

LICENCE

Licence No. / Licence n° 3055

Issue Date / Date de délivrance August 14, 2013

In accordance with *The Environment Act* (C.C.S.M. c. E125) /
Conformément à la *Loi sur l'environnement* (C.P.L.M. c. E125)

Pursuant to Section 12(1) / Conformément au Paragraphe 12(1)

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

MANITOBA HYDRO:
"the Licencee"

for the construction, operation and maintenance of the Development being the Bipole III Transmission Project, consisting of a new 500 kV HVdc transmission line connecting two new converter stations, one in the north near Gillam (Keewatinoow Converter Station) and one in the south near Winnipeg (Riel Converter Station), two new ground electrodes connected to each of the new converter stations, and new 230 kV ac transmission collector lines to connect the new northern converter station to existing northern converter stations, in accordance with the Proposal dated December 14, 2009, the Bipole III Transmission Project Environmental Impact Statement (EIS) filed under The Environment Act in December 2011, supporting information filed in association with the EIS dated June 22, July 31, August 8, September 17 and 20, October 2, 23, and 19, 2012, January 28, February 19, and 25, 2013, in consideration of the June 2013 Clean Environment Commission Report on Public Hearings, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence:

“**bog**” means a peat-covered wetland in which the vegetation shows the effects of a high water table and a general lack of nutrients. The surface is often raised relative to the surrounding landscape and isolated from mineralized soil waters. At least 40 cm of peat are present. The plant community is dominated by cushion-forming Sphagnum mosses (peat mosses), ericaceous shrubs and black spruce trees;

“**Director**” means an employee referred to in this licence, so designated pursuant to *The Environment Act*, who is the Director of the Environmental Approvals Branch of the Department of Conservation and Water Stewardship (CWS), unless otherwise specified;

“**Environment Officer**” means an employee so designated pursuant to *The Environment Act*;

“**native habitat**” means grasses, wildflowers, shrubs, trees, and other vegetation that occur naturally and support fauna indigenous to the area;

“**Minister**” means the Minister of Conservation and Water Stewardship;

“**quarry**” means a mine that is an open excavation from which quarry mineral is removed;

“**quarry mineral**” means a mineral, other than a diamond, ruby, sapphire or emerald, that is obtained from a quarry, and includes sand, gravel, clay, shale, kaolin, bentonite, gypsum, salt, peat, peat moss, coal and amber, and rock or stone that is used for a purpose other than as a source of metal, metalloid or asbestos;

“**record drawings**” means engineering drawings complete with all dimensions which indicate all features of the pipeline as it has actually been built;

“**Region**” means the geographic areas of the Province of Manitoba in which the Department of Conservation and Water Stewardship has been divided;

“**Regional Director**” means an employee so designated by the Department of Conservation and Water Stewardship;

“**Regional Forester**” means an employee so designated by the Department of Conservation and Water Stewardship;

“**riparian area**” means an area of land on the banks or in the vicinity of a waterbody, which due to the presence of water supports, or in the absence of human intervention would naturally support, an ecosystem that is distinctly different from that of adjacent upland areas (*The Water Protection Act 2005*);

“**rutting**” means a sunken track or groove made by the passage of vehicles;

“**slash**” means branches and other woody debris that result from forest clearing;

“**transmission line right-of-way**” means the corridor for the proposed 500 kV HVdc transmission line, as defined and described in the EIS;

“**waterbody**” means any body of flowing or standing water, whether naturally or artificially created, and whether the flow or presence of water is continuous, intermittent or occurs only during a flood, including but not limited to a lake, river, creek, stream, and wetland (slough, marsh, swamp, etc.), including ice on any of them (*The Water Protection Act 2005*); and

“**wetland**” means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity which are adapted to a wet environment. They are generally less than approximately 2 metres in depth (National Wetland Working Group 1997).

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall, in addition to any of the following specifications, limits, terms and conditions specified in this Licence, upon the request of the Director:
 - a) sample, monitor, analyse or investigate specific areas of concern regarding any segment, component or aspect of the Development for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated from the Development; and
 - c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and other information as may from time to time be requested.
2. The Licencee shall submit all information required to be provided to the Director under this Licence, in writing, in such form (including number of copies) and of such content as may be required by the Director and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.
3. The Licence shall adhere to the commitments made in the EIS and supporting information filed in association with the EIS during construction and operation of the Development.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Pre-Construction

4. The Licencee shall submit a complete Environmental Protection Plan (EPP) for approval of the Director prior to construction of the Development. The EPP shall describe the approach to be used by the Licencee to ensure that mitigative measures are applied systematically, and in a manner consistent with the commitments made in the EIS, including commitments for mitigation measures to address concerns raised by First Nations, Metis communities and local Aboriginal communities about potential adverse effects on the exercise of Aboriginal treaty rights as summarized in the EIS commitment table. If prior approval is given by the Director, separate EPPs may be submitted for the construction and operation phases, as well as for different reaches or components of the Development. Specifically, the EPP shall:
 - a) describe the environmental management system and protocol for internal reporting on monitoring and compliance for the construction of the project;
 - b) provide field construction personnel with clear instructions on the mitigation measures to be implemented and on the appropriate lines of communication and means of reporting to be followed throughout the full-life cycle of the project;
 - c) summarize environmental sensitivities and mitigation actions and emergency response plans and reporting protocols;

- d) provide specific information on waste management practices to be used during the construction phase of the project, including consideration of all liquid and solid wastes generated;
 - e) identify how Aboriginal Traditional Knowledge will be enhanced and used in activities addressed in the EPP; and
 - f) address issues and concerns identified by representatives of First Nations, Metis, and local Aboriginal communities relating to the environmental effects of the project as described above.
5. The Licencee shall, prior to construction of the Development in a Wildlife Management Area (WMA), obtain a WMA Use Permit from the Director of the Wildlife Branch of CWS.
 6. The Licencee shall, prior to construction of the Development in agricultural areas, consult with agricultural land owners to determine the tower placement that would have the least impact on agricultural operations, and incorporate those changes into the final design of the Development unless there is compelling rationale to depart.
 7. Where routing is along existing drains, the Licencee shall place towers for the Development in or immediately adjacent to the grass swales along the field side of drains, unless there is compelling reason to depart.
 8. The Licencee shall follow the recommended routing changes cited in recommendation 9.3 in the Clean Environment Commission's report unless there is compelling reasons not to do so. Any proposed deviations from the route changes recommended by the Clean Environment Commission's recommendation 9.3 shall be provided to the Director, for approval prior to construction in those areas, providing compelling rationale for the final route preferred.
 9. The Licencee shall, prior to construction of the Development in the areas cited in the Clean Environment Commission's recommendations 10.1, 10.2, and 10.3, incorporate the changes recommended in the transmission line route into the final design of the development for those specific locations.
 10. The Licencee shall, prior to construction of the Development, submit maps of the final route to the Director with a description of any changes from the Final Preferred Route identified in the EIS. Maps may be submitted all at once for the entire route or in several separate submissions for portions of the route to accommodate construction schedules.
 11. The Licencee shall prepare a plan for construction and maintenance associated with the Development within the area of the Lake Winnipegosis Salt Flats Ecological Reserve, the proposed expansion, and the source salt spring in consultation with the Parks and Natural Areas Branch and submit the plan for approval of the Director prior to initiating construction in this area.
 12. The Licencee shall, for each region of CWS, re-establish any of the Forestry Branch's existing Permanent Sample Plots (PSPs) located within 200 m of the transmission line right-of-way with two new PSPs prior to construction in each applicable Region. Approval of the locations of the new PSPs shall be obtained from the Director of the Forestry Branch.

13. The Licencee shall, prior to construction in forested areas, consult with the responsible Regional Forester of the Forestry Branch to determine the disposition of timber cleared in association with the Development in those areas.
14. The Licencee shall, prior to construction, retain a qualified archaeological consultant to conduct a Heritage Resources Impact Assessment (HRIA) to identify and assess any heritage resources that may be negatively impacted by Development. Plans for the identification of and mitigation for Aboriginal sacred or ceremonial sites shall be included in the report. The HRIA shall be submitted to the Director for approval prior to construction.
15. The Licencee shall, prior to construction of the Development, submit access management plans for approval of the Director. The access management plans shall include, but not be limited to, the anticipated types and locations of roads, trails, and water crossings required to access the right-of-way of the Development, and associated decommissioning plans. The plans may be submitted all at once for the entire route or in stages along the route as construction progresses.
16. The Licencee shall use terrain features and vegetation composition to limit access to and line-of-sight along the Development right-of-way.
17. The Licencee shall, prior to construction of the Development, submit a general plan for addressing any unanticipated adjustments to the transmission line right-of-way for approval of the Director. The plan shall describe the action and process that will be followed in the event an unanticipated adjustment is needed due to field conditions.
18. The Licencee shall prepare a report on monitoring programs to be undertaken in relation to the mitigation measures outlined in the EIS and supporting information. Monitoring of community socio-economic and cultural effects should be included in the report. The report shall be submitted prior to June 30, 2014, for the approval of the Director, and:
 - a) provide a description of the proposed activities for monitoring effects to the physical, aquatic, and terrestrial environments arising from construction of the Development;
 - b) describe the parameters to be measured, the methodology and frequency of measurement, references to establish thresholds and sustainability indicators, where appropriate, and the protocol for reporting the results of monitoring of the environmental conditions affected by the Development to CWS;
 - c) in cooperation and consultation with the Wildlife Branch, monitor white-tailed deer distributions and prevalence of brainworm along the transmission line; and
 - d) using methods approved by the Wildlife Branch, include descriptions of proposed programs:
 - i) to continue monitoring the population status and movements of the woodland caribou herds specifically affected by the Development for 25 years, or less if approved otherwise by the Wildlife Branch. Collaring may be included over the timeframe as determined by the Wildlife Branch;
 - ii) for the monitoring of black bear and timber wolf populations, distribution, and predation on woodland caribou in sensitive areas within the caribou ranges in the vicinity of the transmission line right-of-way;
 - iii) to conduct periodic moose surveys for 25 years, or less if approved otherwise by the Wildlife Branch including, but not necessarily limited to, Game Hunting Areas 14, 14A and 19A; and

- iv) to monitor the use of major points of access within the Development to sensitive wildlife areas by humans and animals using trail cameras, or other more effective techniques, for at least five years after clearing is completed.
19. The Licencee shall, prior to construction which may affect the Gillam area, conduct a community health assessment of the Gillam area to determine the potential impact that a large temporary influx of workers may have on personal, family and community life.
 20. The Licencee shall consult the Wildlife Branch of CWS regarding the design and implementation of mitigation measures for the protection of moose and caribou in known sensitive ranges along the transmission line right-of-way. A mitigation plan for these ranges shall be submitted to the Director for approval prior to clearing of the transmission right-of-way in known sensitive areas.
 21. The Licencee shall consult the Wildlife Branch and include in the plan required in Clause 18, regarding the design and implementation of mitigation measures and monitoring for impacts to birds of prey including the species at risk such as the peregrine falcon and ferruginous hawk.
 22. The Licencee shall conduct clearing components of the Development between August 1 and April 30 of each construction year to avoid potential impacts to the nesting habitat for migratory birds and the calving and rearing habitat for woodland caribou. Should any transmission line clearing be required after April 30, the Licencee shall, prior to the construction activity, consult and reach an agreement with the Wildlife Branch regarding the location of any key wildlife habitats to be avoided including caribou calving areas and bird nesting and brooding areas.
 23. The Licencee shall, prior to construction of the Development, provide a copy of this Licence to the contractor and subcontractor(s) involved in the Development.
 24. The Licencee shall, prior to construction of the Development, arrange meetings with the construction project managers and the Northeast, Northwest, Western, and Central Regional Directors of Department of Conservation and Water Stewardship (CWS) to review construction related matters.
 25. The Licencee shall not less than two weeks prior to beginning construction of the Development in each Region of CWS, notify the responsible Regional Directors of the intended start date of construction within a particular Region and the name of the contractor responsible for the construction.
 26. The Licencee shall, prior to the commencement of construction on Crown land, apply for and obtain the appropriate land tenure allocations in accordance with *the Crown Lands Act* from the Crown Land and Property Agency.
 27. The Licencee shall, prior to construction of the Development in each Region of CWS, obtain work permits and general land permits from the appropriate Regions and comply with the conditions of all permits.

Respecting Construction and Maintenance

28. The Licencee shall, during construction of the Development, employ qualified environmental inspectors to monitor the work on a daily basis to ensure that all the environmental practices outlined in the EIS, the EPPs, and supporting information are carried out.
29. The Licencee shall, during construction of the Development, arrange quarterly meetings with the responsible Regional Directors of CWS to discuss construction, environmental protection, and emergency response issues.
30. The Licencee shall expand and enhance the furbearer pilot study conducted on the Wuskwatim Transmission Project to include areas along the transmission line right-of-way.
31. The Licencee shall submit, to the Director for approval, a plan to accommodate the continuation of educational programs on community traplines that are affected by the Development.
32. The Licencee shall develop a policy, for submission to the Director, to manage documented losses to outfitters that are attributable to the Development and provide an option for disposition of payments in an annual format where compensation is deemed necessary.
33. The Licencee shall, prior to construction of the Development, develop a policy, for submission to the Director, to provide an option for disposition of payments in an annual format where compensation is paid in agricultural areas associated with the Development.
34. The Licencee shall design and decommission quarries in connection with the Development in accordance with the *Quarry Minerals Regulation 65/92*. Reclamation of individual quarries shall occur as soon as they are no longer in use for the Development.
35. The Licencee shall submit annual plans for the harvest of timber on Crown Lands within the transmission right-of-way of the Development to the applicable Regional Forester in advance of clearing in those areas.
36. The Licencee shall, in consultation with the Forestry Branch, manage vegetation along the transmission right-of-way in coniferous dominated forest to retain the coniferous character.
37. The Licencee shall, during construction of the Development, dispose of all sewage and septage from on-site sanitary facilities in accordance with the *Onsite Wastewater Management Systems Regulation 83/2003*, or any future amendment thereof.
38. The Licencee shall dispose of non-reusable construction debris and solid waste from the construction and maintenance of the Development at a waste disposal ground operating under the authority of a permit issued under *Waste Disposal Grounds Regulation 150/91*, or any future amendment thereof, or a licence issued pursuant to *The Environment Act*.
39. The Licencee shall, during construction and maintenance of the Development, adhere to the general recommendations on design, construction, and maintenance of stream crossings as specified in the Manitoba Department of Natural Resources guidelines titled *Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat, May 1996*, and the current versions of applicable federal Department of Fisheries and Oceans Operational Statements.

40. The Licencee shall establish any fuel storage areas required for the construction and maintenance of the Development:
 - a) a minimum distance of 100 metres from any waterbody; and
 - b) in compliance with the requirements of the *Storage and Handling of Petroleum Products and Allied Products Regulation 188/2001*, or any future amendment thereof.
41. The Licencee shall, during construction and maintenance of the Development, operate, maintain, and store all materials and equipment in a manner that prevents any deleterious substances including fuel, oil, grease, hydraulic fluid, coolant, and other similar substances from entering any waterbodies. An emergency spill kit for in-water use shall be readily available on site during construction.
42. The Licencee shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
43. The Licencee shall, following the reporting of an event pursuant to Clause 42:
 - a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the Director; and
 - d) submit a report to the Director about the causes of breakdown and measures taken, within one week of the repairs being done.
44. The Licencee shall minimize the burning of slash generated during clearing of the Development where smoke may affect residences. In these areas, the Licencee shall dispose of slash using environmentally suitable methods such as chipping and mulching where feasible.
45. The Licencee shall not use herbicides in association with construction of the Development.
46. The Licencee shall, during construction and maintenance of the Development, prevent the introduction and spread of foreign aquatic and terrestrial biota (e.g., weeds, non-native species) to surface waters and in native habitats and prevent invasive species to agricultural lands. To ensure this, all equipment used for the construction of the Development, including transport trucks and trailers, shall be cleaned prior to moving between areas of differing vegetation types (e.g., cultivated land to natural prairie, to forested, etc.).
47. To prevent rutting having the potential of mixing of soil layers, the Licencee shall implement mitigation measures as appropriate (e.g., avoiding excessively wet soils or other means).
48. The Licencee shall, during maintenance of the Development in Environmentally Sensitive Sites (ESSs) identified in the EPP related to traditional plant harvesting:
 - a) clear vegetation using only low impact methods including hand clearing;
 - b) not apply herbicides in the ESSs and within a buffer from the sites, unless a vegetation management agreement stating otherwise is developed with the First Nations, Metis communities and local Aboriginal communities that utilize the specific sites; and

- c) post signs indicating herbicides have been applied in areas along the transmission line right-of-way when and where herbicides have been applied in the vicinity of the ESSs. The postings shall be left in place for one month after the application has occurred.
49. The Licencee shall, during construction and maintenance of the Development, clear only tower locations, danger trees, and trees in excess of 17 meters in height within the transmission line right-of-way along the approximately 8 kilometer long section of Game Hunting Area 19A, which is currently inaccessible by means of existing fence lines and trails.
50. The Licencee shall leave wildlife trees, where possible, throughout the Development right-of-way where they do not pose a hazard.
51. The Licencee shall, in consultation with Wildlife Branch, manage the Development right-of-way from Swan River northward to discourage population increase and distribution of white-tailed deer.
52. To ensure no net loss of wetlands, the Licencee shall, during construction and maintenance of the Development, maintain a minimum 30 meter riparian buffer zone immediately adjacent to wetlands and the shoreline of lakes, rivers, creeks, and streams. Within the riparian buffer zone:
 - a) trees that must be removed shall be cleared using only low impact methods including hand clearing;
 - b) all existing low growth vegetation such as grasses, shrubs, and willows shall be maintained;
 - c) the application of herbicides shall be prohibited; and
 - d) any affected wetland area will be restored, replaced or offset as approved by the Director to ensure no net loss of wetlands.
53. The Licencee shall, where native prairie habitat is disturbed during construction of the Development, retain a native prairie re-vegetation specialist to plan and oversee reclamation of these areas. Re-vegetation monitoring shall be conducted by the native prairie re-vegetation specialist for a minimum of three complete growing seasons. Follow-up monitoring, seeding, maintenance, and/or weed control shall be conducted until disturbed areas are re-vegetated to the satisfaction of the Director. Re-vegetation shall:
 - a) where conditions are ideal regarding topography, slope, moisture, time of year, and the condition of nearby prairie, allow for natural re-vegetation; or
 - b) where conditions are not ideal for natural recovery, re-vegetate areas exposed during the construction with native seed mixes approved by the Wildlife Branch of CWS.
54. The Licencee shall ensure access within the Development, where possible, to quarry mineral withdrawals by Manitoba Infrastructure and Transportation (MIT) in Townships 22-11W, 30-17W, 22-12W, 30-18W, 23-12W, 31-19W, 25-13W, 32-20W, 26-13W, 33-21W, 30-18W, 33-25W, 32-20W, 44-25W, 49-25W, and 45-25W.
55. The Licencee shall remove any temporary construction access routes and rehabilitate all disturbed areas within MIT's right-of-way and controlled area upon completion of construction of the Development in the locations identified in Clause 54 of this Licence.
56. The Licencee shall implement the monitoring programs approved pursuant to Clause 18 of this Licence.

57. The Licencee shall, during construction of the Development, submit annual reports to the Director on the success of the mitigation measures employed during construction, a description of the adaptive management measures undertaken to address issues, and recommendations for improvements of mitigation in future projects. The reports shall include a progressive assessment of the accuracy of predictions made in the EIS and supporting information, including those relating to domestic use of resources (including Aboriginal Traditional Knowledge) by First Nations, Metis communities and Local Aboriginal communities and the socio-economic and cultural impacts to those groups. The annual reports shall be submitted for five years after completion of construction or as otherwise approved by the Director.

Respecting Post-Construction

58. The Licencee shall provide the data and report annually to the Director, on the results of the monitoring programs approved pursuant to Clause 18 of this Licence.
59. The Licencee shall:
- a) prepare “record drawings” for the Development and shall label the drawings “record drawings”; and
 - b) provide to the Director, within six months of the completion of construction of the Development, two sets of “record drawings” of the Development.
60. The Licencee shall, for approval of the Director, submit a vegetation control plan for line maintenance. The plan shall consider Integrated Pest Management (IPM) strategies and shall eliminate the use of herbicides during maintenance unless there are no other feasible means available. If herbicides are used, the Licencee shall adhere to the *Pesticides Regulation 47/2004*, or any future amendment thereof, for the storage, handling and application of pesticides in conjunction with the Development.
61. The Licencee shall not, during maintenance of the Development, use herbicides in Wildlife Management Areas, unless otherwise approved in the vegetation control plan referenced in Clause 60 above.
62. The Licencee shall not use herbicides in bog areas during maintenance of the Development.
63. The Licencee shall, upon completion of construction of the Development, undertake a third-party environmental audit to assess whether commitments they provided in their EIS and supporting information were met and to assess the accuracy of the assumptions and predictions in these documents. The audit shall be repeated after five years. Reports on the audits shall be submitted to the Director.
64. The Licencee shall, no later than December 31, 2013, develop and maintain an easily accessible project-related website to contain all of the information related to monitoring and assessing environmental mitigation and management committed to in the EIS and as noted in the CEC report. The website should contain minutes from community meetings related to the Development monitoring and mitigation management.

Respecting Alterations to the Development

65. The Licencee shall obtain approval from the Minister for any proposed alteration to the Development before proceeding with the alteration in accordance with *The Environment Act*.

REVIEW AND REVOCATION

66. If, in the opinion of the Minister, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Minister may, temporarily or permanently, revoke this Licence.
67. If the construction of the Development has not commenced within three years of the date of this Licence, the Licence is revoked.
68. If, in the opinion of the Minister, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Minister may require the filing of a new proposal pursuant to Section 12 of *The Environment Act*.

Originally signed by

Gord Mackintosh
Minister of Conservation and Water
Stewardship

Client File No.: 5433.00