similar, combinations of experts and other key actors are not really 'local' events focussing on, and representing local issues and concerns. Rather they may be well-rehearsed, nationally applicable performances in which experienced players recite general arguments applying to multiple wind farm proposals. Moreover, it is

interesting to observe that parties on all sides of the argument – including those representing local opponents – act to uphold this occurrence.

It appears that much of the evidence put forward at the inquiry was tried and tested and generaliseable; equally applicable to many other potential wind farm sites around the UK. It did not therefore reflect the particular issues relating to that single proposal. Far less did it reflect the real concerns and worries of the local community without whom the public inquiry most likely would never have occurred. It is ironic that local opposition groups if successful at opposing a planning application are then represented and defended in an arena which severely limits the role and influence of local, lay knowledge. Whilst they may have hoped that the inquiry would provide an impartial forum focussed on the issues which were pressing for this particular community, they ended up as little more than a passive audience to a travelling show.

However, the local opposition group's role in constructing salient issues must not be overlooked. Whilst the public inquiry moved the debates away from considering lay knowledge and the particular concerns expressed within objection letters, it must be borne in mind that these concerns had already been shaped and influenced through the actions of the opposition group. As such identifying what the 'true' concerns of the local community were, or what issues the inquiry would have needed to consider in order to accurately and fully reflect local interests would be extremely problematic.

### 11.5 The Social Cost

As noted in chapter ten, interviewees mentioned that the proposed development and the planning application process had had a divisive effect within the community. Whilst supporters were generally more optimistic that any bad feeling between individuals or groups would die away once the wind farm was constructed, objectors were less positive. Personal Objectors made reference to particular individuals who they claimed they would never trust again. It was clear that friends had both been made and lost through the planning process: The organisation of the campaign group brought people together and enabled otherwise disparate individuals to bond over a common interest; however, it also meant that tensions arose between individuals who found themselves on opposite sides of the argument. In some cases neighbours who had known each other for many years, and reported no previous grievances, became enemies who would 'walk on the other side of the road' if they saw each other.

Further, among both supporters and objectors there was a unanimous loss of trust within the members of the local council, and also a sense that the local authority was both incompetent

and unreliable. No interviewees gave a positive account of the local authority or council members – it was one of very few points about which all interviewees agreed. This is potentially a serious point since the local authority is responsible for public services and many important decisions within the local area. Moreover, the council members are elected by local community members and as such depend on ensuring the trust of their constituents. Such a whole-sale condemnation of these parties may have important repercussions for future local politics.

The lost of trust in the council and the divisions which emerged between members of the local community represent what I consider to be the 'social cost' of the proposed development. This cost is incurred through the planning process and is not related to the physical development of the wind farm, thus it is not dependent on the outcome of the planning process and would have occurred even if the inquiry verdict had been different. This therefore implies an ethical responsibility for potential developers entering local communities, since whether or not the wind farm is constructed the individuals employed by the developers can leave the area but those who live there must bear the social costs of the development which could potentially be very long-lasting. Furthermore, since the social costs are not tied to physical impacts of the wind turbines they could occur whether or not planning permission is granted – as such they are costs of the planning process and not of wind farm development *per se*.

Interviewees (in opposition to the development) also recounted that they were left with a bad impression of the developers and this had various implications: Firstly, it meant that there was lingering resentment towards the company within the local community after the planning application had been approved. Secondly, interviewees recounted that they would not trust the company in the future and would let others know of their negative experiences (Personal Objector1, Personal Objector2). Thirdly, one interviewee commented that they had sold their shares in the company and would not use them as an energy supplier in the future (Personal Objector2). Such negative consequences are harmful for the reputation of the company.

### 11.6 Different Perspectives on the Planning Application

This chapter has already drawn attention to how the arguments which held most influence at different stages of the planning process changed. In particular it was noted that the arguments which had been of key concern to individuals writing objection letters were subsequently marginalised within the public inquiry. Policy and legislation were shown to have been of paramount importance within the inquiry reporter's justification for upholding the appeal. Through the analysis of the inquiry report, it appears that the reporter's priority was to ensure

that the proposed development would be in accordance with policy and legislation. This took precedence over the need to reflect local views and therefore enabled many concerns which had been expressed within objection letters to be overlooked.

The issues relating to the proposed development were perceived and communicated very differently by local community members and the inquiry reporter. Additionally, they were also perceived and communicated differently by representatives of the developers. Essentially, for members of the local community the debates around this proposal concerned a particular, recognizable landscape and one about which they had very personal perspectives. Although individuals contested each others' claims to the hill, it was part of their homes and in many cases they had known and had connections with it for a long time. It was enjoyed for many different reasons and purposes, and in the majority of cases was valued just for being there – it had intrinsic value. However, for the developers it had no such significance and they saw no reason why the proposed development should be refused planning permission. They thought of the site in particular terms (suitability for a wind farm) and were comparing it with numerous other potential or actual wind farm sites across the country. Whilst for local people this debate was about *one* particular and special location and the ways in which it fitted into their private worlds, for the developers it was about one of many potential development sites which fitted into the larger picture of the drive for more renewable energy in Scotland and the UK.

This difference of perspective was reflected in the ways that individuals spoke about the proposed development and also in the arguments that they made. The emotive and personal language used in many objection letters reflected the perception of the development site as a unique and special part of the local environment, and this perspective informed a position, based on 'commonsense', that this should be protected. However, the developers referred to the site as something which could be quantified, measured and assessed. It was viewed as posing no special features – except in its suitability as a wind farm site – and any potential reason for protecting it could be overcome through planning conditions or special measures. Their perspective based on technical assessments and government targets informed an assertion that it was a 'good' and necessary development site.

The inquiry reporter viewed the site as something under dispute and which needed to be assessed in accordance with national policy and legislation. Within the inquiry report it was referred to as an objectively observable entity with no particular intrinsic value. The reporter sought to take an objective approach (or at least sought to portray himself in such a way) and

to consider the 'facts' of the case without being swayed by emotive arguments which were 'beyond the remit of the inquiry'.

As has been made clear within this and the preceding chapters, once the decision-making power passed from the local authority to the SEIRU reporter the nature of the debates about the proposal became less and less 'local' in their nature. Local, lay voices were disregarded in favour of those of experts, and the evidence given most weight was that which was based only on short-term assessments of the locality (but years of experience else where). Local lay knowledge was made redundant, and with it the local nature of the planning application was lost. This is reflected within the inquiry report where, as was shown above, on many issues concerns were dismissed via a reliance on national policy and legislation. Local concerns were overlooked or seen as secondary and the focus instead was on whether the particular issue was problematic according to national guidelines. As such it was not considered whether issues were problematic according to local values and interests.

The reliance on experienced experts raised the possibility that the inquiry represented a traveling show being played out across the country, and in which many of the same experts were giving similar evidence on the same topics at numerous inquiries. Thus, the issues discussed lost their specificity to the location and were instead generalised and applicable to many other wind farm sites across the country. This point is amplified through the reliance on national policy which turns the focus away from issues which are particularly salient within that locality and towards whether the development accords with national guidelines. Whilst the earlier planning application decision may have been based on specific local concerns, the final outcome from the inquiry was based instead on general national issues.

### 11.6 Locating Power within the Planning Process

In this case it appeared that the power which the local opposition campaign group possessed stretched only so far as delaying the eventual planning application outcome, but did not extend to influencing what that outcome was. As Bell *et al* (2005: 463) have noted; 'The structure of the planning system may encourage 'oppositional' participation but planning policy and government support for wind energy may make successful opposition increasingly difficult'. In this case objectors were able to effectively express their concerns within the local planning system and as such to have the planning application refused, however the result of this refusal was an appeals process which served to sideline the very concerns which had brought it about.

In order to consider more fully the power which objectors possessed it is instructive to consider Lukes' (1974 [2004]) theory of power (as set out in chapter four). If one considers the arguments presented here in line with the one-dimensional view of power (i.e. according to the outcomes of the formal decision-making process), it would appear that the objectors had little or no power. However, by considering Lukes' (1974 [2004]) three-dimensional view of power some alternative perspectives are possible.

It cannot be denied that the opposition campaign group exerted significant influence up until the point of the public inquiry, and as such were powerful actors in the early planning application process. An observable outcome of this was that the approval which was eventually secured by the developers was significantly delayed and the process cost the developers, planning bodies and ultimately the council considerable time and money. Thus, the campaign group might be considered to have exercised covert power in ensuring negative consequences for the developers as well as creating negative publicity about the development, and wind power generally. The campaign group's publicity may have influenced other members of the public's views about wind energy and could potentially have negative consequences for future developments. It may also be envisaged that such costly delays and negative publicity might influence future prospective developers either by making them reluctant to construct wind farms or to be sensitive and responsive to campaign groups' arguments.

It is interesting to note the role of the proforma cards in re-shaping the nature of objections. This may be perceived to have contributed to the prioritising of perceivably 'objective' issues, and might be viewed as an example of agenda-setting power. However, this can alternatively be taken to represent an example of how objectors acted in accordance with covert power exercised within the planning process. As Luke's (1974 [2004]) set out, the three-dimensional view of power acknowledges the power to shape people's beliefs and ideologies. In this case we can see that objectors' beliefs about what constituted 'appropriate' objections were in line with those set out in the planning system.

Similarly, whilst it might be seen that the central position of expert knowledge within the public inquiry served to marginalise lay knowledge – and consequently much of the local opposition's argument – the construction of expert knowledge as central was maintained by all sides of the argument. Lay opposition witnesses became disgruntled with the inquiry process and the difficulty that they experienced in presenting evidence. However it was not just the developers but also the opposition campaign group who relied on expert witnesses and who were represented by lawyers referring to credentials and expertise as key factors in

assessing the legitimacy and credibility of evidence. Representatives of the opposition group actively tried to present their evidence in as 'expert' ways as possible. A more nuanced understanding of what constitutes expert or lay knowledge, and a greater appreciation of the value of 'lay expertise' may have benefited the local opposition group's case. However, it was in part the opposition group themselves who upheld the constructed distinction between expert and lay knowledge.

Given that this dichotomy was upheld by individuals representing all sides of the argument – as well as by the planning system and decision-maker - the proposition that this took power away from local objectors must be re-considered. The discussion so far has implied that local lay opponents to the proposed wind power development fell victim to an uncompromising, top-down and essentially undemocratic process. However, the observation that this was in part maintained by the local opponents themselves suggests that they were complicit in this course of action.

It appears that expert knowledge has secured a hegemonic position within technical decision-making and that its central role is therefore not questioned or challenged (even by those who might be perceived to suffer as a result). Within interviews whilst objectors were critical and sceptical of experts and the evidence they presented, they acknowledged a need to present their own case in the language and style of expertise. Inquiry participants acted as though the assumption that expert and lay knowledge can be clearly distinguished from one another – and moreover that they should be – was engrained into the belief systems of not only policy-makers and planning officials but also lay people. Thus, this may be taken as an example of the power present within the planning system to shape people's beliefs and ideologies. As Luke's (1974 [2004]) set out, according to the three-dimensional view of power, the exercise of power does not require overt conflict but rather can take place through shaping people's worldviews so that conflict does not arise. For example, objectors do not protest (within the inquiry setting) that their lay knowledge is being sidelined in favour of expert knowledge, or that their concerns are being overlooked, because they have been socialised to accept that expert knowledge exists in a 'real' sense and that it should be given a central place within decision-making arenas.

The three-dimensional view of power is extremely interesting when used to examine the power present within the planning system and policies themselves. For example, the role of members of the public is severely constricted by setting limits as to what is 'acceptable' evidence to be presented within the inquiry and by favouring expert, technical knowledge over lay knowledge. Furthermore, the safeguarding of policies as beyond challenge is a clear

exercise of agenda-setting power. Thus, one does not need to look at the outcomes to see that power is predominantly found in the hands of the decision-making elite, as opposed to the public participants within decision-making processes.

## 11.8 Revisiting the Wind Power Literature

Before summing up this chapter it is worth briefly revisiting the wind power literature in order to assess how the data presented here relate to key debates which were set out in chapter three.

A principal driver within the literature has been shown to be the conviction that localised public opposition represents a key obstacle to meeting government targets for the development of renewable energy (see for example; Barry *et al* 2008, Bell *et al* 2005, Devine-Wright 2007, Ellis *et al* 2007, Peel & Lloyd 2007). However, the findings presented here cast considerable doubt on the assertion that opponents to wind power developments are influential actors, instead it is argued that power rests predominantly within the planning system and structures and works in favour of prospective developers. Thus the research challenges this central premise underpinning the literature.

The research also further refutes previous studies which referred to objectors and supporters as homogenous groups (e.g. Krohn & Damborg 1999). The study has shown that, despite at times presenting standardized arguments (*i.e.* when writing objection letters), individuals have a wide range of reasons and motivations for objecting to proposed wind power developments. Thus attempts to describe all objectors under one heading could not do justice to their multiplicity of experiences and perceptions. As was outlined in chapter three, the literature is becoming more sensitive to the heterogeneity of wind power opponents. One example of this is Bell *et al* (2005) who set out three possible explanations for the 'gap' between the apparent high levels of public support for wind power and the strong opposition experienced by particular proposed wind farms. It is worth returning to each of these in turn in order to consider how the data relate to each of the possible explanations.

*The Democratic Deficit Explanation:* According to this argument general support for wind power exists, however, particular planning application debates are dominated by opponents who have stronger motives to act than supporters. The data presented here does not decisively refute or confirm this hypothesis. It is not possible to assert whether there existed a 'silent majority' of community members who supported the proposed development. In interviews 'personal supporters' claimed that this 'silent majority' existed, however 'personal objectors' contended that the majority of local people were opposed to the development. Furthermore, it

must be acknowledged that there was active local support for the development (although this was not as significant as the active opposition). Ultimately, the opposition was not effective and as such one cannot claim that they dominated the planning process (certainly not in the public inquiry stage).

*Qualified Support Explanation:* According to this argument supporters of wind power generally do not support it unconditionally, but rather they are supportive subject to a range of conditions (*i.e.* that there is no adverse impact on the local environment). Opposition to particular proposed wind farms is therefore not inconsistent with individuals' general position of qualified support. The data provided some evidence of this phenomenon (for example, Personal Objector2 contended that they would fully support a wind farm if it was in the right place). However, the majority of objectors who were interviewed or spoken to at the inquiry were highly critical either of wind power as a technology or of current energy policies. Their opposition was therefore targeted at wind energy policies generally and they did not typically exhibit a position of qualified support. Of course, it must be noted that objectors may have presented themselves as against broader policies rather than merely the particular development as an active means of legitimating their personal positions or avoiding the possibility of being labelled a 'NIMBY'.

*The Self-Interest Explanation:* This argument is synonymous with that of NIMBYism: Individuals support the general idea of wind power but oppose it when it would affect them or their lifestyles. Although, supporters (both 'professional' and 'personal') routinely referred to objectors as 'NIMBY's', the data provided no evidence to support this hypothesis. As noted above, objectors were typically opposed to wind power, or energy policies generally rather than merely the specific proposed development. Again, however, one cannot say with confidence that the arguments articulated by objectors fully or accurately reflected their true concerns – it is possible that individuals with 'NIMBY' views disguised or concealed these believing that such views would not be considered legitimate.

Whilst Bell *et al*'s (2005) study represents a significant move away from previous homogenous classifications of objectors, the data presented here do not support the proposed explanations. The research findings suggest that typologies of objector and supporter positions are not useful or appropriate, instead one must attempt to consider the full range of experiences and perceptions.

In common with Ellis *et al* (2007) and Barry *et al* (2008), the research has identified similar motivations on the part of objectors and supporters. For example, local people who became

actively involved with the planning application (either in support or opposition to it) recounted that their key motivations related to the desire to ensure that everyone had enough information to make an informed choice. They typically also aimed to refute what they considered to be false information. This is in keeping with Barry *et al*'s (2008) observation that: 'Anti-wind industry objectors portray themselves not simply as defenders of valued local environments but also as grassroots defenders of the democratic process'. However, this observation is found to be equally applicable to active supporters of wind energy.

Concern with democratic processes emerged as a key motivation for action. 'Personal' interviewees (whether supporters or objectors) repeatedly referred to issues of trust, fairness and accountability. Importantly, the findings refute Krohn and Damborg's (1999: 959) argument that objectors to proposed wind farms 'are primarily against the people who want to build the turbines'. In this case opposition emerged at a time when objectors appeared to be largely indifferent about, or unconcerned by, the approach of the developers. Instead opponents were aggrieved by the planning processes and decision-making institutions. Criticisms of the developers emerged later, once the different sides of the argument had already become entrenched. At that point, as has been observed by Barry *et al* (2008), objectors sought to undermine the legitimacy of developers by highlighting factors such as their financial interests. Furthermore, objectors used aspects such as representatives of the developers' clothes or mode of transport at the inquiry to refute the environmental justification of the proposed development. As Barry *et al* (2008) have noted, in highlighting factors such as the financial interests of developers, opponents implied that these interests refuted developers' claims to be motivated by environmental grounds – thus environmental and financial motives were perceived to be incompatible.

The research appears to support Wolsink's (2007a) argument that opposition arises from a perception that decision-making or planning processes are unfair. He contended that; 'the crucial factor is not that residents have strong intentions to shift the burden to others [as NIMBY explanations suggest], but that they consider it unfair that others, or the decision makers, shift the burden to them' (Wolsink 2007a: 1203). However, whilst the findings of this research suggest that issues of fairness indeed play key roles in shaping community members' attitudes, the research challenges the underlying assumption within Wolsink's theory. He argued that opponents were typically supportive of wind power in general and of national renewable energy policies and that their opposition formed in response to perceived unfairness. He therefore advocated collaborative approaches to planning to increase localised public support. However, the form of collaboration which he advocates appears to reflect many of the concerns that were raised regarding participation in chapter three. Public

participation or engagement is seen as a way to secure particular outcomes; the possibility that *not* building a wind farm might be the appropriate outcome is not considered. Thus, he is advocating one-sided information campaigns rather than two-way dialogue or real collaboration in planning processes. In the case study presented here such an approach would have been likely to further alienate and antagonise opponents who were typically opposed not only to the particular development but also to broader energy policies and wind power in general.

Another strong theme within the literature is the suggestion that opposition emerges out of ignorance of wind power, and hence that experience or greater awareness will lead to greater acceptance (Ebert 1999, Krohn & Damborg 1999, Warren *et al* 2005). This research challenges this line of reasoning. It has been found that many objectors are extremely well informed. Indeed, objectors who were interviewed typically demonstrated a significant level of awareness both of existing wind farms and also of renewable energy and planning policies. In several cases objectors had previous professional experience related to energy or wind power development. 'Personal' interviewees (objectors) had conducted significant research on the topic and could by no means be considered ignorant. Thus, as Ellis *et al* (2007) contend, there is no clear relationship between awareness or knowledge and acceptance of wind power.

The research only partially supports the oft cited claim that the strongest impact on an individual's attitudes towards wind farms comes from the perceived visual impact (*i.e.* Wolsink 2000, 2007a, 2007b, Breukers & Wolsink 2007). The thematic analysis of objection letters did highlight that visual impact and the size of the turbines are important and emotive aspects of wind power developments and form major issues within objection letters. However, objections were characterised most strongly by their diversity of topics. It was demonstrated that individuals are concerned by a wide range of factors. Thus, whilst visual impact appears to be highly salient it is not appropriate to suggest that any one factor can be identified as the central or key concern of objectors.

Bell *et al* (2005: 463) acknowledge that opponents are not always successful in challenging planning applications but contend that; 'The potential of opponents to block wind power developments is likely to be greater if they fit a particular educational and socio-economic profile that enables them to operate more effectively in the political arena'. However, in this case study the opposition group consisted largely of highly educated and politically connected individuals. For example, evidence was given on behalf of the opposition group by a prominent law lord and a retired employee of a national body which acts as a statutory

consultee in wind power planning applications. Independent opposition witnesses included a Member of the Scottish Parliament and retired Member of the (UK) Parliament. Whilst such actors may have been influential in the initial planning application stage this does not appear to have held much sway at the public inquiry. Moreover, the opposition group struggled with the demands and pressures of the public inquiry despite the impressive range of skills and experience that they possessed. This highlights the truly arduous nature of public inquiries for third party groups. The extant wind power literature overlooks the important role played by public inquiries and the particular demands that they place on objectors.

## 11.9 Summary

This and the preceding five chapters have shown that whilst local objectors were able to influence the early planning application stage (when the decision-making power lay with the local authority), this resulted in an appeals process which was beyond the influence of lay people, and within which local objectors played only a cosmetic role.

The early planning process may have presented an opportunity for lay people to exercise an influence, but given the inevitability that the developers would appeal the decision to refuse planning permission, it is the public inquiry where power is really assigned. The public inquiry, however, is a process managed and adjudicated by representatives of the Scottish Executive who, as several interviewees pointed out, are committed to increasing the proportion of Scottish electricity produced from renewable sources of energy. This potentially presents a conflict of interests, and as far as local objectors were concerned meant that arguments in opposition to the development of the wind farm were unlikely to be given as much consideration as those in favour.

During the public inquiry, which, as discussed above, largely came about due to local anxieties and a successful local campaign opposing the proposed development, local, lay voices were relegated to the margins and the process was dominated by highly technical expert debates. Yearley (2005) points out the irony of science which is traditionally thought of as being objective and hence providing impartial 'truths', being the subject of cross-examination in an adversarial event such as a public inquiry. Indeed, the adversarial nature of the public inquiry meant that experts were presented in opposition to one another and the scientific or technical 'facts' which they presented were explicitly demonstrated to be questionable and uncertain. Nevertheless, expertise continued to play a central role, and lay witnesses where they were given opportunities to speak were routinely reminded that issues which they raised had already been dealt with by the relevant experts.

As noted in chapter four, Wynne (1996) has been critical of a large section of the STS literature in saying that whilst it views the public as being sceptical and reflexive with regards to science and technology it does not attribute meaningful agency to the public. Wynne's argument appears to be reflected in the findings of the case study, in that whilst it is acceptable for lay people to question science and experts and engage with them critically this can only be done so far as it represents debates *within* science and expertise and not beyond. For example, it is anticipated that lay publics will question one expert's evidence in relation to another and will consider the conflicting theories, but will *not* create their own independent theory or have their own pre-existing or independent knowledge, certainly not which could be considered of equal merit. Thus the public inquiry which arose as a result of the local campaign group's action, was a forum for conflicting expert ideas but *not* for local opinion or lay knowledge.

The local opposition group's role within this case study became increasingly cosmetic as the planning process progressed. The influence which they exerted in the early stages was eliminated as the importance of expertise, credentials and policy grew. Given the centrality of policy to the eventual decision one must question whether any other outcome was possible. A vast array of issues were raised in objection to the proposed development, but on every substantial topic reviewed within the inquiry report the reporter refers to national policy or guidelines to justify his decision to uphold the appeal. Since current policy places great emphasis on increasing the proportion of electricity generated from renewable sources then it is not overly cynical to suggest that the inquiry reporter – who was appointed by Scottish Executive ministers – would look on a renewable energy development favourably.

The existing wind power literature has to date largely overlooked the particular role played by public inquiries and the demands that these place on local objectors. In doing so it has also underestimated the challenges that objectors face – and consequently overestimated the influence or power that they possess. The detailed examination of the public inquiry process (and different actors' perceptions of it) presented in this thesis therefore represents a significant contribution to the literature. The following chapter will look at further examples of public inquiries in order to highlight the ways in which this case study appears to be typical.

## 12.0 Assessing to What Extent the Case Study Reflects Wider Experience

### 12.1 Introduction

As noted within the methodology chapter, this research – being based on a single case study – cannot make any claims to being representative. However, through considering other comparable cases one can assess the analytical generalisation to be made from this case study. In order to do so, this chapter will firstly consider other case study research which has been conducted at public inquiries in order to evaluate to what extent this research reflects the findings of that which has gone before it. Following the inductive approach of this research these case studies have not been considered earlier within the thesis since the research does not aim to test theories which might have been derived from them. Rather the case studies are used here to test the theories which have arisen from this research.

Secondly, this chapter will present the findings of thematic qualitative analyses which were conducted on the conclusions of five inquiry reports associated with wind power planning applications in Scotland. This thematic analysis was conducted in the same manner as that shown in chapter seven and as such will highlight to what extent it appears that the findings of this case study (in relation to the decision-making rationale) reflect broader experiences of wind power planning appeal decisions.

### 12.2 Public Inquiry Case Studies

The chapter begins by considering two important case studies of public inquiries: firstly of the Windscale Inquiry (Wynne 1982) and secondly of an inquiry into the proposed exploitation of a peat bog (Yearley 1989, 2004). These two case studies both relate to STS and hence were selected due to the analogous theoretical lenses which they and this thesis make use of. Furthermore, there are important similarities in the topics of the public inquiries discussed. The first case study (Wynne 1982) considers a public inquiry into the proposed development of a plant to reprocess spent nuclear fuels. The inquiry is related to a highly controversial energy source (nuclear) and its subject matter was at the time (late 1970's) extremely political and contentious, this has similarities with the current highly publicised and politicised nature of wind power. The second case study (Yearley 1989, 2004) examines debates around the proposed exploitation of a peat bog and its potential environmental impacts. It considers approaches taken in cross-examination and hence comparisons with the observations made in this case study are possible. The particular debates considered are essentially focussed on environmental impacts as they were in the case study presented here. In sum, it is felt that there are sufficient similarities

between these two case studies and that presented in this thesis to allow meaningful comparisons and to test the analytical generaliseability of the research findings.

There have, of course, been many other studies of public inquiries (for example; Brown 2003b, Gephart 1992, Mercer 2002, Kemp 1987, O'Riordan *et al* 1988). However, it is impractical to review all of these in detail. Therefore in order to demonstrate the salience of the themes emerging from this research the chapter will briefly highlight key similarities between the findings presented here (and by Wynne 1982 and Yearley 1989, 2004) and those of further public inquiry case studies.

### *12.2.1 The Windscale Inquiry*

In 1977 a public inquiry was held into the proposed development of a thermal oxide reprocessing plant (THORP) at Windscale (which was later renamed as Sellafield) in the Cumbria region of north-west England. The development was proposed by British Nuclear Fuels (BNFL) and was intended to reprocess some 1200 tonnes of spent nuclear fuels each year. At the time of the inquiry nuclear power was a highly controversial and emotive issue, and as such: 'Although ostensibly a factual investigation of a specific local plan, organized within a modest tradition of administrative investigation, the Inquiry was the key part of a major exercise in the resolution of social conflict' (Wynne 1982: 7).

Wynne (1982) provides a detailed and insightful account of the issues and processes which emerged through this public inquiry (which lasted 100 days). The themes which are discussed by Wynne bear important resemblances to those which surfaced within this thesis' case study, and these will now be outlined.

Wynne recounts how issues relating to the social aspects of the proposed development and associated policies were kept out of the public inquiry despite being of considerable significance to objectors. He contended that objectors were more concerned with questions of trust and accountability rather than physical aspects of the development, but that such questions were considered illegitimate within the inquiry setting:

> For modern technology, embodying large-scale disciplined social relationships, possible material consequences are dwarfed by unforeseeable changes in social being. Since these are controlled by the decision-making elite, the physical consequences of the technology are less important to people than the trustworthiness of that elite to respond wisely to inevitable but unforeseeable future social pressures. Thus the central *rational* questions about technology are social and

> historical […] To call this illegitimate adds insult to the injury of existing alienation, and it reveals the risks inherent in this way of achieving political authority.
> (Wynne 1982: 164, emphasis in original)

It is somewhat ironic then that whilst objectors were explicitly prevented from raising issues and questions of a social nature, the inquiry process simultaneously concealed a number of social presumptions and decisions which were intrinsic to its operation. Wynne observed that the THORP inquiry maintained legitimacy by creating the illusion of being an objective 'fact-finding' exercise, however, this illusion concealed a number of subjective value-judgements which were necessary in order to reach a decisive outcome. Indeed, the very act of determining which issues were to be included within the inquiry debate and which were irrelevant or inappropriate required subjective judgements and interpretation of policies.

> Every inquiry or equivalent procedure will always face a dilemma. To be genuinely definitive it must eventually face the question of its own agenda-defining premises; yet to stand a chance of being authoritative it must pretend that no such question exists.
> (Wynne 1982: 172)

A further means of marginalising social or explicitly subjective matters within the inquiry was by centralising the role of science and expertise. However, Wynne contends that this relied on a positivist image of science which saw it as objective and impartial, and as such that there exists an observable 'truth' which can be uncovered through scientific endeavour:

> [it is implied] that expert conflict exists only because one or other side (or both) is imprecise, incompetent, ideological, or otherwise biased. Consensus is taken to be natural, because the facts, once seen clearly, 'speak for themselves'[…] cross-examination is supposed to expose whichever expert party is concealing its incompetence or bias, and thus lead to the natural resolution of the conflict.
> (Wynne 1982: 133)

Wynne points out that this is, of course, based on a false understanding of science and scientific practices – which typically create disagreement rather than consensus. Nevertheless, the notion of science as objective fits with the 'fact-finding' role assigned to the public inquiry, and the broader legal system.

> One of the premises of legal analysis is that issues can be purified into precise empirical questions built on the logic of unilinear causal relations […] This presentation therefore implies that a logical decision has flowed from an objective rule of law applied with remorseless impartiality to objective facts. Thus a judicial approach defines issues as one-dimensional, fragmenting them into piecemeal questions formulated in precise terms. This demand for precision may do violence to reality, especially where conflict exists over the meaning of a case.
> (Wynne 1982: 121)

Although legal analysis is based on the assumption that 'truth' can be found through a process of logical reasoning based on objective 'facts', when one considers that in reality science presents

innumerable contradictions and uncertainties, it is inevitable that those seeking the 'truth' will need to make (subjective) judgements about which experts are more reliable or better qualified as 'fact-givers' in any particular inquiry.

Interestingly, Wynne notes that throughout the inquiry whilst proponents of nuclear were portrayed as being rational and demanding debate which was constricted to 'hard facts', opponents were depicted as being overly emotive and hence unreliable. However, Wynne maintains that all parties involved at the inquiry made arguments based on value judgements, in particular he states that; 'nuclear advocates frequently make evaluative 'factual' assertions, despite claiming to have separated facts and values […] Contrary to pro-nuclear claims, this integration of beliefs about 'the way things are' into social value frameworks […] is symmetrical […] these characteristics are intrinsic to rational debate and not sporadic and eradicable – as is widely assumed' (*ibid:*11). Hence he notes that not only is the prioritising of objective 'facts' over subjective values misguided (due to its faith in positivist scientific inquiry), but furthermore that overlooking subjective values removes many potentially valuable and insightful topics of debate from the inquiry.

By casting objectors as irrational and subjective whilst proponents were seen as rational and objective the role which objectors could play within the inquiry was somewhat lessened. This was made all the more difficult by the lack of resources which objectors had in comparison to BNFL. Wynne notes that whilst preparations for the inquiry were difficult for all parties: 'There was incomparably greater pressure on objectors. Whereas BNFL was mapping out its case in March, most objectors did not even know whether, and on what platform they would attend' (*ibid*: 97). Whilst BNFL had significant resources which they could deploy for the inquiry the objectors were typically 'inexperienced, part-time, and already exhausted [before the inquiry began]' (*ibid*: 97). During the inquiry the account given by Wynne portrays objectors' experiences as being arduous and fraught with difficulties, not least due to the pressures to present evidence in a manner acceptable for the 'fact-finding' nature of the inquiry.

Through many of the points already mentioned, Wynne's account presents the inquiry as an exercise in social control. The inquiry was described as 'projecting a particular model of democracy – one that required only the expert discovery of objective facts about a narrowly defined question' (Wynne 1982: 10). He asserted that due to the increasingly politicised nature of nuclear energy during the 1970's a means of social control was necessary to prevent, or minimise

opposition to new developments. Wynne argues that within democratic societies such social control comes through public knowledge – and in particular scientific knowledge. 'The demand for 'hard facts' alone excludes debate about the interpretive social frameworks within which those facts have meaning' (*ibid*: 3). Thus what counts as 'fact' is defined by an elite who consequently impart political meaning onto these 'facts' and simultaneously serve to classify all alternative perspectives as irrational and hence irrelevant for consideration within decision-making processes. Accepted knowledge is then hegemonic and beyond (legitimate) refute. As such one can either defer to this knowledge or be labelled as irrational and/or emotive (and hence unable to offer 'hard facts').

Wynne suggests that the public inquiry represented a ritual in which exercises in social control were played out by reinforcing the dominance of expertise and marginalising alternative voices:

> One of the most general norms transmitted by the judicial approach – and emphatically expressed at Windscale – is that issues can be defined and resolved exclusively by reference to empirical facts. Indirect, emotional, or symbolic relations are strongly abjured. The very denial of a wider symbolic dimension is itself an important form of symbolic action, signifying to society at large how decisions should be taken and thus what kind of social order should exist.
> (Wynne 1982: 122)

Through requiring lay people who wished to participate in the inquiry to couch their arguments in the language of scientific or technical expertise and 'facts', the inquiry forced individuals to conform to the procedures set out by those in control of the process. Furthermore, Wynne suggests that beyond those attending the inquiry individuals who were aware of it or the arguments made would receive messages about the importance of 'hard facts' and the limited (even negligible) role of subjective values or alternative knowledges within decision-making (or indeed policy-making). Such messages ultimately serve to protect the *status quo* and maintain social order within society. As such the inquiry is seen to have served a far wider role than merely determining the fate of the proposed THORP.

### *12.2.2 Northern Irish Peat Bog Inquiry*

The second public inquiry case study that will be discussed in this chapter took place in the mid-1980's in Northern Ireland. The subject of the inquiry was a planning application to drain and exploit a peat bog which was said to be of great significance to conservationists. The inquiry was discussed in a paper by Yearley (1989) and later updated as a book chapter (Yearley 2004). Some of the key issues discussed by Yearley will be outlined in this section.

A key theme running throughout Yearley's discussion of the inquiry is that much of its approach (and particularly the approach of the prospective developers' lawyer during cross-examination of opposition witnesses) was based on 'an inflated image of scientific objectivity' (Yearley 1989: 435). Two examples in Yearley's account illustrate this point particularly well. The first relates to a scoring system which had been used by the Countryside and Wildlife Branch of the Department of Environment (Northern Ireland) (DoENI) in assessing the relative importance of different peat bogs and hence designating certain bogs as Areas of Special Scientific Interest (ASSI). The bog in question had been identified as a possible ASSI and hence cross-examination of witnesses from the Countryside and Wildlife Branch focussed on the methods of this scoring system (it is noteworthy that greater attention appears to be given to the *methods* rather than the outcomes of the scoring system).

Bogs were scored based on the presence or absence of certain key features, and were then ranked. The bog under discussion at the inquiry was ranked in third place (with a total score of 59 – the highest score was 66). Cross-examination raised questions about the objective nature of the scoring system; for example the witnesses were queried as to why and how some aspects included in the scoring system had been weighted differently from others (*i.e.* some features appeared to hold greater importance). Moreover, one witness (an ecologist) giving evidence in opposition to the developers contended that the bog in question, due to its large size, was of greater value even than the 'top ranking' bog. The Countryside and Wildlife Branch acknowledged that;

> It must be stressed that an index compiled in this way has no absolute meaning; it is no more than a rather crude device to bring together a set of observations.
> (cited in Yearley 1989: 432)

As such the individual conducting the cross-examination was able to assert that the scoring system had no coherent basis and could be interpreted or re-weighted so as to produce results which favoured any one bog. It was therefore seen to be inappropriately subjective and hence invalid. However, Yearley notes that;

> It should be appreciated that these objections could have been raised to any scoring system […] Consequently the Countryside and Wildlife Branch's situation was rather that of being 'damned if you do and damned if you don't'. Had they not tried to devise an objective instrument and just based their assertions on their 'impressions' or 'judgement' they could readily have been attacked for being unscientific and subjective. [...] On the other hand, any instrument – however surrounded by caveats – is bound to commit them to some system of scoring which lacks transcendental validity, and which can be made to appear arbitrary if not tendentious.
> (Yearley 1989: 432-433)

The second example, which is closely related to the first, concerns the flexibility of the scoring system. The Countryside and Wildlife Branch acknowledged that each site must be considered not only according to its numerical 'score' but also according to any 'key features'. In the case of the bog in question it was asserted that the bog had extra significance due to the fact that it was a breeding ground for the Large Heath Butterfly (a species which was reported to be found at a reducing number of sites). As such it was contended that the bog was of greater value than suggested by the scoring system alone. However, as noted by Yearley (1989, 2004) once it had been granted that bogs could have 'extra' positive features beyond those included in the scoring system, it also had to be acknowledged that there might be 'extra' negative features which could lower its significance despite a bog having a high score. It was argued that certain negative physical features of the bog in question meant that its value was far less than was suggested by the scoring system. Not only did this present challenges to the high valuation which had been made of the bog, but it was also 'part of an attack on the way in which the apparently 'scientific' method of scoring had to be modified, even manipulated, in the light of *ad hoc* considerations – considerations which did not feature in the assessment system' (Yearley 1989: 434).

In defence against criticisms that such *ad hoc* considerations challenged the 'scientific' nature of the scoring system it was contended that the criteria 'have to be interpreted':

> But of course, if the criteria have to be interpreted, this act of interpretation can be presented as very problematic. If it all depends on interpretation, the scoring system hardly appears to be constraining at all. It seems to be a device which conservationists can invoke when it suits them, and which can be overridden when it does not.
> (*ibid*: 434)

Following on from the focus on scientific method, a second key theme in Yearley's discussion was concerned with the importance placed on expertise and credentials within cross-examination at the inquiry. For example, one opposition witness giving evidence on bog ecology was questioned as to what his area of expertise was. His line of work was in researching 'almost undisturbed' bogs, however he had no experience of bogs in Northern Ireland and did not work in the field of bog assessment. It was therefore 'suggested that the person was not really an expert on bog *assessment*, even though he might be an expert on bog ecology (although whether there are such creatures as bog assessment specialists was not determined)' (Yearley 1989: 428, emphasis in original). As Yearley notes the approach taken in cross-examination was that it was not necessary to prove that experts in any particular area actually existed, but rather solely to prove that any particular witness was *not* an expert in that area and hence that their evidence was

not reliable. As such emphasis was taken off the substance of a witness' evidence and instead placed on the credentials of the witness.

This emphasis on discrediting opponents fitted well with the overall aim of the inquiry debates which Yearley noted were not intended to convince or win over their opponents, or to create greater understanding: 'Instead the aim was to discredit the opponent's presentation in the eyes of a third party' (*ibid*: 436). The principle means of doing this comes through contesting the 'scientific' basis of the evidence put forward (either through a perceived lack of expertise on the part of the witness or flaws in the methods employed or approach taken). Interestingly, the lawyer acting on behalf of the prospective developers claimed to have little or no scientific knowledge, but nevertheless he appeared to be claiming to have a sound understanding of scientific method – or how science *should* be conducted.

> Overall, it is clear that the features which the QC highlighted to his greatest advantage – the conventionality of the scoring system and the dependence of scientific categorisation on tacit skills and unexplicated interpretation – are the very aspects which authors from the sociology of science have insisted typify all scientific knowledge.
> (Yearley 2004: 73-74)

Thus whilst it may not be based on an accurate understanding of the realities of science, the 'inflated image of scientific objectivity' which was mobilised by the developers' lawyer throughout the inquiry served as a powerful tool for undermining their opposition's arguments and witnesses.

### *12.2.3 Similarities with this Case Study*

From reviewing the above two case studies it is clear that they hold many important similarities and common themes with this thesis' case study. To begin with, in keeping with the discussion in the preceding chapters, both case studies acknowledged a central role of science and expertise within the public inquiry process. Moreover, both acknowledged that this role was based on a false notion of the nature of science and scientific practices. As Wynne (1982) noted, at the Windscale Inquiry a strongly positivist view of science was adopted and this saw science as essentially being a consensual activity which enabled the objective discovery of 'facts'. Through this lens disagreement was seen as evidence of 'bad' science or incompetence. Similarly, Yearley (1989, 2004) contended that at the Northern Irish bog inquiry an 'inflated image of scientific objectivity' was apparent and led to the effective discrediting of opposition witnesses.

This unrealistic – perhaps idealised – vision of science was also evident in the case study discussed in this thesis, where the emphasis on credentials and expertise revealed a belief that where disagreement existed about a particular issue this could be attributed to one party's incompetence and could therefore be rectified by demonstrating that the opposing witness was incompetent, inappropriately qualified or inexperienced to give evidence on the particular topic.

The emphasis placed on credentials and expertise was also discussed by Yearley (1989, 2004) who observed that cross-examination of opposition witnesses typically aimed to discredit the individual or organisation and focussed more on methods of assessment used rather than the outcomes of assessments (this closely reflects much of the discussion in the previous chapters).

As noted above, Wynne (1982) commented that for opposition witnesses (who were described as inexperienced and ill-prepared) the inquiry process was fraught with difficulties and proved to be an exhausting process, (this was certainly also true within this thesis' case study). Similarly, Yearley (1989, 2004) asserted that for scientific witnesses the inquiry process was unfamiliar and taxing.

> Scientific witnesses facing cross-examination have to confront challenges arising from the need to have their arguments publicly understood by lay persons, the assessor or judge and, if there is one, the jury […] scientists can be made to suffer under public scrutiny.
> (Yearley 2004: 57)

He, in common with Wynne (1982), contends that whilst scientists are accustomed to debating their findings and accept disagreement and challenge as a (constructive) part of their work, the inquiry setting, with its emphasis on uncovering 'the truth' and dispelling disagreement within a designated time frame, is an alien and potentially intimidating forum which does not easily accommodate full discussion or analysis of their work. Wynne contends that;

> Scientists (especially those who have suffered from its ruthless tactics) […] usually believe that what distinguishes technical discussion at inquiries from academic discussion is the lack of any impetus towards the truth.
> (Wynne 1982: 135)

Within this thesis' case study it was evident that many individuals who had given evidence at the inquiry (as well as those who had merely been in the audience) found the process of cross-examination to be brutal and intimidating. It was stated that whilst there were very experienced witnesses representing all parties, less experienced witnesses felt ill-prepared and unable to present a convincing argument. This was in no small part due to the need to present their arguments in the appropriate language and within the boundaries of acceptability defined by

public inquiry rules and norms. Such observations resonate with Wynne's assertion that the public inquiry can be taken to represent an exercise in social control whereby individuals must express themselves in accordance with accepted knowledge or be categorised as irrational. In the previous chapters (as in the discussion of Wynne's case study) it was clear that witnesses who could not back up their evidence with 'reliable' data or scientific reasoning were discredited as illegitimate and as having little to contribute to the inquiry process.

This was also a powerful means of removing social or explicitly subjective matters from the public inquiry discussions. However, as Wynne noted such matters were potentially of considerable significance. In particular, Wynne noted the importance of trust as a key issue in the acceptability of any proposed development; however, he also noted how the discussion of such issues was not permitted within the Windscale Inquiry. Within this thesis' case study it was found that lay witnesses were concerned with questions of who would be held accountable *if* negative impacts occurred as a result of the development, however, despite allowing these questions to be put forward in third party evidence the inquiry never explicitly dealt with these issues or attempted to answer these questions. Instead, the inquiry (and the resulting inquiry report) focussed predominantly on 'objective', 'scientific' and quantifiable issues and concealed any evidence of subjective judgement.

Wynne (1982) highlighted the need for the inquiry to maintain an illusion of objectivity in order to secure legitimacy. However, he also noted how this illusion disguised a great many subjective judgements without which a decisive outcome would not have been possible. This was also the case within the inquiry discussed within this thesis. For example, as discussed in chapter eleven, policy was an 'untouchable' subject within the inquiry and was safeguarded as being beyond refute or challenge. As such the merits of policies (for example the justifications given for developing renewable energy) could not be questioned. However, policies are not incontrovertible documents and required at least some degree of interpretation by the inquiry reporter in order to be translated into concrete outcomes. The process of this interpretation was never discussed or acknowledged.

As noted in chapter two, Scottish planning policies (and particularly those relating to renewable energy) begin from the presumption that development is necessary and desirable. Moreover, the Scottish Executive is seen to have taken a strongly pro-renewables approach and thus questions must be raised about the potentially partisan position of the inquiry reporter who was appointed

by Scottish Executive ministers. As Wynne (1982) noted, important considerations are raised as to the role of the state as an 'impartial arbiter' in areas of conflict where they have a clear vested interest.

The notion of social control discussed by Wynne (1982) is an interesting concept and raises questions as to the implicit role of planning appeals in wind power controversies. Chapters six to eleven have illustrated in some detail how policy, science and expertise were central to the public inquiry and how oppositional voices (particularly those of lay people) were marginalised as the planning process progressed. The fact that relevant policies could not be debated strongly limited the scope of objectors' influence and silenced a great deal of criticism which might otherwise have been expressed. Moreover the constant need to be able to back up statements with proof, or to provide 'facts' meant that the subjective realities of individual people and their concerns could not be expressed. Thus the inquiry rules and structure effectively served to silence much of the opposition's voice and to weaken its influence. This might therefore be seen as a means of controlling 'democratic' processes so as to secure outcomes which reflect the aims of the decision-making elite. Furthermore, just as experiences at the Windscale Inquiry sent out messages to wider society about the appropriate language and knowledge to be used in decision-making arenas (Wynne 1982), so the same could be said to be true in this case.

### *12.2.4 Similarities in Further Studies of Public Inquiries*

The two case studies discussed above are felt to provide appropriate illustrations of the analytical generalisations to be made from this research. However, in order to further demonstrate the broader relevance of the research findings this chapter will now very briefly outline some key similarities with further public inquiry studies.

Wynne's proposition that inquiries represent exercises in social control is widely supported in studies of public inquiries. For example, Brown (2003b: 108) contends that the role of a public inquiry 'is to investigate those problems that threaten the state with a legitimation deficit, [and] to re-establish and justify state authority'. Similarly, Kemp (1987: 177) asserts that: 'Outcomes of public hearings are rarely objective, rational, and egalitarian; they are manipulated to further the interests of both state and capital', and furthermore that; 'public inquiries are seen to legitimize controversial decisions taken in several important areas of governmental planning activity' (*ibid.*: 179). Equally, Gephart (1992) in a study of a public inquiry into a fatal pipeline accident

concluded that the inquiry was used to distort local logics of safety and to legitimise state regulation and state actions in disaster control.

The findings of this thesis' case study (and those of Wynne 1982 and Yearley 1989, 2004) demonstrated that positivist visions of science and scientific enquiry played important roles within the public inquiry. It was shown that expertise – and importantly who could be demonstrated to be an expert – proved to be a crucial factor within cross-examinations. Mercer (2002) in his study of an Australian public inquiry (referred to as the Gibbs Inquiry) into the impacts on human health of exposure to non-ionizing radiation and electric and magnetic fields (EMF) found that: 'Claims about EMF science in the *Gibbs Inquiry* were also claims about how to, and who could, do legitimate EMF science' (Mercer 2002: 208). Thus, in common with the case study, it was shown that the inquiry focused not only on the evidence presented by expert witnesses but also on how that evidence had come about and the qualifications or credentials of the witnesses presenting it.

The case study presented in this thesis demonstrated the difficulties experienced by local (lay) actors in presenting their case at the inquiry. Such difficulties were reflected in Wynne's (1982) study and have also been noted in studies by Ince (1984) and O'Riordan *et al* (1988). Reflecting on a public inquiry to determine a planning application for a new nuclear plant (Sizewell B) Ince (1984: 6) commented that; 'the objectors did well at the inquiry out of all proportions to the resources available to them. But I do not think that this means that the gross inequality of resources at the Sizewell inquiry can be regarded as acceptable'. It appears to be widely acknowledged that the odds are generally stacked against local objectors within public inquiries.

A further important theme to have emerged from the discussion of the case study and that of Wynne (1982) is the extent to which subjective judgements are concealed within public inquiries, and particularly within decision-making rationales. This was also found by Brown (2003b: 109) who noted that 'the sensemaking efforts of inquiry teams are represented in text as authoritative' despite being derived from assessments of conflicting claims and typically considerable uncertainty. This representation of authority is aided through the use of positivist visions of science and knowledge and claims to being able to distinguish between 'correct' and 'false' evidence:

> Public inquiry texts make authority claims through recourse to a set of rules governing knowledge, its production and representation, which they present as establishing valid and

reliable accounts. In this way, reports bear witness to their own validity, constructing a 'mask' of authority which creates a particular regime of truth
(Brown 2003b: 97)

Inquiry reporters present their accounts of inquiry evidence as though it points towards straightforward answers and is based on clear 'fact'. The report therefore is presented as an objective, and authoritative account of the reporter's rational assessment of which pieces of evidence are 'true', relevant or robust and which are 'false', irrelevant or tenuous. It appears that the disguising of subjective influences within the decision-making process is an important element of writing the inquiry report.

The chapter will now discuss the findings of thematic analyses of five Scottish wind power planning application inquiry reports, and highlight further patterns within inquiry reporters' strategies for writing such reports.

## 12.3 Scottish Wind Power Planning Appeals Decision-Making

The above section has outlined some key similarities between the analysis of this thesis' case study and other public inquiry case studies. This section will now turn to look more specifically at the decisions of wind power planning appeal public inquiries within Scotland.

In order to assess how representative this inquiry decision was in relation to other Scottish wind power planning application appeals a selection of (five) inquiry reports from other similar appeals were accessed from the DPEA website. The five reports which were analysed were selected through convenience sampling, since these were the only reports available to download at that time (October 2007). However, the reports reflect a range of rural locations and planning decision outcomes. The planning applications concerned were found in three different local authority areas and three of the appeals were dismissed (refusing planning permission), whilst two were upheld (granting planning permission). Table 9.1 provides an outline of the five planning application appeals, and in order to enable comparison also includes the details of the case study.

**Table 12.1: Summary of Planning Application Appeals**

| Reference | Local Authority | Number of Turbines | Number of Objection Letters | Number of Support Letters | Outcome of Appeal |
|---|---|---|---|---|---|
| PPA 340 491 | Perth & Kinross | 12 | 1077 | (NOT STATED) | Upheld |
| PPA 340 490 | Perth & Kinross | 10 | 192 | (NOT STATED) | Dismissed |
| PPA 340 420 | Perth & Kinross | 18 | 86 | 9 | Upheld |

| | | | | | |
|---|---|---|---|---|---|
| PPA 110 504 | Aberdeenshire | 6 | 442 | 402 | Dismissed |
| PPA 270 285 | Highland | 10 | (NOT STATED) | (NOT STATED) | Dismissed |
| *CASE STUDY* | *ANON.* | *16* | *c. 700* | *22* | *Upheld* |

In chapter seven a thematic qualitative analysis of this case study's inquiry report was discussed in which all sections of the report had been analysed, however it was decided to focus here on the decision-making rationale in each case and for this reason the thematic analyses outlined below relate solely to the conclusions of the inquiry reports (*i.e.* the reporters' reasoning for his/her decision).

Another difference between the analyses discussed in this chapter and that in chapter seven is that the length of discussion relating to each topic has been measured in paragraphs instead of pages. This is due to the fact that most topics were discussed in far less detail in these inquiry reports than were topics in the case study's report – as such measurements in terms of pages would have had little meaning and most topics would have been counted only as a very small fraction of a page. Nevertheless, the lengths of each discussion are not intended to be compared with the lengths of discussion of similar topics in the previous report but instead should highlight differences *within* particular reports. It is the weighting which is given to different topics – and not the actual length of discussion of topics – which is of interest. The following charts provide an overview of the thematic analysis findings.

**Figure 12.1: References in Conclusions for PPA 340 491**

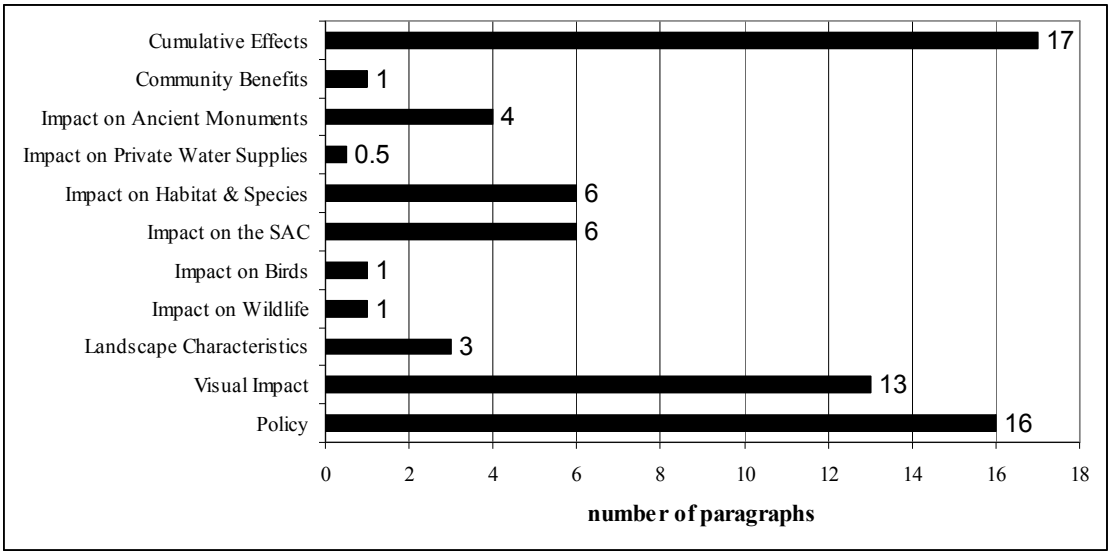


**Figure 12.2: References in Conclusions for PPA 340 490**

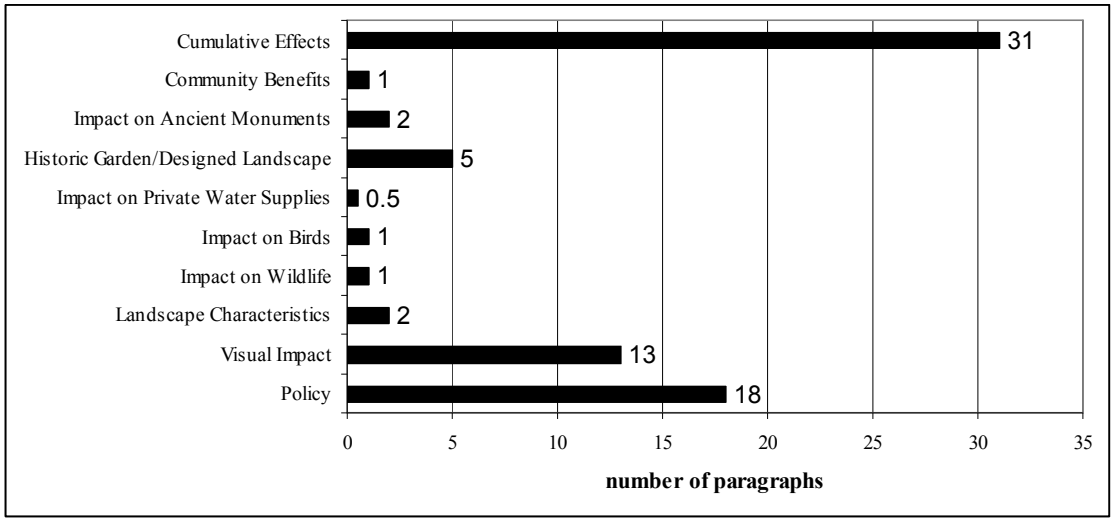



**Figure 12.3: References in Conclusions for PPA 340 420**

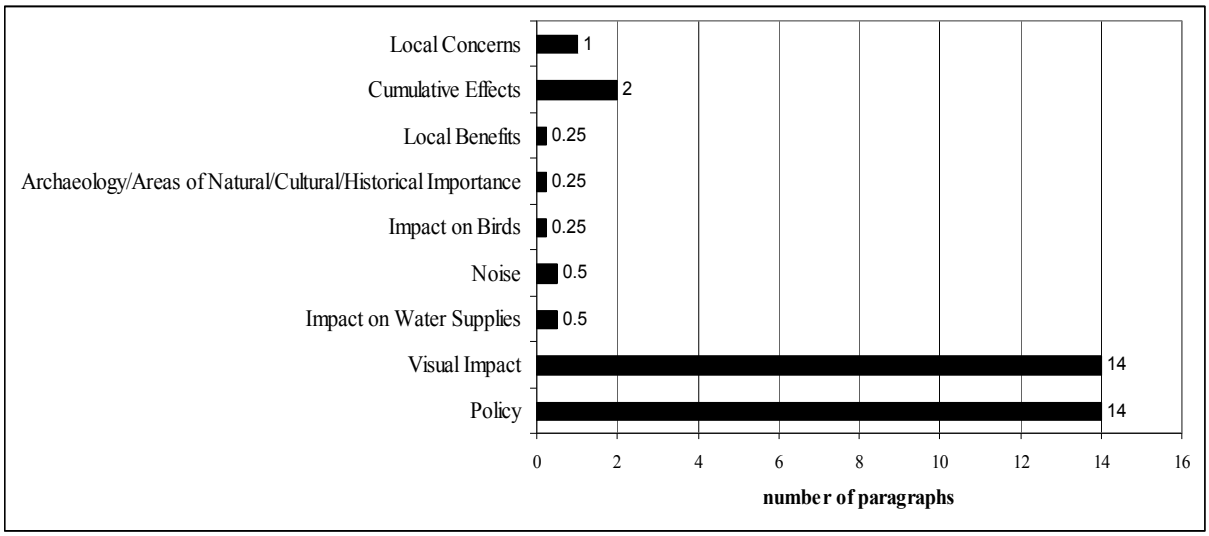


**Figure 12.4: References in Conclusions for PPA 110 504**

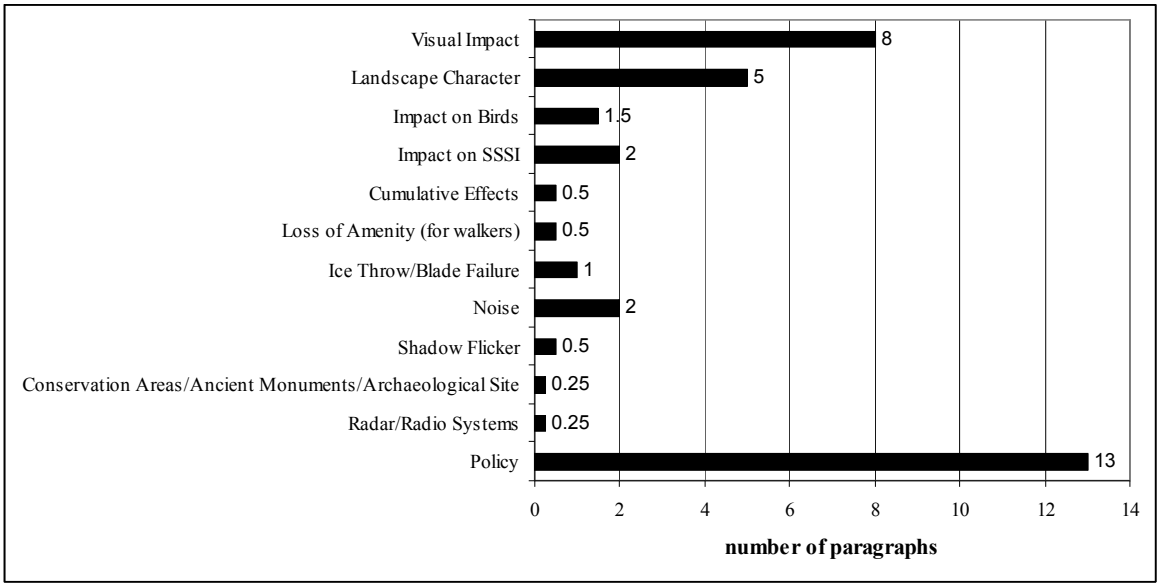
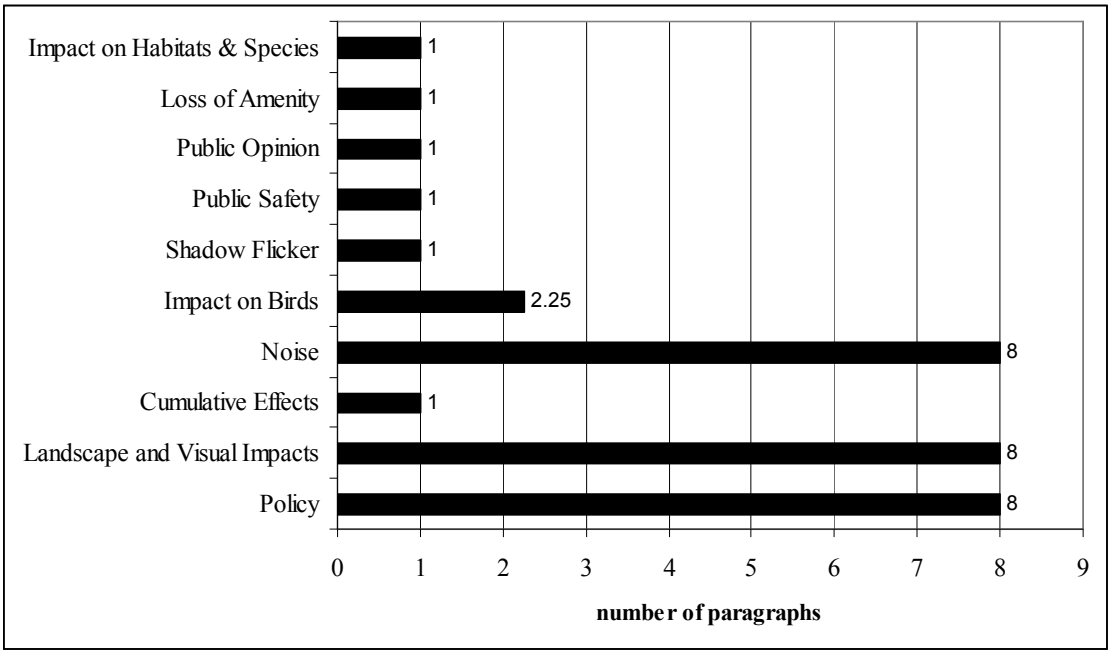



**Figure 12.5: References in Conclusions for PPA 270 285**




Whilst a broad range of topics and issues have been covered within the conclusions of the different inquiry reports, two topics arise most persistently: Policy and Visual Impact. The importance of policy to the decision-making of the case study's inquiry has been well-highlighted

in the preceding chapter. In the case study's inquiry report policy was referred to in the second longest length within the report's conclusions. In the reports outlined above, policy is in every case referred to in either the longest or second longest length out of all topics discussed. This suggests that the central position of policy within the decision-making process of the case study's inquiry is also reflected in other inquiries.

The other important topic is visual impact; in the case study inquiry report's conclusions visual impact was discussed at the third most length (equal with noise). In the examples outlined here, it is noteworthy that, with the exceptions of PPA 340 491 and PPA 340 490, that this topic is in all cases discussed in either equal length with policy or in the second longest length. In the two exceptions visual impact is discussed in the third most length after cumulative impact and policy, however it should be acknowledged that references to cumulative impact refer almost exclusively to cumulative *visual* impacts, and hence could feasibly be included under this topic heading.

In PPA 340 491 and PPA 340 490 where the topic of cumulative impact has significant salience this can be explained by the nature of the inquiries. These two appeals were part of a 'conjoined inquiry' in which six separate appeals over proposed wind power developments (each of which were found within close proximity to one another) were determined by the same reporter and were considered simultaneously. This was a somewhat unusual approach and is explained in the following extract from the minutes of the pre-inquiry meeting;

> Each appeal is separate and Ms Heywood [the reporter] will make 6 separate decisions on whether they should be granted or refused planning permission. The 6 proposals are for very similar developments located very close together in the Ochils. They have a number of issues in common, particularly potential cumulative visual and landscape impacts. If the appeals were dealt with completely separately at 6 separate inquiries, the potential cumulative impacts of one scheme with all the other schemes would have to be considered 6 times at each separate inquiry. It would save a lot of time and effort for all participants if the cumulative issues for the schemes could be considered together, or, in other words, conjoined.
> (http://www.perthshire.com...)

Thus, given that the reporter was acutely aware of the multiple wind farm proposals in the locality and was considering these in relation to one another, cumulative impact was inevitably a major and central issue within these appeals.

There does not appear to be any direct correlation between the lengths at which topics are discussed and the outcomes of appeals. However, possible connections can be found between the number of turbines and the outcomes; for those proposed developments which would consist of

10 or less turbines the appeal was dismissed whilst for those with more than this (including that of the case study) the appeal was upheld. Of course this may be a very simplistic connection to make and the number of turbines cannot be taken as a definitive deciding factor. Nevertheless, the following extract from one of the inquiry reports of a dismissed appeal supports such conclusions.

> You state that the proposed development would have a peak generating capacity of 20 MW. Considered against the 2020 target of 6 GigaWatt (GW) stated in SPP 6, this is a small amount. […] In this case, I conclude that the energy contribution and reduction in emissions that would result from the construction of the Snowgoat Glen wind farm, although important, do not outweigh the totality of the significant detrimental impacts.
> (PPA 340 490: 46 – 48)

Although each of the reports relating to dismissed appeals emphasizes the policy commitment to renewable energy and the acknowledgement (found within SPP6) that small developments should not be dismissed due to their size since cumulatively they may make a valuable contribution to national targets, it appears that the inquiry reporters have, at least implicitly, weighed up the perceived costs of the proposed development against its potential contribution to renewable energy targets. Such a cost benefit analysis would naturally favour larger developments.

What is very interesting from reviewing these inquiry reports is the lack of obvious connection between volume of objection letters and outcome of inquiry. Indeed, Table 9.1 appears to suggest that those appeals for planning applications which attract the most objection letters are upheld! Most notably, PPA 340 491 received some 1077 objection letters and ultimately was approved, whereas PPA 110 504 which received 442 objection letters and 402 support letters (this must be noted as an exceptionally high level of support) was refused.

As was discussed in chapter two, Scottish planning policy dictates that whilst local views should be taken on board they do not constitute a major influence over planning decisions. Examples such as the one which has just been cited appear to suggest that, in the case of wind power developments, planning goes directly against local views (presuming that the volume of objection/support letters can be taken as an indication of local views). This raises the issue of 'the public interest' and how this concept is defined. If planning decisions are being taken with the intention of protecting 'the public interest' then it is clearly felt by decision-makers that 'the public interest' is identified most accurately through policy as opposed to through the voices of 'the public'.

## 12.4 Summary and Conclusions

This chapter has served to highlight similarities between the central case study of this thesis and other planning applications. Firstly, case studies of other public inquiries were examined in order to highlight common experiences of the inquiry process and key themes which appear to be representative of the inquiry process and system. Secondly, a sample of public inquiry reports for Scottish wind power planning appeals was considered in order to illustrate the similarities between the decision-making rationale employed in this thesis' case study and other cases. Taken together these two discussions have drawn attention to a number of common themes and similarities which suggest that this thesis' case study may be representative in numerous respects. It is shown that the theories derived from this research apply to broader experiences of planning and public inquiries in particular – hence the research has secured analytical generalisation.

A central theme which emerged through the discussion of the case study in chapters six to eight, and which has subsequently been reinforced through the review of case studies by Wynne (1982) and Yearley (1989, 2004) is the centrality of expertise within the inquiry process. It has been demonstrated that the inquiry system demands that all evidence be backed up by scientific 'proof' and be based on a sound objective approach. Witnesses must be able to present their evidence in the language of 'facts' and this presents a major challenge for lay people objecting to a proposed development out of fears or anxieties relating to potential impacts on their home or lifestyle. Furthermore, by creating such an important role for expertise it is possible for witnesses to be discredited through arguments that they are not experts. As Yearley (1989, 2004) noted it is not necessary to prove that any experts actually exist in a particular subject, but by proving that a particular witness is *not* an expert in the precise subject being discussed they can be discredited and their evidence thrown out. This encourages lawyers conducting cross-examination to focus more on the credentials of witnesses than on the substance of the evidence they present. In particular it means that where two witnesses present evidence on the same topic for opposing parties the lawyers will focus on attempting to prove that their counterpart's witness is unreliable, inappropriately qualified or incompetent and hence that their evidence should not be taken into consideration. Ultimately, this can be seen to work to the advantage of developers since, as has been noted in this case study as well as by Wynne (1982), opposition groups typically do not have the same level of resources as developers and hence are represented by some experts but mostly by 'enthusiastic amateurs' from the local community. Inevitably such 'enthusiastic amateurs' will not have the same level of qualifications or experience as the developers' experts.

However, as was noted above, this notion that disagreement represents one or both parties being inexperienced or incompetent is based on a positivist view of science and knowledge and an 'inflated image of scientific objectivity' (Yearley 1989, 2004). As has been shown in chapter four, there is a great deal of literature which suggests that such a view of science is erroneous. Notably it has been acknowledged that science typically leads to *dis*agreement and a lack of consensus, as such the conflicting evidence found within inquiries does not necessarily represent bad practices but may instead demonstrate opportunities for healthy debate. However, such healthy debate would not be helpful for reaching conclusive or efficient decisions and therefore boundaries of acceptable language and approach are set in order to define what is 'appropriate' for the inquiry and how this ought to be communicated. Consequently these boundaries also serve to sideline lay voices, and in the case study discussed within this thesis this ultimately meant sidelining opposition voices.

Wynne's (1982) argument that public inquiries represent exercises in social control is of great interest to this thesis. The exertion of social control can be found within the case study in a number of ways. Firstly, as just noted, the inquiry required evidence to be given in a factual manner and reified the position of experts, thus minimising the input or influence of lay people and sending powerful messages about who is deemed competent to take part in decision-making processes. Secondly, as discussed in chapter seven, policy took on a central legitimating role within the inquiry decision-making. The thematic analyses of inquiry reports have demonstrated that policy is indeed a key factor in appeal decisions, and as such the fact that this matter has 'untouchable' status is of great significance. The importance of policy, and the way in which it was guarded against challenge at the inquiry highlighted the conviction that existing policies adequately reflected 'the public interest' and that lay people were ill-qualified or inappropriate to engage with such matters. Thus, whilst its outputs affect members of the public's lives, policy is kept strictly in the realm of policy-makers. The creation of boundaries of what is permissible and what is improper for inclusion at the inquiry controls the participation of members of the public and effectively sets limits to democracy.

Although it has been suggested that through the 'untouchable' status of policy, and the pro-renewables stance of the Scottish Executive opposition voices are sidelined making it almost inevitable that appeals will be upheld, it is important to acknowledge that not all wind power planning applications receive approval at public inquiry. Indeed out of the inquiries which have been considered here (including that of the case study) fifty per cent were upheld whilst fifty per

cent were dismissed – although it should also be noted that one of those which was dismissed (PPA 270 285) was subsequently appealed to the Court of Session. What is, however, of great significance here is that whether or not an appeal is upheld or dismissed does not appear to have any connection to the level of public support or opposition encountered by the planning application. Thus, clear messages are sent that public opinion is not deemed an appropriate indication of the merits of a proposed development, and further that public opinion is not a key consideration when determining the outcome of an appeal. In this way the public is once again reminded that its voice is subordinate to that of policy and expertise.

## 13.0 Conclusions and Contributions

### 13.1 Introduction

This PhD began with the aim of understanding community responses to wind power developments, however in addressing this issue the research has opened up a number of other debates and has considered a far broader range of subjects than those typically discussed within the wind power literature. Given the biases identified within the literature (discussed in chapter three), it has been crucial to conduct this research with an impartial, reflective and holistic approach. The research has attempted to redress the persistent 'pro-wind' bias within the literature, but importantly in doing so it does not take an 'anti-wind' position. Instead the research is intended to be non-partisan and to show the realities of wind power planning as they are actually experienced by the various actors involved. Through adopting this approach it has become clear that the research is about a lot more than the planning and development of wind power (or renewable energy). Rather it relates to wider relationships between members of the public and science and expertise. More fundamentally it relates to relationships between members of the public and the state (represented by decision-making institutions).

The thesis has engaged with a number of literatures, notably the wind power literature, Science and Technology Studies (STS) and the planning policy and theory literatures. This chapter will set out how the research has contributed to each of these literatures. It will then discuss the limitations of this research and make recommendations for further research within each of the literatures.

### 13.2 The Wind Power Literature

A key contribution of this thesis comes through the ways in which it challenges major assumptions found within the existing wind power literature. Chapter three highlighted key themes in the literature and it was shown that central to many of these is the assumption that localised opposition to proposed developments presents a major problem for the realisation of national targets for renewable energy production (e.g.: Bell *et al* 2005; Breukers & Wolsink 2007; Devine-Wright 2007; Ellis *et al* 2007; Peel & Lloyd 2007). This assumption, combined with the widely accepted belief that the majority of the British public support wind power (e.g.: Bell *et al* 2005; Breukers & Wolsink 2007; Devine-Wright 2005; Toke 2002; Wolsink 2000), has led many working within this field to be motivated by an objective to overcome this opposition (e.g.: Bell *et al* 2005; Peel & Lloyd 2007; Strachan *et al* 2006; Toke 2002; Wolsink 2007a). This thesis has presented a critical account of such reasoning: Within chapter three it was argued that such a

partial (and manipulative) stance ultimately limits and biases the findings which the literature can present. Furthermore, it was asserted that the conviction that the majority of the public supports wind power has not been proven and is instead based on an uncritical acceptance of opinion poll or survey results. The thesis has also challenged the assertion that localised opposition presents significant problems for the development of renewable energy.

### *13.2.1 Questioning Assumptions of Public Support*

Chapter three highlighted that much of the literature relating to public responses to renewable energy developments – and wind power in particular – refers to opinion poll data, or the findings of public surveys to suggest that public support for the technology is in general high. Whilst it was acknowledged that there is evidence to suggest this may be true (eg McGowan & Sauter 2005, POST 2007), the majority of references to opinion polls and other surveys are typically brief and do not provide any details of the polls/surveys in question, or make any critical assessments of the polls/surveys they cite. Within this literature it appears to have become accepted knowledge that opinion polls show high levels of support for wind power (see for example; Bell *et al* 2005, Devine-Wright 2005, Krohn & Damborg 1999, Toke 2002, Wolsink 2000) yet a critical discussion of these opinion polls is lacking. More importantly, the professed high levels of public support are taken as the starting point for many important arguments which have been made in this field. For example, it is this perceived overall public support which has in the past enabled local opponents to be labelled NIMBY's. In order for the NIMBY paradigm to hold salience it had to be based on a conviction that the majority of the public supported renewable energy developments – and therefore that opposition was somehow irregular, and even illegitimate – as such references were frequently made to opinion poll data showing overall high support.

More recently, since the NIMBY paradigm has fallen from grace, papers continue to take as their aim explaining a (albeit somewhat more nuanced) 'gap' between high support for wind power (as allegedly demonstrated by opinion polls) and the opposition often experienced by particular proposed developments (e.g. Bell *et al* 2005, Wolsink 2007a). The focus of attention is in explaining the occurrence of the 'minority' who oppose wind power developments. However, equal attention is not given to explaining the strength of the conviction that majority support exists. This thesis is not trying to argue that such a conviction is wrong, but rather it is intended to point out that such a conviction should at least be justified. Cursory references to opinion poll findings are not enough. Furthermore, such references serve to shield opinion polls from critical

analysis. Their findings are accepted as 'factual' and accurate without any discussion as to how they came about.

Basing academic arguments about wind power around passing (and naive) references to opinion poll findings could be taken as a reason to discredit much of the literature on this topic. The conviction that the general public supports renewable energy – and wind power in particular – has been the starting point of many papers and academic discussions on the topic of renewable energy. However, without any discussion of where this conviction came from, what data it is based upon, or how one can know that the data is reliable such papers and discussions remain gravely flawed and open to challenge.

### *13.2.2 Challenging Assumptions about the Power of Local Objectors*

The findings set out in chapters six to ten, as well as the discussions in chapters eleven and twelve, have highlighted the limited power held by local objectors. Within the case study it was found that the power which objectors had (whilst significant in the early planning application stage) ultimately extended only so far as being able to delay an eventual outcome, but not to determining what this outcome was. Furthermore, from reviewing the inquiry decisions from five other wind power appeals (set out in chapter twelve) it was found that there is no correlation between the level of objection to a proposed development and the outcome of the planning application. Local opposition may, as contended by Toke (2005b), be influential at the local authority level, however according to the accounts given by 'professional' interviewees, where a local authority rejects a wind power planning application there is a high likelihood that the developers will lodge an appeal. Thus, it is the appeals stage where power is most meaningfully exercised, and simultaneously where local objectors are least influential.

A *one-dimensional view of power* could not do justice to the complexities of this case and would not have been able identify the many ways in which power was exercised. A one-dimensional view would have conceived the local objectors as being powerful actors in the early planning application process (getting the application refused by the council) and the developers as powerful actors in the later public inquiry phase (getting the planning application approved). However, it would not have been able to recognise the many more subtle forms of power at play. Lukes' (1974[2004]) *three-dimensional view of power* is therefore valuable for considering the various different power relationships within the case. Throughout both phases of the process, power was exercised through the processes, structures and even language of the planning system.

For example, in the early planning application stage the local opposition group exercised power through the organisation of opposition and by constructing certain objection issues as central (for example through the proforma cards). At the later public inquiry stage the debates and issues were re-constructed through the language of expertise and national (at times international) policies and regulations. This reconstruction was highly significant.

The three-dimensional view is particularly interesting in identifying the power which was exercised by the planning system itself (as opposed to those acting within it). Throughout both phases power was exercised through norms of planning procedures and the boundaries which were set. This was most explicit in the public inquiry stage where the contribution of lay objectors was limited due to their lack of credentials and expertise. However, this power was also exercised in the earlier planning application phase when the opposition group responded to the perceived need to represent their objections through 'legitimate' arguments (*i.e.* prioritising concerns over ornithology above those relating to visual impact). This reflects both Lukes' (1974[2004]: 28) argument that power is exercised through shaping people's 'perceptions, cognitions and preferences in such a way that they accept their role in the existing order of things', and also Wynne's (1982) contention that public inquiries (as exercises in social control) transmit messages to members of the public about the appropriate roles of expert and lay knowledge. Objectors within this case responded to such power (or social control) and hence did not challenge the central position given to experts or the assumption that their knowledge was less legitimate. Furthermore, they actively endeavoured to present their own case in line with the dominant ideological position which favours 'scientific', 'objective' 'facts', even when doing so disadvantaged their own position.

As was noted in chapter four, Lukes' theory of power has been criticised for being of little use in empirical research. For example, it was contended that the 'third face of power defie[s] the possibility of scientific evaluation on the grounds that it depend[s] on unobservable real interests' (Shapiro 2006: 146). However, this thesis has demonstrated the practical value of the three-dimensional view of power and the advantages which can result from considering power relations in line with this model. This therefore represents a significant contribution of this thesis.

The literature focuses heavily on the roles played by local objectors and suggests that localised opposition to proposed developments is a major problem for the realisation of renewable energy targets (e.g.: Bell *et al* 2005; Breukers & Wolsink 2007; Devine-Wright 2007; Ellis *et al* 2007;

Peel & Lloyd 2007). It is therefore suggested that local objectors are powerful actors, however such analyses fail to take account of the many ways in which power is exercised *on* objectors. Furthermore, by considering the actions of objectors in isolation from the systems and structures within which they are acting the literature fails to acknowledge the ways in which objectors' actions are in fact *re*-actions and responses to powerful ideologies and social control. Objectors are therefore acting with limited capabilities and the planning process is unable to reflect their full range of concerns and experiences.

### *13.2.3 The Emphasis on Developers*

Within chapter three it was demonstrated that the extant literature places significant emphasis on prospective developers' behaviour (e.g.: Breukers & Wolsink 2007; BWEA 1994; Ebert 1999; Krohn & Damborg 1999; Upreti & Horst 2004; Wolsink 2007a). In particular, much of the literature points towards a perceived need for developers to engender greater participation of community members (e.g.: Bell *et al* 2005; Breukers & Wolsink 2007; Toke 2005a; Toke *et al* 2008). According to such arguments greater public acceptance of proposed wind farms could be achieved through greater openness from prospective developers. However, this research found little or no evidence to support this theory. As discussed in chapters six and ten, within this case study local community members (including those opposed to the development) initially had few criticisms of the developers. Moreover, opposition formed at a time when the developers were perceived to be acting fairly and openly. The opposition were not so much concerned with the actions or behaviour of the developers, but rather those of the local authority. Within interviews the vast majority of criticisms or complaints expressed by objectors (as well as supporters) focussed on the planning system, processes and decision-making institutions. Thus attempting to create greater community acceptance through focussing on the actions of the developers, in this case, would have been a fruitless activity. As such, if there is to be an emphasis on engendering greater participation this should more appropriately be targeted at planning authorities and decision-makers.

Within the literature review it was suggested that one obstacle to meaningful participation may come through the reluctance of objectors to participate. It was noted that national anti-wind power organisations have suggested boycotting participative activities (Views of Scotland 2002) and that objectors are encouraged to take a combative position in relation to developers (*ibid.*, www.countryguardian.net/fight.htm). Concern was expressed that in following the guidelines set out by national organisations objectors would rely on standard objections rather than addressing

the particular merits or flaws of individual proposed developments. Additionally, it appeared that objectors would raise issues which were not necessarily relevant to the planning application (for example, relating to the financial motives of the developers). It is therefore interesting to note that the concerns raised in the literature review were borne out in the findings of the case study, however they were equally (or perhaps more) applicable to the developers as to the objectors.

The creation of the proforma objection letters can be viewed as an example of the standardisation of objections on the part of local objectors. However, within the public inquiry stage far more explicit examples of this standardisation were found. Chapter 11 highlighted the extent to which the planning application had gone from being a specifically local issue to a generalisable act within a well-rehearsed travelling show. All parties played a role in this standardisation (or generalisation) process, and all sides of the argument were represented by highly experienced witnesses and expert evidence which might be applied to any number of wind farm proposals. If there was a victim of this process it was clearly the opposition group, whose lay knowledge was sidelined, however, there was no one culprit. The developers, the objectors and the decision-maker were all complicit in constructing the public inquiry process in such a way as to discount the local nature of the debates.

The concern expressed in chapter three that objectors might raise issues which were irrelevant to the planning application (for example to do with the developers' motives or behaviour) was perhaps misplaced. It was asserted in interviews with supporters that the opposition group raised a whole raft of unnecessary topics at the public inquiry and that they were 'clasping at straws', however, from my own observations it appeared that the developers focussed on many irrelevant aspects of the evidence presented at the inquiry. For example, the emphasis on credentials of witnesses distracted from the substance of evidence. In cross-examination questions relating to the nature of the opposition group or the qualifications of a witness appeared to represent examples of where the developers (or at least the developers' advocate) were raising, and focussing on issues which were largely irrelevant to determining the merits of the planning application.

This relates to a further key contribution of this thesis. Whilst the existing literature frequently makes references to the actions of developers – particularly how developers *should* act – there are no studies of developers' experiences or perceptions of planning application processes. As Ellis *et al* (2007) note, the literature focuses almost exclusively on the attitudes and experiences of

objectors. This research therefore represents a pioneering and highly valuable study due to its consideration of not only objectors', but also supporters' and developers' experiences and perceptions of the planning process. Through considering multiple viewpoints equally and impartially the research has been able to uncover far greater insights into the realities of wind farm planning. This impartiality is a highly important feature of this research and one that sets it apart from the majority of the existing literature in which; 'The ideological (i.e. unreflectively pro-wind) and epistemological (i.e. unreflectively positivist) bias has led to poor explanatory findings, which in turn has resulted in ineffective policy' (Ellis *et al* 2007: 536).

The access to the developers was an invaluable aspect of the research. Being able to shadow the developers during the public inquiry and observing them both in formal and informal settings enabled many insights which would not otherwise have been possible. The observation phase of the research engendered strong relationships of trust between myself and the developers and this led to data which could not have been collected simply through interviews. As such this research draws on a body of data which has not previously been considered within the wind power literature. In this research the developers are considered equally with local objectors and local supporters, whereas in the existing literature they are typically treated as potential beneficiaries but not subjects.

*13.2.4. Considering the Nature of Objections*

As noted above previous studies have focussed on the attitudes and experiences of objectors, however where these have considered the nature of objectors' arguments they have typically drawn on information provided within interviews or surveys (e.g. Warren *et al* 2005). There has been little consideration of the content of objectors' arguments as they are actually presented within the planning process, (one notable exception is Woods 2003). Therefore this research with its detailed consideration of both the contents and methods of objection letters, as well as of arguments presented at the public inquiry *and* accounts given in interviews represents a valuable contribution to the literature by presenting a holistic picture of what objectors actually object about (as opposed to merely what they say they object about). Furthermore, by combining this with an analysis of the inquiry reporter's rationale the research provides a timely examination of how objectors' (and developers') arguments are actually treated in formal decision-making.

Moreover, this holistic picture with its consideration of arguments made at different times and in different contexts highlights important aspects of the planning process which have not previously

been discussed in the literature. For example, how the structures of the planning system restrict objectors to present themselves in accordance with dominant ideologies relating to the roles of expert and lay knowledge, and how objectors' arguments lose their local, specific nature as planning processes become more centralised and expert-oriented.

### *13.2.5 An Unexceptional Subject*

A further contribution that this thesis makes to the wind power literature is in highlighting the unexceptional nature of the challenges addressed. The literature treats opposition to wind power as a unique 'problem' and there are few comparisons made between the findings of studies related to individual and community responses to wind power and other studies of public relationships with science or technology. However, this thesis contends that experiences with wind power are merely representative of wider relationships between science and the public. As such a considerable contribution is made by tying discussions of community responses to wind power into wider debates found within STS. The next section will discuss how this thesis relates and contributes to the field of STS.

## 13.3 Science and Technology Studies

As set out in chapter four, one of the main contributions of STS has been to question and challenge the dominant position of science and expertise within society. It has demonstrated that scientific knowledge is not fundamentally different from other types of knowledge and that there is no reason why science should not be the subject of sociological analysis or inquiry (Bloor 1976). The STS literature disputes the long-perpetuated myth that science is somehow 'special' and immune to social or political influences, rather it points to the many ways in which social or political factors enter into scientific practices (Latour & Woolgar 1979[1986], Campbell 2003). Such influences are identified in every stage of scientific practices; from the initial conception of problems or research questions, to the selection of methods or samples, to the recording and interpretation of results. Thus, science cannot be viewed as a source of indisputable 'facts' or certainties based on 'objective' inquiry, but rather is 'hesitant, flawed, fallible, incomplete, uncertain, corrigible' (Gieryn 1999: 360).

### *13.3.1 Evidence of Uncertainty in Science*

The uncertain, disputed nature of scientific 'facts' has been well illustrated within this thesis. The case study provided many explicit examples of the conflicting nature of expert knowledges. For example, the public inquiry setting actively encouraged disputes between experts. In various

instances contradictory evidence was presented by experts representing the developers and the opposition group. Although disagreements were typically presented as being due to the 'opposite side's' ill-qualified or inappropriate experts, the adversarial nature of the inquiry meant that it was not possible to present scientific or expert analysis as a consensual activity. Furthermore, as was pointed out by several interviewees (discussed in chapter 10), the experts could not be viewed as objective actors, nor could their evidence be perceived as being free from social or political influences. Experts were hired to represent a particular case and as such their evidence, presented as 'hard facts', was inevitably informed by subjective influences.

### *13.3.2 The Traditional View of Science in the Planning System*

Nevertheless, the inquiry process clearly had its foundations in a traditional dichotomous view of expert and lay knowledge. The aim of the inquiry was to evaluate different claims to knowledge in order to establish the best possible outcome based on 'valid' and 'legitimate' expertise. Therefore, establishing who were credible expert witnesses was considered a legitimate and necessary exercise within the inquiry (this is clear from the reporter's approval of - or lack of objection to - the cross-examination techniques used at the inquiry). The emphasis on proving witnesses to be credible or not based on their qualifications and credentials highlighted the conviction that sound evidence could only come from experts, and as such the assumption that lay people could not contribute valid or significant knowledge.

These findings concur with observations by Sandercock (1998) and Rydin (2007) that the planning system is rooted in modernist ideologies. Whilst planning theorists have critiqued this modernist underpinning it persists within planning practice. Sandercock (1998: 80) contended that although theorists acknowledge the value of incorporating multiple knowledges and viewpoints, planning professionals are afraid of the subjective and often emotive nature of lay knowledge and hence 'choose to hide behind the apparent safety and alleged objectivity of data'. Such a position is certainly reflected in this case wherein it was found that although lay people were given opportunities to speak their voices were typically overlooked in favour of those of experts.

### *13.3.3 Contesting the Progress of the Second Wave of STS*

This has implication for Collins and Evans' (2002) controversial proposal for a 'third wave of science studies' which was discussed in chapter four. They suggested that STS had successfully broken down boundaries between expert and lay knowledge and that the hegemony of science

had been effectively confronted. It was argued that; 'science studies has resolved the Problem of Legitimacy by showing that the basis of technical decision-making can and should be widened beyond the core of certified experts' (Collins & Evans 2002: 237). However, they felt that in achieving this goal STS had also dissolved 'the distinction between expertise and democracy' (*ibid:* 269). Therefore it was suggested that it was time to begin rebuilding boundaries so as to distinguish appropriate roles for expert and lay knowledge. However, this research contests Collins and Evans' (2002) suggestion that earlier phases of STS have resulted in meaningful changes in the treatment - or even perception - of expert and lay knowledges.

Within the case study it was clear that the structures and processes of the planning system conceived expert and lay knowledge as entirely discrete and irreconcilable. Moreover, the constructed boundary between expert and lay knowledge served to position expert knowledge as dominant and relegated lay knowledge to the sidelines. Thus, a traditional, modernist view of science and knowledge is shown to persist within decision-making institutions and it is hard to conceive of the 'Problem of Legitimacy' as being 'resolved'.

Furthermore, there are many common themes and findings between this case study and those of Wynne (1982) (Windscale THORP inquiry), Yearley (1989) (Northern Irish bog inquiry) and Wynne (1992, 1996) (Cumbrian sheep farmers). Each of these case studies contended that decision-making processes around scientific or technical issues were dominated by expert knowledge and were based on a traditional view of science and expertise. Wynne (1982, 1992, 1996) has highlighted many instances where lay people had knowledge – or lay expertise - which could have been of significant value within the decision-making processes, however, he also demonstrated that this was largely overlooked in favour of 'objective', 'rational' expertise. The similarities between the research presented in this thesis and these three studies are striking and highlight the limited progress that has been made over the last three decades. This lack of progress is despite significant advances and developments within the STS literature and policy commitments (at least in words) to public engagement and consideration of lay knowledge.

This research therefore contests Collins and Evans' (2002) argument that the efforts of STS have resulted in meaningful changes or that the boundaries between expert and lay knowledge have been successfully deconstructed beyond the academic STS literature. As such Collins and Evans' argument that the re-instatement of boundaries would lead to a more balanced situation as a consequence of the results of the second wave of STS seems naïve when we are still awaiting

evidence of the effects of this wave.

*13.3.4 Implications of Translating STS into Commitments to Public Engagement*

Much of the STS literature is centrally concerned with the democratisation of science and technology. For example, significant work has been done to highlight the existence of 'lay expertise' and hence to demonstrate the valid contributions to be made by non-experts (Epstein 1995, Kerr *et al* 1998, Rowe & Wright 2001, Wakeford 1998, Wynne 1992, 1996). Such discussions have led to calls for greater consideration of lay knowledges and greater participation of lay publics in decision-making, the implication being that decision-making institutions ought to engender more opportunities for lay people to become involved and to express their views or opinions. Commitments to public engagement in planning policies will be discussed below, however here it is worth considering the findings of this research in relation to the facilitation of lay engagement within scientific or technical decision-making broadly.

It is noteworthy that within the case study all actors – whether lay or expert, supporter or objector – appeared to perceive a distinction between expert and lay knowledge, and moreover appeared to perceive the former to be more legitimate. This is observable through the opposition group's efforts to present their arguments by reference to rational, objectified evidence, rather than their own lay expertise or personal opinions (which very likely formed the true basis of their objections). At the inquiry, all sides of the argument were represented by expert witnesses and this ultimately shaped the nature and content of the debates. As noted above, the opposition group were acting in response to dominant ideologies and covert power which shaped their perceptions of what was acceptable or legitimate knowledge within the inquiry setting. Thus, although interviewees expressed scepticism about the value of expertise, within the inquiry they did not challenge the central position which was given to expert evidence. In this way, lay objectors were complicit in the marginalisation of their knowledge and acted to uphold the central position of expertise to the inquiry.

If this complicity is representative of lay people in decision-making arenas, it raises critical questions for the democratisation of science. It is far simpler to suppose that lay voices are excluded through the actions and rules of decision-makers and powerful elites than through their own actions. Such simpler conclusions would be likely to be reached in examining processes through a two-dimensional view of power. This would lead one to suggest that elites need to become more flexible and accommodate a wider variety of knowledges. However, by referring to

the three-dimensional view of power the issues become more complex. One must acknowledge that lay actors are not only responding to visible signals of what is desired (*i.e.* that they are being invited to participate in a decision-making process), but also to less obvious influences which have shaped their expectations of the process and their perceptions of what a legitimate contribution would be. The active roles of lay people in interpreting what is expected or required of them, and presenting themselves in ways which are perceived to lead to optimal benefits must be acknowledged. Even if greater opportunities for public engagement and inclusion of lay knowledges existed, it is likely that lay people taking part would perceive a need to present their knowledge in expert, objectified ways. Thus, engaging with the opinions and knowledge of lay members of the public is more problematic than simply setting up encounters or opportunities. Rather it requires a fundamental change in the ways by which expert and lay knowledge are presented – and subsequently perceived – within society.

## 13.4 Planning Policy

### *13.4.1 Planning Policy and Participation*

This clearly has implications for planning policy with its increasing emphasis on public engagement and consultation. Within chapters two and four, scepticism was expressed about the implications of planning commitments to public engagement. As noted in chapter four, Irwin (2006) has contended that much of the language of STS has been adopted by policy-makers who routinely express commitments to public engagement and participation in science and decision-making activities. However, he noted that 'the conventional wisdom generally remains that public and expert opinions should not be confused, but kept separate within decision-making processes' (Irwin 2006: 315). As such it was suggested that commitments to public engagement may represent little more than commitments in words alone. When one combines such concerns with the awareness that accessing lay views may be problematic due to lay people's own preconceptions of what counts as legitimate knowledge and how this should be presented, it becomes clear that public participation in decision-making processes is a challenging goal.

Within the case study it was found that although lay people were given opportunities to speak within the all-important public inquiry phase, their voices were easily overlooked. Expert knowledge was privileged and lay knowledge was instead treated as extraneous and largely immaterial. Thus, one cannot conclude that the case study illustrates a democratic, participatory planning system in action. Rather the findings reflect a situation closer to one in which the (lay) participants 'become a ghostly presence within the planning process – visible, heard even, but

ultimately only there because their involvement lends credibility and legitimacy to decisions that have already been made' (Hildyard *et al* 2001: 59).

The new planning bill (discussed in chapter two) came into effect after the public inquiry verdict had been determined. Therefore, these findings cannot be taken as a refutation of the planning system's commitment to 'strengthening the involvement of communities' and 'reflecting local views better'. Nevertheless, they are an indication of the extent of the challenges that the planning system faces and how far changes need to go.

### *13.4.2 Implicit and Explicit Biases in the Planning System*

More importantly the research has pointed to a number of implicit (as well as explicit) biases within the planning system. Chapter two set out the pro-development perspective underpinning planning policies and processes and noted that, despite frequent references to goals of sustainable development (SD), the true ideological underpinning of the planning system mirrors far more closely that of ecological modernisation (EM). Thus, there is a bias in favour of development and a confidence in the ability of 'scientific progress' to address social and environmental problems. Furthermore, planning policies contain explicit instructions to consider renewable energy developments with some lenience. It is said that 'the planning system should manage the process of encouraging, approving and implementing renewable energy proposals' (SPP6: *v*) and that 'Regional spatial strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources' (PPS22: 7)

As such, members of the public objecting to wind power developments are faced not only with a range of obstacles related to their non-expert status and lack of resources, but also with a planning system which explicitly favours the developers. Facilitating meaningful participation is therefore of even greater importance. However, it is clear that such participation, which would require openness, transparency and the possibility that any party (including objectors) could secure their desired outcome, is not in the interests of the planning system, especially in relation to its stated objective of 'support[ing] and encourag[ing] the continued growth of all renewable technologies' (SPP6: *v*).

Thus, the current dominance of expertise – which impedes lay opposition – works in favour of the planning system, particularly in areas where there is a clear preference for development (*i.e.*

renewable energy). Allowing public inquiries (or other decision-making processes) to focus on witnesses' credentials presents reporters with a convenient justification for favouring developers (who are typically better resourced and represented by highly qualified experts). In this way the planning system can claim to be participatory, and hence legitimate, by allowing lay objectors to present evidence, but through the persistence of traditional views of expert and lay knowledge it is able to easily overlook and discredit their contributions. Hence, decision-makers will (consciously or unconsciously) act to uphold traditional boundaries between expert and lay knowledge and to facilitate the forms of (covert, ideological) power and social control which are exerted through planning processes. This raises questions as to what role the planning system plays within social and political life.

### *13.4.3 The True Role of the Planning System*

Chapter two noted that the planning system is legitimated by claims to serving and protecting 'the public interest'. However, it was also noted that the concept of 'the public interest' is inherently ambiguous and highly contested. Yet it continues to form a central justification for planning activities and decisions and consequently its interpretation and implementation warrant considerable scrutiny. Who defines what is in the public interest, and how, are critical issues.

Within chapter two it was shown that planning policies (particularly in relation to renewable energy development) are responsive to pre-existing policies. The public interest appears to be interpreted as what is deemed necessary or worthy within existing related policies. Thus, the planning system reifies Government and state decisions and these are deemed competent at establishing what is in the public interest. This approach reflects the modernist underpinning of the planning system (and perhaps wider state institutions) in overlooking the heterogeneity of public interest*s* and the level of uncertainty which exists around environmental, scientific or technological matters. It presumes that 'disinterested experts, working within the institutions of the modern nation-state, [can] objectively and rationally analyse a problem and arrive at a solution that is in 'the public interest'' (Sandercock 1998: 197). It assumes that there can be definite answers to society's social and environmental problems and that these can be identified by 'a certain chosen, well-educated group' (*ibid*: 197). However, the concept of 'the public interest' can never be invoked apolitically; any definition or interpretation of the concept will always be loaded with subjective meaning and the values of those defining and interpreting it. Thus, claims that the planning system functions to serve and protect 'the public interest' ultimately conceal its true role in serving and protecting the authority of the state and the status

quo (in terms of state-public power relations).

### *13.4.4 Redefining 'The Public Interest'*

The case study in this research demonstrated the heterogeneous nature of interests in one particular community and in relation to one particular development. This is no doubt only a small example of the range of interests which can be found within community groups – or wider society. In reality there is no single public interest but rather a range of conflicting, competing and diverse public interest*s*. Therefore claims to protecting 'the public interest' are somewhat dubious. In the case study, if there was one interest which all members of the community (supporters and objectors) shared in relation to the proposed development, it was the desire to freely express their concerns and interests and to participate in an open democratic decision-making process.

Such common goals reflect deontic or dialogical concepts of the public interest which are centrally concerned with processes (rather than outcomes) and the planning rights of members of the public (Alexander 2002). This has much in common with the work of the 19th century political philosopher John Stuart Mill who contended that all individuals have the right to pursue their own interests and exercise their own freedoms in any way so long as they do not infringe upon another individual's freedoms. An individual's freedom of thought and their freedom to express such thoughts were seen to be important examples of this. Mill eloquently stated that:

> If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind.
> (Mill 1859 [2003]: 87)

According to Mill there is no justification for excluding any voice from a debate, indeed he contends that such exclusion would be harmful to the debate. It is seen to be unfair not only for those who are silenced but also for those doing the silencing, since: 'If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error' (*ibid.*: 87). Mill contends that whilst individuals may have views about which opinions are right or wrong, no individual can know this with absolute certainty. Furthermore, he notes that at all times in history certain views have been held to be correct which at a later date have been 'deemed not only false but absurd; and it is as certain that many opinions, now general, will be rejected by future ages, as it is that many, once general, are rejected by the present' (*ibid.*: 89).

For this reason he asserts that it is not only an infringement of an individual's rights to silence their opinions but it is also damaging to wider society and the pursuit of truth.

Thus, Mill recognises that 'knowledge' and 'facts' cannot be viewed as certain and that these should be open to debate. In this line of reasoning knowledge-claims about climate change, or about the need to cut emissions and to produce energy from renewable sources are acknowledged as being open to debate, and views which counter the dominant way of thinking are shown to be legitimate and necessary within policy- and decision-making. Silencing such alternative views in order to reach conclusive decisions is not, according to Mill, in 'the public interest' since it prohibits debate and the opportunity not only to consider other viewpoints but also to strengthen one's own argument should the alternative views be proven false.

This has much in common with the work of STS in showing the uncertain, fallible nature of science, knowledge and expertise. Ultimately, since it is impossible to know which knowledges are 'true' or 'false', one cannot know with any certainty which policies or outcomes will be in the long-term public interest. As Mill (1859 [2003]) observed, the one thing which we can be certain of is that just as we know things which previous generations did not and as we have thrown out ideas which were previously taken for granted, future generations will know things that we do not and will prove wrong things that are today held as certainties. However, one cannot know in advance which ideas will ultimately be proven wrong, and cannot judge which policies or actions will in the future be deemed to have been erroneous. For this reason decisions ought to be based on the widest possible knowledge base and with the fullest consideration of criticisms.

According to this line of thought the public interest cannot be determined by an elite of decision-makers, or in a 'rational', 'objective' way. The public interest cannot be conceived of as a discrete entity or goal, but rather it is best served through open deliberation and the free exchange of ideas and knowledges. The public interest is thus conceptualised as a guiding principle for processes *not* outcomes and cannot therefore be determined in advance.

In the case of planning for renewable energy development, one cannot say that progressing towards national targets protects the public interest, because one cannot know with certainty what the implications of developing (or not developing) renewable energy will be. Instead the public interest can be protected by ensuring that all individuals with concerns or interests in relation to proposed developments have the opportunity to express these concerns and interests in an open

and fair forum. Moreover, individuals' participation must be meaningful and their contributions must be considered equally with those of experts and other more traditional participants. However, as noted above, this would require more than simply facilitating opportunities for members of the public to participate in decision-making processes and ensuring that their voices were influential, but rather it would entail fundamental ideological and cultural changes in the ways by which the public's knowledge is perceived within society (by decision-makers, experts and lay people).

## 13.5 Limitations and Recommendations for Future Research

This research contributes to a number of literatures - notably those relating to wind power, STS and planning theory. The findings point to a number of areas for future research within each of these literatures. The limitations of this research and recommendations for further research in the associated literatures will now be set out.

### *13.5.1 Recommendations for the Wind Power Literature*

Firstly, in relation to the wind power literature, this research makes a substantial critical contribution. It has challenged a number of key assumptions which have long been central to the literature, and has highlighted the partial approach which is ultimately considered responsible for limiting the findings of previous research. As such, this thesis demonstrates the need for a new, impartial and more critical approach within the literature.

The research findings have suggested that objectors are not as influential as the existing literature suggests and have drawn attention to the many ways in which power is exercised on objectors. Additionally, the research has suggested that the literature's emphasis on objectors' relationships with developers is misplaced. Such findings are important, however their significance is unclear given that they are based on a single case study. Thus, it would be extremely valuable for future research to examine such themes in other case studies. Within the timeframe and resource constraints of the PhD it was not feasible to conduct multiple case studies, doing so would have considerably lessened the depth in which they were examined and consequently the insights which were enabled. However, comparing the findings of this research with further equally detailed case studies would be highly beneficial. Importantly, such case studies must be conducted according to the impartial and holistic approach used in this research, and must consider the views and experiences of objectors, supporters and developers equally.

Furthermore, future case studies could be located in England and Wales as well as Scotland, so as to establish whether experiences are different within Scotland compared with the rest of the UK. This is an important consideration given Toke's (2005b) assertion that wind power development has been less problematic in Scotland than in England or Wales. If Toke's contention is correct, it is worth considering whether the various forms of power which were identified in this case, and which ultimately limited the influence of objectors, are typical of Scottish wind power planning but less so of that found in England or Wales. It will be highly valuable to examine the level of power and influence of objectors in England and Wales in comparison with those in Scotland.

One theme within the wind power literature which this research could not address was the well-cited assertion that opposition to wind power developments fades away after construction. This research has focussed solely on the planning phase of the development and as such it is not possible to say how objectors (or supporters and representatives of the developers) felt about the development once it was constructed. Therefore, it will be interesting to revisit this case in a year or two years' time in order to re-examine individuals' perceptions and accounts of the planning process and development.

### *13.5.2 Recommendations for the STS Literature*

The research findings concur with many important themes within the STS literature and demonstrate considerable similarities with those of other case studies in this field. As noted above, the research suggests that despite substantial progress within the academic STS literature this has not resulted in meaningful changes in the ways in which expert and lay knowledges are perceived or treated in decision-making fora, or wider society. Crucially this research has drawn attention to the ways in which lay people construct their arguments and present themselves in accordance with their perceptions of what constitutes legitimate knowledge. Lay people have been shown to respond to covert, ideological power and to shape their contributions according to perceived norms and expectations rather than by reference to their lay expertise, experiences or emotions.

Such findings highlight important areas for future research. To date there has been significant emphasis on the construction of expertise and scientific 'facts', and how these are favoured by decision-making institutions. However, equal attention must be paid to how lay people construct their own claims to knowledge and how they perceive such constructions. It would be interesting to examine lay people's reflections on the ways in which they present their knowledge claims,

and also on what they consider to be 'legitimate' knowledge. Furthermore, participatory activities must be examined and evaluated in line with the three-dimensional view of power so as to consider not only the opportunities for participation which are enabled, but also the expectations and active roles of participants in shaping and constructing knowledge claims.

### *13.5.3 Recommendations for the Planning Theory Literature*

This research makes an important contribution to the planning theory literature by considering several of the key debates in relation to their practical implementation. For example, this thesis has considered public participation as it is addressed within the planning theory literature and policy documents, and moreover, as it is actually experienced in one particular example. As such it has drawn attention to the difficulties and limitations which are encountered in participatory exercises. The thesis has also shown how, despite being widely renounced within the planning theory literature, the public interest continues to be called upon as a central legitimating concept within planning policies. Thus whilst the literature has become more critical and reflexive, in practice the planning system retains its modernist underpinning and drive.

Such contributions point to several areas where future research is needed. Firstly, Lukes' three dimensional view of power could be applied far more broadly to consider a range of planning activities. This is particularly relevant in considering issues of public participation so as to identify the many different forms of power to which participants are subject. If meaningful participation is ever to be achieved then understanding the complex relationships of power which exist is crucial. Future research should endeavour to uncover the ways in which the planning system (and officials working within it) perpetuate existing power relationships, and construct/maintain boundaries between expert and lay knowledges.

Secondly, the research has also demonstrated that 'the public interest' remains a key concept for debate within the literature. Despite falling out of favour in the planning theory literature it remains central to planning practice and therefore cannot be overlooked. If the public interest is conceived of as an aim or outcome then it will always require considerable interpretation and will remain inherently ambiguous. However, by viewing it in the way that it is set out above - as a set of guiding principles for democratic processes - it enables greater openness and equity and facilitates participation. Further research should therefore be directed at developing such a conception of the public interest in practical terms. This could have highly beneficial implications

for planning policy and practice.

## 13.6 Summary and Final Comments

The central aim of this research was to understand community responses to proposed wind power developments, however in progressing towards this aim a vast range of diverse but related topics have been addressed. The thesis has drawn on, and contributed to, a variety of literatures, and has shown how these literatures are connected. Thus, the final conclusions relate not only to the wind power literature but also to the STS and planning theory literatures.

Nevertheless, the key contribution is to the wind power literature. It is hoped that this research will encourage those working within this literature to reflect critically on the preconceptions and biases informing their work. It does not necessarily refute the claims made in relation to public opinion or the merits of wind power, but rather it highlights the need to explicitly discuss and reflect on the bases of these claims. If the aim is to understand public reactions and attitudes to wind power then one must be open to consider all aspects of these and to reflect on the processes and structures out of which such reactions emerge.

To date the literature has treated opposition to wind power as a problem which must be overcome, however, in doing so it has failed to identify many other more pressing problems and challenges. These relate to the roles of expert and lay knowledges within society (and decision-making fora particularly) and the implications of such roles for democratic processes. The modernist ideologies underpinning national policies (i.e. energy and planning policies) require considerable scrutiny since they effectively limit the range of potential outcomes and the influence of non-expert or non-traditional actors. Hence these ideologies can act to limit the possibilities for dissent (where those dissenting are likely to be lay people) and consequently protect the status quo (disguised as 'the public interest'). As such objectors to wind power represent one example of problematic actors for the state since they represent dissenting voices and hence their power is restricted through decision-making processes and structures. The research findings suggest that opposition is not a major problem for wind power development since it is not influential on eventual outcomes, however, the structures of the planning system within which such opposition acts are problematic for the goals of participatory democracy.

Nearing the end of the twentieth century Sandercock (1998: 204) concluded that:

> The current political process represents people's needs only in the crudest and most partisan way,

> even in an open democracy. If we want to achieve greater social justice, less polluted environments, and broader cross-cultural tolerance, and if planning is to contribute to these social goals, then we need a broader and more politicized definition of planning's domain and practices.

Some ten years later I find myself reaching the same conclusions. There remains a need for greater reflection on the ways in which the planning system (as well as other state institutions) structures relationships between members of the public and elite actors (for example between lay people and experts). This research has provided an example of the challenges faced by actors wishing to participate in democratic processes; further work is needed to establish how such challenges can be overcome.

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**Annex 1: Secondary Material Reviewed for the Case Study**

*Since examination of the PhD the details of the secondary material reviewed for the case study have been removed in order to ensure anonymity. This has been done with the support of the examiners.*

**Annex 2: Full list of Categories and Codes used in the Thematic Analysis of Objection Letters**

**a the wind turbines**
a1 noise
a2 visual impact
a3 scale/size of structures
a4 cumulative effect (i.e. with other locally proposed wind farms)
a5 number of turbines
a6 won't stand up to storms
a7 block emergency services communications
a8 decommissioning
a9 shadow flicker

**b wind power technology**
b1 wind power is unreliable (no constant wind)
b2 wind power is inefficient (in terms of energy generation)
b3 wind power is expensive/subsidised
b4 it will not reduce greenhouse gas emissions (i.e. carbon dioxide)
b5 consideration of energy used during construction processes
b6 Scotland is already self-sufficient in energy supply/ has an excess of energy/ renewable energy developments are unnecessary in Scotland
b7 Scotland's energy supplies England/ wind farms should be located in England
b8 short-term or little gain and/or long-term damage
b9 represents a superficial solution
b10 no evidence of continued viability
b11 money-making exercise for private companies
b12 should be located offshore
b13 alternatives, (i.e. solar/nuclear/wave power or energy conservation)
b14 conventional (fossil-fuel) power stations would still be needed
b15 needs improved
b16 Scotland is serving as a guinea-pig
b17 money-making exercise for land-owners
b18 miscellaneous quote regarding Scotland

**c traffic and roads**
c1 alternative route is more suitable
c2 widening the road will increase road speeds
c3 widening the road will increase risk/incidence of accidents
c4 the widening process will cause hold ups (i.e. for commuters and school bus)
c5 widening the road will increase traffic volume
c6 widening the road will create 'rat runs'
c7 widening the road will bring strangers to the area
c8 widening the road will destroy the red squirrel habitat
c9 widening the road will mean destroying/cutting back mature roadside trees
c10 widening the road will increase danger to non-car road users (i.e. walkers/cyclists/horse-riders) in the country
c11 construction traffic will increase danger to pedestrians in [local town]
c12 construction traffic will cause traffic jams in [local town]
c13 construction traffic will slow down emergency services

c14 construction traffic will increase parking in residential areas in [local town]
c15 construction traffic will damage roads/bridges/the church wall
c16 construction traffic/increased traffic on new road will kill more hedgehogs/deer/squirrels
c17 construction traffic will be damaging for businesses in [local town]
c18 the road would need to be restored to its current size/shape/beauty after construction
c19 could components be airlifted to site?
c20 personal user of road on a daily/regular basis – concerned about disruption
c21 other
c22 construction traffic will cause a nuisance/inconvenience/disruption to local residents
c23 increased traffic on the road will cause more accidents

**d tourism**
d1 job losses
d2 visitors will be less likely to return if the natural beauty of the area is spoilt
d3 the wind farm would be visible from the [A road] tourist route
d4 the [local walking trail] would be adversely affected
d5 the wind farm would negatively affect local income from tourism

**e ornithology**
e1 damage to feeding or nesting sites
e2 physical harm from turbines
e3 osprey
e4 black grouse/blackcock
e5 plovers
e7 other raptors
e8 geese
e9 owls
e10 hen harriers
e11 other bird species

**f impact on individuals/families**
f1 reduction in property value
f2 property unsaleable
f3 loss of TV signal
f4 stress of the planning process
f5 ruined views
f6 reduced quality of life
f7 negative effect on livestock
f8 pollution of private water supply (quality)
f9 reduction in private water supply (quantity)
f10 damage/risk to private water supply (uncertainty)

**g archaeology**
g1 historic battle sites
g2 ancient monument
g3 stone dykes
g4 prehistoric settlement

**h environmental degradation**
h1 peat bogs
h2 red squirrel colony

h3 local protected area
h4 wildlife habitat
h5 Scotland has unique beauty
h6 the site is near to an important garden
h7 the area is beautiful/unspoilt/peaceful/a wilderness
h8 there is always more environmental damage than anticipated/calculated
h9 the area is already spoilt/over-developed
h10 effects on wildlife (i.e. animals)

**j the planning process**
j1 no traffic surveys have been conducted
j2 community council has been too slow to object
j3 individuals have had no formal notification from planners
j4 registration has been backdated
j5 planners are not critical of UK policy/the claims made for wind power
j6 the Environmental Statement is a whitewash
j7 nothing else would be allowed to be built on a site like this
j8 waste of planning and administrative resources
j9 local residents have not been given an opportunity to understand the issues or debate them publicly
j10 lack of adequate research into wind speeds
j11 remaining doubts in environmental statement over water supply
j12 a large number/the vast majority of residents are against the proposal
j13 proposal brought in at a time when most people are busy/away on holiday
j14 council-developer interactions
j15 criticisms of techniques used by the developer (i.e. in assessing noise levels or drafting the environmental statement)
j16 criticisms of techniques used by the council

**k community fund**
k1 more appropriate to compensate individuals
k2 no real community
k3 should not be apportioned by the Council
k4 people affected by the wind farm won't benefit
k5 community funding equates to bribery

**l renewables policy**

**m other**
l1 low flying aircraft will be affected/present hazard
l2 used to be a firing range – danger from shells
l3 plea to councillors
l4 opposing other developments as well
l5 no demonstrable benefit
l6 there should be a regional/national strategy
l7 location, (i.e. proximity to the boundary of a National Park)
l8 legitimising/claim to credibility (i.e. long-term resident/expert knowledge/regular visitor)
l9 local concerns treated with contempt (by developers)

**Annex 3: Sample Interview Guide**

Introduction

- Describe your connection with the proposed wind farm?
- Can you talk me through the history of the planning application from when you first heard about it up until the point that an appeal was lodged?
    - what were the key developments/turning points?
- At what point did you become involved with the project/planning application/opposition campaign?
- Did you find the level of opposition surprising? (i.e. number of letters)
- What do you think the main grounds for objection were/What were your main reasons for objecting to/supporting the planning application?

The Appeal

- How did you feel about the inquiry before it began?
- How did you feel about your case going into the inquiry?
    - How did you feel about it afterwards?
- What was your general impression of the inquiry?
- Please give me your reflections on each of the following key actors:
    - The Reporter
    - The Advocates
    - Representatives of the Developers
    - Representatives of the Council
    - Representatives of the Opposition Group
    - Expert Witnesses
    - Local Media
- What were the best and worst things about the inquiry process?

The Inquiry Report/The Verdict

- How did you feel about the report?
- Do you think it dealt with all the issues?

Reflections on the Planning Process

- Were you satisfied by the planning process?
- If you could change one thing about the planning process what would it be?
- Do you anticipate any long-lasting effects on the local community?