MINNESOTA DEPARTMENT OF COMMERCE

September 8, 2006

TO: Glenn Wilson, Commissioner
DOC (Tel: 651-296-4026)
Edward Garvey, Deputy Commissioner
DOC (Tel: 651-296-9325)

THROUGH: Marya White, Manager
DOC (Tel: 651-297-1773

FROM: William Cole Storm, Staff
DOC Energy Facility Permitting (Tel: 651-296-9535)

RE: DOC Staff Recommendation on Content of the Environmental Impact Statement
Mesaba Energy Project Proposed by Excelsior Energy, Inc.
PUC Docket No. E6472/GS-06-668

ACTION REQUIRED: Signature of the Commissioner on the attached Order, "Environmental Impact Statement Scoping Decision." Once signed, the Department of Commerce (DOC) staff will mail the notice of the order to interested parties.

BACKGROUND:

Excelsior Energy, Inc. is proposing to construct and operate a coal-feedstock Integrated Gasification Combined Cycle ("IGCC") power plant. The proposed power plant will be constructed in two phases; each phase will be capable of producing approximately 606 MW (net) of baseload power.

The U.S. Department of Energy (DOE) selected the Mesaba Energy Project under the Clean Coal Power Initiative Round 2 solicitation for negotiation of a Cooperative Agreement. Under the Cooperative Agreement DOE would provide financial assistance for the proposed project. On October 5, 2005, DOE published a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) in the Federal Register (70 FR 58207). It is DOE's intent to prepare, in cooperation with the Minnesota Department of Commerce and the Minnesota Public Utilities Commission, an EIS that will fulfill the requirements of both the Federal and State environmental review processes.

Excelsior Energy filed a Joint Permit Application for a large electric power generating plant (LEPGP) site permit, a high voltage transmission line (HVTL) routing permit and a pipeline (partial exemption) routing permit on June 16, 2006.

In an Order dated July 28, 2006, the PUC accepted the Joint Permit Application submitted by Excelsior Energy for the Mesaba Energy Project.

The permit application is being reviewed under the Full Review Process (Minn. Rule Chapter 4400) within the Power Plant Siting Act. Under the full permitting process the applicant is required to submit two sites and/or routes (i.e., a preferred and an alternate) for consideration.

As part of the permitting process, the DOC is responsible for certain procedural requirements (i.e., public notice and meetings), issuing the EIS Scoping Decision and the preparation of an Environmental Impact Statement. A contested case hearing will also be conducted following completion of the draft EIS. The PUC has up to one year from the time the application is accepted to complete the process and make a final decision; that decision includes a determination on the adequacy of the EIS and the determination whether to grant the requested permits, as well as, site/route selection and permit conditions.

EIS Scoping Process

The Minnesota Department of Commerce (DOC) held two public informational and Environmental Impact Statement (EIS) scoping meetings for the Mesaba Energy Project on consecutive nights in the vicinities of the preferred and alternative site in northeastern Minnesota.

The first meeting was held on August 22, 2006, at Taconite Community Center in Taconite. The second was held on August 23, 2006, at Hoyt Lakes Arena in Hoyt Lakes.

In satisfying the notification requirements within Minn. Rules 4400.1350, the public informational and EIS scoping meetings were announced in the *EQB Monitor* on July 31, 2006, and published notices appeared in local newspapers, including: the *Scenic Range News* on July 6; the *Duluth News Tribune, Hibbing Daily Tribune, The Mesabi Daily News,* on July 5, the *Grand Rapids Herald-Review* on July 7; and *The East Range Shopper* on July 3. Additionally, notice was sent to those persons whose names are on the EQB general notification list, regional and local governments, and each person whose property is adjacent to any of the proposed sites or routes.

Both meetings began at 7:00 pm Central Daylight Time (CDT) on the respective nights.

The Taconite meeting adjourned at approximately 10:45 pm, and the Hoyt Lakes meeting adjourned at approximately 9:30 pm. Each scoping meeting was preceded by an open house from 4:00 pm to 7:00 pm, during which DOC, U.S. Department of Energy, Office of Fossil Energy, National Energy Technology Laboratory (DOE-NETL) and Excelsior Energy personnel were available to answer questions.

Information packages were available to attendees that included a fact sheet on the State siting and routing process, and the Draft EIS Scoping Document. Also, Excelsior Energy, Inc. exhibited approximately 25 mounted graphic displays illustrating various features of the proposed project.

Collectively, approximately 400 individuals attended the public scoping meetings, including several individuals who attended both meetings. One hundred and fifty-nine individuals signed

the attendance list at Taconite; 123 signed the attendance list at Hoyt Lakes. All attendees were invited to provide comments, either written or spoken, on the proposed project.

Those attendees wishing to speak were given an opportunity to do so. Comment sheets were made available for all attendees wishing to provide written comments.

DOC Energy Facility Permitting (EFP) staff led the presentations and presided over both formal meetings. A court recorder was present at each meeting to ensure that all spoken comments were recorded and legally transcribed. Fifty individuals presented oral comments at the meetings.

In addition, DOC-EFP staff provided an e-mail address for members of the public who preferred to submit their comments electronically, a postal address for those who preferred to mail their comments, a telephone fax number for those who preferred to fax their comments and a toll-free telephone number for those who preferred to speak their comments. In all, 49 comments were submitted via e-mail, US Post Service mail, or fax.

The transcripts and all comments are maintained as part of the Administrative Record.

Comments and Responses

All of the various comment submissions were reviewed to characterize specific issues, concerns, and questions, to ensure the consideration of all substantive concerns. Comments received during the public scoping period are intended to help direct and focus the analysis and contents of the EIS.

Operational Information and Design

Several respondents recommended that project operational information and design details be included in the EIS, including process information, information about the expected efficiency and reliability of the plant, feedstocks, utilities and resource requirements, emissions, and controls. Other comments addressed the physical size of the plant and the expected "footprint", rail alignments, transmission corridors, and various other features.

This information will be incorporated into the project/process description sections of the EIS.

Opinions

A number of comments contained statements of opinion and rhetorical questions, such as the desirability of a particular site. Such comments have not been assimilated into the Scoping Decision in all cases; however, the EIS will attempt to address the subjects raised to the extent appropriate.

Need

Many respondents expressed concerns about the need for the proposed facility, both from the perspective of electricity demand (e.g. exemption from certificate of need) and from the perspective of whether coal use is the best choice to meet that demand.

Because the Department has concluded that this facility qualifies as an "innovative energy project,"[1] and because Minnesota Statue 216B.1694, subdivision 2, item 1, has exempted such a project from demonstrating need, issues related to the need, size or type of the facility are excluded from consideration in this matter. Thus, such issues are not within the scope of the EIS. The DOC will not, as part of this environmental review, consider whether a different size or different type plant should be built instead. Nor will the DOC consider the no-build option.

Viability

Additionally, some of the comments conveyed concern over the long-term operation and viability of the project. Respondents questioned whether the envisioned economic benefits of the proposed facility are valid, and whether economics should outweigh the potentially adverse environmental and human effects of construction and operation of the facility.

There is currently a docket before the PUC pertaining to Excelsior Energy's proposed power purchase agreement (Docket E6472/M-05-1993) that will evaluate many of these concerns.

Overall Environmental Impacts

Numerous comments were received with respect to specific natural resources, environmental welfare and human health issues. The majority of the comments were related to the use of natural resources (e.g., coal, land, water, national parks), the discharge of pollutants to the natural environment (e.g. air, water, wetlands, , CO_2 emissions) and adverse health effects, and the socioeconomic impacts of the project (e.g. jobs, taxes, and property values).

Comments were also received relating to eminent domain, increased vehicular and rail traffic, and demands on local community services (e.g. emergency responders, local water and sewer systems, and tourism/recreation). Concerns were also expressed about connected actions and the cumulative effects of current industrial activities and future projects planned within the vicinity of the Mesaba Energy Project.

These issues, along with the typical LEPGP, HVTL and Pipeline routing and siting impacts, have been incorporated into the proposed Order on the Environmental Impact Statement Scoping Decision.

SCHEDULE: The Draft Environmental Impact Statement will be completed February, 2007.

[1] *See* Direct Testimony of Eilon Amit, at pp. 5-6, MPUC Docket No. E6472/M-05-1993 (petition of Excelsior Energy, Inc. for approval of a power purchase agreement), filed on September 5, 2006.

In the Matter of Excelsior Energy, Joint (LEPGP, HVTL, Pipeline) Application for the Mesaba Energy Project in Itasca and St. Louis Counties)

ENVIRONMENTAL IMPACT STATEMENT SCOPING DECISION

PUC Docket No. E6472/GS-06-668

The above matter has come before the Commissioner of the Department of Commerce (the Department) for a decision on the content of the Environmental Impact Statement (EIS) to be prepared in consideration of the Joint Permit Application for the proposed Mesaba Energy Project from Excelsior Energy.

Having reviewed the matter, and having consulted with staff, I hereby make the following Order on the content of the EIS:

MATTERS TO BE ADDRESSED

The EIS will address the following matters:

Cover Page
Executive Summary
Table of Contents (Including List of Figures, List of Tables)
Acronyms and Abbreviations
Glossary

1. Purpose and Need for the Proposed Action
    - 1.1 Introduction (Lead Agency, Cooperating Agencies, Project Proponent, Location)
    - 1.2 Clean Coal Power Initiative (Background and project selection)
    - 1.3 Proposed Action (Brief synopsis distinguishing between DOE's Proposed Action and project proponent's Proposed Action)
    - 1.4 Purpose and Need for the Proposed Action
        - 1.4.1 Purpose of the Proposed Action
        - 1.4.2 Need for the Proposed Action
            - 1.4.2.1 DOE Need
            - 1.4.2.2 Minnesota DOC and PUC Role
            - 1.4.2.3 Project Proponent Need
    - 1.5 Regulatory Framework
        - 1.5.1 National Environmental Policy Act
        - 1.5.2 Minnesota State Requirements
            - 1.5.2.1 Minnesota Rules, Chapter 4400
            - 1.5.2.2 Minnesota Statute 216B.1694 Innovation Energy Project

1.5.2.3 Minnesota Rules, Chapter 4415/18 CFR Part 157 of the Natural Gas Act
1.5.2.4 Minnesota Environmental Policy Act
1.5.2.5 Taconite Tax Relief Area
1.5.2.6 Other State Requirements and Permits

1.6 Scoping of the Environmental Impact Statement
1.6.1 NEPA Scoping Process
1.6.2 Minnesota Rule 4400.1700, subpart 2
1.6.2 Public Comments Received
1.6.3 Special CCPI Considerations under NEPA
1.6.4 Region of Influence
1.6.5 Connected Actions (Phase II Power Plant, County Hwy 7 Realignment)

1.7 Associated Actions
1.7.1 Related NEPA Compliance Actions (Including Final Programmatic EIS, Clean Coal Technology Demonstration Program, DOE, November 1989)
1.7.2 Related DOE CCPI Activities
1.7.3 Related Regional Activities

2. Proposed Action and Alternatives

2.1 Description of the Proposed Action (Non-site-specific description and general features of the Mesaba Energy Project)
2.1.1 Technology Selection and Process Description
2.1.1.1 Technology Selection (Including discussion of lessons learned from Wabash River Coal Gasification Repowering Project)
2.1.1.2 Gasification Combined-Cycle Technology
2.1.1.3 Process Components and Major Equipment (potential carbon capture/transport/sequestering)
2.1.1.4 Plant Utility Systems
2.1.2 Resource Requirements (Inputs)
(General needs for the plant that affect site selection and help frame the later discussion of how site alternatives were selected and how sites were eliminated)
2.1.2.1 Feedstock and Flux Requirements
2.1.2.2 Natural Gas Requirements
2.1.2.3 Process Water Requirements
2.1.2.4 Infrastructure Requirements
2.1.2.5 Transportation Requirements
2.1.2.6 Land Area Requirements
2.1.3 Discharges, Wastes, and Products (Outputs)
2.1.3.1 Air Emissions
2.1.3.2 Water Effluents
2.1.3.3 Liquid Wastes
2.1.3.4 Solid Wastes
2.1.3.5 Marketable Products
2.1.3.6 Toxic and Hazardous Materials
2.1.3.7 Pollution Prevention, Recycling, and Reuse
2.1.4 Construction Plans
2.1.4.1 Construction Staging and Schedule
2.1.4.2 Construction Materials and Suppliers
2.1.4.3 Construction Labor
2.1.4.4 Construction Safety Policies and Programs

- 2.1.5 Operation Plans
  - 2.1.5.1 Test Plans
  - 2.1.5.2 Operational Plans
  - 2.1.5.3 Operational Labor
  - 2.1.5.4 Health & Safety Policies and Programs
  - 2.1.5.5 Worst-case Operating Scenario
- 2.2 Alternatives
  - 2.2.1 Alternatives Available to DOE
    - 2.2.1.1 Proposed Action (Proceed continue cost-shared funding beyond preliminary design/project definition)
    - 2.2.1.2 No-Action Alternative (Do not proceed with the cooperative agreement)
  - 2.2.2 Alternatives Sites Considered (by Excelsior Energy)
    - 2.2.2.1 Preferred West Range Site (Including HVTL & Pipeline corridors)
    - 2.2.2.2 Alternative East Range Site (Including HVTL & Pipeline corridors)
    - 2.2.2.3 Alternatives Eliminated from Detailed Evaluation
  - 2.2.3 Alternatives Available to Minnesota PUC
    - 2.2.3.1 Approve Permits for Preferred West Range Site
    - 2.2.3.2 Approve Permits for Alternative East Range Site
    - 2.2.3.3 Disapprove the Permit Application

3. Affected Environment (Note: This section will contain the described information for both the West Range Site and the East Range Site)
   - 3.1 Introduction
   - 3.X Resource Subject (Note: This "X" outline applies to all resource subjects listed below)
     - 3.X.X.1 Regional and Local Conditions
     - 3.X.X.2 Site-specific Conditions
     - 3.X.X.3 Corridor-specific Conditions
   - 3.2 Aesthetics (daytime and nighttime)
     - 3.2.1 Physical Setting
     - 3.2.2 Viewshed
     - 3.2.3 Scenic Resources
   - 3.3 Air Quality and Climate
     - 3.3.1 Local and Regional Climate
     - 3.3.2 Air Quality Regulations
     - 3.3.3 Local and Regional Air Quality
     - 3.3.4 Sources of Air Pollution
     - 3.3.5 Sensitive Receptors (Including Class I Areas)
     - 3.3.6 Air Quality Management Plans
   - 3.4 Geology and Soils
     - 3.4.1 Geology
     - 3.4.2 Mineral Resources and Mining
     - 3.4.3 Seismic Activity
     - 3.4.4 Soils
     - 3.4.5 Prime Farmland
     - 3.4.6 Potential Formations for Geologic Sequestration of CO_2
   - 3.5 Water Resources
     - 3.5.1 Groundwater
     - 3.5.2 Surface Water

3.6 Floodplains
- 3.6.1 Local Hydrology and Drainage
- 3.6.2 Flood Hazard Areas

3.7 Wetlands

3.8 Biological Resources
- 3.8.1 Terrestrial Ecosystems
- 3.8.2 Aquatic Ecosystems
- 3.8.3 Protected Species and Habitats

3.9 Cultural Resources
- 3.9.1 Archeological Resources
- 3.9.2 Historic Resources
- 3.9.3 Native American Cultural Resources (includes Indian treaty rights)

3.10 Land Use
- 3.10.1 Existing Land Use/Human Settlement
- 3.10.2 Zoning Ordinances
- 3.10.3 Local and Regional Land Use Plans

3.11 Socioeconomics
- 3.11.1 Demographics
- 3.11.2 Housing
- 3.11.3 Employment and Income
- 3.11.4 Business and Economy

3.12 Environmental Justice
- 3.12.1 Minority Populations
- 3.12.2 Low-Income Populations

3.13 Community Services
- 3.13.1 Law Enforcement
- 3.13.2 Fire Protection
- 3.13.3 Emergency Response
- 3.13.4 Parks and Recreation

3.14 Utility Systems
- 3.14.1 Water
- 3.14.2 Wastewater
- 3.14.3 Energy
- 3.14.4 Telecommunications

3.15 Traffic and Transportation
- 3.15.1 Local Roads and LOS
- 3.15.2 Rail Access (includes impact of rail traffic on emergency vehicle response)

3.16 Materials and Waste Management
- 3.16.1 Construction Materials
- 3.16.2 Coal and other Feedstock
- 3.16.3 Landfills
- 3.16.4 Recycling Facilities

3.17 Safety and Health
- 3.17.1 Occupational Safety Considerations
- 3.17.2 Community Health Issues
- 3.17.3 Local and Regional Receptors/Health Risk Assessment
- 3.17.4 Electromagnetic Fields (EMF) (Including Henshaw effect)

- 3.18 Noise
  - 3.18.1 Local Ordinances
  - 3.18.2 Existing Sources of Noise
  - 3.18.3 Local and Regional Receptors
- 3.19 Light and Glare
  - 3.19.1 Local Ordinances
  - 3.19.2 Existing Light Sources
  - 3.19.3 Local and Regional Receptors

4. Environmental Consequences (Note: This section will contain the described information for both the West Range Site and the East Range Site)
   - 4.1 Introduction (Including categories of relative impact)
   - 4.X Resource Subject (Note: This "x" outline applies to all resource areas listed)
     - 4.X.1 Approach to Impacts Analysis
       - 4.X.1.1 Region of Influence
       - 4.X.1.2 Method of Analysis
       - 4.X.1.3 Criteria of Impacts
     - 4.X.2 Common Impacts of Proposed Action (Including construction and operation, Phases I & II)
     - 4.X.3 Site-specific Impacts (Including construction and operation, Phases I & II)
       - 4.X.3.1 West Range Site
       - 4.X.3.2 East Range Site
     - 4.X.4 Corridor-specific Impacts (Including construction and operation, Phases I & II)
       - 4.X.3.1 West Range Transmission, Pipeline, and Transportation Corridors
       - 4.X.3.2 East Range Transmission, Pipeline, and Transportation Corridors
     - 4.X.5 Impacts of No-Action Alternative
     - 4.X.6 Mitigation of Adverse Impacts
   - 4.2 Aesthetics
   - 4.3 Air Quality (includes discussions on CO_2)
   - 4.4 Geology and Soils
   - 4.5 Water Resources (surface & groundwater, including the Swan & Mississippi)
   - 4.6 Floodplains
   - 4.7 Wetlands
   - 4.8 Biological Resources
   - 4.9 Cultural Resources (includes Indian treaty rights)
   - 4.10 Land Use/Human Settlement (includes recreational land uses)
   - 4.11 Socioeconomics
   - 4.12 Environmental Justice
   - 4.13 Community Services
   - 4.14 Utility Systems
   - 4.15 Traffic and Transportation (includes impact of rail traffic on emergency vehicle response)
   - 4.16 Materials and Waste Management
   - 4.17 Safety and Health
   - 4.18 Noise
   - 4.19 Light and Glare
5. Summary of Environmental Consequences
   - 5.1 Comparative Impacts of Alternatives
   - 5.2 Potential Cumulative Impacts
   - 5.3 Unavoidable Adverse Impacts and Mitigation

5.4 Irreversible and Irretrievable Commitments of Resources
5.5 Relationship between Short-term Uses of the Environment and Long-term Productivity
6. Regulatory Compliance and Permit Requirements
7. Agencies and Individuals Contacted
8. Distribution List
9. References
10. List of Preparers (Including Conflict of Interest Certification)
11. Index

Appendix

The above guide is not intended to serve as a "Table of Contents" for the EIS document, and as such, the organization of the information and data may not be similar to that appearing in the EIS.

IDENTIFICATION OF PERMITS

The EIS will include a list of permits that will be required for the applicant to construct this project.

ISSUES OUTSIDE OF THE ENVIRONMENTAL ASSESSMENT

Because the Department has concluded that this facility qualifies as an "innovative energy project,"[1] and because Minnesota Statue 216B.1694, subdivision 2, item 1, has exempted such a project from demonstrating need, issues related to the need, size or type of the facility are excluded from consideration in this matter. Thus, such issues are not within the scope of the EIS. The DOC will not, as part of this environmental review, consider whether a different size or different type plant should be built instead. Nor will the DOC consider the no-build option.

SCHEDULE

The EIS shall be completed in February, 2007.

Signed this 13 day of September 2006

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE

Glenn Wilson, Commissioner

I:\EQB\Power Plant Siting\Projects - Active\Excelsior - Mesaba Energy\Environmental Review\Scoping Documents\EIS-scoping-decision.doc

[1] See Direct Testimony of Eilon Amit, at pp. 5-6, MPUC Docket No. E6472/M-05-1993 (petition of Excelsior Energy, Inc. for approval of a power purchase agreement), filed on September 5, 2006.