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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**COMMENTS AND RECOMMENDATIONS OF THE
MINNESOTA DEPARTMENT OF COMMERCE
ENERGY FACILITY PERMITTING STAFF**

DOCKET NO. PL, E280/GP-06-1481

Meeting Date: April 10, 2008.....Agenda Item #

Company: Nashwauk Public Utilities Commission

Docket No. **PUC Docket Number: PL, E280/GP-06-1481**

**In the Matter of the Application of the Nashwauk Public Utilities
Commission for a Routing Permit for a Natural Gas Pipeline**

Issue(s): Should the Commission issue a route permit to Nashwauk Public Utilities Commission (NPUC) for a natural gas pipeline. If so, which route alternative should be designated and what conditions should be placed in the pipeline routing permit?

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Relevant Documents

Pipeline Route Permit Application (Full Process)	July 27, 2007
EFP Comments/Recommendations (Routes Selected for Consideration)	October 30, 2007
PUC Order on Routes Selected for Consideration	December 7, 2007
Comparative Environmental Analysis	December 21, 2007
Public Hearing Transcripts	January 9, 2008
ALJ's Report and Recommendation	February 22, 2008

The enclosed materials are work papers of the Department of Commerce Office of Energy Security Energy Facility Permitting Staff. They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted.

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Attached Documents

1. Full Process Pipeline Route Permitting.
2. Routes Accepted for Consideration.
3. Karna Alignment Modification.
4. Proposed Findings of Facts, Conclusions of Law and Order.
5. Proposed Pipeline Route Permit.

(Relevant documents and project information can be found on eDockets (06-1481) or the PUC Facilities Permitting website: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=19035>)

Statement of the Issue

Should the Commission issue a route permit to Nashwauk Public Utilities Commission (NPUC) for a natural gas pipeline? If so, which route alternative should be designated and what conditions should be placed in the pipeline routing permit?

Project Description and Introduction

Project Area

The proposed Nashwauk to Blackberry pipeline project is located within a semi-rural area of southeastern Itasca County in northeastern Minnesota. The area is a mix of forested land, wetlands, pasture and small farms, and mine lands. Iron ore deposits (i.e., the Mesabi Range), along with past and present mining activities (i.e., mine pits, tailings basins, stockpiles, reclaim ponds, etc.) follow a belt of iron ore 110 miles long, averaging 1 to 3 miles wide, and reaching a thickness as great as 500 feet. The “range” extends between Grand Rapids and Babbitt, Minnesota.

Project Description

The proposed 24-inch pipeline route originates at a take-off point on the existing Great Lakes Gas (GLG) 36-inch pipeline in Blackberry Township. The GLG pipeline crosses the region from the northwest along US Highway 2, through the city of Grand Rapids, continuing along US Highway 2 southeastward towards the city of Floodwood.

The proposed pipeline will be a 24-inch outside diameter, welded steel, fusion bond epoxy-coated pipe. The pipeline will provide the natural gas fuel required to operate the proposed

Minnesota Steel Nashwauk Taconite Reduction Plant and other potential industrial customers near the city of Nashwauk. The proposed pipeline will provide natural gas service to Minnesota Steel's proposed plant for use in the processing of taconite and other plant operations. The pipeline is designed to deliver natural gas at a maximum rate of 206 million cubic feet per day and is planned to operate at a pressure of 599 pounds per square inch gauge (psig). The Maximum Allowable Operating Pressure of the pipe will be 1016 psig.

Before the Commission addresses the final decision, EFP staff would like to provide the Commission with (1) a brief discussion of the regulatory process and procedures associated with pipeline routing and (2) an overview of the Nashwauk-Blackberry Project and Department activities since Commission acceptance of the initial Pipeline Routing Permit application.

Regulatory Process and Procedures

Minn. Stat. 216G.02 requires a pipeline routing permit from the Commission to construct certain intrastate natural gas and petroleum pipelines in Minnesota; which includes pipelines with a diameter of six inches or more that are designed to transport hazardous liquids like crude petroleum and those that are designed to carry natural gas and be operated at a pressure of more than 275 pounds per square inch.

There are two review procedures available to applicants for obtaining a pipeline routing permit:

A) **Partial Exemption.** An applicant may apply for a “Partial Exemption from Pipeline Route Selection Procedures” if the project is not expected to have significant environmental impacts. In such a case, the process normally takes from 60 to 120 days from acceptance of the application to completion.

B) **Pipeline Route Selection Procedures.** For larger or more controversial projects with expected significant environmental impacts, a more complex process is required and is referred to as “Pipeline Route Selection Procedures.” It can take up to nine months to complete from the time the application is accepted and includes an analysis of alternatives and a contested case hearing (**Attachment 1**).

If an applicant is applying for a pipeline routing permit under the pipeline route selections procedures process (Minn. Rule 7852.2600, Subpart 2) the application must identify a proposed (preferred) route and evidence of consideration of alternative routes.

Procedurally, the process begins like the partial exemption request with notice to the public of the application (Minn. Rule 7852.0900) acceptance and the scheduling of a public meeting (Minn. Rule 7852.1300, Subpart 1, Item A).

The public has 70 days from the Commission’s acceptance of the application to propose alternative routes or route segments. The pipeline routing rules, part 7852.1400, allow any person to propose an alternate route or route segment.

The Commission must then determine which routes and route segment will be considered at the public hearing (Minn. Rule 7852.1400, Subpart 1). The Commission must approve for consideration at the public hearing the routes and route segments proposed by the applicant and may accept for public hearing any other route or route segments it considers appropriate for consideration. No route shall be considered at the public hearing unless accepted by the Commission before notice of the hearing. A proposer of a route or route segment that the Commission has accepted for consideration at the hearing shall make an affirmative presentation of facts on the merits of the route proposal at the public hearing.

A comparative environmental analysis (CEA), of all the pipeline routes accepted for consideration by the Commission, must be prepared/reviewed by the commission staff (Minn. Rule 7852.1500). This CEA must be submitted as prefilled testimony.

Prior to the public hearings held to consider the routes accepted for consideration by the Commission, the Commission shall hold a public information meeting to explain the route designation process, present major issues, and respond to questions raised by the public (Minn. Rule 7852.1300, Subpart 1, Item B).

A public hearing, presided over by an Administrative Law Judge (ALJ), must be held for the purpose of establishing a complete record upon which the Commission can base a decision on issuance of a pipeline route permit and designation of a pipeline route (Minn. Rule 7852.1700).

The Commission, in its final decision will determine the pipeline route selection and issue the pipeline route permit, specifying appropriate permit conditions. The Commission will base its decision on the public record and the criteria for pipeline route selection laid out in Minn. Rule 7852.1900.

Pipeline Safety and Minnesota Office of Pipeline Safety

The federal government establishes minimum pipeline safety standards under the [U.S. Code of Federal Regulations \(CFR\), Title 49 "Transportation", Parts 190 - 199](#). The Office of Pipeline Safety (OPS), within the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), has overall regulatory responsibility for hazardous liquid and gas pipelines under its jurisdiction in the United States. Through certification by OPS, the state of Minnesota regulates, inspects, and enforces intrastate *gas* and liquid pipeline safety requirements. By signed agreement with OPS, Minnesota also inspects interstate liquid and gas pipeline safety requirements. This work is performed by the Minnesota Office of Pipeline Safety, within the State Fire Marshal Division of the Minnesota Department of Public Safety.

It should be noted that pipeline routing rules apply only to the route of the pipelines. The pipeline routing rules do not set safety standards for the construction of pipelines. See Minnesota Statutes 116I.015 Subd.3.

Agricultural Impact Mitigation Plan

Minnesota Statutes 216E.10, subd.3(b), requires an applicant for a permit for a transmission line, power plant and pipeline to address agricultural concerns. Only a small fraction of the land

along the proposed pipeline route is currently farmed. EFP staff, the applicant and the Minnesota Department of Agriculture are coordinating actions on this requirement. A Draft

Agricultural Mitigation Plan (AMP) was part of the pipeline routing permit application and that continues to be a work in progress and will be throughout the hearing. The Draft AMP is a working document and subject to change based on review and comment by the public and what actions will best mitigate impacts to all types of agricultural lands that may be affected by the project.

A final AMP can be included as one of the conditions in a pipeline routing permit issued by the Commission.

Department activities

On March 6, 2007, the Nashwauk Public Utilities Commission (NPUC) filed an application for a pipeline routing permit and partial exemption from pipeline route selection procedures for the Nashwauk to Blackberry natural gas pipeline project. The docket number for this project is PL E-280/GP-06-1481.

On April 3, 2007, the Commission released an order that accepted the NPUC application under the partial exemption rules as complete.

On Wednesday, April 18, 2007, a public information meeting was held at the Taconite Community Center concerning the proposed Nashwauk to Blackberry pipeline route permit application. The public had until May 18, 2007, to submit comments on the project and application. Due to some procedural issues associated with the notice for the initial public meeting, a second public information meeting was held on May 24, 2007, at the Nashwauk City Hall. The public comment period was extended to June 8, 2007.

Approximately 50 people attended the second information meeting; a variety of questions were asked and comments made by the attendees. Approximately 90 comment letters were received during the comment period. While concerns raised included safety of the pipeline, impact on property values, limitations on the use of pipeline easements, and compensation to land owners, the major issues seemed to be the lack of discussion on alternative routes contained within the application and a desire to have a citizen advisory committee established.

On July 12, 2007, the NPUC submitted a request to the Commission to convert its original application for a partial exemption into a full proceeding pursuant to Minn. Rule Chapter 7852. On July 27, 2007, NPUC submitted a revised pipeline routing permit application incorporating the requirements of the full Pipeline Route Selection Procedures.

The revised application included analysis of 5 routes (**Attachment No. 2**), the preferred route (**Alternative 3**) originally proposed in the initial filing; two additional routes which were studied and rejected as part of the Itasca County Infrastructure program initiated in 2005 (**Alternative 1**

and **Alternative 2**); and two routes (**Alternative route P1** and **Alternative route P2**) developed from citizen input during the partial exemption process.

On August 9, 2007, the Commission granted NPUC's request to convert to the full pipeline route selection procedures. This decision included:

1. Accept the revised Nashwauk Public Utilities Commission pipeline route permit application under the full pipeline route selection procedures and grant NPUC's request to convert the current docket (PL, E280/GP-06-1481) to the full review process.
2. Authorize the Department to establish a citizen advisory committee with the charge and structure recommended in the provided attachment.

On August 28, 2007, the Department held a third public meeting at the Taconite Community Center to inform the public of the conversion to the full review process, to receive comments on route alternatives or modifications, and to solicit input into the components of the comparative environmental analysis. Approximately 32 people attended this public meeting, two of whom spoke during the open forum portion. Approximately 18 comment letters were received during the comment period. The comments/issues raised included:

- minimum distance from housing that a pipeline can be routed by;
- who is the responsible entity should an environmental problem arise;
- can access to the pipeline ROW be restricted to authorized users by a fence/gate system;
- who is the natural gas going to be sold to;
- can the abandoned pipeline ROW along highway 169 be utilized
- suggested alternative routes or route segments;
- supporting statements for the MSI plant and the proposed route.

The first meeting of the CAC also took place on this date. The Citizens Advisory Committee met three times from August 2007 to October 2007. The meetings were open to the public, and frequently additional people attended to listen to the discussion. The committee, through a facilitated process, discussed and made recommendations to the Commissioner of Commerce following the charge given to the task force. The CAC released its report on October 26, 2007.

The CAC recommended that routes Alternative 1, Alternative 2, Alternative P-1 and Alternative P-2 be carried forward for consideration during the contest case hearing. The CAC discussed several alternative route segments to Alternative P-1 and Alternative P-2, but given the fact that each alternative shared the same constraints presented by the Nashwauk isthmus, a consensus could not be reached and further discuss on the modification to these routes were tabled.

The CAC recommended that additional information be developed on an Alternative Route Segment (**CAC Alternative Route Segment**).

On November 8, 2007, the Department EFP staff presented the docket before the Commission for a decision on which additional pipeline alignments, route segments and route alternatives should be accepted for consideration at a contested case hearing.

On December 7, 2007, the Commission released an order identifying the pipeline routes authorized for further consideration at the contested case hearing. The order authorized consideration of the applicant's preferred route (**Alternative 3**), four route alternatives (**Alternative 1**, **Alternative 2**, **Alternative route P1**, and **Alternative route P2**) and one route segment (**CAC Alternative Route Segment**).

The Department EFP staff released the Comparative Environmental Analysis (CEA) on the routes authorized for further consideration on December 21, 2007.

Public hearings were held on January 3, 2008, and January 4, 2008, at the Nashwauk City Hall; approximately 30 members of the public attended the hearings, eight of whom offered comments.

During the public hearing, Mr. Peter Clevestine from the Department of Natural Resources, Division of Lands and Minerals, stated that the DNR has an interest in protecting the northern outcrop of the Biwabik Iron Formation which lies on the north side of Nashwauk.. Mr. Clevestine also stated that three of the alternative routes (P1, P2 and the CAC alternative segment) would encumber these deposits. Whereas, the other three routes (**Alternative 1**, **Alternative 2**, and **Alternative 3**) could avoid these deposits if the terminus could be shortened by 0.5 mile.

NPUC testified that the Applicant's preferred route (**Alternative 3**) could terminate 0.5 miles (the point at which the route turns north as designated on page D-18 of Ex. 12, and south of County Road 58) before the end-point specified in its Application, as long as the route continued two miles beyond Minnesota Steel to support further industrial development.

Nineteen comments were received during the public comment period following the public hearing; sixteen opposed Alternative Routes P-1, P-2 and the CAC Route Segment. Specifically, those commenters opposed the three alternative routes because of their proximity to populated areas and highways, the higher costs associated with the alternatives, and the impact on existing snowmobile trails and environmental ecosystems. The majority of those public comments also expressed support for the Applicant's Preferred Route

Three written comments opposed the Applicant's Preferred Route. Michael Karna opposed the Applicant's Preferred Route because it would traverse property he owns; he also believed that there was an inconsistency between the number of houses affected in the partial exemption application and in the full application. Bob Norgard raised some issues about the mineral resources in the area and also proposed an end point to what he considered to be a "citizens'" alternative route. Clarence and Ellie Randle's comment suggested that the Applicant's Preferred Route had been inappropriately altered to cross their property. As noted in a comment letter from the NPUC consultant Charles Michael, it appears the Randles confused the route proposed for the Excelsior Energy project with the proposed NPUC pipeline route. The NPUC route has not changed since the Application was filed.

The Administrative Law Judge released his report and recommendations on February 22, 2008.

The ALJ's report contains a summary of the evidence in the record and a recommendation based on that record. It is not a final decision. Department EFP staff has incorporated the ALJ's report into draft Findings of Fact, Conclusions of Law and Order (**Attachment 4**).

Pipeline Routes Accepted for Consideration

The Commission authorized consideration of the applicant's preferred route (**Alternative 3**), four route alternatives (**Alternative 1**, **Alternative 2**, **Alternative route P1**, and **Alternative route P2**) and one route segment (**CAC Alternative Route Segment**).

The Commission's Order also approved further consideration of the route alignment proposed by Mr. Michael Karna, even though Commission approval was unnecessary because the requested alignment falls within the parameters of the pipeline corridor. Mr. Karna had also requested consideration of another alternative route segments that he was offering. However, the Commission's Order excluded both Mr. Karna's alternative route segment and another alternative identified as the White Alternative Route Segment from further consideration

A regional feature to keep in mind when evaluating potential pipeline routes originating from the GLG pipeline is the Mesabi Range, including past, current and potential future activities associated with the ore deposits.

Pipeline routes which tap into the GLG pipeline east of Grand Rapids, and therefore south of the range, must at some point cross the range to connect to the Minnesota Steel plant, which is located on the north side of the range. Due to past, present and future mining activities, the number of available areas, within a reasonable distance from both the GLG pipeline and the Minnesota Steel Plant, to cross the range are limited. Three potential areas to cross the ore deposits are apparent: the Highway 7 area near the city of Taconite; the area between Patrick Stilling Basin and Snowball Lake near Pengilly; and through the city of Nashwauk (i.e., the isthmus of land between Hawkins Pit and LaRue Pit).

After consideration is given to the future mining activities associated with the Minnesota Steel plant, the passage near Pengilly must be eliminated from consideration.

The Nashwauk isthmus presents some severe technical issues relating to the development of a linear project such as the natural gas pipeline route through the city of Nashwauk. When considering potential future mining activities around the two pits, the blast buffer zone (2000 feet), and the population density, routing through the city becomes problematic.

Alternative 1 West Grand Rapids (yellow)

Alternative 1 extends 27.2 miles from a point west of Cohasset, Minnesota, to the termination point, approximately 8.5 miles north and 22.6 miles east, near the city of Nashwauk, Minnesota. The alignment traverses east from Cohasset approximately 2.7 miles turning north at County Road 168 for approximately 2.5 miles and then northeast and east approximately 22 miles terminating east of Nashwauk, Minnesota. This alternative alignment extends from the northeast

¼ of the northwest ¼ of Section 9, Township 55 North, Range 26 West, Itasca County (Latitude 47.234118, Longitude -93.650705). This alternative alignment terminates in the northeast ¼ of the southwest ¼ of Section 29 in Township 57 North Range 22 West, Itasca County (Latitude 47.384504, Longitude -93.196173).

Alternative 2 East Grand Rapids (orange)

The proposed pipeline will run north for approximately 13-miles to an area near the city of Taconite. The proposed pipeline will then turn northeast for approximately 9-miles until it reaches the city of Nashwauk. The pipeline will terminate in the northeast ¼ of the northeast ¼ of Section 36 in Township 57 North Range 23 West, Itasca County.

Alternative 2 extends 24.6 miles from a point east of LaPrairie, Minnesota, to the termination point, approximately 10.7 miles north and 15.2 miles east, near the city of Nashwauk, Minnesota. The alignment traverses east from LaPrairie approximately 7.4 miles where it intersects the preferred alignment. At this point, Alternative 2 turns north for approximately 7 miles and then northeast and east approximately 10.2 miles, terminating east of Nashwauk, Minnesota. This alternative alignment extends from the northwest ¼ of the northwest ¼ of Section 10, Township 55 North, Range 25 West, Itasca County (Latitude 47.23624, Longitude -93.488939). This alternative alignment terminates in the northeast ¼ of the southwest ¼ of Section 29 in Township 57 North Range 22 West, Itasca County (Latitude 47.384504, Longitude -93.196173).

Alternative 3 NPUC Preferred Route (red)

This pipeline route originates at a take-off point on the existing Great Lakes Gas (GLG) 36-inch pipeline in Blackberry Township. The pipeline will run north for approximately 13 miles to an area near the city of Taconite. The proposed pipeline will then turn northeast for approximately 9 miles until it reaches the city of Nashwauk. The pipeline will terminate in the northeast ¼ of the northeast ¼ of Section 36 in Township 57 North Range 23 West, Itasca County (Attachment 1 provides project location maps for the proposed pipeline).

Alternative P-1 (light blue)

Alternative P1 extends 25.4 miles from the GLG 36 inch diameter pipeline south of State Highway 2 in Sago Township southeast of Warba, Minnesota, to the termination point, approximately 19.4 miles north and 3 miles west, near the city of Nashwauk, Minnesota. The alignment traverses northeast approximately 19 miles along Highway 65 and Highway 16 and extends just east of the Saint Louis County boundary where it turns west-northwest approximately 8.8 miles to Highway 169, and then northeast along Hwy 169 approximately 4.7 miles to County Highway 58 and then approximately 5.7 miles west and southwest terminating west of Nashwauk, Minnesota. This alternative alignment extends from the southeast ¼ of the northwest ¼ of Section 13, Township 53 North, Range 23 West, Itasca County (Latitude 47.077883, Longitude -93.202829). This alternative alignment terminates in the southwest ¼ of the southeast ¼ of Section 4 in Township 56 North Range 23 West, Itasca County (Latitude 47.257282, Longitude -93.267021).

Alternative P-2 (dark blue)

Alternative P2 extends 29.9 miles beginning from same terminus as Alternative P1 at the GLG 36 inch diameter pipeline south of State Highway 2 in Sago Township southeast of Warba, Minnesota, and extends to the same termination point, approximately 19.4 miles north and 3 miles west, near the city of Nashwauk, Minnesota. Alternative P2 traverses northeast, approximately 19 miles along Highway 65, to Highway 169 where it intersects Alternative P1.

The alignment parallels Hwy 169 approximately 4.7 miles to County Highway 58 and then approximately 5.7 miles west and southwest terminating west of Nashwauk, Minnesota. This alternative alignment extends from the southeast ¼ of the northwest ¼ of Section 13, Township 53 North, Range 23 West, Itasca County (Latitude 47.077883, Longitude -93.202829). This alternative alignment terminates in the southwest ¼ of the southeast ¼ of Section 4 in Township 56 North Range 23 West, Itasca County (Latitude 47.257282, Longitude -93.267021).

CAC Alternative Route Segment (purple)

The CAC Alternative Route Segment traverses east from LaPrairie, along the Alternative 2 Route corridor, for approximately 7.4 miles where it intersects the preferred route (i.e., Alternative 3) corridor. At this point, the CAC Alternative Route Segment follows the Alternative Route 2 and Alternative Route 3 shared corridor for approximately ¾ of a mile. From this point the CAC Alternative Route Segment diverges from the other two routes and heads northeast for approximately 8.9 miles, where it connects to the Alternative Route P-1 corridor. From this point, the CAC alternative Route Segment shares the corridor for Alternative Route P-1 northeast along Hwy 169 approximately 4.7 miles to County Highway 58 and then approximately 5.7 miles west and southwest terminating west of Nashwauk, Minnesota.

Karna Alignment Modification (See Attachment 3)

Mr. Karna owns the property (parcel No. 08-010-3200) where the preferred route would tie into the Great Lakes Gas (GLG) main. The stated alignment for the preferred route transects Mr. Karna's property on a diagonal (southwest – northeast) and potentially interferes with his development plans. In his request, Mr. Karna is seeking a modification in the alignment which would move the proposed NPUC – GLG tie-in approximately 800 feet east. This would place the tie-in approximately 200 feet west of the eastern property line of parcel number 08—010-3200. From this new tie-in point, Mr. Karna proposes the new alignment continue straight north, joining the original alignment at the crossing of Highway 2.

In their response dated October 15, 2007, to an information request from the Department concerning this matter, NPUC stated that the purpose of the requested 1,320 foot route was to allow NPUC to respond to and place the pipeline ROW (i.e., alignment) according to actual site conditions, and when possible, to accommodate landowner requests for modifications.

Additionally, NPUC stated that the Karna modification is reasonable, lies within the originally proposed route and the moving of the tie-in along the GLG line is not expected to present any problems with pipeline construction.

The proposed change in alignment would move the pipeline closer to one residence, from an approximate distance of 300 feet to a distance of 100 feet; however, no new property owners would be impacted.

Comparative Environmental Analysis

Minnesota Rule 7852.1900, Criteria for Pipeline Route Selection, subp.3, provides the criteria to be used in selecting a route for designation and issuance of a pipeline routing permit. These same criteria were used to compare the routes in the CEA. They are:

- A. human settlement, existence and density of populated areas, existing and planned future land use, and management plans;
- B. the natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;
- C. lands of historical, archaeological, and cultural significance;
- D. economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;
- E. pipeline cost and accessibility;
- F. use of existing rights-of-way and right-of-way sharing or paralleling;
- G. natural resources and features;
- H. the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;
- I. cumulative potential effects of related or anticipated future pipeline construction; and
- J. the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.

The overall human and environmental impact from this project is not likely to be significant, as long as all appropriate and specified mitigation measures for right-of-way preparation, construction and pipeline operation and maintenance are followed.

Neither the Route Alternatives nor the CAC Route Segment described in the Commission's December 7, 2007, Order offer significant advantages over the Applicant's Preferred Route in terms of human or environmental impacts. Rather, each of those Route Alternatives and the CAC Route Segment raise some greater human and environmental concerns.

DOC EFP Staff Analysis and Comments

The Applicant's Preferred Route meets all of the criteria set forth in Minn. R. 7852.1900. No alternative route would minimize the human and environmental impacts to a greater extent than the Applicant's Preferred Route, particularly if a minor modification is made to where the

pipeline terminates in the vicinity of the City of Nashwauk. In comparison to the alternative routes under consideration, the Applicant's Preferred Route affects the fewest number of residences of any route and requires the shortest length of right-of-way. The Applicant's Preferred Route also costs less than the alternative routes; contains the fewest number of watercourse crossings; affects the smallest number of federal and state-listed species; crosses the least number of grassland cover areas; and does not affect any listed historical, archaeological sites within 0.25 miles of the route.

The P-1 and P-2 Alternatives and the CAC Route Segment compromise future mining operations by falling within the industry standard 2000-foot buffer zone between a high-pressure gas pipeline and blast mining. As described in the NPUC's application, only the last half-mile segment of the Applicant's Preferred Route would interfere with future development of mineral resources. If the Applicant's Preferred Route is modified by deleting that last half-mile segment, as the ALJ recommends, it would have no adverse impact on the future development of mineral resources and mining operations in the area. The NPUC has agreed to delete that segment of the pipeline.

The record establishes that the Applicant's Preferred Route satisfies all routing criteria. The Route Alternatives that the Commission directed to be considered in its December 7, 2007, Order, do not provide any significant advantages over the human or environmental impacts of the Applicant's Preferred Route.

Department EFP staff recommends that the Commission grant the requested routing permit for the Applicant's Preferred Route, modified to eliminate the last half-mile segment and to include the Karna Alignment Modification.. A proposed Pipeline Route Permit has been developed by the Department EFP staff and is attached (**Attachment 5**).

Commission Decision Options

A. Approve and Adopt the Findings of Fact, Conclusions of Law and Order for the NPUC Natural Gas Pipeline Project (PUC Docket No. PL E280/GS-06-1481) which:

1. Designates a route for the construction of the Nashwauk-Blackberry natural gas pipeline project;
2. Issues a Pipeline Route Permit, with appropriate conditions, to Nashwauk Public Utilities Commission.

B. Approve and adopt the Findings of Fact, Conclusions and Order as above while imposing any further permit conditions as deemed appropriate.

C. Amend the Findings of Fact, Conclusions and Order and Route Permit as deemed appropriate.

D. Make some other decision deemed more appropriate.

EFP Staff Recommendation: The Department EFP staff recommends Commission adoption of options A.