

**GENERAL INSTRUCTIONS FOR EXCEL TEMPLATE:**

1. Do not leave blank rows above or between comments.
2. Do not modify or delete the instructions or the column headings (i.e. the grey areas).
3. Each comment must have an associated topic and recommendation.
4. All formatting (i.e. bullets) will be lost when this file is uploaded to the Online Comment Table.
5. If necessary, adjust the cell width and height in order to view all text.
6. Cutting and pasting comments from WORD documents cannot include hard returns (spaces between paragraphs).
7. If you would like to create paragraphs within a single cell, please use a proper carriage return (ALT & ENTER).

<b><u>TOPIC</u></b>	<b><u>COMMENT</u></b>	<b><u>RECOMMENDATION</u></b>
<i>Be as specific as you think is appropriate; for example a section or page of the document, a recommendation #, general comment, etc.</i>	<i>Comments should contain all the information needed for the proponent and the Board to understand the rationale for the accompanying recommendation.</i>	<i>Recommendations can be for the proponent or for the Board. Recommendations should be as specific as possible, relating the issues raised in the "comment" column to an action that you believe is necessary.</i>

<b>Item Number</b>	<b>Topic</b>	<b>Comment</b>	<b>Recommendation</b>
1	Basic Information on the Land Use Activity	There were few detailed designs submitted with the application. Details lacking included the pole and cross-bar configuration, guy wire design and placement, and double pole design that may be used on corners or long spans on the Misery Road. To better understand the potential for environmental effects on birds and caribou, such information should be provided by the company.	DDEC should provide details on the pole and cross-bar configuration, guy wire design and placement, and double pole design that may be used on corners or long spans on the Misery Road. DDEC should also explain how the design was chosen to minimize effects on wildlife and use of habitat.
2	Environmental Impacts	Section 6 of the application form presents DDEC's predictions of environmental impacts. The proposed overhead line may minimize risk to caribou from the perspective of risk to injury, but ignores potential additional risk to movement through this added linear feature. Power transmission lines have been demonstrated to cause reindeer in Scandinavia to avoid areas	DDEC should provide its analysis and predictions of the impacts of the power line on caribou movement, when considered in conjunction with the physical structure of the road and haul traffic. It is essential to place this additional information before the WLWB prior to installing the power line

		<p>adjacent to the lines and hinder their migration under the lines altogether (Nellemann et al. 2003, Vistnes et al. 2004, Vistnes and Nellemann 2008; although these conclusions have been questioned by other researchers: Reimers et al. 2007). In addition, recent research has suggested that ultraviolet discharges on power lines may be visible to reindeer (and other wildlife), and that these discharges contribute to wildlife avoidance of power lines and enhanced reluctance to cross under them (Tyler et al. 2014). Additional effects of the proposed Misery power line in combination with the existing physical road structure and increasing traffic may increase the partial barrier effect of these linear developments on caribou movement. The Agency is not convinced that the current Wildlife Effects Monitoring Program adequately measures deflection by caribou along road systems at Ekati.</p> <p>Nellemann, C., P. Jordhøy, I. Vistnes, O. Strand, and A. Newton. 2003. Progressive impacts of piecemeal development on wild reindeer. <i>Biological Conservation</i> 113:307–317.</p> <p>Reimers, E., B. Dahlea, S. Eftestøla, J.E. Colmana, and E. Gaare. 2007. Effects of a power line on migration and range use of wild reindeer. <i>Biological Conservation</i> 134:484–494.</p> <p>Tyler, N., K.-A. Stokkan, C. Hogg, C. Nellemann, A.-I. Vistnes, and G. Jeffery. 2014. Ultraviolet vision and avoidance of power lines in birds and mammals. <i>Conservation</i></p>	<p>because, as noted in point 3 below, the best means of installation may well be different from that proposed by DDEC. Even if the installation is not revised, the means of monitoring the line may be influenced, as noted below in point 4.</p>
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3	Alternatives	<p>There is mention in the application (s. 5) of parts of the line being laid on the ground at the north and south ends. There is little discussion of any alternative configurations or designs. Alternatives considered should have included an option of laying all the power lines on the ground, as well as laying the power lines on the ground at caribou crossings.</p>	<p>DDEC should provide an assessment of alternative power line designs including an all on-the-ground option, and on-the-ground option for caribou crossings. The assessment should include an estimate of financial costs and predicated environmental impacts.</p>
4	Monitoring and Reporting	<p>The application does not contain any information about monitoring and reporting of the power line and its environmental impacts. Such monitoring should include bird kills and deterrence, and caribou movement deflections and disruption to behaviour (which may include the use of cameras). If there are measureable deflections and disruption, consideration should be given to burying the power line at critical crossings or other locations.</p>	<p>DDEC should provide details on how it intends to monitor the environmental effects of the power line, the effectiveness of mitigation measures (including pole caps, line spinners and guy wires), and how this information will be publicly reported and used in further mitigation, including the possible burying or laying of the power line on the ground.</p>

5	Engagement	The 32-page Engagement Registry submitted with the application does not mention the power line proposal as it deals with the Lynx and Jay-Cardinal Projects. Although the covering letter mentions that the proposal was discussed at community meetings and changes in design were incorporated, no details of those meetings are provided. The Agency only learned of the proposal from DDEC after the land use permit applications was circulated for comment.	DDEC should provide details of its specific engagement activities around the power line project, concerns and issues raised and how the company has responded.
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