

Ontario Energy Board

EB-2010-0059

Staff Discussion Paper

Transmission Project Development Planning

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Table of Contents

1	INTRODUCTION	1
	1.1 Purpose	1
	1.2 Background.....	1
	1.3 Legislative and Regulatory Framework.....	2
	1.4 Definitions	4
2	THE OPA AND TRANSMISSION PLANNING	5
3	A PROPOSED FRAMEWORK FOR THE DEVELOPMENT OF ENABLER FACILITIES AND NETWORK EXPANSION PROJECTS	6
	3.1 Process to Designate a Transmitter.....	9
	3.2 Hearing for Leave to Construct	15
	3.3 Hearing for Rate Recovery	16
4	PROPOSED FILING REQUIREMENTS.....	19
	4.1 Overview of the Plan and of the Applicant	19
	4.2 Transmission Project(s)	21

1 Introduction

1.1 Purpose

This document sets out Board staff's proposals for transmission project development planning in Ontario. These proposals are made in the context of a consultation aimed at the development of a process that can facilitate the timely and cost effective development of major transmission facilities that may be required to connect renewable generation in Ontario through the implementation of a process that provides, among other things, greater regulatory predictability in relation to cost recovery for development work.

Board staff's proposals build on earlier work by the Board with respect to transmission connection cost responsibility and in particular on the process the Board has developed for "enabler" transmission facilities. If the proposals set out in this Discussion Paper are adopted by the Board, the enabler development process would also be followed in respect of the development of other transmission facilities in Ontario. Board staff's proposals focus specifically on development work for projects identified by the Ontario Power Authority as it assesses transmission investments associated with the connection of generation under the Feed-in Tariff program. As described below, development is a stage leading up to, but separate and apart from, construction.

This Discussion Paper also includes proposed filing requirements for the preparation of transmission project development plans.

1.2 Background

As a consequence of the passage of the *Green Energy and Green Economy Act, 2009* ("GEA"), there has been enormous interest in connecting renewable generation to both distribution systems and the transmission system. The Ontario Power Authority ("OPA") has received applications representing over 9000 MW of renewable generation under its Feed-in Tariff ("FIT") program. In addition, the Government has signed an agreement with a consortium headed by Samsung to construct a further 2500 MW of renewable generation capacity. Transmission capacity has been allocated for 500 MW leaving 2000 MW in need of transmission capacity. On this basis, there is 11,000 MW of renewable generation for which transmission capacity may be required. However,

existing or approved transmission facilities in Ontario can accommodate only 4000 MW¹ of generation. To connect the balance of 7000 MW, as well as any other renewable generation that may come forward subsequently, billions of dollars of transmission investment will be needed.

The OPA, which has as one of its objects to “conduct independent planning for electricity generation, demand management and conservation and transmission”, has stated that it will assess transmission investments that in its view are required and economically justified to connect those FIT applicants and other renewable generation for which there is not available capacity. The OPA is expected to begin its assessment in August 2010.

The *Ontario Energy Board Act, 1998* (“OEB Act”) contains new provisions that require licensed transmitters, as and when mandated by the Board and in the manner determined by the Board, to develop transmission system plans to accommodate renewable generation, and to file those plans for review and approval by the Board.

These deemed licence conditions can be used by the Board to ensure that necessary development work is being done on each potential transmission project.

Board staff has met with licensed transmitters to discuss how the transmission planning process might work. Transmitters have indicated the need for a clear process, including an articulation of the overall transmission planning, approval and rate recovery framework. Two transmitters have also applied to the Board to establish deferral accounts to accrue expenses associated with investments to accommodate the connection of renewable energy.

Board staff has also met with transmission companies from outside Ontario who have indicated an interest in investing in transmission in Ontario.

1.3 Legislative and Regulatory Framework

Until the passage of the GEA, the Board had four principal processes or instruments of particular relevance to transmitters and transmission planning. These are:

- **Review, approval and implementation of an Integrated Power System Plan (“IPSP”):** The Board, in approving an IPSP, is approving the planning basis for transmission expansions to connect the generation resources identified in the Plan. The Board is also required to facilitate the implementation of all approved

¹ Of this 4000 MW, the OPA estimates that 2500 MW is currently available, with an additional 1500 MW becoming available when the Board-approved Bruce to Milton transmission facilities are completed.

IPSPs when it exercises the powers or performs the duties given to it under statute.

- **Leave to construct:** The construction, expansion or reinforcement of electricity transmission lines that are greater than 2 km in length require leave to construct from the Board, which will be granted where the Board believes that the project is in the public interest. When a transmitter is the proponent of such facilities, the transmitter is expected to demonstrate the need for the facilities. As a result of amendments to the OEB Act made by the GEA, in deciding whether or not a project is in the public interest the Board must now also consider the promotion of the use of energy from renewable resources, where applicable and in a manner consistent with the policies of the Government of Ontario.
- **Licences:** Subject to any exemption set out in regulations made under the OEB Act, no person may own or operate a transmission system unless licensed by the Board to do so. Among the illustrative list of licence conditions set out in the OEB Act that the Board may impose are conditions that require transmitters to expand their transmission systems in accordance with the market rules or to implement transmission requirements identified in an approved IPSP.
- **The Transmission System Code:** Licensed transmitters in Ontario are required to comply with the Board's Transmission System Code ("TSC"). The TSC governs the relationship between transmitters and their customers, and includes rules regarding standards and cost responsibility for connections and network facilities.

The amendments to the OEB Act made by the GEA have, among other things, increased the Board's focus on the connection of renewable generation through changes to the Board's objectives and through the introduction of new deemed licence condition provisions related to transmission and distribution system planning.

Specifically, the Board's new objective specific to renewable energy is to "promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities".

In addition to this new objective, the GEA has amended the OEB Act to create deemed licence conditions for all licensed electricity distributors and transmitters as follows:

(2.1) Every licence issued to a transmitter or distributor shall be deemed to contain the following conditions:

...

2. *The licensee is required to prepare plans, in the manner and at the times mandated by the Board or as prescribed by regulation and to file them with the Board for approval for,*
 - i. *the expansion or reinforcement of the licensee's transmission system or distribution system to accommodate the connection of renewable energy generation facilities, ...*
3. *The licensee is required, in accordance with a plan referred to in paragraph 2 that has been approved by the Board or in such other manner and at such other times as mandated by the Board or prescribed by regulation,*
 - i. *to expand or reinforce its transmission system or distribution system to accommodate the connection of renewable energy generation facilities, ...*

1.4 Definitions

In this Discussion Paper, the following definitions are used:

Transmission project development plans are plans for development of one or more transmission projects filed with the Board in response to the Board's invitation or direction under s. 70(2.1)2 to file a plan to develop transmission facilities identified by the OPA.

Development is work, including consultation, route planning, engineering and site/environmental studies, undertaken in order to choose among options and/or prepare an application for leave to construct. From the regulatory perspective, this stage lasts from the approval of a transmission project development plan until leave to construct is applied for or until a project begins construction, if leave to construct is not required.

Construction includes final engineering work, site acquisition and preparation, asset acquisition and construction until a facility is in service.

Incumbent transmitter is any transmitter to whose existing system a network expansion or an enabler line identified by the OPA would connect.

Operating transmitters are licensed transmitters operating transmission assets in Ontario at the relevant time and participating in the rate pool for network assets.

New entrants are entities that intend to pursue transmission opportunities in Ontario but that are not, at the relevant time, operating transmitters.

2 The OPA and Transmission Planning

As noted above, the OPA has, as one of its objects, to conduct independent planning for electricity generation, demand management, conservation and transmission and to develop integrated power system plans.

While an IPSP reviewed and approved by the Board would, under ideal circumstances, be best suited to the evaluation of needed transmission facilities, no such approved Plan is currently available.² However, it is expected that the OPA will, by the summer of 2010, begin an assessment of transmission investments that in its view are required and economically justified to connect the FIT applicants whose projects cannot be accommodated by existing transmission capacity. The OPA's assessment process is known as the Economic Connection Test ("ECT").

The outcome of the ECT is expected to be a comprehensive assessment of transmission requirements considering the magnitude and location of applications for FIT contracts and other factors that the OPA considers relevant. It is expected that the ECT would identify four broad categories of transmission investments, two of which are proposed to be subject to the designation and transmission project development plan approval process described in section 3 below:

- **Capacity enhancements (not subject to designation and plan approval process):** Upgrades to existing network capability through the use of upgrades such as Static Var Compensators (SVCs) and regional transmission line upgrades;
- **Network reinforcement (not subject to designation and plan approval process):** The reinforcement of existing transmission network facilities;
- **Enabler facilities (subject to designation and plan approval process):** As defined in Board's Transmission System Code, these are transmitter-owned connection facilities designed to connect clusters of renewable resources to the existing network; and
- **Network expansion (subject to designation and plan approval process):** The expansion of the transmission network through major new network facilities.

² Section 25.30 of the *Electricity Act, 1998* requires the OPA to develop and submit to the Board an Integrated Power System Plan. Such a Plan was submitted by the OPA to the Board in August 2007 (EB-2007-0707). Review of the Plan by the Board was adjourned in October 2008 until such time as the OPA files a revised IPSP based on a directive issued by the Minister of Energy and Infrastructure on September 17, 2008.

Board staff is proposing that the development of capacity enhancements to and network reinforcements of an incumbent transmitter's system be undertaken by the incumbent transmitter and addressed through the normal rate-setting and, where applicable, leave to construct processes. In other words, incumbent transmitters should incorporate these ECT-identified projects into their capital plans for review during their next cost of service rate proceeding. It is not proposed that these projects be subject to the designation and plan approval process described in section 3.

By contrast, Board staff is proposing that the designation process already contemplated for enabler facilities be extended to cover major network expansions identified in the ECT, and that both enabler facilities and major network expansions be the subject of transmission project development plans.

3 A Proposed Framework for the Development of Enabler Facilities and Network Expansion Projects

Board staff emphasizes at the outset that the designation and transmission project development plan approval process described in this section applies solely to transmission project development work, and not to construction activities. Board staff anticipates that virtually all projects that will be subject to the proposed designation and plan approval process described below will be projects for which leave to construct is required, and this Discussion Paper assumes that to be the case.

While the OPA's analysis will identify which transmission investments are, in its judgment, economically justified, it does not have a mandate that would allow it to ensure that the transmission facilities are in fact developed.

The Board, however, does have the ability:

- to ensure that transmitters are developing needed projects;
- to ensure that projects are in fact required before construction proceeds; and
- to identify which transmitter should be responsible for development work, if done at ratepayer expense.

The Board has already put into place a framework to address the development and construction of enabler facilities, through the "Transmission Connection Cost Responsibility Review" consultation and associated amendments to the TSC (EB-2008-

0003). The TSC makes provision for enabler facilities to be identified in three different ways, including on the advice of the OPA.³ The Board would conduct a “designation process” to determine which transmitter would have the responsibility for developing the enabler facility. The designated transmitter would do the development work needed to apply for leave to construct and other approvals as required. The final need for the project would be determined at the leave to construct stage, with rate recovery for any unsubscribed portion of the enabler facility addressed in a rates proceeding.

Staff proposes that the Board extend this framework to include major network expansions identified by the OPA in each Economic Connection Test. In order to ensure that transmitters are developing enabler facilities and network expansion projects that have been identified by the OPA, staff is proposing that the Board accept, solely for transmitter designation and project development purposes, the outcome of the ECT as filed and without substantive examination. Board staff expects that the OPA will conduct and document the ECT in a manner that will make the outcome sufficiently robust for project development purposes. A substantive evaluation of the need for any particular enabler or transmission network facility would then follow at the leave to construct stage.

This potentially competitive designation process would lead to the selection of one or more operating transmitters or new entrants to develop the ECT-identified enabler facilities or network expansion facilities.

A transmitter designated by the Board to develop one or more enabler or network expansion projects would be responsible for undertaking the necessary development work. If the Board ultimately grants leave to construct, the facilities would be constructed and put into service. Rate recovery would be determined in a rate proceeding, although as described below Board staff is proposing that that the Board provide, at the time of designation and plan approval, assurance that prudently incurred costs for development work will be recoverable. The development costs could be included in the revenue requirement to be recovered through the Ontario Uniform Transmission Rate.⁴

³ This Discussion Paper deals specifically with enablers that are identified by the OPA through the ECT, but the designation process described in this section could also apply to enabler facilities identified in the other two ways set out in the TSC.

⁴ The Uniform Transmission Rate is a schedule of tariffs charged to all transmission customers. The charges are collected by the Independent Electricity System Operator and then paid to the province’s transmitters according to a set allocation. The most recent proceeding to set and allocate the UTR resulted in an Order released January 21, 2010 (EB-2008-0272).

Staff believes that the process described in this section can promote the timely expansion of a transmission system to accommodate the connection of renewable generation while protecting the interests of ratepayers. Using the outcome of the OPA's Economic Connection Test provides an objective basis on which to identify enabler and network expansion facilities that require development, and will speed up the project development process.

Development costs represent a relatively small portion of total project costs, and the advancement of potential transmission projects can be achieved at relatively little risk to the ratepayer. Use of a designation process provides an early opportunity for the Board to consider competing proposals, and can be expected to produce more cost-effective outcomes.

Staff notes that competitive tendering processes for transmission have been used successfully in other jurisdictions. Both Texas and the United Kingdom have used similar processes to attract new investment in transmission to connect renewable resources, as described in Appendix A.

Board staff expects that the initial ECT report will identify multiple network expansion and enabler projects. The proceeding to designate transmitter(s) to develop these projects may be lengthier since transmission project development plans from a transmitter may involve several distinct facilities. Board staff further expects that subsequent ECT reports will only identify changes from the previous report and that there will be relatively few new facilities identified. The designation process will be shorter as a result.

The approach that staff is proposing is quite different from the one being implemented for distribution system planning under the same licence conditions. There are several important reasons for this difference. First, the OPA has an important legislated responsibility for transmission planning in addition to the planning that transmitters are expected to undertake themselves. By contrast, distributors are solely responsible for planning within their defined service areas. Second, distribution project development and, to a lesser degree, construction times are short compared to transmission project development and construction times. Therefore, it is particularly important for distributors to address capital requirements as part of a more comprehensive plan.

3.1 Process to Designate a Transmitter

Identification of facilities requiring designation

After completing an ECT, the OPA will file with the Board a report with its conclusions regarding new transmission facilities, including network expansions and enabler facilities that the OPA believes are required and economic. That report would be posted on the Board's website.

Notice and Direction to File

If particular enabler or transmission network expansion facilities are identified in a particular ECT report received by the Board, the Board would begin a proceeding on its own motion, with notice sent directly to all licensed transmitters and made available for other interested parties. As noted above, staff proposes that the Board accept the outcomes of the ECT for enabler and transmission network expansion project development purposes, leaving the need for these projects to be confirmed at the leave to construct stage. The designation and plan approval proceeding would therefore focus on choosing a transmitter to undertake development rather than on assessing need.

To ensure that at least one transmitter brings forward a transmission project development plan for network expansions and enabler facilities identified in an ECT report, the Board would require an incumbent transmitter to file a transmission project development plan for those facilities under its condition of licence. The Board would also invite voluntary transmission project development plans for the enabler and network facilities from other operating transmitters and new entrants.

Requirement to be Licensed

Board staff is recommending that, in order to file a transmission project development plan requesting to be designated for any particular project, a new entrant must be licensed by the Board as a transmitter. Under the OEB Act, a licence is only required to own and operate a transmission system, and as such is only required when a facility has been constructed and energized. However, the licensing process can be used to ensure that a new entrant meets certain minimum requirements in relation to financial and technical capability, and can therefore provide comfort that the new entrant is both qualified and committed to doing business in Ontario should it be designated. This will,

among other things, avoid having to devote time at the designation stage to an examination of a new entrant's general financial and technical capabilities. As noted above, while notice of a designation proceeding will be made available on the Board's website, only licensed transmitters will receive direct notice.

Issue for stakeholder comment: Should new entrants be required to be licensed as transmitters as a condition of participation in a designation process?

When to File

In the UK, Ofgem allows three months for the Qualification to Tender to be prepared as part of the process to select transmission providers for integrating offshore generation. In Texas, where the Public Utility Commission of Texas selected transmission service providers to build Competitive Renewable Energy Zone transmission, there was a three month period between beginning the proceeding and the transmitters filing statements of intent. Information on and references for the UK and Texas are set out in Appendix A.

Issue for stakeholder comment: How long would it take to prepare transmission project development plans (i.e., how much time should be given for filing transmission project development plans after notice of the designation process has been given)?

Decision Criteria and Process

Transmission construction in Ontario is an involved and generally time consuming process, involving both considerable technical and project management expertise and negotiation skills to undertake the necessary consultations and obtain any required land use rights.

Staff anticipates that the Board will designate, as the transmitter selected to perform the transmission development activities for a given project, the transmitter that the Board believes is best able to plan, permit, finance, construct, operate and maintain the transmission facility when considered in light of the Board's objectives as set out in the OEB Act.

General corporate fitness (financial and technical) will be assumed for any transmitter that is licensed. Therefore, for the designation process, Board staff anticipates that the Board will primarily be interested in three aspects of a transmission project development plan: (a) the financial and technical capacity of the transmitter to undertake

development of the specific projects at issue, including its demonstrated ability to carry out the work based on experience with similar projects; (b) the transmitter's plan for carrying out the work and associated consultations; and (c) the economic efficiency of the transmitter's plan.

Staff proposes that the Board use the criteria listed below to determine which transmitter should be designated for any given project. Where the only filing is from the incumbent transmitter that has been directed to file a transmission project development plan by the Board, Board staff recommends that that Board use these criteria to evaluate the plan.

- **Organization and Experience:** This criterion would enable the Board to evaluate the manner in which the transmitter intends to undertake the project(s) in its plan (for example, whether the transmitter will partner with or contract out to third parties) and the experience of the transmitter in relation to key non-technical project activities.
 - The transmitter's organizational plan for undertaking the project. This would include contracting for significant work and partnerships, including any involvement by First Nations or Métis groups.
 - Experience of the transmitter, including the specific management team, with regulatory processes, the acquisition of land use rights and landowner and other required consultations.
- **Technical Capability:** This criterion would enable the Board to evaluate the technical expertise of the transmitter and the specific management team that is being proposed in relation to the specific requirements of the project(s) in the transmitter's project development plan.
 - Technical expertise of the transmitter, including the specific management team, in terms of transmission development and construction for facilities similar in magnitude and nature to those of the project(s) in the transmitter's plan.
 - Any technological innovation that the transmitter may propose in relation to a project in its plan.
- **Schedule:** This criterion would enable the Board to evaluate the manner in which the transmitter has prioritized the project(s) in its transmission project development plan, and the time within which the transmitter expects to complete various stages of the development and construction processes for each project.

- Prioritization of projects, where more than one project is included in the transmitter's plan, and the extent to which the proposed prioritization will expedite the connection of renewable resources.
- Estimated timelines with milestones
 - Project development stage (up to leave to construct application)
 - Project construction stage (from leave to construct issuance to in-service date)
- **Costs:** This criterion would enable the Board to evaluate the anticipated costs associated with the project(s) in the transmitter's project development plan and any cost reduction opportunities, for example those stemming from economies of scale.
 - Estimated budgets:
 - Project development stage
 - Project construction stage
 - Cost reduction opportunities: Whether and to what extent costs can be reduced as a result of economies of scale, shared resources, etc.
- **Financing:** This criterion would enable the Board to evaluate the manner in which the transmitter is proposing to finance the development and construction of the project(s) in its transmission project development plan.
 - Financial position: Access to the financial resources, either equity or debt, necessary to carry out the development work and construct the facilities identified in the plan.
 - Whether or not alternative mechanisms as set out in the "Report of the Board: The Regulatory Treatment of Infrastructure Investment in Connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario" (EB-2009-0152)⁵ are being or will be requested.

⁵ Available on the Board's website at http://www.oeb.gov.on.ca/OEB/_Documents/EB-2009-0152/Board_Report_Infrastructure_Investment_20100115.pdf

- **Land Owner and Other Consultations:** This criterion would enable the Board to evaluate the manner and time in which the transmitter is proposing to carry out all required consultations and to obtain all required land use rights.
 - The transmitter's approach to and plan for carrying out all required consultations, including with municipalities, landowners, and First Nations and Métis groups.
 - The transmitter's approach to and plan for obtaining all rights-of-way and other land use rights that would be required for purposes of the development and construction of the project(s) in its plan.

Issue for stakeholder comment: Are these the appropriate decision criteria? Should the decision criteria be weighted and, if so, which are most important?

Section 70(1.1) of the OEB Act allows for approvals under a licence to be granted without a hearing. However, Board staff believes that transmitter designation is better examined in a process that allows for participation by interested stakeholders, and that a hearing is ideally suited to the transmitter designation and transmission project development plan approval process.

Potentially, if there is only one transmitter that files a transmission project development plan for any particular project, the Board could hold a relatively simple, written hearing. Board staff anticipates that the designation and plan approval proceeding could take from four to nine months from the date of receipt of complete transmitter plan(s), depending on the number of transmitters that file plans, the number of projects in each plan and the type of hearing (written or oral).

Board staff anticipates that the designation proceeding would be the forum in which the Board would confirm whether a proposed enabler project meets the screening criteria described in the TSC.

Implications of Plan Approval

Upon completion of the designation process, the Board would approve the transmission project development plan of a transmitter with respect to development of an individual enabler or network expansion project or a slate of projects. Approval would mean that the transmitter has been designated to do development work on the relevant project.

The Board would direct the designated transmitter to develop the specific project (or projects) to the point where a leave to construct application would be required. The

decision could attach conditions on implementation of the transmission project development plan such as milestones for completion and reporting requirements.

As noted above, development costs (for example, for engineering work, site studies and landowner and other consultations) are small in comparison to the complete costs of building a project. Board staff recommends that, when the Board designates a transmitter to develop a particular enabler or network expansion project, the Board create any necessary deferral accounts and provide assurance that prudently incurred costs within the budget associated with the approved transmission project development plan will be recoverable through rates. The Board might address this explicitly in its decision by stating that the budgeted amount for development was determined on a prima facie basis to be a prudent expense for future recovery. Board staff believes that this approach would be in keeping with the statements expressed by the Board in the Notice of Revised Proposal to Amend a Code⁶ regarding transmission connection cost responsibility issued on April 15, 2009 (the “April TCCR Notice”). Specifically, the Board stated that, to the extent that costs associated with an enabler facility project were adequately assessed in the course of designating a transmitter to undertake development activities the issue would not be revisited except in relation to any material deviations. The Board qualified this by stating that “the information before the Board at the relevant time would need to be at a level of detail at least equal to that which would be required to satisfy the requirements of the Board’s review of a transmitter’s capital budget in a rates proceeding...”

Development work will involve engineering work and site studies. The designated transmitter would have to consult with the OPA regarding the status of FIT-contracted and other generation projects. The designated transmitter will have to consult with landowners, and with affected First Nations and Métis groups, among possible others. The designated transmitter will also have to determine other factors that will affect the size and configuration of the project, including load requirements from direct customers and connected distribution systems, and all applicable reliability standards. Board staff proposes that costs for this work be accrued in the deferral account.

If the designated transmitter contends that immediate funding is required, it could apply for a rate rider as part of its plan. If the Board granted the request, provision could be made for recovery through allocation of the revenue from the Ontario Uniform Transmission Rate even if the designated transmitter has no ratepayers of its own.

⁶ http://www.oeb.gov.on.ca/OEB/Documents/EB-2008-0003/Notice_REVISED_Proposed_Amendments_TCCR_20090415b.pdf

Board staff emphasizes that the transmitter designation and transmission project development plan approval process set out in this document is not intended to replace or eliminate the requirement to obtain leave to construct for any particular project.

Issue for stakeholder comment: Are staff's proposals regarding the implications of plan approval reasonable?

Designating Multiple Transmitters

Board staff suggests that the Board should consider, in appropriate cases, designating two transmitters to develop the same project, with the final determination of who should proceed to construction being made at the leave to construct stage. The advantages of being able to decide the most cost effective alternative based on the better and more detailed information available at that time could, in Board staff's view, outweigh the expense of funding two development streams. Board staff expects, however, that the designation of more than one transmitter in relation to the development of the same project would be an exceptional occurrence.

Issue for stakeholder comment: Under what circumstances should two transmitters be designated to develop the same project and to recover the development costs from ratepayers?

3.2 Hearing for Leave to Construct

Once a transmitter is designated for a particular project, it must develop the project to the point where leave to construct is the next step.

As indicated by the Board in the April TCCRR Notice:

“In the normal course, the Board anticipates that the transmitter that is designated to undertake development activities relating to an enabler facility will also be the transmitter that will eventually construct and own the enabler facility. However, the Board does not wish to preclude at the outset that this might not be the case.”⁷

Board staff suggests the extension of this concept to ECT-identified transmission network expansions. While there is no guarantee that the transmitter that has been

⁷ http://www.oeb.gov.on.ca/OEB/_Documents/EB-2008-0003/Notice_REVISSED_Proposed_Amendments_TCCRR_20090415b.pdf

designated to develop a transmission project will eventually be the transmitter that will construct, own and operate the facilities (assuming that construction proceeds), Board staff assumes that this would normally be the case.

The OPA will be responsible for supporting the characteristics, inputs, construction and application of the ECT. It is ultimately preferable that it do so once in conjunction with an IPSP or in respect of a given ECT, rather than in every leave to construct hearing in support of a particular project or transmitter.

Current filing requirements for leave to construct applications can be found on the Board's website.⁸ The leave to construct hearing under section 92 of the OEB Act examines project classification; need; options; and costs and benefits. The application must include a project summary including a concise description of the location of the project; the project schedule; the project costs; and the transmission rate impacts. Affected landowners, affected First Nations and Métis groups and the Ministry of Aboriginal Affairs must be served notice of the hearing by the applicant. Because leave to construct carries with it the ability to request the right to expropriate land under section 99 of the OEB Act, confirming the need for the project will be particularly important from that perspective as well.

If the Board grants leave for a project, the successful transmitter will construct the project once any other approvals are obtained, and will then put it into service.

3.3 Hearing for Rate Recovery

Board staff suggests that, in the normal course, the rate hearing would determine the prudence of any variation from the budget for development expenses accrued in a deferral account, and that recovery of the prudent amounts would be allowed at that time.

Board staff expects that transmission planning, and the need for any given specific facilities, may be in flux for a period of time as entities gain experience with the FIT program. Therefore, staff anticipates that some enabler or network expansion facilities that proceed through the development phase on the basis of an ECT may subsequently be determined not to be needed. Board staff proposes that the designated transmitter should be able to apply for recovery of the development costs in such cases even if the project is wound down by reason of the project being determined by the Board not to be needed or otherwise terminated at the direction of the Board. In the case of a

⁸ Chapter 5 of EB-2006-0170: Filing Requirements for Transmission and Distribution Applications http://www.oeb.gov.on.ca/documents/minfilingrequirements_report_170706.pdf

designated transmitter that has no ratepayers of its own at the time, the amounts in the deferral account could be disposed as a regulatory asset included in the revenue requirement to be recovered through the Ontario Uniform Transmission Rate. Board staff notes that, in the April TCCRR Notice, the Board stated that a transmitter designated for enabler development activities would be allowed to recover all of the prudently incurred costs associated with the activities even if the facility did not proceed to construction, provided that failure to proceed was for reasons outside of the transmitter's control.⁹ If, however, a designated transmitter incurs further development expenses, other than wind up expenses, after a project is no longer identified as needed in an ECT, staff suggests that these amounts should be considered imprudent unless the Board approves continued spending.

If more than one transmitter is designated to do development work, the transmitter that does not receive leave to construct the project should nonetheless be able to recover the development costs, subject to testing for prudence for variance from the development budget.

If a transmitter incurs any expenses in developing an enabler or network expansion project for which it was not designated, staff suggests that the amounts should be considered imprudent. This should particularly be the case if another transmitter has been designated to do development work for the project, but in Board staff's view this should also generally be the approach even if no transmitter has yet been designated. The fact that a transmitter may be successful at the leave to construct stage in relation to a project for which it was not designated should not affect this outcome.

A rate hearing would also deal with the recovery of construction costs for projects that proceed to construction.

⁹ http://www.oeb.gov.on.ca/OEB/Documents/EB-2008-0003/Notice_REVISED_Proposed_Amendments_TCCRR_20090415b.pdf

The following is an illustrative flow chart of the proposed designation and transmission project development plan approval process, and where it fits with leave to construct and rate proceedings. For convenience, the chart shows the recovery of costs flowing from a cost of service rate hearing. However, this Discussion Paper acknowledges that a rate rider could be approved at other points in the process.

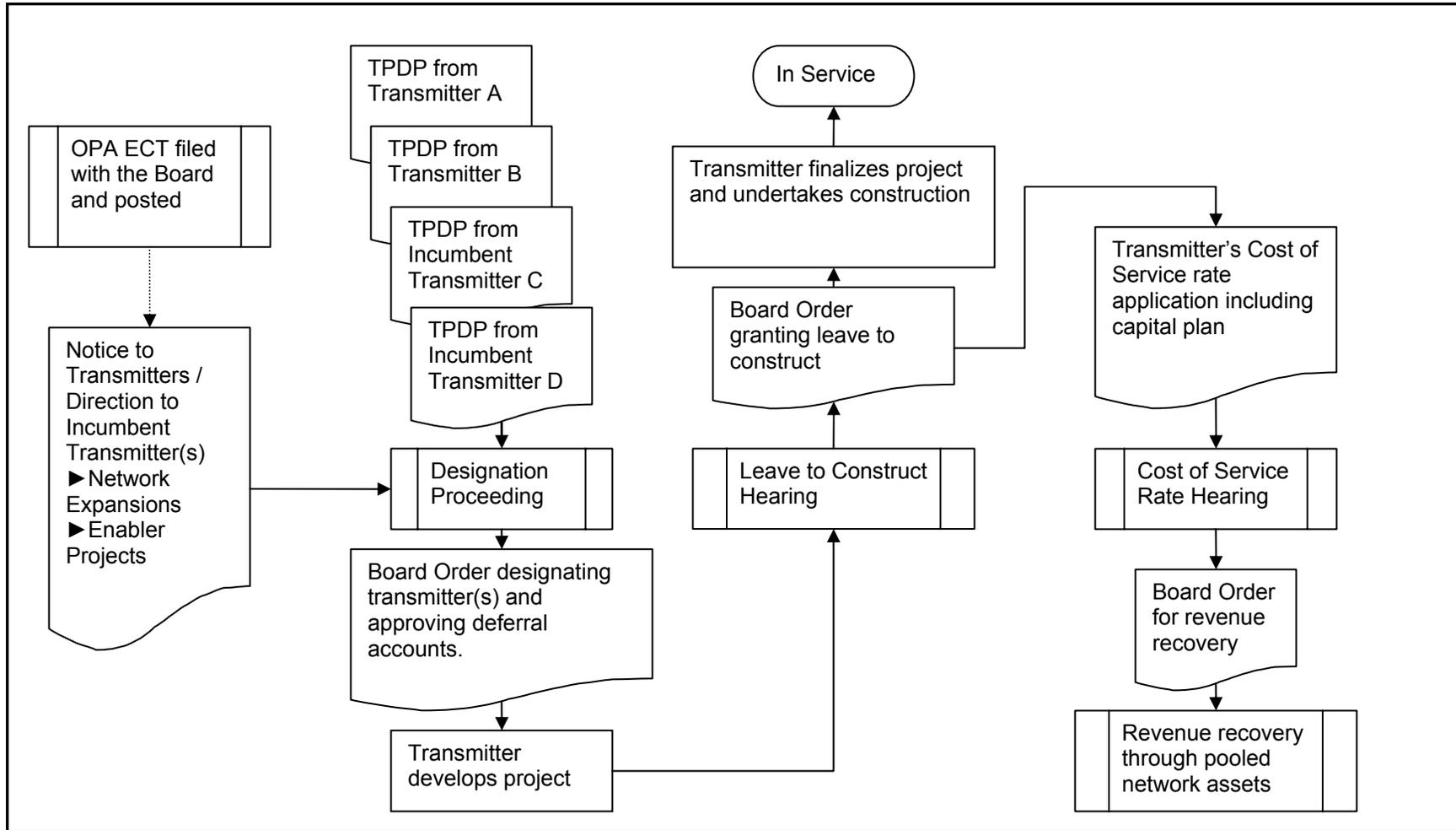


Figure 1: Process for Transmitter Designation and Transmission Project Development Plan Approval

4 Proposed Filing Requirements

The decision criteria that staff is suggesting be used to designate a transmitter and approve a transmission project development plan are outlined in section 3.1. As described in that section, the decision criteria focus on three areas: (a) the financial and technical capacity of the of the transmitter to undertake development of the specific projects at issue, including its demonstrated ability to carry out the work based on experience with similar projects; (b) the transmitter’s plan for carrying out the work and associated consultations; and (c) the economic efficiency of the transmitter’s overall plan. The filing requirements proposed below are designed to solicit the information that Board staff believe would be required by the Board in applying the decision criteria.

Having transmitters file transmission project development plans in accordance with specified filing requirements will allow for a more streamlined and timely process. Consistency in filings will be particularly important in cases where the Board will be considering proposals from different transmitters in relation to the development of the same project(s).

The filing requirements set out below are proposed as minimum requirements for transmission project development plans. Board staff anticipates that any issues relating to the confidentiality of information contained in a transmission development plan will be addressed by the Board in accordance with its *Practice Direction on Confidential Filings*.

For convenience, the proposed filing requirements refer to a transmitter that files a transmission project development plan as an “Applicant”, irrespective of whether the transmitter has been directed to file a plan or is filing one on a voluntary basis.

Issue for stakeholder comment: Are these the appropriate filing requirements to enable the Board to apply the decision criteria identified in section 3.1? If other decision criteria are being suggested, what additional filing requirements would be appropriate for the other criterion or criteria?

4.1 Overview of the Plan and of the Applicant

Applicant Name and Licence Number

As noted above, Board staff proposes that any Applicant be licensed as a transmitter in Ontario prior to the date of filing.

The Applicant should provide the following information:

- The Applicant's name.
- The Applicant's OEB transmission licence number.

Where information provided as part of the transmitter's licence application has changed, this should be noted.

Plan Overview

The Applicant should provide an overview of its transmission project development plan, including:

- The number of projects in the plan, each identified by reference to the description provided in the Notice issued by the Board to initiate the designation and plan approval proceeding.
- The total costs associated with all projects in the plan, broken down as follows: development; construction; and operation and maintenance.
- Where the plan contains more than one project, the methodology used by the Applicant to prioritize the projects in the plan, and the resulting prioritization.
- The Applicant's assessment of the economic efficiency of its plan.

The Applicant should provide an affidavit sworn by a senior officer of the Applicant stating that all of the information contained in the Applicant's filing is true.

Organization and Applicant's Experience

The Applicant should identify how, from an organizational perspective, it intends to undertake the project(s) in its plan.

- An overview of the organizational plan for undertaking the project(s), including any partnerships or contracting for significant work. If there are third parties that are proposed to have a major role in the development, construction, operation or maintenance of the projects, these third parties must be identified and their role in the project(s) described.
- Where applicable, participation by First Nations and Métis groups should be included.
- An organizational chart to illustrate the information above.
- An overview of the Applicant's experience with regulatory processes, the acquisition of land use rights and landowner and other required consultations.

- The specific management team for each project must be identified, and resumes provided for key management personnel.

4.2 Transmission Project(s)

This section is generally intended to solicit information regarding the Applicant's plan for each specific project in its transmission project development plan. Where the relevant information is the same for more than one project, that fact should be noted with appropriate cross-references. In such a case, the information need not be repeated in detail.

Project Identification

The Applicant must identify the project by reference to the description provided in the Notice issued by the Board to initiate the designation and plan approval proceeding, and provide an overview of each project. For each project, the following should be provided:

- General routing, a general description of the proposed structure types (lattice, monopole, etc.) and composition (wood, steel, concrete, hybrid, etc.), conductor size and type, right-of-way width, transmission facilities with which the project will interconnect (including facilities owned by the Applicant), voltage rating, transfer capability, overall impact on any existing transmission system, and other relevant transmission facility characteristics.

Technical Capability

The Applicant must demonstrate the technical capability to engineer, plan, construct, operate and maintain the project, based on experience with projects of equivalent nature, magnitude and complexity. To that end, the following should be provided in relation to the project:

- A discussion of the type of resources, including relevant capability (in-house personnel, contractors, other transmitters, etc.) contemplated for use by the Applicant for the following: design, engineering, material and equipment procurement, licensing and permitting, construction, operation and maintenance, and project management.
- Resumes for key technical team personnel.

- The project team's relevant experience and the available resources that would be dedicated to each activity associated with developing, constructing, operating and maintaining the project, including design, engineering, material and equipment procurement, licensing and permitting, construction, operation and maintenance, and project management.
- A description of any technological innovation that is proposed in relation to the project.

An Applicant that does not, at the time of filing, have transmission assets in the Province of Ontario should also provide the following:

- Evidence of experience in other jurisdictions in constructing and operating similar projects in transmission.
- Evidence that the Applicant's business practices are consistent with good utility practices for the following: design, engineering, material and equipment procurement, right-of-way and other land use acquisitions, licensing and permitting, consultations, construction, operation and maintenance, and project management.
- Confirmation that the Applicant has not previously had a licence or permit revoked and is not currently under investigation by any regulatory body.

Schedule

The Applicant should submit a project development schedule identifying major milestones and proposed dates for completing those milestones, as well as a project construction schedule identifying major construction milestones and proposed dates for completing those milestones.

In this section, the Applicant should include the following:

- A discussion of the overall project development and construction schedules, identifying significant milestones for engineering and design, right-of-way and other land use acquisitions, material and equipment procurement, consultations, financing, construction and any other significant activities.
- The date by which the Applicant expects to file an application for leave to construct, including significant milestones supporting the development of the leave to construct application.
- The date by which the Applicant expects the project to be in service.
- A project execution Gantt chart showing major steps and milestone dates for both project development and project construction.

- Any innovative practices that the Applicant is proposing to use to accelerate the project development and/or project construction schedules.
- The major risks to achievement of the project development and/or project construction schedules, and the Applicant's strategies to mitigate or address those risks.
- Where the plan contains more than one project, a description of how the Applicant would propose to sequence the projects, how the development and construction schedules for the projects are compatible, and how the project development and projects construction schedules and the resources required to achieve those schedules are consistent with the financial and human resources proposed to be made available by the Applicant.

Costs

The Applicant should provide: (1) an estimated budget for the development of the project up to the filing of the leave to construct application; (2) an estimated budget for any further development of the project after leave to construct has been granted; (3) an estimated budget for the construction of the project; and (4) the estimated average annual cost of operating and maintaining the project.

In this section, the Applicant should also:

- Review the estimated total development and capital costs of the project, broken down by category of cost (including permitting and licensing, engineering and design, procurement of material and equipment, construction, consultations, land use rights and interest during construction). The basis for and assumptions underlying the cost estimates should be identified.
- Break down the project development budget to provide annual schedules of development expenditures.
- If applicable, review how the project fits within the Applicant's existing transmission network and economies that can be realized given its existing transmission system and location of maintenance centers.
- Where the plan contains more than one project, discuss how the Applicant would propose to reduce costs through economies of scale and shared resources.

Financing

The Applicant must demonstrate that it has the financial capability necessary to develop, construct, operate and maintain the project. The Applicant should

demonstrate its existing financial capacity, its ability to access the debt and equity markets and the terms and conditions of any financing.

In this section, the Applicant should provide the following:

- Evidence that it has capital resources that are sufficient to develop, finance, construct, operate and maintain the project, when considered individually and in conjunction with all other projects in the plan.
- Evidence that the financing, construction, operation, and maintenance of the project, when considered individually and in conjunction with all other projects in the plan, will not have a significant adverse effect on the Applicant's creditworthiness or financial condition.
- The Applicant's financing plan, including the estimated proportions of debt and equity and the estimated cost of debt and equity, including the use of variable and fixed cost financing, and short-term and long-term maturities.
- If the financing plan contemplates the need to raise additional debt or equity, evidence of the Applicant's ability to access the debt and equity markets and the terms and conditions applicable to the debt or equity financing.
- The Applicant's current cost of debt, and a discussion of how the project, when considered individually and in conjunction with all other projects in the plan, might impact this cost of debt.
- The identification of any alternative mechanisms (e.g., rate treatment of construction work in progress) that the Applicant is requesting or likely to request.¹⁰

Land Owner and Other Consultations

The Applicant must demonstrate the ability of its management team to conduct successful consultations with landowners, First Nations and Métis and other relevant parties.

In this section, the Applicant should identify:

- An overview of the rights-of-way and other land use rights that would need to be acquired for the purposes of the development, construction, operation and

¹⁰ See Report of the Board on The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario, http://www.oeb.gov.on.ca/OEB/Documents/EB-2009-0152/Board_Report_Infrastructure_Investment_20100115.pdf

maintenance of the project, and the Applicant's schedule and proposal for obtaining those rights.

- A consultation plan for the project, including:
 - Identification of the parties to be consulted;
 - A schedule for consultations with each party; and
 - The method of consultation for each party or class of party.
- A description of the project team's consultation experience, broken down by reference to each class of party to be consulted.
- A description of any consultations undertaken to the date of filing, including a description of significant issues that have arisen and remain outstanding.

Additional Information

The Applicant should include any other information that it considers relevant to its plan.