8. OPERATIONS/MAINTENANCE

Operation of The Project consists of electrification of the line and ongoing/emergency maintenance as required once the line is in service. Operations and maintenance activities have the potential to impact the environment. Potential impacts will be avoided if possible, then minimized and/or mitigated as necessary.

8.1 Activities and Potential Impacts

8.1.1. Line Operation

High voltage transmission lines, when operating, can result in corona discharge and electric/magnetic fields. These potential impacts are considered to be minimal and already occur as a result of the existing line. With regard to corona and their effects, Ontario Hydro (1985) provides the following:

> "*When the electric field intensity at the surface of a conductor exceeds the dielectric breakdown strength of air, the air in the immediate vicinity of the conductor becomes ionized. This phenomena is known as corona discharge. The corona discharge manifests itself by bluish tufts or streamers of light, occasionally visible at night, appearing around the surface of the conductor. These are more or less concentrated at irregularities (e.g. nicks, scratches, contaminating particles) on the conductor surface. Corona discharge is accompanied by a hissing or crackling sound. In foul weather, the added irregularities caused by rain, freezing rain or snow on the conductor surface my result in increased corona activity.*
>
> *Corona on a transmission line may result in power losses, audible noise, radio noise, TV interference (TVI) in isolated cases and the production of minute quantities of oxidants (ozone and nitrous oxides).*"

Health Canada (2012) has stated: "*Health Canada does not consider that any precautionary measures are needed regarding daily exposures to EMF [electric magnetic fields]... at ELF [extremely low frequencies]. There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors*". Further, the line passes through undeveloped areas within The Park, and as such, EMF effects or concerns are not expected.

8.1.2. Maintenance

Once constructed, the facility will require ongoing maintenance. A Transmission Vegetation Management Program (TVMP) is required by the North American Electric Reliability Corporation (NERC) Standard FAC-003-1 for transmission lines operating at 200 kV and higher. The purpose of the plan is to improve the reliability of electric transmission systems by preventing outages from vegetation located on transmission ROWs, minimizing outages from vegetation located adjacent to ROWs, and maintaining clearances between transmission lines and vegetation on and along transmission ROWs (NERC, 2006). Industry best practices will