

## 3.0 Alternatives

### 3.1 Evaluation Criteria for Analysis of Alternatives

#### 3.1.1 *Minnesota Rules for Alternatives Analysis in an EIS*

Pursuant to Minnesota Rule 4410.2300(G), an EIS must compare the potentially significant impacts of the proposal with those of other reasonable alternatives to the proposed project. The EIS must address one or more of each of the following types of alternatives or provide a concise explanation of why no alternative of a particular type is included in the EIS:

- Alternative sites,
- Alternative technologies,
- Modified designs or layouts,
- Modified scale or magnitude,
- Alternatives incorporating reasonable mitigation measures identified through comment periods for EIS scoping or the DEIS, and
- No Action Alternative.

The alternatives that will be considered during the DEIS process are identified in Section 3 of this document. The public may comment on these alternatives and propose additional alternatives during the 45-day comment period on the DSDD. DOC-EERA will apply the criteria in Minnesota Rule 4410.2300(G) in determining whether additional alternatives not already identified in Section 3 will be included for analysis in the DEIS.

Minnesota Rule 4410.2300(G) states that an alternative may be excluded from analysis in the EIS if:

- it would not meet the underlying purpose of the project,
- it would likely not have any significant environmental benefit compared to the project as proposed, or
- another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits but substantially less adverse economic, employment or sociological impacts.

#### 3.1.2 *Criteria for Evaluating Alternatives included in an EIS*

All alternatives that will be carried forward for consideration in the EIS will be identified in the FSDD. Not all alternatives included in the final scope, however, must be evaluated in detail in the EIS. Alternatives included in the scope of the EIS that were considered but eliminated based on information developed through the EIS analysis must be discussed briefly and the reasons for their elimination must be stated.

DOC-EERA will use the following criteria in determining whether (under Minnesota Rule 4410.2300(G)) an alternative included in the scope of the EIS could be eliminated based on information developed through the EIS analysis.

1. The alternative must meet the underlying purpose of the project.

The purpose of the project is to transport growing crude oil production from the Bakken Formation in North Dakota to the Superior, Wisconsin, terminal and then connect to various other pipelines expanding access to refinery markets in the US Midwest and beyond.<sup>14</sup>

2. The alternative must be reasonable.

DOC-EERA will assess reasonableness of the alternatives based on the technical feasibility, costs, reliability, energy demand, overall state energy needs and the appropriateness of the size, type and timing of the alternative compared to the Applicant's proposed project.

3. The alternative would have significant environmental benefits compared to the applicant's proposed route.

Examples of environmental criteria that may be used during alternatives evaluation in the DEIS include but are not limited to:

- A. Wells and aquifers: number of wells and aquifers within alternative corridor
- B. Waterbodies: quality, context, number of rivers, lakes, creeks, and drainages, crossed by each alternative
- C. Wetlands: acres, types, number of crossings
- D. Rare Resources: Natural Heritage Information System (NHIS) data impacted by each alternative (by number or acreage)
- E. Land Management/Ownership: number of acres of tribal lands, or federal or state parks/recreation impacted by each alternative
- F. Land Use Cover Type: acreage of agriculture, forestry, urban, etc.
- G. Cultural Resources: number of sites, National Register of Historic Places (NRHP) eligibility, impacts within the project corridor, Traditional Cultural Properties, and subsistence areas
- H. Co-location: number of miles co-located with other utility or roadway infrastructure by each alternative

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<sup>14</sup> Certificate of Need Notice Plan, Enbridge, June 7, 2013; p.ii.

- I. High Consequence Areas (HCAs): Number of HCAs crossed by each alternative as defined by Pipeline and Hazardous Materials Safety Administration (PHMSA) criteria for hazardous liquid pipelines. Focus on unusually sensitive ecological resources.<sup>15</sup>
4. The alternative would have similar environmental benefits but substantially less adverse economic, employment or sociological impacts compared to the applicant's proposed route.

Examples of economic, employment or sociological criteria that may be used to analyze the alternatives during evaluation in the DEIS include but are not limited to:

- A. Project cost
- B. Number of jobs due to construction
- C. Full-time jobs as a result of construction
- D. Induced impacts
- E. Displacement
- F. HCAs: Number of HCAs crossed by each alternative as defined by PHMSA criteria for hazardous liquid pipelines. Focus on populated areas and drinking water sources.<sup>16</sup> Populated areas include both high population areas (called "urbanized areas" by the US Census Bureau) and other populated areas (areas referred to by the US Census Bureau as a "designated place").

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<sup>15</sup> *Unusually sensitive ecological areas* include locations where critically imperiled species can be found, areas where multiple examples of federally listed threatened and endangered species are found, and areas where migratory water birds concentrate.

<sup>16</sup> *Drinking water sources* include those supplied by surface water or wells and where a secondary source of water supply is not available. The land area in which spilled hazardous liquid could affect the water supply is also treated as an HCA.