# NINTED STATES. TO ASSENCE TO ASSE

# **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

#### REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE REGIONAL ADMINISTRATOR

February 24, 2005

Colonel Thomas L. Koning, District Engineer US Army Corps of Engineers 696 Virginia Road Concord, MA 01742-2751

Secretary Ellen Roy Herzfelder Executive Office of Environmental Affairs Attn: MEPA Office EOEA No. 13061 100 Cambridge Street, Suite 900 Boston, MA 02114

RE: Corps of Engineers' Draft Environmental Impact Statement/Report, Cape Wind Energy Project

Dear Colonel Koning and Secretary Herzfelder:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the Cape Wind Energy project in Nantucket Sound off the coast of Massachusetts.<sup>1</sup>

The DEIS details Cape Wind Associates, LLC's proposal to install a wind-powered generating facility in Nantucket Sound consisting of 130 wind turbine generators (WTGs), an electrical service platform (ESP), and 102 miles of transmission cables to connect the turbines to the service platform and to existing infrastructure on land. Each WTG will be 426 feet tall at its highest point and the ESP will extend 39 feet above the water surface. The wind turbines will occupy 24 square miles of Nantucket Sound and will be 4.7 miles from the closest point of land (Point Gammon on the mainland). The bathymetry of Nantucket Sound is irregular with charted water depths ranging between one and 70 feet. The project will be capable of producing an average annual output of approximately 170 megawatts (MW). For perspective, the capacity of the 18 natural gas power plants that were brought on line in New England between January 2000 and December 2002 ranged from 86 MW to 528 MW.

<sup>&</sup>lt;sup>1</sup> This letter serves as our comment on the DEIS, the Draft Environmental Impact Report prepared under the Massachusetts Environmental Policy Act, and the Corps of Engineers' public notice for a Rivers and Harbors Act Section 10 permit for the project.

This large-scale renewable energy generation facility would help the region meet numerous state and federal public policy goals focused on renewable energy production and air quality. In our scoping letter we identified the generation of electricity from fossil fuels as the single largest industrial source of air pollution in New England. Power plant emissions have contributed to unhealthy air and other degradation of the environment, including acidification of lakes and streams, mercury deposition, visibility impairment, greenhouse gas emissions, and excessive nitrogen loading to our ecosystems due to power plant emissions. In addition, fossil fuel burning power plants can cause environmental harm from their withdrawal of cooling water from, and their discharge of heated water to, the region's waterways. Consequently, EPA New England strongly supports an increase in the amount of electricity generated in the region from renewable resources such as wind.

EPA participated in the preparation of the DEIS through many interagency meetings and by providing comments during scoping and on the Administrative Draft Environmental Impact Statement (ADEIS). Our scoping comments addressed the project's purpose and need, called for a thorough consideration of alternatives and impact assessments across a wide range of issues, and recognized the importance of public trust issues in the process and the precedent setting nature of the project. We also specifically requested the development of an environmental baseline for purposes of measuring the project's impacts and developing a mitigation and monitoring program.

We recognize that preparing the EIS for this project has required considerable effort on the Corps' part. Over the past several years the Corps has consulted with federal, state and local agencies and the public throughout the process. However, many of the concerns raised by EPA and other cooperating agencies about the project, the consideration of alternatives, and the analysis of impacts have not been addressed in the DEIS. We do not believe that the DEIS provides enough information to fully characterize baseline environmental conditions, the substantial environmental impacts of the proposed project, and alternatives that avoid or minimize those impacts. Without this information we do not believe an adequate mitigation and monitoring plan can be developed, nor can a decision be made as to whether the project is environmentally acceptable and in the public interest.

For the reasons discussed above and in the attachment, EPA has rated this DEIS as "Category 3–Inadequate" in accordance with EPA's national rating system, a description of which is attached to this letter. In order to address the issues raised in this letter, we recommend that the Corps prepare a supplemental DEIS. We are ready to continue to participate on the cooperating agency team to provide additional input, as necessary, to help the NEPA analysis for the project

advance. Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,

Robert W. Varney

Regional Administrator

Runw. U.

Enclosure

cc:

Governor Mitt Romney
Senator Edward Kennedy
Senator John Kerry
Representative William Delahunt
Michael Bartlett, United States Fish and Wildlife Service
Andrew Raddant, United States Department of Interior
Jack Terrill, National Marine Fisheries Service-Northeast Region
Margo Fenn, Cape Cod Commission
Greg Watson, Massachusetts Technology Collaborative
Jim Gordon, Cape Wind

# Additional Detailed Comments Corps of Engineers DEIS for the Cape Wind Energy Project February 24, 2005

#### **Alternatives**

An offshore wind power facility of the scale of the Cape Wind project is without precedent in the United States. It is proposed at a time when there are public policy initiatives in place at the state and federal levels which call for increased reliance on renewable energy generation. While we agree with these initiatives we also believe that any project must undergo a rigorous alternatives analysis required by NEPA. In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

The range of reasonable alternatives is determined by the underlying project purpose and need as defined by the Corps. The DEIS states that the purpose and need is "to provide a utility-scale renewable energy facility providing power to the New England grid." The DEIS also defines "utility-scale" facilities as those with generating capacities that range between 200 and 1,500MW. As we have indicated in the past, the "utility-scale" component of the purpose and need definition, as it has been defined in the DEIS, prevents the consideration of smaller commercial energy projects that taken singly or combined could provide renewable energy for use in New England while also helping to satisfy the various state legislative mandates such as the Renewable Portfolio Standards in MA and CT, and commitments such as those in the New England Governors and Eastern Canadian Premiers Climate Action Plan. While we support consideration of the applicant's proposal as it is currently defined we believe that the purpose and need should not constrain the EIS so that evaluation of smaller alternatives is precluded.

The question of reasonableness and viability of smaller scale alternatives, when viewed singly or in combination, requires a transparent presentation of project economics because smaller scale alternatives have been rejected as a result of the applicant's assertions about what is economically feasible. The applicant has asserted that projects smaller than the proposed project are not economically feasible because of the upfront infrastructure costs. To the best of our knowledge no independent review by the Corps of whether smaller scale projects (e.g., projects 25%, 50%, 75% of the size of the applicant's proposal) are economically feasible has been conducted. An examination of smaller scale alternatives with correspondingly smaller impacts and use of public lands could sharpen the EISs presentation of both benefits and tradeoffs associated with the Cape Wind proposal. Throughout the development of the EIS EPA has requested that this be provided, and we continue to believe it is necessary given the potentially significant impacts of a project as large as the Cape Wind proposal.

## No Action Alternative

We appreciate the acknowledgment that "alternative renewable energy technologies will continue to evolve and develop" even in the absence of the applicant's proposal. We find no foundation, however, for the statement that "under the No-Action Alternative, or if the permit is denied, it is likely that commercial development of offshore wind power in the United States, at a comparable size and scale of that proposed by the Applicant, will not advance significantly." This statement is not supported, and does not reflect the significant political and industry attention focused on furthering offshore wind energy development. The lack of comprehensive ocean policy, regulations, and leasing provisions may be more of a barrier to future development and private investment than the success or failure of one or more projects proposed in Nantucket Sound.

The No Action alternative should include a discussion of the status of other renewable energy projects (solar, small hydro, biomass, land based wind, etc.) and how they would impact the regional situation for RPS compliance.

# **Project Impacts**

Our scoping comments called for the EIS to establish a baseline from which impacts of the project alternatives can be measured. The same baseline information should then also be used to provide the benchmark that is essential for any monitoring program. Throughout the process we also emphasized the need for the EIS to support any conclusions about potential environmental impacts with relevant information/data so that all of the alternatives can be compared with one another based on objective information. We do not believe the current analysis does this in several key areas highlighted below.

#### **Aquatic Impacts**

Conversion of habitat: The placement of 130 monopiles in Nantucket Shoals will create approximately 4 acres of hard substrate surface area, coupled with the loss of 3.21 acres of soft substrate. Though the acreage of hard substrate from the project footprint seems relatively small compared to the total project area, ecological effects of the patches of hard substrate will extend beyond the footprint. The monopiles will function essentially as patch reefs and as a result will support an array of encrusting invertebrates and fish that prefer hard substrate. Additionally, they will provide stationary foraging opportunities for pelagic fish species, sea turtles and sea ducks.

The DEIS cites two studies that suggest that manmade structures placed in the marine environment can benefit fish species that have demersal, philopatric, territorial or reef-obligate life histories. The DEIS states that the fish aggregating effect will be for a relatively small area around each structure. This is statement is factually incorrect. The majority of the organisms that will ultimately comprise the community around each one of the structures will likely recruit there from the larval phase. Most of these larvae will be generated literally miles from their final recruitment location. Additionally, pelagic species that may take advantage of the new foraging opportunities cover great distances, and alterations to their normal movement and foraging patterns cannot be considered a small areal impact. Ultimately, the DEIS provides no support for

its assertion that the aggregating effect is relatively small. This question of scale is one of the most critical for the assessment of changes to the aquatic environment posed by this project.

The DEIS concludes that the cumulative impact of these 130 patch reefs is insignificant by saying they are small and far apart and thus the general community structure will not change. Again, the document provides no support for this assertion. The distance between structures (1/3 to 1/2 of a nautical mile) is well within the range of travel for many pelagic fish, sea turtles and sea ducks. Additionally, it is certainly well within the range that larvae produced at one monopile could recruit to another monopile. Thus, there almost certainly will be some interactive effect, between the monopiles, but the DEIS does not provide a full assessment of this effect.

Temporary construction impacts/mitigation: The DEIS describes much of the construction related impacts as insignificant because they are temporary. Impacts to the bottom will occur over 1400 acres and will have the potential to disrupt/alter normal spawning, migration and foraging of a number of species. Traditionally, to minimize impacts to these important life functions for aquatic species, the Corps has required adherence to "time of year" windows which allow marine construction to proceed, while still being protective of critical life processes for a variety of marine resources (for example, winter flounder and shellfish spawning). Generally, these windows will direct work to occur during the winter months, but they are determined by the types of resources present at the project location. The construction of this project is scheduled to occur in the late summer/fall time frame, and thus would represent an impact occurring during a time of year when most marine construction is typically avoided to protect resources (for example, shellfish spawning and winter flounder early life development).

Recently, in Massachusetts Bay, Duke Energy constructed the Hubline natural gas pipeline that traversed 28 miles of seafloor. The Hubline project was subject to time of year construction windows and habitat restoration efforts. We expect that the work to install 102 miles of cable associated with the Nantucket Shoals site will result in impacts that also warrant the development of a time of year restriction and a habitat restoration program. We urge the Corps to work with the participating state and federal agencies to develop the restriction and restoration programs, to present them in the EIS and incorporate both into any permit for a project in Nantucket Sound. We recommend that the EIS describe how the time of year restrictions would alter Cape Wind's current proposed construction schedule and discuss the likely effectiveness of the time of year restriction in protecting marine resources.

Threatened and endangered species: The DEIS provides little site specific data on the use of Nantucket Shoals by threatened and endangered sea turtles (including the loggerhead, Kemp's ridley and leatherback) and other marine mammals. In addition, there is little support for the DEIS' conclusions that the construction and operation of the wind farm will not negatively affect sea turtles or marine mammals. The aggregation of fish and the proliferation of blue mussels and crabs around each structure will serve as an enticement to sea turtles and fishermen alike. Thus, commercial trawlers may be more inclined to trawl near these structures and charter boats and

recreational fishermen will also likely make them destination spots. This focused fishing effort and boat traffic (including vessels to provide maintenance to the structures) may only serve to increase the risk of boat collisions and/or impacts from fishing gear to sea turtles and marine mammals. We recognize that the biological assessment required under the Endangered Species Act will address these issues. We recommend that the EIS continue to incorporate the biological assessment in the EIS and that it address this potential impact more thoroughly.

**Eelgrass**: The DEIS claims that the route of the transmission line was chosen to avoid impacts to submerged aquatic vegetation, primarily eelgrass. The project proponent used data from the Mass GIS website on statewide eelgrass distribution and supplemented that with their own consultant's survey in July 2003. Information from this survey is not presented in the DEIS. At a minimum, a map detailing the transmission line route with the vegetation mapped by the consultant and a discussion of the methods used should be provided.

The DEIS states that a pre- and post-construction eelgrass survey will be conducted to determine if eelgrass is lost during construction. The DEIS states that the closest the transmission line comes to existing eelgrass is 70 feet. It has been EPA's experience in a large number of projects that this is not a sufficient buffer distance to assume that no impact will occur. Eelgrass is very sensitive to changes in light, thus it is not unusual to see impacts well outside the footprint of projects that may be causing sediment resuspension. Additionally, distances on the order of tens of feet are well within the normal variability associated with construction in the marine environment. To minimize impacts from construction vessels to eelgrass, EPA suggests that the project proponent mark off the edge of the eelgrass meadow with buoys and implement a "no wake" zone for construction vessels for 200 feet from the edge of the meadow. EPA strongly urges the project proponent to work out the scope of these eelgrass surveys with the state and federal resource agencies before they are conducted, so there will be no disagreements on the determination of impacts and subsequent required mitigation. It will be important for the applicant to demonstrate that impacts to eelgrass have been avoided and minimized before a compensatory mitigation plan for unavoidable impacts is developed. EPA would strongly recommend a Before After Control Impact (BACI) design, which has been implemented for other recent projects (Hubline, Golden Anchor marina, Nantucket electrical cable line).

Monitoring: In Massachusetts, projects that have the potential to impact large areas of the marine environment have typically been required to conduct comprehensive monitoring to assure that large scale changes are not occurring. For example, the Massachusetts Water Resources Authority (MWRA) has a large monitoring program for the Metropolitan Boston Area's sewage discharge due to its potential to impact a large spatial area. EPA has also required substantial monitoring programs for power generating facilities that use once-through cooling water and discharge waste heat to the marine environment. Finally, the Corps in consultation with EPA and other federal and state resource agencies, required substantial monitoring for the Duke Energy Hubline natural gas pipeline project. In the case of the outfall and cooling water discharge examples, the activities represent ongoing sources of impact to the marine environment and as a result the monitoring plans are essentially permanent. The Hubline monitoring protocol was

designed to examine impacts to multiple habitat types over a large area for a finite period of time. In addition, it was intended to look at the recovery of habitats and determine if additional compensatory mitigation should be required. The impact analysis for construction of the Hubline was estimated to result in 5400 acres of disturbance over 28 linear miles. The Cape Wind project is expected to result in 1400 acres of impact over 72 linear miles. Although the Cape Wind project would affect less acreage, nevertheless it is a project of significant size and will require a substantial monitoring and mitigation plan.

Because the applicant's proposed project will include a large suite of temporary impacts combined with a set of permanent structural changes from the monopiles, the challenge will be to devise a monitoring program that effectively addresses both of these situations quantitatively. We recommend that the Corps in consultation with the resources agencies form a technical advisory group (similar to the one put together for the MWRA) to develop the necessary monitoring plan. The components of this monitoring plan should address recovery of impacted habitats and the change in use of the project site by threatened and endangered species and finfish.

# Air Quality and Public Health Impact Analysis

While EPA agrees with the DEIS that the Cape Wind project would result in public health benefits and air quality improvements by reducing emissions from other fossil fuel based energy sources, EPA believes that the analysis presented in the DEIS to characterize these benefits has not been done in a manner that will most accurately characterize those benefits.

Specifically, in Sections 5.15, 5.16.3, and 5.16.4, the DEIS provides estimates of air pollution reductions associated with the proposed project. One set of estimates was based on comparisons of emissions from two particular power plants in the region and the others were based on emission rates from the New England Power Grid. However, those emission rates were calculated retrospectively using marginal emission rate data from 2000. This method does not provide a realistic picture of the future benefits of Cape Wind or any other renewable energy project.

EPA suggests that the Corps revise its air quality analysis to reflect the following:

- It should be prospective in nature and based on a dispatch model that integrates realistic assumptions about conventional and renewable energy growth, electricity imports/exports, and fuel prices to project emission benefits in the years that the project would be in operation. A study using this methodology entitled "Electric Sector Emissions Displaced due to Renewable Energy Projects in New England" was conducted by LaCapra Associates for the Massachusetts Technology Collaborative in February 2003.
- It should analyze the potential air quality benefits within the framework of the mandated emission caps on SO<sub>2</sub> and NO<sub>x</sub> that have been established for the electric generation

sector. This analysis should examine potential air quality benefits within the construct of these cap and trade programs that addresses applicability differences between the  $SO_2$  and  $NO_x$  programs, the seasonal nature of the  $NO_x$  program, and emission setasides in the  $NO_x$  program for renewable energy projects in certain states, and whether the existence of such cap and trade programs would negate any potential benefits associated with the Cape Wind Project.

- It should address potential reductions of pollutants not included in the cap and trade programs such as particulate matter and mercury.
- It should include the project's prospective impact on regional CO<sub>2</sub> emissions and how that would contribute to the Administration's goal of reducing greenhouse gas (GHG) intensity by 18% by 2012, and the New England Governor's Conference goal of reducing CO<sub>2</sub> emissions to 1990 levels by 2010 and 10% below 1990 by 2020.
- Finally, EPA suggests that any air quality analysis include potential local impacts on the Cape and the Islands.

## **Avian Impacts**

In our comments throughout the DEIS development (most recently in comments on the ADEIS in June 2004) we urged that the DEIS clearly indicate what technical studies were requested by expert agencies, and, if those agencies' advice was not followed, explain the basis for the decision. The DEIS lacks a description of how agency input was incorporated into the analysis, especially input from the United States Fish and Wildlife Service (USFWS) pertaining to field study designs with respect to how to establish baseline conditions and to evaluate project impacts. We continue to believe that at a minimum, the DEIS should explicitly note areas where recommendations of the resource agencies and other avian experts were not followed.

The DEIS at page 5-102 explains that agencies were consulted. While it is accurate to report that the agencies were consulted, the DEIS leaves the impression that agency input was fully integrated into the data collection and impact analysis components of the DEIS. This deficiency should be corrected and the analysis revised and supplemented to incorporate the input of the USFWS and other experts.

In general, we believe that the efforts to characterize avian baseline conditions, and subsequently impacts from the proposed project, fall short of the specific recommendations of the USFWS, and other recognized avian experts. This shortcoming, especially with respect to the collection of site specific data to characterize bird use throughout the year and in a number of conditions (at night, in bad weather, etc.) at the project site and pertaining to the estimation of how many bird deaths will result each year due to collisions with wind turbines, must be addressed with supplemental study and analysis before any comprehensive public interest evaluation can be completed by the Corps.

We note that the USFWS requested in numerous interagency meetings that the avian study include three years of remote sensing (radar) to collect data to fully characterize the risk turbines might pose to birds. Because the EIS approach to date has not included data collection consistent with the USFWS input it is difficult to know what impacts will be caused in the rotor swept area under a variety of conditions. Instead of three years, the radar data collection took place for two one month periods in the spring and fall of 2002 and the data was then extrapolated to predict impacts.

In addition, data collection techniques have resulted in discrepancies. For example, we remain concerned about the discrepancy between the number of targets observed in the rotor swept zone by radar (127,697) and the number of birds counted (365) in the rotor swept zone during 46 aerial surveys from 2002 to 2004. Additional remote sensing appears warranted to adequately characterize baseline conditions and to predict potential avian impacts from the proposed project.

In other areas of the avian impact analysis comparisons are made to other sources of bird mortality including collisions with buildings, towers and hunting. As we stated in our comments on the ADEIS, we are not confident that such comparisons are relevant unless those comparisons are offered as a means to characterize cumulative impacts or to suggest that the project will prevent that source of mortality. We do not believe that the latter is the case. Moreover, such descriptions may be relevant to understand the sources and magnitude of threats to birds but they do little to specifically answer questions about what additional impacts to birds (through death, displacement by barrier effect, harassment, etc.) can be expected from the project.

The analysis also lacks specific empirical data to help address the impact of the project to birds during bad weather, early morning, and at night. Supplemental analysis aimed at providing site specific temporal and spacial remote sensing data on avian use of the project airspace, specifically the rotor swept area, would help to characterize avian impacts during inclement weather and at night. Moreover, we believe that more comprehensive analysis of the potential for the turbine lighting to attract and kill birds of various species should be provided.

# **Public Interest Review**

The Corps has indicated that its decision on the Section 10 permit will be based on a public interest review which will weigh the project's benefits against its impacts from a public perspective. One of the most important impacts that EPA and others have requested be considered in this review is the impact of siting a private power generation facility on 24 square miles of the Outer Continental Shelf (OCS), land held in public trust under federal jurisdiction. Since the scoping process, increasing public concern has focused on the limitations of the Rivers and Harbors Act Section 10 authority and the lack of an established process through which the federal government can effectively address a number of precedent setting issues associated with the proposed project. This "regulatory gap" includes issues such as the lack of existing policy and regulation dictating which agency has authority over siting issues, whether competition should exist for development sites, how and whether easements, leases or fees should be required

for the use of public property and its resources by a private entity, and what sort of requirements should be imposed to ensure proper site restoration and management after the useful life of the project ends.

We recognize that the Corps is not responsible for filling the regulatory gap. However, we believe that under NEPA, the Corps has an obligation to ensure that the EIS fully addresses this project's impacts on the federal government's interest in the OCS land which would be occupied. The Corps public interest review will require consideration of this issue, but the DEIS provides no specific information to describe how the Corps will evaluate and weigh the numerous issues as part of the decision-making process. The EIS should be expanded to fully explain how the public interest review factors will be applied.

# Jurisdictional Issues (drying Rocks)

In June of 2004 we suggested that developing information regarding so-called "drying rocks" should be reflected in the DEIS analysis. We offered that a comprehensive discussion of this emerging issue would include figures showing the drying rocks in question, how they might change the state/federal boundary, and what changes in jurisdiction/authority over a portion of one or more of the project configurations in Nantucket Sound might be expected. Based on our review, we could not find any discussion of this issue in the DEIS. The recent announcement by the Massachusetts Highway Department that the limits of the Commonwealth's jurisdiction will expand, and the ramifications of this shift, should be reflected in any subsequent NEPA analysis for the project.

#### **Process**

We have a number of process suggestions we believe would improve the analysis under NEPA.

# Third Party Agreements

We recommend that the Corps should develop specific third party agreements with the consultant team responsible for the generation of the supplemental analysis required to respond to input from federal, state and local agencies and the interested public. The agreements should specifically describe the Corps management responsibilities over the consultant team and should limit the applicant's involvement in the environmental analysis in the future to funding the third party consultant's efforts. We suggest that the Corps review the third party arrangements the United States Forest Service utilizes as one example of how this issue could be addressed.

# Consideration of Input from Agencies and the Public

The Corps' efforts to respond to comments and provide supplemental information necessary to understand the environmental impacts of the project, and to conduct a complete public interest review, should include a process to address the input from agencies and the public. The current effort lacks an explanation of how input from agencies and the public was considered and addressed. In the future, in those instances where the advice is not followed the EIS should

explain why a different approach is followed.

# Other

- We suggest that the content of Appendix 3-E be expanded to include copies of the peer reviewers comments, not just a summary of those comments. This section should also include a copy of the assignment and any supporting information the peer reviewers were provided at the time the work was requested.
- We suggest that introductory text could be added to each appendix to indicate whether or not the Corps established the scope of the analysis performed in each instance.

#### Summary of Rating Definitions and Follow-up Action

# Environmental Impact of the Action

#### LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### **EC-Environmental Concerns**

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### **EO--Environmental Objections**

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### **EU--Environmentally Unsatisfactory**

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

# Adequacy of the Impact Statement

#### Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

# Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.