

Ontario Energy Board



EB-2009-0397

Filing Requirements:

**Distribution System Plans - Filing under Deemed
Conditions of Licence**

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1.0 INTRODUCTION

1.1. Purpose and Development of the Filing Requirements

On June 16, 2009, the Ontario Energy Board (the Board) issued Guidelines entitled: Deemed Conditions of Licence: Distribution System Planning. This document creates Filing Requirements based on the policy direction in those Guidelines. It has been updated to reflect developments since that time and restructured to more closely follow the structure of other Board filing requirements. The revised Filing Requirements are effective as of the date of issuance.

These Filing Requirements mandate the time and manner in which licensed electricity distributors are required to file distribution system plans pertaining to the connection of renewable generation facilities under their deemed condition of licence. Although the Board is not mandating that all distributors file distribution system plans pertaining to the development of a smart grid, these Filing Requirements also provide direction to distributors in relation to the inclusion of smart grid development activities and expenditures in their distribution system plans. These directions must be followed by distributors seeking to recover smart grid related costs, or distributors who choose for any other reason to include smart grid information in their distribution system plans.

The Filing Requirements set out the minimum requirements for distribution system plans, and do not preempt the Board's discretion to make any order or give any direction as it considers necessary concerning any matters raised in relation to those plans.

These Filing Requirements will be updated as needed to reflect legislative and regulatory developments.

1.2. Legal and Regulatory Framework

1.2.1. Deemed Licence Condition to File Plans

On September 9, 2009, the *Green Energy and Green Economy Act, 2009* (the "GEA") was proclaimed into force. The GEA amended the *Ontario Energy Board Act, 1998*

(OEB Act) and the *Electricity Act 1998* (Electricity Act) to address renewable generation connections and smart grid development.

The GEA amended section 70 of the OEB Act to include the following provisions that create deemed licence conditions for all licensed electricity distributors and transmitters:

- (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, and
 - ii. the development and implementation of the smart grid in relation to the licensee's transmission system or distribution system.
 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, and
 - ii. to make investments for the development and implementation of the smart grid in relation to the licensee's transmission system or distribution system.

1.3. Other Relevant Legislation, Regulatory Requirements and Related Board Initiatives

1.3.1. Smart Grid

The legislative provisions relating to the development and implementation of a smart grid allow the Government to specify the objectives for the smart grid, the timelines for implementation, and the roles and responsibilities of various parties in relation to implementation. To that end, the Minister of Energy issued a directive to the Board on November 23, 2010 regarding steps to be taken by the Board in relation to the establishment, implementation and promotion of a smart grid.

The Board has released a Staff Discussion Paper entitled *In Regard to the Establishment, Implementation and Promotion of a Smart Grid in Ontario* for stakeholder comment (EB-2011-0004), and the Board will in due course establish policies in relation to smart grid implementation. These Filing Requirements provide direction to distributors in relation to the inclusion of smart grid development activities and expenditures in their distribution system plans pending issuance of the Board's policies.

1.3.2. Cost Responsibility for Investments Related to the Connection of Renewable Generation

On October 21, 2009, the Board issued amendments to the Distribution System Code (DSC) which revised the Board's approach to assigning cost responsibility between distributors and generators in relation to the connection of renewable generation facilities (EB-2009-0077). The cost responsibility rules are described in greater detail in section 2.4.1 below.

1.3.3. Province-Wide Recovery of Certain Connection-Related Costs

Section 79.1 was added to the OEB Act by the GEA to allow recovery from all provincial electricity ratepayers of some or all of the Board-approved costs incurred by a distributor to make an "eligible investment" for the purpose of connecting or enabling the connection of "qualifying generation facilities" to its system. Ontario Regulation 330/09 (Cost Recovery re Section 79.1 of the Act) made under the OEB Act provides for the calculation and recovery of costs that are subject to the pooling mechanism set out in 79.1 of the OEB Act.

Under Ontario Regulation 330/09, an investment is an "eligible investment" if, in addition to meeting the definition set out in section 79.1(5) of the OEB Act, the costs associated with the investment are the responsibility of the distributor as set out in the DSC. Also, under that Regulation, the Board is required to take into account the direct benefits that accrue to customers of a distributor as a result of that distributor's eligible investments. The amount of the direct benefits represents the portion of the eligible investment costs that are borne by the distributor's ratepayers, with the remaining being pooled across all provincial ratepayers.

The Board's *Framework for Determining the Direct Benefits Accruing to Customers of a Distributor under Ontario Regulation 330/09* (EB-2009-0349) (the *Framework for Determining Direct Benefits*) sets out the Board's policy with respect to the calculation or quantification of direct benefits. These Filing Requirements require that distributors provide information pertaining to direct benefits in a manner consistent with that policy.

1.3.4. Provision of Connection-Related Information

Section 25.37 of the Electricity Act requires distributors and others to provide information regarding the ability of their systems to accommodate generation from renewable energy generation facilities, as well as information regarding the completion of connection assessments. Section 4 of Ontario Regulation 326/09 (Mandatory Information re Connections) made under the Electricity Act sets out the details regarding the requirement for reporting to the Board and for making connection-related information available to the public. Section 2 of that same Regulation contains certain requirements related to the completion of connection assessments for renewable generators.

2.0 GEA PLAN: GENERAL & ADMINISTRATIVE MATTERS AND DIRECT BENEFITS

2.1. Time of Filing

A Green Energy Act Plan (GEA Plan) must be filed as part of a distributor's cost of service rate application, unless the Board otherwise requires that the distributor prepare and submit a GEA Plan at another specified date. The GEA Plans will form part of the public record to be examined in the rate hearing.

The Board may, in any particular case, require the preparation and filing of a GEA Plan from a distributor at a time other than the time set out in these Filing Requirements, or may permit a deferral of the filing to a later date.

2.2. Deferrals

The Board may permit a distributor to defer the filing of a GEA Plan. A distributor that wishes to request a deferral should specifically include that request in its cost of service application, together with a detailed explanation of why the deferral has been requested, and a proposal for when the GEA Plan will be filed. The Board will make its determination regarding the request for deferral based on a consideration of the number of renewable generator connection applications that the distributor has received, and such other factors that the Board may deem appropriate.

2.3. Form of Filing: Basic vs. Detailed Plan

Where a distributor is planning to make material system investments related to the connection of renewable generation or the development of a smart grid within the next five years, a Detailed GEA Plan as described in these Filing Requirements must be filed. In all other circumstances, a distributor must file a Basic GEA Plan with its cost of service rate application.

The materiality threshold is reached, for the purposes of these Filing Requirements, and a Detailed GEA Plan must be filed in either of the two following circumstances:

1. The total capital costs of all a distributor's planned projects related to the connection of renewable generation and/or the development of a smart grid in any one year:
 - Are more than \$100,000 and exceed 3% of the distributor's distribution rate base;
or
 - Exceed \$5,000,000.

2. The total capital costs of all a distributor's planned projects related to the connection of renewable generation and/or the development of a smart grid over five years:
 - Are more than \$100,000 and exceed 6% of the distributor's distribution rate base;
or
 - Exceed \$10,000,000.

2.4. Direct Benefits

Section 79.1 of the OEB Act and Ontario Regulation 330/09, from which the *Framework for Determining Direct Benefits* derives, deal solely with renewable generation connection costs and do not address the recovery of smart grid costs.

2.4.1. Investments to which the Direct Benefits Calculation Applies

Under the DSC, distribution system investments related to the connection of renewable generation facilities are classified in the DSC within three general categories: “connection assets”, “expansions” and “renewable enabling improvements” (REI). Cost responsibility for each is assigned as follows:

- For connection assets, the generator bears 100% of the cost;
- For expansions: (i) if the expansion is identified in a Board-approved plan or is otherwise approved or mandated by the Board, the distributor is responsible for 100% of the costs; and (ii) in all other cases, the distributor is responsible for the costs up to the “renewable expansion cost cap” (\$90,000 per MW of capacity of the connecting generator) and any amount above that cap is the responsibility of the generator; and
- For REIs, the distributor bears 100% of the cost.¹

As noted in section 1.3.3 above, the pooling mechanism set out in section 79.1 of the OEB Act applies in respect of investments for which cost responsibility lies with the distributor under the DSC. As such, the calculation or quantification of direct benefits pertains to expansions and REIs, but not to connection assets.

2.4.2. Direct Benefits

2.4.2.1. Capital Costs

For expansions and REIs, a quantification or calculation of the direct benefits is required. For distributors that file a Basic GEA Plan, in accordance with the *Framework on Determining Direct Benefits* the distributor is permitted to use a standardized approach. Currently, that approach calls for the use of the direct benefits allocation

¹ Cost responsibility for renewable generation connections is addressed in section 3 of the DSC.

approved by the Board in the EB-2009-0096 proceeding pertaining to Hydro One Networks Inc., as follows: for expansions, 17% of the cost constitutes the direct benefits, and for REIs the direct benefits percentage is 6% of the costs. As also set out in the *Framework for Determining Direct Benefits*, in the future the Board will update these percentages based on an ongoing weighted average of actual direct benefits associated with all distributors that have completed a detailed benefits assessment.

A distributor that is permitted to use the standardized approach described above has the option to undertake a more detailed direct benefit assessment. In such cases, the assessment should be consistent with the *Framework for Determining Direct Benefits*.

For distributors filing a Detailed GEA Plan, a detailed direct benefits assessment should generally be undertaken in accordance with the *Framework for Determining Direct Benefits*. However, where the distributor's costs fall below the threshold referred to in section 2.2 above when smart grid capital costs are excluded, the distributor may use the standardized approach described above.

2.4.2.2. Note on OM&A Costs

On OM&A costs, the *Framework for Determining Direct Benefits* clarifies that:

“Eligible investment” costs, as set out in O. Reg. 330/09 and section 79.1 (5) of the Act, are not limited to only the initial capital investment costs but also include the *up-front* OM&A costs necessary for the purpose of “enabling the connection of a qualifying generation facility”. However, given that section 79.1 focuses solely on the initial investment, ***ongoing OM&A costs that are incurred by the distributor after the investment has been made will not be eligible for provincial recovery.***

2.5. Additional Information

Distributors seeking to recover costs from ratepayers through GEA Plan approval should carefully consider whether there is a need for more information than is mandated by these Filing Requirements. For example, the current assessment described in section 4.0 “GEA Plan Scope” requires information for only certain feeders. If, however, the reason for a proposed investment relates to other feeders, the current assessment should include all relevant feeders.

2.6. Confidential Information

Any issues relating to the confidentiality of information contained in a distribution system plan will be addressed by the Board in accordance with its *Practice Direction on Confidential Filings*, which should be followed when filing a GEA Plan. As noted in the *Practice Direction*, the Board's general policy is that all records should be open for inspection by any person unless disclosure of the record is prohibited by law. The placing of materials on the public record is the rule, and confidentiality is the exception. The onus is on the person requesting confidentiality to demonstrate to the satisfaction of the Board that confidential treatment is warranted in any given case.

2.7. Obligation to Connect and Renewable Connection/Smart Grid Expenditures

Nothing in this document should be construed as limiting a distributor's obligation to proceed with the connection of renewable generation facilities. By requiring the filing of GEA Plans, the Board is not mandating that all distributors make investments relating to renewable generation. Nor must a distributor wait for the approval of a GEA Plan before beginning work to connect renewable generation.

Distributors may make expenditures relating to renewable generation connection, or to the smart grid, in accordance with applicable legal and regulatory requirements. The prudence of those expenditures and recovery of their costs will be subject to Board review in the normal course.

3.0 PREPARATION OF THE GEA PLAN

A GEA Plan, and distribution system investments proposed within it, should be appropriate to the anticipated demand for renewable generation connection in the service area of the distributor. The size of a distributor, and the characteristics of the territory served by that distributor, should also be factors in the scope and design of a GEA Plan.

3.1. Purposes of a GEA Plan

The preparation and filing with the Board of a GEA Plan serves three main purposes:

- The GEA Plan filing provides information to the Board and interested stakeholders regarding the readiness of a distributor's system to accommodate the connection of renewable generation and the expansion or reinforcement necessary to accommodate renewable generation, and, eventually, the development and implementation of the smart grid;
- The GEA Plan filing provides evidence in proceedings for approvals related to infrastructure investments for renewable generation, and smart grid where applicable, and the recovery of the resulting costs from ratepayers; and
- Provides a basis, through the approval of a GEA Plan, by which all of the costs of an expansion to connect renewable generation facilities will be the responsibility of the distributor under the DSC, and therefore also eligible for recovery through the provincial cost recovery mechanism set out in section 79.1 of the OEB Act. As noted in section 2.4.1, cost responsibility for expansions is generally otherwise subject to being split between the distributor and the generator.

3.2. Information Exchange with Third Parties

Co-ordinated planning among distributors, transmitters and the Ontario Power Authority (the OPA) will be essential in achieving the goals reflected in the GEA in a timely and cost-effective manner. Section 25.37 of the Electricity Act and the associated Regulation 326/09 (discussed above) mandate the publication of some information, but distributors must share critical information necessary to the orderly connection of renewable generation with their embedded and host distributors, transmitters and the OPA.

Distributors, in preparing a GEA Plan, must therefore take into account the following key factors:

- The applications from renewable generators over 10kW for connection in the distributor's service area;

- The overall potential for developing renewable generation in the distributor's service area;
- Constraints within the distributor's system related to the connection of renewable generation;
- Upstream constraints of a host distributor or transmitter that may affect the ability to accommodate renewable generation connection in the distributor's service area;
- Downstream constraints the distributor may cause for an embedded distributor; and
- Any information received from the OPA regarding integrated planning for regions of the province or the province as a whole.

Distributors must therefore consult with embedded and host distributors, upstream transmitters and the OPA when preparing their GEA Plans, as discussed below.

3.2.1. Information Exchange with the OPA and OPA Comment

The OPA has indicated that as part of its Feed-in Tariff (FIT) program, it will work with distributors to integrate transmission and distribution system planning. Communication and meetings with the OPA should be a valuable source of information for distributors planning system investments associated with the connection of renewable generation.

Each distributor is required to submit its GEA Plan to the OPA for comment prior to filing. The OPA comment letter must be filed with the GEA Plan, and any response to the letter from the distributor must be included in the application or reflected in the GEA Plan as filed.

1. Basic GEA Plan

For distributors filing a Basic GEA Plan, the Board expects that the OPA will comment on the applications it has received under the FIT program from renewable generators that would connect in the distributor's service area.

Distributors should submit the Basic GEA Plan to the OPA not less than 30 days in advance of the date the distributor needs to receive the OPA letter for inclusion in the cost of service application.

2. Detailed GEA Plan

For distributors filing a Detailed GEA Plan, the Board expects that the OPA will comment on:

- The applications it has received from renewable generators through the FIT program for connection in the distributor's service area;
- Whether the distributor has consulted with the OPA, or participated in planning meetings with the OPA;
- The potential for co-ordination with other distributors and transmitters; and
- Whether the projects and activities to accommodate renewable generation proposed in the Detailed GEA Plan are consistent with any integrated plan for the region, or for the province as a whole.

Distributors should submit Detailed GEA Plans to the OPA no less than 60 days in advance of the date the distributor needs to receive the OPA letter for inclusion in the cost of service application. Distributors submitting Detailed GEA Plans to the OPA are advised to notify the OPA of the planned submission date no less than 30 days before submission of the Detailed GEA Plan to the OPA.

3.2.2. Information Exchange with Affected Distributors and Transmitters

All distributors are required to consult with embedded and host distributors, and upstream transmitters, in preparing their Basic or Detailed GEA Plans. Host distributors and the transmitter to whom the distributor is connected should be provided with a forecast of renewable generation connection and any planned system investments to accommodate the forecast connections.

Distributors must provide the following information as part of their GEA Plan filing:

- A description of the consultation, including planning meetings, undertaken with any affected distributors and transmitters; and
- A description of how feedback received from any affected distributors and transmitters was reflected in the GEA Plan as filed with the Board (this could

include correspondence between the distributor and the affected distributors and transmitter).

4.0 GEA PLAN SCOPE

The GEA Plan must include information regarding the connection of renewable generation, and may also include preliminary work for the development of a smart grid, if the distributor is seeking to recover smart grid related costs. The GEA Plan should be clear and explicitly tied to any cost recovery the distributor is seeking through its rate application.

Conservation and demand management (“CDM”) programs and costs are not to be included in a GEA Plan, although the effects of CDM programs on system capacity should be considered in preparing the GEA Plan.

4.1. GEA Plan Content: Renewable Generation Connections

As outlined in the sections that follow:

- Basic and Detailed GEA Plans must both include (i) a current assessment of the distribution system and (ii) information on the planned development of the system to accommodate renewable generation connections; and
- Detailed GEA Plans must also include a description of projects and activities related to renewable generation connections and their associated expenditures.

4.1.1. Basic GEA Plan

A Basic GEA Plan is intended to provide information to the Board and interested stakeholders regarding the readiness of a distributor’s system to connect renewable generation and the expansion or reinforcement necessary to accommodate renewable generation.

The Basic GEA Plan should cover a five year horizon, and include information regarding any capital expenditures the distributor intends to make and any OM&A expenses it

expects to incur. Where the distributor is seeking to recover costs related to the connection of renewable generation from ratepayers, the Basic GEA Plan must contain detailed costing information for specific projects for at least the first year of the Basic GEA Plan. The level of detail should be sufficient for the Board to assess the need for and prudence of the planned projects and their associated costs.

If a distributor is unable to provide this level of detail for all five years of the Basic GEA Plan, the distributor may discuss the general level and type of investments and expenses anticipated for years 2 – 5 of the Basic GEA Plan. However, such general information will not allow the Board to assess the prudence of and approve cost recovery for the expenditures anticipated in the later years of the Basic GEA Plan.

4.1.2. Detailed GEA Plan

A Detailed GEA Plan, in addition to providing information to the Board and interested stakeholders regarding the readiness of a distributor's system to connect renewable generation and the expansion or reinforcement necessary to accommodate renewable generation, should contain detailed costing information for specific projects for at least the first year of the Detailed GEA Plan.

The Detailed GEA Plan should cover a five year horizon, and include the specific capital expenditures the distributor intends to make and the OM&A expenses it expects to incur. Where the distributor is seeking to recover costs related to the connection of renewable generation from ratepayers, the level of detail should be sufficient for the Board to assess the need for and prudence of the planned projects and their associated costs.

If a distributor is unable to provide this level of detail for all five years of the Detailed GEA Plan, the distributor may discuss the general level and type of investments and expenses anticipated for years 2 – 5 of the Detailed GEA Plan. However, such general information will not allow the Board to assess the prudence of and approve cost recovery for the expenditures anticipated in the later years of the Detailed GEA Plan.

4.2. Content Common to Basic and Detailed GEA Plans: Current System Assessment and Planned Developments

4.2.1. Current Assessment of the Distributor's System

The GEA Plan should include the following information about the current state of the distribution system:

- A description of the distribution system's current capacity to accommodate generation from renewable energy generation facilities, including the available capacity to connect generation. This information does not have to be provided for every feeder in the distribution system, but must be provided for each feeder:
 - That is directly connected to a transformer station that is itself directly connected to a transmission system or a host distributor system; and
 - For which the OPA has received one or more applications from renewable generators under the FIT program.
- Any factors that may limit the distributor's ability to connect renewable generation facilities, including constraints in the upstream transmission system or a host distributor's system;
- The identification of any expenditures (capital or OM&A) related to renewable generation connections that are already included in the distributor's approved capital plans, funded through current rates (including any approved rate riders or adders) or tracked in deferral accounts; and
- A description of any relevant unique challenges and opportunities associated with the distributor's system as it is currently configured.

4.2.2. Planned Development of the System to Accommodate Renewable Generation Connection

4.2.2.1 Basic GEA Plan Where No Connection Applications from Renewable Generators

Where a distributor is aware that no applications from renewable generators have been received by the OPA through the FIT program for connection within the distributor's service area, and the distributor has not received any requests for microFIT connections, the description of the planned development of the system may consist of the following, in lieu of the information referred to below:

- A statement regarding the lack of FIT applications and microFIT connection requests; and
- The letter of comment from the OPA.

4.2.2.2 Basic GEA Plan Where Connection Applications from Renewable Generators and all Detailed GEA Plans

In this section, the distributor should describe the distributor's view of its outlook and objectives for the next five years for accommodating the connection of renewable generation facilities. The following information should be included:

- The number and the capacity (in MW) of renewable generation connections anticipated over the five-year period based on existing connection applications, information available from the OPA and any other information the distributor has about the potential for renewable generation in its service area. Where a distributor has a large service area, or two or more non-contiguous regions included in its service area, a regional breakdown should be provided;
- The infrastructure projects and activities, if any, that the distributor intends to undertake in the next five years to accommodate generation from renewable energy generation facilities and cost estimates for those projects or activities;
- Where costs may be recovered from provincial ratepayers, a calculation of the direct benefits accruing to the distributor's customers, consistent with the *Framework for Determining Direct Benefits*;

- The method and criteria that will be used to prioritize expenditures in accordance with the planned development of the system, noting in particular whether and when the distributor is planning to connect a distributor-owned renewable generation project (or projects);
- Information regarding consultation with any affected distributors and transmitters as described above; and
- The letter of comment from the OPA.

4.3. Content Specific to Detailed GEA Plans

4.3.1. Executive Summary

This section should appear at the beginning of a Detailed GEA Plan and should provide, in brief:

- A summary of the current assessment of the distributor's system;
- A list of the renewable generation connection capital projects contained in the GEA Plan;
- A summary of the expenditures (both capital and OM&A) necessary to complete the capital projects;
- The total costs it is seeking to recover from ratepayers, including both its own distribution ratepayers and provincial ratepayers under section 79.1 of the OEB Act;
- A summary of relevant information received from the OPA, and any affected distributors and transmitters, and how that information is reflected in the GEA Plan; and
- A brief description of how the distributor expects its system to develop over the next five years to accommodate the forecasted renewable generation projects.

4.3.2. Projects and Costing for Renewable Generation Connection

The information set out below should appear after the current system assessment and the planned development information referred to in section 4.2 above.

A Detailed GEA Plan should describe the projects and activities to accommodate renewable generation expected to occur within the next five years and their associated expenditures (capital or OM&A expenses). These activities should be incremental to activities (on-going or planned) currently included in rates or in Board-approved capital budgets. Any costs that a distributor seeks to include in rates for the test year (generally year 1 costs) must be supported by detailed, project-specific information in the Detailed GEA Plan.

Information for years 2 – 5 can be less specific and less detailed, and may be provided on an “activity” rather than a project-specific level where the distributor does not have information to support a more detailed analysis. Where a distributor seeks a funding adder (where prudence of the expenditures has not been determined by the Board), sufficient information must be provided to allow the Board to assess the need for the mechanism and the nature and quantum of costs to be collected from ratepayers.

The following three subsections should be included in this section of the Detailed GEA Plan.

1. Selection of Projects and Activities

This subsection should discuss the method and criteria used by the distributor to select and prioritize the projects or activities related to renewable generation connection, including any considerations for distributor-owned generation, and show how the application of this methodology led to the selection of the projects and activities as described in the Plan. For projects for which the distributor is seeking a determination of prudence and cost recovery in the application, the distributor must identify any alternatives to the projects considered by the distributor, and the reasons for selection of the proposed projects.

2. Description of Projects and Activities

This subsection should provide a discussion of each project or activity, including the following information:

- A description of the proposed project or activity;
- An estimated construction schedule and completion date for the project or activity;
- A description of how the project or activity is expected to improve the system's ability to accommodate the connection of renewable generation facilities;
- A description of the direct benefits accruing to the distributor's customers consistent with the *Framework for Determining Direct Benefits*; and
- A discussion of the risks to successful completion of the project or activity and the actions to be undertaken to mitigate those risks.

3. Costing of Projects and Activities

Cost information should be presented separately for each project or activity, and include:

- Detailed budgets (capital and OM&A) for the project or activity;
- A delineation of the project elements and costs between:
 - Connection assets;
 - Expansion of the system; and
 - Renewable enabling improvements;
- Where costs may be eligible for recovery from provincial ratepayers, a calculation or quantification of the direct benefits accruing to the distributor's customers, consistent with the *Framework for Determining Direct Benefits*;
- A clear statement of the costs sought to be recovered through rates in the current application, and cross-references to any other schedules in the application in which these costs appear; and
- If the distributor is seeking a rate rider or funding adder, the dollar amount of, and the basis for calculating the rate rider or funding adder (see section 5.0 "GEA Plan Approval" for a description of these mechanisms).

In addition to the cost information presented for each project, distributors should provide two summary tables similar to the following, one for capital expenditures and one for

OM&A expenses, to illustrate the calculation of the total amount to be recovered from the distributor’s ratepayers, and from provincial ratepayers. In completing the tables, distributors should remember that the cost responsibility rules now set out in the DSC, and thus the provincial recovery mechanism set out in section 79.1 of the OEB Act, apply only to investments associated with renewable generation projects for which an application to connect was made on or after October 21, 2009.

Capital Expenditures

\$	Year 1	Year 2	Year 3	Year 4	Year 5
Gross Cost					
Less Generator Contribution					
Less Provincial Recovery ²					
Net Distributor Cost					

This section of the Detailed GEA Plan must also include a revenue requirement calculation for the amounts to be recovered in rates beginning in the test year. As with any revenue requirement calculation, the distributor must identify all assumptions used in the calculation, and the basis for those assumptions.

4.3.3. Appendices

A description of the distributor must be included in the GEA Plan as an appendix. Any studies or supporting analyses for the GEA Plan should also be appended to the plan.

4.4. GEA Plan Content: Development of the Smart Grid

The Board is not requiring all distributors to file information pertaining to the development of a smart grid in their GEA Plans at this time. However, distributors filing a Basic or Detailed GEA Plan:

² This amount should be net of any direct benefits, calculated or quantified consistent with the *Framework for Determining Direct Benefits*.

- Must include activities and expenditures related to the development of the smart grid in their GEA Plan if they are seeking the recovery of those costs; and
- May include such activities and expenditures in their GEA Plan in any other case.

A distributor that includes smart grid development expenditures in a GEA Plan must do so in accordance with these Filing Requirements, and must provide that information in a section of the GEA Plan that is separate from the information related to renewable generation connection.

The Board recognizes that an investment related to renewable generation connection may incorporate what the distributor believes to be smart grid technologies. In such cases, distributors should include the information relating to the smart grid technologies, and any costs associated with those technologies, in the smart grid portion of the GEA Plan, with the balance of the costs included in the renewable generation connection portion of the GEA Plan.

At the present time, smart grid development activities and expenditures should be limited to smart grid demonstration projects, smart grid studies and planning exercises, and smart grid employee education and training.

The Board is aware that work has been and is being done in Ontario and in other jurisdictions (most notably the United States) regarding smart grid development. The Board expects that distributors will, prior to making smart grid related expenditures, familiarize themselves with that work to ensure that efforts are not being unnecessarily duplicated. In addition, the Board does not expect distributors to be engaging in research and development activities related to smart grid development at this time.

Any proposed smart grid activities should be incremental to activities (on-going or planned) currently included in rates or in Board-approved capital budgets. The smart grid section included in a GEA Plan should discuss the method and criteria used by the distributor to prioritize the activities, and show how the application of this methodology led to the selection of the activities as described in the GEA Plan.

Detailed cost information must be provided for any smart grid expenditures for which the distributor is seeking cost recovery. Cost information should be presented separately for each project or activity, and include:

- Detailed budgets (capital and OM&A) for the project or activity;
- A clear statement of the costs sought to be recovered through rates in the current application, and cross-references to any other schedules in the application in which these costs appear;
- If the distributor is seeking a rate rider or funding adder, the dollar amount of, and the basis for calculating the rate rider or funding adder (see section 5.0 “GEA Plan Approval” for a description of these mechanisms); and
- A revenue requirement calculation for the amounts to be recovered in rates beginning in the test year, identifying all assumptions used in the calculation, and the basis for those assumptions.

In addition, the following descriptive information should be provided for all smart grid development activities:

1. Smart Grid Demonstration Projects

- A discussion of the technology to be demonstrated and the anticipated benefits from a successful application of the technology;
- A discussion of any risks or barriers to the widespread implementation of the technology if the demonstration phase proves successful;
- Confirmation that the distributor has undertaken a review of other demonstration projects as reported on the Board’s website or elsewhere, to determine what has already been learned about the technology;
- Information on any other demonstration projects that have been conducted using the technology and a discussion of why additional demonstration is necessary;
- A discussion of any joint participation agreements, information sharing arrangements and other efforts that the distributor has made to avoid undertaking projects that unnecessarily duplicate other ongoing or planned demonstration projects so as to avoid redundant demonstration projects; and

- A description of the formal evaluation that will be performed to assess the value of the projects. The evaluation should be suitable for sharing with other distributors.

2. Smart Grid Studies and Planning Exercises

- A statement of the objectives of the study that clearly indicates the information that will be developed and how that information will aid in developing a smart grid;
- A discussion of any joint participation agreements, information sharing arrangements and other efforts that the distributor has made to avoid undertaking studies that unnecessarily duplicate other ongoing or planned studies so as to avoid redundant studies; and
- Information on how the distributor has incorporated the results of any previous studies or planning exercises with similar objectives and a clear explanation of the new information that the distributor expects from the study or planning exercise it is proposing.

3. Smart Grid Education and Training

- A statement of the nature and purpose of the education or training that clearly indicates how the activity will aid in smart grid development; and
- A discussion of how participation in smart grid training or education programs such as conferences, workshops or forums will further the distributor's understanding of smart grid development or otherwise aid in developing a smart grid.

Smart grid education and training is intended to further a distributor's understanding of smart grid development by building internal expertise. As such, education or training activities are expected to be directed at distributor personnel (whether permanent or on contract).

5.0 GEA PLAN APPROVAL

5.1. Review of Activities and Related Costs

The Board will review each distributor's GEA Plan, generally as part of the distributor's cost of service rate application. The Board and parties to the hearing will subject the projects and costs proposed in a GEA Plan to similar scrutiny as any other cost proposed to be included in rates.

The Board will assess the prudence of the activities and costs to the extent permitted by the level of detail provided. The GEA Plan should contain sufficient evidence to allow the Board to conduct this examination. Issues of need, project selection, project budget and prioritization of expenditures that are addressed through the GEA Plan approval process in sufficient detail will not be revisited in subsequent proceedings. If recovery of approved expenditures is to occur through a rate rider, an account to track variances from budgeted costs may be established.³

The Board will approve only those portions of a GEA Plan which it finds to have been appropriately supported by evidence, and it may attach conditions to its approval of a GEA Plan or any portion of a GEA Plan.

5.2. Availability of Additional Funding for Proposed Expenditures

In general, rates approved as part of a cost of service application will include only costs from year one of a GEA Plan. An exception to this general rule could occur if the Board is considering an application based on two test years, and finds the information in the GEA Plan sufficiently detailed and robust to approve for both test years.

The Board recognizes that distributors may need additional funding for expenditures proposed in a GEA Plan between cost of service applications, and will consider applications for suitable funding mechanisms. The nature of the mechanism used will depend on whether the Board is able to properly assess prudence of the proposed expenditures based on the evidence filed in the application.

A rate rider is a tool to allow recovery of expenditures that have been examined as part of an application, found to be prudent, and approved for recovery by the Board. An

³ See Section 7.0 on capital and OM&A deferral accounts.

account to track variances from budget may be established in conjunction with a rate rider.

In contrast, the costs collected through a funding adder (sometimes referred to as a rate adder) are not subjected to a prudence review before the adder is approved. The costs will be subject to a prudence review in the first cost of service application following the implementation of the adder. The Board will require the distributor to refund to ratepayers costs already collected through the adder if these costs are subsequently found to be imprudent.

Where costs recorded in a deferral account have not been subjected to a prudence review, recovery of these costs may be denied at the time the Board considers an application to dispose of the balances in the account.

6.0 REPORTING ON THE GEA PLAN

6.1. Implementation of Detailed GEA Plans

The Board will require that distributors file status reports on the implementation of their approved Detailed GEA Plans. At a later date, the Board will provide further direction as to the time and the manner of reporting.

6.2. Smart Grid Development Activities

In respect of smart grid development activities that a distributor chooses to include in its GEA Plan, the Board will require distributors to provide evaluations of the outcome of such activities to ensure that the benefits of experience are shared. These reports should include:

- A description of the activity;
- The specific technologies tested or demonstrated, where applicable;
- Activity costs;
- The performance of the demonstrated technologies, where applicable;
- The benefits of the activity, quantified where appropriate or otherwise presented on a qualitative basis; and
- Recommendations and lessons learned from the project.

The Board intends to maintain an on-line repository of smart grid studies, demonstration and pilot project reports. To maximize the utility of this repository, the Board expects distributors to avoid to the maximum extent possible any restrictions on the disclosure of information. Distributors must in all cases ensure that any information disclosure restrictions that cannot be avoided will not hinder meaningful reporting or replication of the results of the study or demonstration project.

Where the information to be reported is, in the distributor's opinion, confidential, the distributor should notify the Board. The Board will be guided by and apply the principles and processes set out in the Practice Direction on Confidential Filings in such cases, to the extent applicable.

7.0 CAPITAL AND OM&A DEFERRAL ACCOUNTS FOR RENEWABLE GENERATION CONNECTION OR SMART GRID DEVELOPMENT

In its Guidelines released June 16, 2009, the Board created four new deferral accounts in the Uniform System of Accounts to allow distributors to begin recording expenditures for certain activities relating to the connection of renewable generation or the development of a smart grid. These deferral accounts were authorized to be used to record the qualifying incremental capital investments or OM&A expenses which are described below. In this context, incremental means that an investment was not included in previous capital plans approved by the Board or is not funded through current rates.

In addition, the Board created two additional deferral accounts as part of the release of the March 25, 2010 version of these Filing Requirements for the recording of amounts collected from ratepayers through any funding adder the Board may approve relating to the connection of renewable generation or the development of a smart grid.

7.1. Renewable Generation Connection Deferral Accounts

7.1.1. Account 1531: Renewable Generation Connection Capital Deferral Account

Investments associated with expansions to connect renewable generation facilities and renewable enabling improvements, both as defined in the DSC, will be recorded in this

capital deferral account. In addition, the capital cost of changes to a distributor's Customer Information System to enable the automated settlement of FIT or microFIT contracts may be included in this account.

The distributor's normal capitalization policies from its last cost of service proceeding should be followed in identifying fixed asset expenditures.

7.1.2. Account 1532: Renewable Generation Connection OM&A Deferral Account

Incremental operating, maintenance, amortization and administrative expenses directly related to expansions to connect renewable generation facilities, and renewable enabling improvements, both as defined in the DSC, will be recorded in this operating deferral account. In addition, costs that can be recorded in this account include expenses associated with preparing a GEA Plan and expenses associated with changes to a distributor's Customer Information System to enable the automated settlement of FIT or microFIT contracts.

Distributors should not record in this account any allocation of general expenses that are not specifically related to the investments that can be recorded in Account 1531.

7.1.3. Account 1533: Renewable Generation Connection Funding Adder Deferral Account

This account will record the revenues collected through a funding adder approved by the Board related to renewable generation connection projects. Separate sub-accounts shall be used to record any amounts collected from a distributor's ratepayers and any amounts received from the IESO (pursuant to the provincial pooling mechanism set out in 79.1 of the OEB Act) in respect of the projects.

7.2. Smart Grid Development Deferral Accounts

The Board is currently limiting amounts that can be recorded in the "Smart Grid Capital Deferral Account" and the "Smart Grid OM&A Deferral Account" to expenditures associated with the following activities:

- Smart grid demonstration projects;

- Smart grid studies and planning exercises; and
- Smart grid education and training.

Expenditures for smart meter-related investments and activities, including advanced metering infrastructure, are adequately addressed through existing mechanisms and may not be recorded in these deferral accounts.

7.2.1. Account 1534: Smart Grid Capital Deferral Account

Investments related to smart grid demonstration projects will be recorded in this capital deferral account. This account will also be used to record the cost of smart grid investments that are undertaken as part of a project to accommodate renewable generation.

The distributor's normal capitalization policies from its last cost of service proceeding should be followed in identifying fixed asset expenditures.

7.2.2. Account 1535: Smart Grid OM&A Deferral Account

Operating, maintenance, amortization and administrative expenses directly related to the following smart grid development activities will be recorded in this operating deferral account:

- Smart grid demonstration;
- Smart grid studies and planning exercises; and
- Smart grid education and training.

This includes expenses associated with preparing the smart grid portion of a GEA Plan.

Distributors should not record in this account any allocation of general expenses that are not specifically related to the investments that can be recorded in Account 1534.

The Board recognizes that an investment in a renewable enabling improvement, as defined in the DSC, may incorporate what the distributor believes to be smart grid technologies. In such cases, distributors should allocate any costs associated with the incorporation of smart grid technologies to the smart grid deferral accounts, with the balance of the costs going to the renewable generation connection deferral accounts.

7.2.3. Account 1536: Smart Grid Funding Adder Deferral Account

This account will record the revenue collected through a funding adder approved by the Board related to smart grid development.

7.3. Interest Charges and Other Matters Relating to the Deferral Accounts

Interest carrying charges will apply to the monthly opening balances in the above accounts using the Board's prescribed interest rates in effect for the relevant quarterly period.

The Board may issue further instructions regarding these deferral accounts, including in relation to reporting, as required.

The recording of amounts into the deferral accounts described above does not guarantee final recovery of those amounts. Recovery of any expenditures recorded will be subject to a prudence review at the appropriate time. This will generally occur during a proceeding to set the distributor's rates, but could also occur at the time the Board approves a project to which the amounts relate, or in such other circumstances as the Board may determine.

8.0 FURTHER INFORMATION

Questions related to these Filing Requirements should be directed to:

Ontario Energy Board
Market Operations Hotline
Telephone: 416-440-7604
E-mail: market.operations@ontarioenergyboard.ca