Minnesota Department of Natural Resources
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Bill Storm
Energy Facility Permitting
Minnesota Department of Commerce
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RE: EIS Scoping Comments for Essar Steel Transmission Line Project

Mr. Storm:

The Minnesota Department of Natural Resources (DNR) has reviewed the Essar Steel Transmission Line Project Route Permit Application and provides the following comments to assist in scoping of the Draft Environmental Impact Statement (EIS).

In general all of the proposed Essar Steel transmission line alternative routes 1A, 2A, 3A and 4A, pass through new green field routes and should be avoided. There are several miles of new greenfield routes, if possible, it be more beneficial to use existing parallel rights of way instead of new routes especially the proposed 8 miles of 1 and 1A and the new corridor in Route 2. Route 2 also uses a lot of existing corridor but the new corridor would run through a major deer wintering area probably destroying or fragmenting conifer stands that are used by deer for winter cover. The new route also crosses the Prairie River. Following existing transmission routes would result in a wide corridor, however there would be less overall fragmentation.

Routes 2, 2A, 3, 3A, 4, and 4A pass through areas that contain unmined ferrous minerals and stockpiled ferrous minerals. If routing of a transmission line passes through or over state owned ferrous minerals, proper compensation for the encumbered mineral resources will be required prior to leasing approval.

Very little state owned lands are involved and could be avoided completely depending on options. There also appears to be an error on in the data base used to assess state land ownership, some of the parcels are indicated to be MNDOT ownership, however, they likely are some other state ownership. Make sure an easement is secured if state lands are included. Also, general language about utilizing forest products removed in ROW clearing might be useful. Line clearing debris that cannot be utilized as round wood products should be encouraged to be used as biomass. Using debris as biomass would eliminate the need for burning and reduces wildfire potential.

Several of the proposed corridors cross streams and rivers. Clearing for any water crossing should be kept to the minimum necessary and suitable ground cover established and maintained, especially on any slope leading to the water. Lake crossings should be avoided, stream crossings should be perpendicular to flow and along a straight run.

In some areas the proposed corridors would be going through extensive natural habitat- mostly lowland shrub and conifer forest swamps, and open shrub and sedge wetlands. The corridors also pass through

areas that have already been very heavily impacted by human activities. The concerns are for those areas that are still closer to their natural state where new corridors could introduce invasive species, induce habitat fragmentation, increase exposure of amphibians to herbicides, and increase the risk of bird collision with power lines, increase the risk of bird electrocution, and increase the need to remove nests of ospreys and ravens from power poles. In short there would be some degradation in the quality of the habitats in general. Although it might not be feasible to quantify these risks and degradations, it is important to note these for the record and mitigate for them.

The scope of the EIS needs to specifically include an evaluation of rare and unique natural resources. The absence of Heritage data points in a specific area should not be misconstrued to mean that rare, threatened and endangered species do not exist at this site. Unless it is known that a recent intensive survey for rare species has been undertaken in that specific area, absence of a species cannot be ascertained. It is best to assess the potential for threatened and endangered species presence based on the habitat type and knowledge of the habitat needs of a species.

A review or existing literature of environmental effects from transmission lines will assist in preparation of the EIS. There is an extensive literature on bird collision and bird electrocution; on effects of habitat fragmentation; and some on the effects of herbicides on amphibians. There is also increased concern about invasive species introductions to natural habitats. There is also literature on habitat fragmentation and there is likely extensive literature on this subject detailed for specific habitat types. There is also an extensive literature on the effects of herbicides on amphibians, this issue should be addressed if herbicides are going to be used in the vegetation management within grid corridors.

Forest and Wetland Habitat Fragmentation –
Considerations should be giving to keeping patches of habitat whole instead of further fragmenting them; especially in areas that are less impacted by mining.

- Address the **quality** of the forest habitat and the wetland habitat that get fragmented by the power line path.
- Consider using the **plant community classification system** to rank the habitat quality.
- A **quantitative measure of habitat fragmentation** can probably be obtained from spatial programs like Fragstats.
  http://www.umass.edu/landeco/research/fragstats/fragstats.html
- The EIS ideally should quantify habitat fragmentation for each of the alternatives with a before and an after fragmentation measure.

Bird Collision with Power Lines

- The EIS should identify measures that would be set in place to minimize bird collision with power lines.
- Alternatives that have a reduced potential for collisions.

Bird Electrocution by Power Lines

- The EIS should address bird electrocution by power lines. The US Fish and Wildlife Service or other available guidelines should be followed to minimize the possibility of birds getting electrocuted.

- What actual measures will be in place to minimize the possibility of birds getting electrocuted.

Raptors /Ravens Nesting on Power lines

Ospreys and Ravens often nest on power poles. This is more likely in areas where there are not adequate nesting sites.

- The EIS should be explicit about how osprey nests on power poles would be handled. The EIS should require that these be reported to the DNR and a strategy to place a nesting platform nearby to replace any nest that has been taken down. Also active nests should not be taken down until after the nesting season has passed and the young have fledged.

Reporting of Bird Mortality Due to Electrocution or Collision

There is extensive literature on the problem of bird collision with and electrocution from power lines. The research indicates that the problem is more extensive than what the current reporting of mortality indicates.

- The Environmental Impact Statement should address the documentation and reporting of bird mortality

Vegetation Management in Power line Corridors

- The EIS should have details on how vegetation under power lines would be managed and whether or not herbicides would be used.
- The effects of herbicide use should specifically address impacts on amphibians.
- There are also increased risk of introducing invasive species to habitats that currently are closer to their natural states and dominated by native species (should check with Bruce Carlson on this)

Risk of collision and electrocution

There are plenty of references to the issues of bird collision and electrocution in the literature. There is a concern that large raptors could get electrocuted by high voltage transmission lines because of their wide wing span.

There are no Natural Heritage records of bald eagle nests or other nests that are within 3 miles from the length of Route 2, Route 2A or Route 1 and Route 1A. Land is heavily impacted by mining in T 57 R22; T57 R23. The Heritage database does not show any bald eagle nests in either of these 2 townships. There are eagle records in T 56 R22 (O' Brien and Little O'Brien Reservoir) but these are probably too far from any proposed power line to be of concern. Route 3 could possibly pose an electrocution/ collision threat to bald eagles and their progeny from nests on the south shore of Swan Lake in T 55N R22W and T55 R23W and for those from nest on Lower and Upper Panasa Lakes in T 56N R23W. There is a northern goshawk nest within a mile from route3 in T55N R23W; both the adult birds and progeny could face a risk of collision/ electrocution from this route.

Raven, herons, ducks have been reported to incur mortality from collision and electrocution. The risk to other birds cannot be evaluated specifically because their nests are not monitored and therefore their locations are not known. This is why it is important that the EIS addresses the monitoring and reporting

of dead birds encountered within the transmission line corridors. Because of many wetlands in the area herons and different duck species would also face an increased risk of collision/ electrocution.

Habitat Fragmentation

Habitat fragmentation is less of a concern for Route 3 in T56N R22W, as the area is already heavily impacted by mining. Route 1 A in T 57N R22W passes through some extensive black spruce swamp – Habitat fragmentation should be addressed if the power line corridor would impact a large lowland area (1 mile x 0.33 mile area in T57N R22W Section 18). Sections 6 and 7 of T57N R22W – and Section 31 of T 58N R22W are not too impacted by mining – Current Habitat quality and the effects that the new power line would have on the habitats in this area should be noted in the EIS. It appears that proposed Route 1 A will be crossing small streams. Details about these crossings should be noted in the EIS.

Route 2A: starting in T57N R23W Section 36 –Section 33 looks like highly disturbed lands- In Sections 31, 32 T57N R23W, and sections 33, 34, 35 & 36 of T 57N R24W Proposed corridor crosses many tributaries to the Sucker River- Prairie River – Concerns need to be noted about these crossings; the habitat patches however show already a lot of fragmentation and interspersion of human modified habitat with wetlands and forest.

Route 2: This route passes over Oreilly Lake and Little Oreilly Lake in T 56N R24W. There is already a 115 KV corridor between these 2 lakes. Will there be any modification to the corridor all the way to the Mine Substation in T56n R23W? It appears that this route may go through old growth forest in Section 31, T57N R24W. EIS will need to address potential effects to this old growth forest.

Route 3A: From Highway 169 going south in T56N R24W Section 25 there are existing corridors that the power line path could follow. In the following sections - T 56 R24 S36, T55 R24 S1, S12, S13 the power line path as depicted in the diagram/map provided deviates from existing roads, trails and paths. There are a lot of wetlands in this area, some very large, that would be fragmented if the power line was straight instead of followed existing roads (which would add to the length of the transmission line). Here consideration of invasive species that could be introduced into more or less natural habitat should be addressed.

Thank you for the opportunity to provide scoping comments on this project. Please contact me at (651) 259-5156 if you have any questions.

Sincerely,

Randall Doneen
Environmental Review Planning Director