

Introduction:

In order to allow markets to adjust to deregulation of the electric industry in Delaware in 2001, the state government mandated a five-year rate freeze. When this period ended in 2006, Delaware Standard Offer Service customers of Delmarva Power & Light endured a 59% increase in electricity rates. In response, the Delaware state legislature passed the Electric Utility Supply Act of 2006 (HB6). This required a Request For Proposals (RFP) for new power for the state of Delaware that would ensure long-term price stability, be environmentally beneficial, and use new technology.¹ In compliance with HB6, Delmarva Power & Light issued a Request For Proposals for a new 400 MW power purchase agreement in August 2006.² In December 2006, three bids were submitted to the Delaware Public Service Commission (PSC) for review: 600 MW offshore wind, 600 MW integrated gasification combined cycle coal, and 177 MW natural gas.³ Though the bill specifically required new environmentally responsible technologies, the primary emphasis explicit in the bill was to stabilize prices.⁴ Preliminary analysis of public input in the Delaware PSC's decision indicates that this is may not be a priority of Delaware residents. The PSC reported unprecedented levels of public participation in related hearings and receipt of thousands of letters addressing the

¹ Electric Utility Retail Customer Supply Act of 2006 (HB6).

² Delmarva Power & Light Company's Compliance Filing and Application For Approval of Proposed Request For Proposals, filed 6 August 2006.

³ PSC staff Summary of Bid Evaluation Report, February 27, 2007.

⁴ HB6.

topic.⁵ Initial tabulation of PSC hearings transcripts indicates significant public support public support for the offshore wind proposal, which according to the state's independent consultant at the time was not the least expensive option.

Problem:

Renewable energy is currently gaining favor with the general public for a variety of reasons from energy independence to climate change mitigation. While it is clearly fashionable to support clean and renewable energy sources at this time, it is another matter entirely to agree to a major construction project within site of one's home or favorite beach. There are currently no offshore wind farms in the United States, though proposals are being considered by several states on the east coast. A project planned by the Long island Power Authority (LIPA) was cancelled last fall after receipt of a report predicting the project would cost more than twice the original estimate.⁶ Massachusetts has been debating Cape Wind Associates' proposed 130 turbine, 420 MW wind farm off Cape Cod since 2001.⁷ Local opposition there has complicated the approval process considerably, the main opposition group contending that while its members support offshore wind in general, they do not want it in Nantucket Sound.⁸ Offshore wind development companies, parts manufacturers, government officials, and private citizens in the United States and abroad are watching the Delaware process with great interest, and will likely interpret a successful bid as opening the door to offshore wind development in the United States. However, the Massachusetts experience has shown

⁵ Delaware PSC public record

⁶ "Assessment of Offshore Wind Power Resources" report prepared for Long Island Power Authority by Pace Global Energy Services, 22 August 2007.

⁷ Cape Wind Associates, LLC. <http://www.capewind.org>

⁸ Alliance To Protect Nantucket Sound, <http://www.saveoursound.org>

that one case should not be taken as representative of general feelings toward offshore wind development. Clearly each development opportunity will involve unique circumstances resulting from the state's regulatory structure, the local population, and the developer's strategy. I believe, however, that it is possible to extrapolate a broader significance from the Delaware energy debate. Careful interpretation may reveal not only the level of external validity of the Delaware experience, but also provide a new context for citizen participation in environmental policy decisions.

Though there was no major organized coalition of endorsement and many individuals' participation was spontaneous, multiple citizens' groups participated in the process. Established groups such as the Delaware chapters of Sierra Club, the Audubon Society the League of Women Voters, local/ regional groups such as the Philadelphia-based Clean Air Council, Citizens for Better Sussex, Green Delaware all encouraged their memberships to participate and catalyzed action in the general public.⁹ A relatively new Sussex County group, Citizens For Clean Power, adjusted its focus from opposing the Indian River coal burning power plant to advocating the proposed wind farm.¹⁰ Though the level of organization involved in these efforts has grown to include alert lists for phone and mail campaigns, form letters, and organized lobbying trips to the Delaware state house, there still exists no formal organized coalition or group specifically dedicated to this particular cause.

Limited experience with offshore wind in the United States makes interpretation of this enthusiasm lack context. The only other example of public sentiment toward a proposed project is found on Cape Cod MA, where support seems to be primarily in

⁹ Delaware PSC public record.

¹⁰ Nagengast, L, 2007, "A New Sense of Power" *Delaware Beach Life*, September 2007: 1.

response to organized opposition, the latter being dominant.¹¹ Until recently, no other offshore project had proceeded past preliminary planning stages leaving the Cape Wind proposal, the associated public fervor and the motivations of the primary opposition group there, the Alliance To Protect Nantucket Sound as the sole example of US public opinion in a real world situation involving an offshore wind farm proposal. Its usefulness as a case for comparison is therefore limited. Without a “control” or a general trend for comparison, Delaware’s acceptance of Bluewater Wind’s development bid cannot on its surface be considered either an aberration or a mandate for further development on the east coast. While the Delaware process may seem relatively untainted compared to that on Cape Cod where unique circumstances have resulted in opposition-an entire book has been written on the behind-the-scenes battles that have taken place in that area-developers, advocates, and policy makers cannot blindly assume the total absence of local conditions facilitating acceptance here.¹² Conversely, the existence of seemingly significant local conditions does not mean that those conditions actually determined the general public’s position on the issue. If local factors in Delaware were overridden by broader concerns such as global warming, it may be appropriate to cautiously consider it an indicator (or at least a legitimate data point) of more general feelings toward offshore wind development in eastern coastal areas. This analysis should elucidate supporters’ motivations, and reveal underlying causes of the seemingly hospitable environment in Delaware. Knowing those may make it possible to predict what sort of reception will await offshore wind developers in communities on the east coast.

¹¹ Semi-structured interviews conducted by the author in November 2007 with leaders and members of Clean Power Now, the major advocacy organization supporting the Cape Wind project, support this.

¹² Williams, Wendy, and Robert Whitcomb (2007). Cape Wind: Money, Celebrity, Class, Politics, and the Battle For Our Energy Future On Nantucket Sound. Public Affairs, New York, NY.

Though the Delaware PSC and its collaborating agencies have evaluated the bids and contract proposals largely on how well they fulfill the requirements of HB6 (price stability, new environmentally beneficial technology) solicited public input on the process. Public workshops, hearings, and official comment periods were well-publicized, and drew hundreds of commenters between August 2006 and April 2007.¹³ The level of citizen participation and the fact that much of it was in support of the wind proposal caught the attention of public officials, industry representatives, the press, and casual observers. Members of both the state agencies that would choose the bid and the state legislature have indicated that they took notice of public opinion in making their decision.

Research Questions:

1. What motivated supporters of the Bluewater Wind offshore wind farm proposal to take action in the form of letters, testimony, demonstrations, op-eds, and formation of citizens groups? (What is the nature and origin of the support for the Bluewater Wind Proposal?)
2. What are the perceived problems different groups are attempting to address by participating in this process?
3. How does identity influence the perceptions and actions of participants in this process?
4. What is the most effective course of action for citizens participating in the environmental/energy policy process?
5. How does risk perception influence the perceptions and actions of participants?

¹³ PSC Public Workshop, 18 August 2006; PSC Public Hearing in Dover De 6 March 2007; PSC Public Hearing in Wilmington DE 8 March 2007; PSC Public Hearing in Georgetown DE 13 March 2007; PSC Public Hearing Dover DE 20 November 2007

6. How do participants conceive of the governmental apparatus at work in this process? (What is the perceived relationship between citizens and state officials?)
7. How do participants perceive industry in general and companies involved in the process specifically?
8. What is the significance of Delaware energy debate to renewable energy policy decisions and renewable energy development?

The expressed motivations of proponents may reveal if their support is a product of a generally favorable attitude toward renewable energies or of specific local conditions that have made the wind proposal attractive in this particular context. If statistical analysis of these testimonies shows tendencies that fit the framework of advocacy driven by personal risk/negative motivators, it may indicate that the seemingly broad public support for the Bluewater Wind proposal is in fact a result of local conditions, and should be extrapolated to other states and regions only in areas where similar conditions exist. If statistical analysis of the testimonies show tendencies that do not fit this (admittedly composite) framework, implying advocacy triggered by relatively positive motivations, i.e. wanting wind power for the sake of wind power as a renewable solution to broader issues, that may indicate a more hospitable climate for offshore wind development on a regional scale. If this is the case, and no major confounding variables are noted in analysis, that may indicate a more widespread sentiment, and good conditions for development in other places where a significant offshore wind resource exists. If there is no discernable pattern, developers must continue to address each possible development site as a completely unique social case.

Literature Review:

The prospect of an offshore wind farm in Delaware has excited support and criticism, skepticism and hope, idealism and suspicion from various stakeholders. Lawmakers, companies, administrators, Non-Governmental Organizations (NGOs), and private citizens have joined in vigorous debate as to whether or not the project should proceed. The process has been a commentary on both environmental and energy policy formulation. It has been a startling case of citizen participation, the origins of which have considerable bearing on the outcome of the debate and its significance for developers, environmentalists, and policy makers. This thesis aims not to isolate the role of one particular pre-chosen policy or social mechanism in this process, as many studies do, but rather to identify as many influences as possible and interrelationships between them, to form a “wide angle lens” image of the environmental policy and advocacy landscape upon which this decision process is playing out.

Introducing their basic text, “A Primer For Policy Analysis”, Stokey and Zeckhauser suggest that before doing anything else, one must establish context for analysis by identifying the “underlying problem to be dealt with” and “specific objectives to be pursued in confronting this problem”.¹⁴ In the Delaware energy debate, multiple stakeholders seem to be pursuing markedly different goals as they participate in the process. Delaware State lawmakers wrote HB6 to mitigate the effects of post-deregulation electricity price increases that were generally considered a failure of the market.¹⁵ Citizens’ groups involved in the process espouse motivations ranging from

¹⁴ Stokey, E. and R. Zeckhauser, “A Primer For Policy Analysis”

¹⁵ Electric Utility Retail Customer Supply Act of 2006 (HB6).

global warming mitigation to decreases in Appalachian mountaintop coal mining. Some groups express a variety of concerns encompassing different time frames and scopes. Citizens For Clean Power, a local Delaware group, cites both local health concerns and global warming as motivating their advocacy activities. From a policy perspective, this makes exploration of policy alternatives difficult.

Though the situation in Delaware seems unique, there is a sizable body of literature concerning citizen participation in environmental policy and the policy process itself. Environmental worldviews, activism, opinions, perceptions, and actions are all studied in an effort to explain why people act the way they do in relation to environmental issues, and how they will act in response to proposed environmental policies.

In their discussion of individual concerns as they relate to organizational values, Bansal¹⁶ differentiate values from concerns, integrating ideas from Rokeach¹⁷ that our values are part of our emotional bedrock, slow to change, constantly and subtly affecting our perceptions and our decisions. Concerns are considered an immediate manifestation of underlying values, surfacing in response to a situation that is in some way not in accordance with an individual's values. Though the situational nature of concerns makes them easier to identify as motivators for action, it is a mistake to assume that they are the root cause of an activist's participation. There is likely not a perfect linear relationship between one identified value and one observed concern, but rather a combination of values may produce a tendency toward certain concerns and consequent actions.

¹⁶ Bansal, P. (2003). "From Issues To Actions: The importance of individual concerns and organizational values in responding to natural environmental issues". *Organization Science* 14 (5), 510-527.

¹⁷ Rokeach, M. (1973). The Nature of Human Values. Free Press, New York, NY.

Kempton, Boster, and Hartley assert that values refer to a person's "...guiding principles of what is moral, desirable, or just."¹⁸ People may take action on an environmental issue simply because they feel it is the right thing to do based on the type of values the person uses to contextualize the world around them. The authors identify three types of values in their research: Religion, anthropocentric values, and biocentric values, saying, "Religion, whether traditional Judeo-Christian religious teaching or a more abstract feeling of spirituality; anthropocentric (human-centered) values, which are predominantly utilitarian and are concerned with only those environmental changes that affect human welfare; and bio-centric (living-thing-centered) values, which grant nature itself intrinsic rights, particularly the rights of species to continue to exist".¹⁹ They elaborate on these three perspectives to include various arguments and rationales made based on them. They present values not as simply a platform upon which concerns are piled, though arguments such as the need to preserve the earth for future generations as an example of an anthropocentric value is similar to the relationship implied by Bansal. Additionally, Kempton, Boster, and Hartley indicate that values may be motivations in themselves that can combine with other motivations to produce action. This view does not seem to be mutually exclusive from Bansal's. What Bansal consider "concerns" that are the actual motivators to action, Kempton, Boster, and Hartley consider complimentary motivators providing a particular *reason* that something is right or wrong. Kempton, Boster, and Hartley extend these findings to define "cultural models", frameworks for defining the relationship between humans and nature.²⁰ Such a

¹⁸ Kempton, W., James Boster, and Jennifer Hartley (1995) *Environmental Values in American Culture*. MIT Press: Cambridge, MA. 12.

¹⁹ *Ibid.* 87.

²⁰ *Ibid.* 2.

framework is unconsciously employed to process new information and form opinions on environmental issues. Olsen et al describe it well, "...each of us views the world through a firmly entrenched set of mental lenses. These lenses are such a fundamental and familiar part of our perceptual and cognitive abilities that we are usually oblivious to them. We rarely even think about them, let alone question their validity or attempt to change them."²¹

Together these values, models, concerns, and beliefs constitute the basic determinants of personal attitudes toward environmental issues. They allow us to attach meaning to statements made about environmental issues and associate those meanings with underlying cultural models. Once identified, models may be used to interpret individual actions and attitudes.

Ignatow extends these components of personal attitudes toward environmental issues to more general theory addressing relationships between nature and society. He proposes an "ecology model" which emphasizes the interaction between humanity and nature, putting faith in science and technology as mechanisms for achieving a harmonious relationship, and a "spiritual model" in which nature is "sacred" and human science and technology (and in fact interaction) can only do harm to it.²²

Lima and Castro²³ and Steg and Sievers²⁴ describe related "worldviews" in their articles relating the Douglas-Wildavsky cultural hypothesis to environmental issues. The Douglas-Wildavsky hypothesis relates societal structure to cultural fears of certain types

²¹ Olsen, M, D. Iodwick, and R. Dunlop, (1992) *Viewing The World Ecologically*.

²² Ignatow, G. (2006) "Cultural Models of Nature And Society: Reconsidering Environmental Attitudes and Concern" *Environment And Behavior*, Vol 38 No 4 July 2006 (443).

²³ Lima, M.L, and Castro, P. (2005). "Cultural Theory Meets The Community: Worldviews And Local Issues". *Journal of Environmental Psychology*, 25(1), 23-35.

²⁴ Steg, L. and Sievers, I. (2000). "Cultural Theory And Individual Perceptions Of Environmental Risks". *Environment and Behavior* 32(2), 250-269.

of risks and threats using a framework that identifies an individual's "grid" (the extent to which an individual's choices are determined by their position in a society) and "group" (the extent to which the society's members relate to one another). In short, patterns of fears and risk perceptions at a societal level are determined by each society's relationship structures.²⁵ While this framework yields four worldviews that they called hierarchist, fatalist, egalitarian, and individualist, literature often isolates individualism and egalitarianism as the most relevant groups opposing one another on environmental issues.²⁶ Egalitarians are categorized as "alarmed, dichotomized, sectarian, expecting imminent ecological disaster in a nature whose balance has been disrupted," and who generally favor behavioral society-wide behavioral changes as solutions to the perceived problem. These individuals supposedly believe that nature is delicately balanced and easily disrupted (as similarly reflected in Ignatow's "spiritual model").²⁷ Individualists, however, are described as not nearly so alarmed by environmental hazards. According to this model, these individuals see nature as a stable and resilient system, and generally believe institutional mechanisms already in place and potential technological solutions will be able to handle them.²⁸ In their 1995 study, Kempton, Boster, and Hartley demonstrated that there is considerably more unity of environmental values and beliefs resulting in a sort of mainstream American environmentalism, while the anti-environmentalism one might expect to find under the Douglas-Wildavsky hypothesis is in fact only represented on the societal fringes.²⁹

²⁵ Douglas, M., and Wildavsky, A. (1982). Risk and Culture: An essay on the selection of technological and environmental dangers. Berkeley: University of California Press.

²⁶ Ellis, R.J., and Thompson, F. (1997). "Culture and Environment in the Pacific Northwest", *American Political Science Review*, 91(4), 885-897.

²⁷ Steg and Sievers, 255.

²⁸ Lima and Castro, 24, 30.

²⁹ Kempton, Boster, and Hartley, 211.

O'Connor, Bord, and Fisher examine this concept of risk perception combined with "knowledge" (in this context means "knowledge" means understanding of global warming as a threat) as a determinant of environmental behavior and intentions in their 1999 study, ultimately determining that risk perception, while not complete substitute for general environmental beliefs, is a are a useful predictor of environmental behavioral intentions.³⁰ O'Connor, Bord, and Fischer further explore the connection between knowledge and risk perception as explanations for support of greenhouse gas emission reduction, ultimately finding that such cognitive explanations are more powerful indicators than economic or political ones. People who see a risk of personal harm/sacrifice as a result of climate change are more likely to support mitigation activities. They do point out that while conceptually most people want to reduce greenhouse gas emissions, modest personal sacrifices are more acceptable than those that may affect the economy in general, jobless rates in particular, or larger personal sacrifices such as seeking out and paying for "green" electricity. They also find that income alone is not as strong an economic indicator of support for mitigation activities as the previously mentioned variables (contradicting the commonly-held belief that financial security is an enabling variable of environmentalism in general and support of related policies specifically).³¹

O'Connor, Bord, and Fisher also assert that though environmentalism has become a broadly accepted concept, demographic characteristics such as age, education, and gender do have impacts on multivariate examinations of behaviors related to climate

³⁰ O'Connor, R, Bord R., and Fisher, A. (1999) "Risk Perceptions, General Environmental Beliefs, and Willingness To Address Climate Change", *Risk Analysis*, 19(3), 461-471.

³¹ O'Connor, R.E., Bord, R.J., Yarnal, B., and Wiefek, N. (2002) "Who Wants To Reduce Greenhouse Gas Emissions?" *Social Science Quarterly* 83(1), 14.

change when there is some risk posed to respondents.³² Olsen et al find that age is inversely related to ecological beliefs and values, education is directly related to ecological beliefs and values.³³ Ignatow finds that age is inversely related to his ecology model, directly related to his spiritual model. Education is directly related to the ecology model, and inversely related to his spiritual model.³⁴

These studies establish the difference between actual behavioral changes and *intentions*. One problem with studies executed in a theoretical space is that it is impossible to completely separate the two. The Delaware case, however, is an actual example of citizens indicating their willingness to pay (more), not just for green electricity, but for offshore wind power specifically.

Steg and Sievers consider risk perception to be not only an integral part of the formulation of environmental policy, but also a determinant of the acceptability of those policies to the public.³⁵ Another more specific concept relevant to this study is a more specific level of concern/risk assessment affected not just by a view of the basic nature of the environment, but also by the scope (local/global) of risk being considered. The concept of “environmental hyperopia” first coined by Uzzell in 2000 addresses the idea that people are often more concerned about global-scale environmental threats with possibly catastrophic consequences (such as global warming) than they are about familiar local environmental threats (such as a local coal-burning power plant).³⁶ Lima and Castro also examine this idea in the context of the Douglas-Wildavsky hypothesis

³² O’Connor, Bord, and Fisher, 469.

³³ Olsen, M., Lodwick, D., and Dunlap, R. (1992) Viewing The World Ecologically. Boulder, CO: Westview Press. 68.

³⁴ Ignatow, 455.

³⁵ Steg and Sievers, 251.

³⁶ Uzzell, D. (2003). “The Psycho-Spatial Dimension of Global Environmental Problems”. *Journal of Environmental Psychology*, 20 307-318.

separately relating environmental concern and risk perception at the local and global levels, ultimately finding that while environmental hyperopia does seem to be real, its effect is moderated by individuals' general perceptions of nature. "Egalitarians", for instance, seemed more susceptible to environmental hyperopia than "individualists". This supports the general outline of the character of these groups, as individualists would be more confident that some solution for global problems will present itself, but will be more likely to become distressed by local threats to their personal welfare.³⁷

Part of the concern felt by individuals may be due to the concept of "place" and its contribution to individual identity. "Place" is a well-known determinant of both individual environmental concerns and policy decisions. Noting, for instance, the apparent enthusiasm in Delaware regarding the possibility of an offshore wind farm, it is tempting to write off the battle over Nantucket Sound as manufactured opposition (and the growing grassroots support group there as the true voice of the people in that area). However, Kempton et al found a strong component of a sense of stewardship based in "place" identification motivating many opponents of the proposed Cape Wind offshore wind project in Nantucket Sound. In this particular case, Cape and Islands residents feel that an offshore wind farm is a violation of a sacred area that is part of their identity.³⁸ While it would seem to follow that the ocean itself would generally fall into this emotional category, it has been suggested that there is a less proprietary feeling toward the open ocean than is expressed toward semi-enclosed areas (such as a bay or sound).³⁹ Cheng et al emphasize that the meaning of an activity may change with the "place"

³⁷ Lima and Castro, 33.

³⁸ Kempton, W., Firestone, J., Lilley, J., Rouleau, T., Whitaker, P. (205) "The Offshore Wind Power Debate: Views From Cape Cod". *Coastal Management*, 33: 119-149.

³⁹ Firestone, J., Kempton, W., and Krueger, A. (2008) "Delaware Opinion on Offshore Wind Power, Final report, prepared for Delaware Department of Natural Resources and Environmental Control. 19.

context.⁴⁰ They also emphasize the role of this concept (whether acknowledged or not by policy-makers) in inspiring collective action, saying that, “Outside the power plays over traditional economic and environmental policy positions conducted by interest groups in legislatures, formal agency planning processes, or courtrooms, natural resource politics involves citizens whose expressions of value for natural resources are rooted in connections with places, connections that define in part who they are.”⁴¹

Though there was no major organized coalition of endorsement and many individuals’ participation was spontaneous, multiple citizens’ groups participated in the process. Established groups such as the Delaware chapters of Sierra Club, the Audubon Society the League of Women Voters, local/ regional groups such as the Philadelphia-based Clean Air Council, Citizens for Better Sussex, Green Delaware all encouraged their memberships to participate and catalyzed action in the general public.⁴² A relatively new Sussex County group, Citizens For Clean Power, adjusted its focus from opposing the Indian River coal burning power plant to advocating the proposed wind farm.⁴³ Though the level of organization involved in these efforts has grown to include alert lists for phone and mail campaigns, form letters, and organized lobbying trips to the Delaware state house, there still exists no formal organized coalition or group specifically dedicated to this particular cause.

While local chapters of larger organizations such as Sierra Club and Audubon Society have undoubtedly played a role in this process, local groups such as Citizens For Clean Power and Citizens For a better Sussex have played pivotal roles in forcing state

⁴⁰ Cheng, A., Kruger, L., and Daniels, S. (2003) “‘Place’ As An Integrating Concept in Natural Resource Politics: Propositions For A Social Science Research Agenda”. *Society And Natural Resources*,16:87-104.

⁴¹ *Ibid*, 93.

⁴² Delaware PSC public record.

⁴³ Nagengast, L, 2007, “A New Sense of Power” *Delaware Beach Life*, September 2007: 1.

government to seriously consider the possibility of an offshore wind farm. While Citizens For a Better Sussex seemed interested in the overall quality of life in Sussex County, their activities, and the *raison d'être* for Citizens For Clean Power, is essentially oppositional and political. Though Kempton et al state that this is in fact not as common as is commonly thought-only about 20% of local groups are formed in opposition to a local threat -the local coal plant as a threat in Sussex County seems to be so pervasive that it may have produced a population of groups that is not representative of national trends. It may be that the small number of local groups formed in opposition to local threat nationwide is low because such threats are usually either not present, not obvious, or are integral to the lives of the local population (for instance, a paper mill whose fumes peel the paint off of every building in town, but also employs a significant portion of the local population).⁴⁴ Whatever the reason, the groups mentioned here do fit the model formed by Kempton et al in that despite their lack of affiliation with a larger national structure, they continue to significantly contribute to what could be a groundbreaking state-wide energy policy decision. They are working proof that local groups that fly under the radar and may be unknown outside their issue sphere are still capable of large-scale achievements.

This may be the kind of change Hays referred to as incremental in his 1992 article, "Environmental Political Culture and Environmental Political Development" analyzing how changes in environmental culture bring on regional shifts and subsequent adjustments in voting records of legislators. I do not mean to imply that the voting record will be significantly changed by that one election decision. Rather, even though this

⁴⁴ Kempton et al, 2001. "Local Environmental Groups: A Systematic Enumeration in Two Geographical Areas"....572.

process constitutes a lurch forward in Delaware's environmental culture, it may also be indicative of the long-term shifts he describes in regional environmental culture.⁴⁵

The direct effects of CCP in particular are demonstrated in John Starkey's Coastal Point article, "Grass-roots Efforts Integral For Wind". Starkey includes quotations from various Delaware public officials who expressed their surprise at the force of the public's sentiment and acknowledged that the combination of several state and local citizen's environmental groups were instrumental in both educating the public and in getting the public's message across to members of the state government. One state representative recalled that, "I had more people lobbying me in Dover for Bluewater than any other. You made one comment and everybody bombarded you with e-mails, letters and calls."⁴⁶ The article went on to imply that one candidate in a special election for a state representative's seat lost the election partly because of public perception that he was in favor of the NRG proposal.

In Todd Gitlin's 16 April 2000 Washington Post article, "Shouts Bring Murmurs, and That Works", the author emphasizes the roles both "outsiders" (members of the public who demonstrate in support of or opposition to certain issues with perhaps relatively limited understanding of the issue itself) and "insiders" (academics and lawyers who are familiar with the workings of bureaucracy and may have a better grasp of the actual issue) in the process of social change. He feels that the former raises awareness, while the latter actually participates in policy changes, writing,

⁴⁵ Hays, S. (1992) "Environmental Political Culture and Environmental Political Development: An Analysis Of Legislative Voting, 1971-1989". *Environmental History Review*, Summer, 102-112.

⁴⁶ Starkey, J. (2007) "Grassroots Effort Integral For Wind". *Coastal Point*.

“Outsiders may resent the fact, but one of their prime functions is to improve the clout of insiders...to energize actual and potential reformers on the inside...to precipitate public debates that have been suppressed by establishments or pursued only by experts in closed rooms where inertia and groupthink overwhelm dissent.”

While this is certainly being played out in Delaware right now, the presence of retired lawyers, professors, former government officials (former “insiders”) and participation by academics and practicing lawyers and lobbyists who straddle the line between “insider” and “outsider” may have helped citizens groups to focus their efforts and find the correct channels for effective communication with the insiders who matter most in this debate. These straddlers help to elevate the activists beyond Gitlin’s model of dilettantes whose most significant achievements are largely unintended.

According to King et al in their 1996 article, “Going Political: A framework For Environmental Interest Group Evolution”, these groups could conceivably accomplish their original task (in the case of CCP, that is cleaning up and eventually closing the Indian River power plant) and, faced with the possibility of going back to their normal lives or continuing their journey toward career activism, choose to re-evaluate their goals and possibly expand both their charter and their membership. One of King et al’s examples, the Gulf Coast Conservation Association (GCCA) initially formed in response to the threat of collapse of the local red drum fishery and expanded to regional and political activity once that threat was obviated.⁴⁷ While Citizens For Clean Power was also formed in response to a local threat of some kind, it is a health threat, it affects their

⁴⁷ King, L., Kaiser, R., and Countoururis, K. (1996) “Going Political: A Framework For Environmental Interest Group Revolution.” *Coastal Management* 24: 85.

community, and CCP started out political. I would predict that CCP will not expand to other issues and other localities after the offshore wind battle has been fought out partly because they have already expanded beyond their community to state level activities while working on their initial problem.

Aronson outlines an eight-step journey from disillusionment to empowerment during which individuals come to identify themselves as “activists”. Edwards describes individuals who had similar experiences in the beginnings of the environmental justice movement.⁴⁸ Both authors describe motivations that move ordinary citizens to engage in activism in the anti-toxics and environmental justice movements. These movements are initially inspired by much more personal and localized motives such as the safety and wellbeing of individuals, their families and their communities.

Aronson describes stages of “transformation” citizens go through on their way to becoming career activists, and the first is “breaking in”, when his subjects “perceived a health threat that provoked them to cross the threshold to action”.⁴⁹

While this sort of realization is a sufficient impetus for many citizens to take action, it must be accompanied by a feeling that action is necessary. Citizens must feel that the government has broken its contract with its constituents to act in their best interest. Edwards quotes Lois Gibbs (known for leading the Love Canal Home Owners Association), “Generally, people at first have blind faith in government. So when they go to the EPA or the state agency and show them there is a problem, they think the

⁴⁸ Bob Edwards, 1995, “With Liberty and Environmental Justice For All: The Emergence And Challenge Of Grassroots Environmentalism In The United States” in *Ecological Resistance Movements: The Global Emergence Of Radical And Popular Environmentalism*, Taylor, Bron Raymond, Ed.

⁴⁹ Aronson, H (1993) “Becoming An Environmental Activist: The Process Of Transformation Form Everyday Life Into Making History In The Hazardous Waste Movement.” *Journal of Political and Military Sociology* 21: 70.

government will side with them. It takes about a year for them to realize the government is not going to help them.”⁵⁰ Aronson describes this feeling as “betrayal”, (though it may be better termed “empowerment”) the moment when individuals truly understand that they must not depend on their local, state, or federal government to fix the perceived problem, and may in fact have to push the government to take any action at all.

“The emerging activists redefined both the government and themselves. As they sought help from the government they came to the conclusion that government decisions are not based on who is right and what is fair. They came to see that to get the government to take the action they wanted they had to exert a great deal of pressure. Moreover, they discovered that they could not “let up,” they had to watch the government incessantly. It is this activity that leads to an identity transformation.”⁵¹

This study will attempt to relate environmental worldviews to the more immediate variables that encourage private citizens to take on advocacy activities as well as to the particular motivations expressed by commenters. It will also examine how these same forces affect the actions of those who participate by speaking or writing only once. The residents of Delaware will be an appropriate case study for testing the theories included here and for reassessing some of the statistical analyses of surveys simulating this type of situation.

Possible Significance of Results:

⁵⁰ Edwards, 45.

⁵¹ Ibid, 77.

The results of this study may be significant to multiple groups including:

1. Offshore wind industry: This study will provide context for the behavior of Delmarva residents and the outcome of the energy debate, whatever that outcome may be. cursory examination of comments made by advocates shows that this is not a simple matter of general goodwill toward the wind industry and development of the US continental shelf. Though I hope to avoid laying out a roadmap for manipulation of local populations, I believe I will be able to provide insight into the values and concerns that produce a favorable climate for offshore wind power development.
2. Policy makers at the local, state, and federal levels: This study will reveal changes in the traditional underpinnings of energy and environmental policy that have resulted from changing environmental, economic, and regulatory conditions. The unexpected reactions of the public to the Delaware state legislature's policy decisions may belie conventional wisdom (for example, the regulation-era norm that customers want the cheapest electricity they can get, and the idea that customers do not know or care where their electricity comes from). Policy alternatives, and indeed the basic methods of energy policy formulation, may be reconsidered.
3. Electricity industry: The electricity industry's (and again the policy makers') traditional structure of PPAs, IRPs, and RFPs may need to be reconsidered to take into account the special case currently presented by renewable energies (for example, the financial advantage provided to developers by long-term PPAs). Additionally, electricity providers may also have to take into careful account the

wishes of their customers beyond consistently available electricity, and instead cater to the growing environmental values changing the way consumers use energy.

Methods:

In order to assess the origins and explain the existence of the apparently widespread public support for offshore wind in Delaware, I plan to conduct an inductive longitudinal survey of public comments submitted to the Delaware PSC during the 21 months between August 2006 and May 2008. The comments comprising my data set were submitted to the PSC both during designated comment periods and as negotiations and bid submission took place. The process (and hence the study) may be divided into four distinct periods⁵² to produce a longitudinally stratified sample:

1. August 1-December 1 2006: RFP comment period
2. December 2 2006-May 22 2007: Bid assessment period
3. May 23 2007-December 18 2007: Contract negotiations between Bluewater Wind and Delmarva Power & Light
4. December 2007 19-June 2008: Legislative debate period⁵³

Though comments were also submitted to other state agencies as well as the state legislature in general and individual senators and representatives, I plan to include only those submitted to the PSC. This is appropriate both because the PSC was the primary

⁵² Delaware Public Service Commission official website: <http://depsec.delaware.gov/irp.shtml>

⁵³ When the proposed contract was submitted by the two companies for review, the state legislature halted the process pending further informational hearings. The Public has continued to comment on this and subsequent development.

agency administering the process, it openly solicited public comments throughout the process, and its statewide jurisdiction will eliminate the need to weight certain districts as might be necessary if comments from specific legislative districts were to be examined. Comments were submitted in various forms, but all have been logged on the PSC's website:

1. Spoken 3-5 minute testimonies at PSC public workshops and hearings⁵⁴
2. E-mails written and submitted electronically to the PSC throughout the process⁵⁵
3. Handwritten and typed letters mailed to the PSC throughout the process, both to the PSC as an entity and specifically addressed to its various members and staff⁵⁶
4. Phone calls made to the PSC⁵⁷

Some of those commenting in one of the first three manners submitted form letters and/or letters representing the views of sizable groups of people such as unions, clubs, and churches. All of these comments are part of the public record, obviating the need for human subjects review of this data source.

Further contextual data and background information will be drawn from reports in Delaware newspapers, particularly the Delaware News Journal, the Coastal Point, and the Cape Gazette. The News Journal in particular has dedicated significant space to the issue on a regular basis, and the same two reporters, Aaron Nathans and Jeff Montgomery have

⁵⁴ Transcripts recorded by court reporter provided by Corbett & Wilcox of Wilmington, Delaware and posted on the Delaware PSC website.

⁵⁵ Emails posted on the Delaware PSC website

⁵⁶ Handwritten and typed letters sent by mail were scanned and posted on PSC's website

⁵⁷ Comments submitted by phone were summarized by

followed the story since it began in 2006.⁵⁸ In addition, personal contact with advocates and participant observation data gathered at demonstrations, organizational meetings contributes a general understanding of the tone and perspective of many advocates' perspective and feelings toward the possibility of an offshore wind farm and the related decision process and will help me to better interpret their brief statements and letters.

I would also like to use information gathered in semi-structured interviews taken for a class project in Fall 2007.⁵⁹ The participants are confidential and there is little personal information other than demographics. The interviews focused mainly on the participants' view on the decision process and the relevance of individual participation in that process. If I cannot obtain an exemption I exclude the interviews from my formal analysis.

My primary research question is, "What motivated supporters of the Bluewater Wind offshore wind farm proposal to take action in the form of letters, testimony, demonstrations, op-eds, and formation of citizens groups?" While general, this question may be addressed descriptively on both a theoretical and a more concrete level. The general public, members of the public leading support efforts, members of the state legislature (those that support and those that oppose the project), Delmarva Power & Light, the Delaware PSC, NRG, Bluewater Wind, local newspapers, NGOs, unions, and probably other not yet identified, form a complex system of relationships. A qualitative approach will clarify the relationships between the players and the various motivations compelling individuals from multiple backgrounds to pursue the same goal-the approval of the proposal-with such vigor. It will also allow me to fully consider the data set and

⁵⁸ Aaron Nathans, Jeff Montgomery

⁵⁹ MAST 692, Environmental Values, Movements, and Policy, taught by Willett Kempton

increase confidence that I have identified as many concepts as possible for use in a statistical analysis. A statistical analysis will compliment the initial qualitative analysis by clearly demonstrating which motivations are prevalent. For instance, I may be aware, in the wake of a qualitative analysis, that both health concerns related to emissions from the Indian River power plant and climate change mitigation are motivating people to participate in the Delaware energy debate. Without quantifying the incidence of each in another sample, however, I may not be able to comment on which is actually the prevalent issue here. In order to assess the significance of the Delaware case for other would-be developers on the east coast with any confidence, I need to be able to comment on not only the mix of variables at work, but the proportions of each ingredient, so to speak. Therefore propose to examine the data set using both grounded theory techniques and statistical analysis.

In the qualitative portion of the study, I propose to begin by extracting concepts from an initial set of 15 comments from each section. If I do not feel saturation has resulted from that initial sample, I will continue until it has been reached before moving on to the next section. As briefly stated above, I will use the concepts and categories identified in this phase to identify relevant motivations and circumstances at work in this process. I will also use them for comparison with existing research. There exists a wealth of previous research to assist in contextualizing the comments being analyzed. While the comments themselves, keywords and concepts they contain, and to some extent my interpretation of their meanings will in themselves provide an understanding of the motivations prompting commenters to participate in the current Delaware energy debate, previously explored concepts including risk perception, “place”, general environmental

beliefs and perceptions, evolution from “ordinary” citizen to activist and the environmental justice and anti-toxics movements all provide insight into the perception frameworks and cultural models people may use to assess environmental issues and to determine their positions on environmental policies.⁶⁰

When conducting the quantitative portion of this study, I intend to code every sixth comment. There are somewhere between 2500 and 3000 comments to which I presently have access. This sample will give me between 400 and 500 comments for coding. I intend to obtain a representative sample of the comments submitted during the four stages of the debate identified above rather than of the Delaware population.

Comments have previously been examined for indications of the commenter’s support or condemnation of the BWW proposal, motivations for submission of the comment, and background information about the commenter.⁶¹ Those variables have been coded in an excel spreadsheet. I feel that the methods used to compile this data set uncovered mostly superficial motivations, and that there is much more to be learned during the compilation of the data set before any statistical analysis is begun. While this data set was compiled using less stringent methods than I plan to apply now, it will be useful to check my initial qualitative work against it to determine if my methods are turning up some of the basic concepts I have identified in the past. In this proposal, it will be useful for demonstrating the basic design I intend to use. The new data set that will come from my qualitative examination of comments will be reexamined for accuracy, clarity, appropriateness, and any information gaps before being applied to

⁶⁰ See accompanying preliminary bibliography for examples.

⁶¹ See accompanying code book.

SPSS for statistical analysis. Any apparent problems will be fixed by going back to the original transcripts and letters for resolution before entering the spreadsheet into SPSS.

Comments included in this study may be consistent with motivations associated with anti-toxics and environmental justice movements, and therefore may indicate specific local circumstances encouraging support for the wind farm. Variables established during previous tabulation of comments include:

1. Health concerns (both general and specific, current and future, for themselves, their children, and their grandchildren)
2. Local air and water pollution Local health care costs
3. Local effects of the Indian River power plant
4. Personal experiences or effects of the issues at hand
5. Possibly issues with local/state governance.

Comments included in this study may also be predominantly concerned with larger issues associated with collective harm and responsibility, such as:

1. Climate change (and associated issues such as carbon taxes)
2. Quality of the earth for future generations
3. General health of the wider environment
4. Sustainable energy
5. Oil/energy independence
6. The role of the Indian River power plant in those issues.⁶²

⁶² Note that mention of this power plant does not necessarily mean that the commenter is concerned only with local issues.

While price of electricity does not seem to be a pivotal issue for those who showed up to the PSC hearings, this analysis will demonstrate its relationship to other motivations and commenters positive or negative feelings toward the BWW bid.

The qualitative analysis and statistical analysis will be further supplemented with semi-structured interviews taken for a class project (MAST 692: Environmental Values, Movements, and Policy) during fall 2007 semester. Participants were selected by dividing commenters into two groups: known members of citizens' organizations and private individuals. Each individual was given a unique number and then selected using a random number generator to eliminate bias on my part. Interviews focused on individuals' motivations for commenting in hearings and letters as well as their own views of their role in this particular policy process. These interviews are valuable for several reasons. They supplement the testimony of specific individuals, allowing more than a three-minute comment period for explanations of their beliefs and opinions. The interviews took place six months after the bidding process ended, and I was able to get an "update" on the participants' activities and feelings about the issue and the process. They also provide a way to check the accuracy of my interpretations of their testimony when compared to the general picture that emerges from coding.

Proposed chapter outline

- I. Introduction
 - a. General information about this particular environmental policy process came about. An expanded version of the introduction to this proposal.
 - b. Justifications for this research project
 - c. Theoretical and concrete contributions to social science, policy relevance, interest to renewable energy industry
- II. Literature Review/history
 - a. Previous research in this area
 - b. Basis for theoretical framework
 - c. Background environmental/energy policy and citizen activism in environmental policy
- III. Methods/findings
 - a. Data sources
 - b. Decisions made about data set, sampling, statistical analysis techniques and tools
- IV. Findings
 - a. Perceptions between/among citizens, involved industries, and state officials of identities and relationships
 - b. Motivations for citizen action in this policy process
 - c. Role of citizens' perceptions and identity in encouraging activism and participation in this policy process.
 - i. Influence of problem identification and risk perception on perceptions
 - d. Most effective actions taken by citizen activists during their participation in this policy process
- V. Conclusion
 - a. Why did people participate
 - b. What made them effective or not effective
 - c. What can activists in other states learn from this
 - d. What can state governments learn from this

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Variable Name	Value Labels
ID#	Continuous
Name	Enter name of commenter
Gender	1=Male 2=Female
Profession	1=Academic 2=Lawyer 3=Doctor 4=Professional? 5=Trade 6=Homemaker 7=Retired 8=Student Code On!!!!!!
Date/Set	1=RFP evaluation hearing (16 Aug) 2=RFP comments (17 Aug - 7 Sept 2006) 3=IC report comments (3 Oct - 30 Oct 2006) 4=PSC hearing: Dover (6 Mar 2007) 5=PSC hearing: Wilmington (8 Mar 2007) 6=PSC hearing: Georgetown (13 Mar 2007)
Writtensvspoken	1=Email 2=Handwritten letter 3=Email form letter 4=Handwritten form letter 5=Spoken at hearing 6=Phone comment
Type of commenter	1=Private individual 2=NRG employee 3=Delmarva employee 4=Conectiv employee 5=Bluewater employee 6=SCS employee 7=Gov't employee 8=Union rep. 9=NGO rep. 10=Elected official 11=Other
Coal	Commenter's comments on coal powered generation 1=Positive 2=Negative 0=Void
Natgas	Commenter's comments on natural gas

	powered generation 1=Positive 2=Negative 0=Void
Wind	Commenter's comments on wind powered generation 1=Positive 2=Negative 0=Void
Nuclear	Commenter's comments on nuclear power generation 1=Positive 2=Negative 0=Void
Bid	Whether any bid for new generation is needed 1=Yes 2=No 0=Void
Process	Whether the RFP process was well-designed/fair 1=Positive 2=Negative 0=Void
<u>MeetsRFP? CHECK!!!!</u>	
<u>RFPcomment? CHECK!!!!</u>	
Contractsize	Commenter mentions the size of the contract called for in the RFP 1=Contract (# of MW) is too big 2=Contract (# of MW) is too small 0=Void (Contract size not mentioned)
Question	Commenter either asked a question or made a statement 1=Question 2=Statement
Problem	Problem commenter feels is being addressed by RFP 1=High electricity prices 2=Volatile electricity prices 3=Climate change 4=Local health problems 5=General pollution CODE ON!!!!!!!!!!!!!!!
Knowledge	Level of comprehension?????
Lowprice	Commenter mentions low electricity price 1=Commenter feels that winning bid

	<p>should bring low price</p> <p>2=Commenter feels that low price is relatively unimportant in this debate</p> <p>0=Not mentioned</p>
Pricestab	<p>Commenter mentions electricity price stability</p> <p>1=Winning bid should bring price stability</p> <p>2=Price stability is relatively unimportant in this debate</p> <p>0=Not mentioned</p>
Energyindep	<p>Commenter mentions “energy independence”</p> <p>1=Energy independence should be considered a goal in this debate</p> <p>2=Energy independence is unimportant in this debate</p> <p>0=Not mentioned</p>
Betterhealth	<p>Commenter mentions improved health of local residents as a goal</p> <p>1=Improved health should be a goal in this debate</p> <p>2=Health concerns are not a problem to be considered in this debate</p> <p>0=Not mentioned</p>
Envhealth	<p>Commenter mentions “Environmental health”</p> <p>1=A generally healthy “environment” is a goal to be considered in this debate</p> <p>2=A generally healthy “environment” is not a goal to be considered in this debate</p> <p>0=Not mentioned</p>
Stopcc	<p>Commenter mentions climate change mitigation</p> <p>1=Climate change mitigation is a goal</p> <p>2=Climate change mitigation is not a goal</p> <p>0=Not mentioned</p>
Lesspollution	<p>Commenter mentions less general pollution</p> <p>1=Less general pollution should be a goal in this debate</p> <p>2=Less general pollution is unimportant in this debate</p> <p>0=Not mentioned</p>
Sustainability	<p>Commenter mentions sustainability</p> <p>1=The winning bid should be a sustainable generation resource</p> <p>2=Sustainability is unimportant in this</p>

	<p>debate</p> <p>0=Not mentioned</p>
Faireval	<p>Commenter mentions bid evaluation</p> <p>1=Commenter feels that bids were being evaluated fairly</p> <p>2=Commenter feels that bids were not being evaluated fairly</p> <p>0=Not mentioned</p>
Bettergov	<p>The commenter calls for better governance by state representatives and agencies</p> <p>1=Yes</p> <p>2=No</p>
Senatehearings	<p>Commenter mentions Nov/Dec 07 Senate hearings</p> <p>1=Commenter feels hearings are necessary</p> <p>2=Commenter feels hearings are unnecessary</p> <p>0=Not mentioned</p>
Negotiations	<p>Commenter mentions BWW/DPL contract negotiations</p> <p>1=Commenter feels negotiations should continue</p> <p>2=Commenter feels negotiations should stop</p> <p>0=Not mentioned</p>
Energycons	<p>Commenter mentions energy conservation</p> <p>1=Energy conservation is a concern</p> <p>2=Energy conservation is not an concern</p> <p>0=Not mentioned</p>
Energyeff	<p>Commenter mentions energy efficiency</p> <p>1=Energy efficiency is a concern</p> <p>2=Energy efficiency is a concern</p> <p>0=Not mentioned</p>
Scope	<p>Level of the commenter's concern</p> <p>1=Local/Individual</p> <p>2=State</p> <p>3=Global</p> <p>4=L/I and state</p> <p>5=L/I and global</p> <p>6=State and global</p> <p>7=Other</p>

<p><u>Persaffected</u></p>	<p>The commenter has been personally affected by the presence of the Indian River coal burning power plant 1=Commenter/commenter's immediate family has been personally affected 2=Commenter knows someone who has 3=Commenter has been personally affected and knows someone who has as well 4=Commenter has not been affected and doesn't know anyone who has 0=Void (Personal/acquaintance affects are not mentioned)</p>
<p>Healthcarehidden</p>	<p>Hidden health care costs of fossil fuel use are a stated concern of the commenter 1=Yes 2=No (Hidden health care costs are not a concern in this debate) 0=Void (Hidden health care costs are not mentioned)</p>
<p>Healthcarerising</p>	<p>Rising health care costs are a stated concern of the commenter 1=Yes 2=No (Rising health care costs are not a concern in this debate) 0=Void (Rising health care costs are not mentioned)</p>
<p>Asthma</p>	<p>Asthma as an effect of the Indian River coal burning power plant is a stated concern of the commenter 1=Yes (Asthma is an effect of the IR plant and should be considered in this debate) 2=No (Asthma is not an effect of the IR plant and should not be considered in this debate) 0=Void (Asthma is not mentioned)</p>
<p>Mercury</p>	<p>Commenter states that mercury is a health threat originating at the IR plant 1=Yes (Mercury is a health threat originating from the IR plant and should be considered in this debate) 2=No (Mercury is not a threat originating from the IR plant and should not be considered in this debate) 0=Void (Mercury is not mentioned)</p>
<p>Cancer</p>	<p>Commenter states that cancer incidence in Delaware is elevated due to emissions from</p>

	<p>the IR plant</p> <p>1=Yes (Cancer rates should be considered in this debate)</p> <p>2=No (Cancer rates are unimportant in this debate)</p> <p>0=Void (Cancer not mentioned)</p>
Autism	<p>Commenter states that childhood autism is a health threat originating at the IR plant</p> <p>1=Yes (Autism should be considered in this debate)</p> <p>2=No (Autism is not a health concern originating from the IR plant and should not be considered in this debate)</p> <p>0=Void (Autism is not mentioned)</p>
Kidshealth	<p>Commenter specifically cites children's health issues</p> <p>1=Yes (Kids' health is threatened by the IR plant and should be considered in this debate)</p> <p>2=No (Kids' health is not specifically threatened by the IR plant and should not be considered in this debate)</p> <p>0=Void (Kids' health issues not mentioned)</p>
Futuregenearth	<p>Commenter states that the earth must be preserved for future generations</p> <p>1=Yes</p> <p>2=No (Preserving the earth for future generations should not be considered in this debate)</p> <p>3=Void (Preserving the earth for future generations not mentioned)</p>
Futuregenhealth	<p>Health of future generations is a stated concern of the commenter</p> <p>1=Yes (Health of future generations will be affected by the outcome and should be considered in this debate)</p> <p>2=No (Health of future generations should not be considered in this debate)</p> <p>0=Void (Health of future generations not mentioned)</p>
IRplant	<p>Commenter mentions Indian River coal burning power plant</p> <p>1=Positive comment</p> <p>2=Negative comment</p> <p>0=Void (Not mentioned)</p>
Airpoll	<p>Commenter mentions air pollution</p>

	<p>1=Air pollution is mentioned as a concern in this debate 2=Air pollution is considered not a problem of concern in this debate 0=Void (Air pollution is not mentioned)</p>
Waterpoll	<p>Commenter mentions water pollution 1=Water pollution is mentioned as a concern in this debate 2=Water pollution is not considered a concern in this debate 0=Water pollution is not mentioned</p>
IGCCclean	<p>Commenter mentions IGCC 1=IGCC is clean 2=IGCC is not clean 0=IGCC is not mentioned</p>
IGCCpractical	<p>Commenter mentions IGCC's practicality 1=IGCC is practical and will be an effective solution to commenter's concerns 2=IGCC is not practical and will not be an effective solution to commenter's concerns 0=IGCC's practicality is not mentioned</p>
Carboncapture	<p>Commenter mentions carbon capture's viability 1=Carbon capture is a viable technology 2=Carbon capture is not a viable technology 0=Carbon capture is not mentioned</p>
Carbontax	<p>Commenter mentions carbon tax 1=Unfair to pass on to customers 2=Fair to pass on to customers 3=Will make renewable energy necessary 0=Not mentioned</p>
Econjobs	<p>Commenter mentions jobs 1=Commenter's choice will provide new jobs 2=Another choice will take jobs away 0=Jobs not mentioned</p>
Econlocal	<p>Commenter's local economy mentioned 1=Local economy will benefit 2=Local economy will suffer 0=Local economy not mentioned</p>
Econstate	<p>Commenter mentions state economy 1=State economy will benefit from choice 2=State economy will suffer 0=State economy not mentioned</p>
Foreignoil	<p>Commenter mentions US dependence on</p>

	foreign oil 1=mentioned 2=not mentioned
<u>Sustargument CHECK!!!!!!</u>	
PSCcomment	Commenter mentions the Delaware PSC's participation in this debate/process 1=Positive comment 2=Negative comment 0=Not mentioned
Delmarvacomment	Commenter mentions DP&L's participation in this debate/process 1=Positive comment 2=Negative comment 0=Not mentioned
ICreport	Commenter mentions the Independent Consultant's <i>October 2006</i> report to the PSC 1=Consultant linked to Delmarva 2=Report is incorrect 3=Report is incomplete 4=Report is acceptable 0=Not mentioned
Deregulation	Commenter mentions deregulation of the electric industry 1=Deregulation is good 2=Deregulation is a mistake 3=Electric industry should be reregulated 0=Not mentioned
Inconvtruth	Commenter mentions the movie "An Inconvenient Truth" 1=Movie proves we need to take action on climate change issues 2=Movie is inaccurate and should not be considered a reason to take action on climate change issues 0=Movie is not mentioned
Windinter	Commenter mentions offshore wind as an intermittent energy source 1=Commenter feels wind is too intermittent to supply electricity for this RFP 2=Commenter feels that wind output profile cannot provide baseload power 3=Commenter feels intermittency will not be a problem and wind is appropriate for this RFP 0=Not mentioned

Windkillsbirds	<p>Commenter mentions concerns that offshore wind farms are hazardous to certain avian populations</p> <p>1=Wind farm will kill significant numbers of birds</p> <p>2=Wind farm will not kill significant numbers of birds</p> <p>3=Commenter cites scientific study to back up claim that wind farm will kill significant numbers of birds</p> <p>4=Commenter cites scientific study to back up claim that wind farm will not kill significant number birds</p> <p>0=Not mentioned</p>
Windnavhaz	<p>Commenter mentions offshore wind farms as a possible navigational hazard</p> <p>1=Commenter feels that wind farm will be a navigational hazard</p> <p>2=Commenter feels wind farm will nt be a navigational hazard</p> <p>0=Not mentioned</p>
Windhurtseco	<p>Commenter mentions possible effect of offshore wind farm on coastal ecosystems</p> <p>1=Commenter feels wind farm will ave positive effects on coastal ecosystem</p> <p>2=Commenter feels wind will have negative effects on coastal ecosystem</p> <p>0=Not mentioned</p>
Windinfra	<p>Commenter mentions infrastructure needs of proposed offshore wind farm</p> <p>1=Commenter feels that insufficient infrastructure exists for proposed offshore wind farm</p> <p>2=Commenter feels that sufficient infrastructure exists for proposed offshore wind farm</p> <p>3=Commenter feels that sufficient infrastructure can easily be added for proposed offshore wind farm</p> <p>0=Not mentioned</p>
Windrealistic	<p>Commenter mentions the extent to which an offshore wind farm is a realistic (practical) for this RFP</p> <p>1=Commenter feels wind farm proposal is realistic</p> <p>2=Commenter feels wind farm proposal is</p>

	<p>unrealistic 0=Not mentioned</p>
Windfish	<p>Commenter mentions that offshore wind farm will affect access/fish populations for anglers 1=Commenter feels that wind farm will have a positive effect 2=Commenter feel that wind farm will have a negative effect 0=Not mentioned</p>
Windprice	<p>Commenter mentions price of offshore wind 1=Commenter feels price will be relatively low 2=Commenter feels price will be too high 3=Commenter feels price will be high but us willing to pay it 4=Not mentioned</p>