

Ontario Energy Board



EB-2009-0397

Filing Requirements:

Distribution System Plans under the Green Energy Act

Draft December 18, 2009

I. Introduction

On June 16, 2009, the Ontario Energy Board issued Guidelines entitled: Deemed Conditions of Licence: Distribution System Planning (“the June 16th Guidelines”). This document creates Filing Requirements based on the policy direction in the June 16th Guidelines.

These Filing Requirements are transitional, and will be updated as needed to reflect legislative and regulatory developments. In particular, 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. At time of writing, the government has not enacted regulations or directives regarding the development of the smart grid. These Filing Requirements focus on plans in relation to renewable generation connection.

Legal and Regulatory Framework

1. Requirement to File Plans

On September 9, 2009, the *Green Energy and Green Economy Act, 2009* (the “GEA”) was proclaimed in 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.

2. [Other Relevant Legislation and Board Initiatives Referred to in these Filing Requirements](#)

a) 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.

b) Province-wide Recovery of Certain Connection-related Costs

Section 79.1 of the OEB Act has been amended by the GEA to allow recovery from all provincial electricity ratepayers of some or all of the costs borne 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 under the OEB Act (Cost Recovery re Section 79.1 of the 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 that Regulation, 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.

The Board has issued a *Staff Discussion Paper on the Proposed Framework for Determining the Direct Benefits Accruing to Customers of a Distributor under Ontario Regulation 330/09* for stakeholder comment. The discussion paper sets out proposed types of direct benefits and a standard methodology for quantifying each of those direct benefits (EB-2009-0349).

c) 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) 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.

II. Purpose of System Plans under the GEA

The preparation and filing with the Board of a system plan consistent with the requirements in the GEA (“GEA Plan”) serves three main purposes:

- Providing information to the Board and the 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;
- Providing evidence in rate applications for capital budget approvals related to infrastructure investments for renewable generation and

smart grid, and the recovery of the resulting costs from ratepayers;
and

- Providing a basis, through the approval of a GEA Plan, by which the costs of certain investments will be the responsibility of the distributor under the DSC, and therefore possibly recovered through the provincial cost recovery mechanism set out in section 79.1 of the OEB Act.

It is important for the successful implementation of the GEA that all distributors assess their systems and provide information regarding system readiness for renewable generation connection and, in future, for the development and implementation of a smart grid. Those distributors who identify system investments that are necessary for the accommodation of renewable generation connection or for undertaking any developmental work related to the smart grid may use a GEA Plan to support cost recovery requests. The requirements set out below are based on the purposes to be served by GEA Plans.

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

Co-ordinated planning among distributors and transmitters and the Ontario Power Authority (the "OPA") will be essential in achieving the goals of 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, the OPA and transmitters.

The Board is not mandating that all distributors make investments relating to renewable generation or smart grid. Nor must a distributor wait for the approval of a plan before beginning work to connect renewable generation. Distributors may make expenditures relating to renewable generation connections and preliminary work for the development of a smart grid that they consider appropriate without a Board-approved plan. The prudence of those expenditures and recovery of their costs will be subject to Board review in the normal course.

To be clear, nothing in this document should be construed as limiting a distributor's obligation to proceed with the connection of renewable generation facilities in accordance with applicable legal and regulatory requirements.

III. Filing of GEA Plans

Each distributor is required to file a GEA Plan for OEB approval regarding the expansion or reinforcement of the distributor's system to accommodate the connection of renewable energy generation facilities. A distributor may also choose to include in the GEA Plan preliminary work for the development of the smart grid.

At a minimum, a distributor must file a Basic GEA Plan which contains an assessment of the distribution system's capacity to accommodate generation from renewable energy generation facilities. The Basic GEA Plan must also include the information the distributor has regarding the likely demand for renewable generation connection in its service territory and a description of the investments that the distributor believes are necessary to accommodate renewable generation.

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 with the OEB. The materiality threshold is reached, for the purposes of these Filing Requirements, in two circumstances:

1. the costs of all a distributor's GEA-related projects in any one year exceed \$100,000, and in addition:

- Exceed 3% of the distributor's distribution rate base; or
- Exceed \$10,000,000.

2. the costs of all a distributor's planned GEA-related projects over five years exceed \$100,000, and in addition:

- Exceed 6% of the distributor's distribution rate base; or
- Exceed \$20,000,000.

In preparing a Detailed GEA Plan, a distributor must seek detailed information from the OPA regarding the level of interest in Feed in Tariff contracts in the distributor's service area, and transmission constraints that may affect the capacity to connect renewable generation facilities. Distributors filing a Detailed GEA Plan must also send the Plan to the OPA for comment. The OPA will provide a letter of comment that should be filed as part of the Detailed GEA Plan.

Timing of Filing

GEA Plans must be filed as part of the distributor's cost of service rate application. This requirement applies to applications for rates for 2011 and subsequent rate years. The Plans will form part of the public record to be examined in the rate hearing.

Where it finds it to be necessary, the Board may require a distributor to file a GEA Plan independently of a cost of service rates application.

IV. Content of GEA Plans

The Filing Requirements set out below create a structure for distributors to follow in preparing a GEA Plan for review and approval by the Board. A GEA Plan may be prepared in relation to the accommodation of renewable generation, preliminary work for the development of a smart grid, or both. The GEA Plan should be clear, readily comprehensible and explicitly tied to any cost recovery the distributor is seeking through its rate application.

Basic GEA Plan – All Distributors

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. It should contain two main elements.

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;
- The identification of any expenditures (capital or OM&A expense) related to GEA activities or projects that are already included in the distributor's approved capital plans or funded through current rates (including any approved adders); and
- A description of any relevant unique challenges and opportunities associated with the distributor's system as it is currently configured.

2. Planned evolution of the system to accommodate renewable generation

In this section, the distributor should describe, to the best of the distributor's ability based on current information, 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 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 territory, or multiple service territories, 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;
- A qualitative analysis of the system benefits that the proposed projects and activities will bring; and
- The method and criteria that will be used to prioritize expenditures in accordance with the planned evolution of the system.

Detailed GEA Plan – Material Investments

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.

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 GEA-related costs from ratepayers, the level of detail should be sufficient for the Board to assess the need for and prudence of the planned projects and activities. If a distributor is unable to provide this level of detail for all years of the Plan, the distributor may discuss the general level and type of investments and expenses anticipated for the later years of the 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 Plan.

Detailed GEA Plans should separate expenditures to accommodate the connection of renewable generation from any expenditures for the development of a smart grid.

A Detailed GEA Plan should contain the elements set out below.

1. Executive Summary

This section of a Detailed GEA Plan should provide, in brief:

- A summary of the current assessment of the distributor's system;
- A list of the GEA-related capital projects contained in the Plan;
- A summary of the expenditures (both capital and OM&A) necessary to complete the capital projects;
- The magnitude of the costs it is seeking to recover from customers, including both its own distribution customers and provincial consumers under section 79.1 of the OEB Act (described above);

- A brief description of how the distributor expects its system to evolve over the next five years to accommodate renewable generation projects.

2. Current Assessment and Future Outlook

This section should contain the information required in a Basic GEA Plan – Current Assessment as described above, and reproduced here for convenience:

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;
- The identification of any expenditures (capital or OM&A expense) related to GEA activities or projects that are already included in the distributor's approved capital plans or funded through current rates (including any approved adders); and
- A description of any relevant unique challenges and opportunities associated with the distributor's system as it is currently configured.

In addition, the distributor should describe, to the best of the distributor's ability based on current information, the distributor's view of its outlook and objectives for the next five years for accommodating the connection of renewable generation facilities.

Information should be included regarding the number and 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. In addition, any information the distributor has regarding transmission constraints or other factors that may limit the distributor's ability to connect renewable generation facilities should be described.

Where a distributor has a large service territory, or multiple service territories, a regional breakdown should be provided.

In this section of the Plan, the distributor must include the letter of comment on the Plan provided by the OPA.

3. Renewable Generation Connection Information

A Detailed GEA Plan should describe in detail the projects and activities to accommodate renewable generation expected to occur within the next five years and their associated expenditures (capital or OM&A expense). These activities should be incremental to activities (on-going or planned) currently included in rates or in Board-approved capital budgets. The following three subsections should be included in the renewable generation connection information section.

a) 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, and show how application of this methodology leads to selection of the projects and activities.

b) 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;
- where a project or activity serves more than one purpose, a functional allocation, to the extent possible, of the project elements between the connection of renewable generation, non-renewable generation and load customers;
- if the distributor is proposing to recover any costs through the provincial recovery mechanism set out in section 79.1 of the OEB Act, a description

of the direct benefits of the project or activity to the distributor's own ratepayers, consistent with the Board's policy; and

- a discussion of the risks to successful completion of the project or activity and the actions to be undertaken to mitigate those risks.

c) 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;
- if the project or activity serves more than one purpose, an allocation of the costs (to the extent possible) between the connection of renewable generation, non-renewable generation and load customers;
- a delineation of the project elements and costs between:
 - connection assets, for which the generator pays;
 - expansion of the system, for which the distributor generally pays; and
 - renewable enabling improvements, for which the distributor pays;
- if the distributor is proposing to recover any costs through the provincial recovery mechanism, a calculation of the direct benefits of each project or activity to the distributor's own ratepayers, consistent with the Board approved methodology and including a breakdown for each type of benefit identified in the Board's policy;
- a clear statement of the resulting 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.

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 accordance with the GEA legislation and Board policy. In completing the tables,

distributors should remember that the cost responsibility rules now set out in the DSC, and 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					
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.

d) Availability of additional funding for GEA-related expenditures

Rates approved as part of a cost of service application will include only costs from year one of a GEA Plan. The Board recognizes that distributors may need additional funding for GEA-related expenditures between cost of service applications, and will consider applications for suitable mechanisms.

4. Smart Grid Development

At the present time, smart grid development plans should focus on smart grid studies or demonstration projects, smart grid planning and smart grid 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. The Filing Requirements relating to smart grid planning and expenditures will be updated as needed to reflect legislative and regulatory developments.

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

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 learnt 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.

Smart grid studies and planning exercises:

- a statement of the objectives of the study or planning exercise that clearly indicates the information that will be developed and how that information will aid in developing and implementing 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.

Smart grid education and training:

- a statement of the nature and purpose of the staff education or training that clearly indicates how the activity will aid in smart grid development and implementation; 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 and implementing a smart grid.

As discussed below with respect to reporting, the Board intends to maintain an on-line repository of smart grid study and demonstration 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.

The Board considers the dissemination of information on smart grid technologies to be an important outcome of any smart grid project. The Board expects studies

to be made available to the general public, and cautions distributors that some non-disclosure agreements may not be recognized.

5. Appendices

Include a description of the distributor as Appendix A. Include any studies or supporting analyses for the GEA Plan as Appendix B. Include additional appendices as required.

V. GEA Plan Approval

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 proposed projects and costs in a Detailed GEA Plan to similar scrutiny as any other cost proposed to be included in rates. The Plan should contain sufficient evidence to allow the Board to conduct this examination.

Where a distributor has filed a Detailed GEA Plan, the nature and effect of the approval of the Plan by the Board will be dependent on the amount and quality of the information provided by the distributor in the Plan. The Board will assess the prudence of the activities and costs described in the Plan to the extent permitted by the level of detail provided. Issues of need, project selection, project budget and prioritization of expenditures that are addressed through the Plan approval process in sufficient detail will not be revisited in subsequent proceedings except in relation to material deviations.

Section 70(2.1) of the OEB Act states that a distributor is required to expand or reinforce its system to accommodate the connection of renewable energy generation facilities, and to make investments for the development and implementation of the smart grid, in accordance with a plan that has been approved by the Board.

VI. Reporting for Detailed GEA Plans

The Board will require that distributors file annual status reports on the implementation of their approved Detailed GEA Plans. These reports should provide the current status of projects and explain any material deviations from the Plan as approved.

In respect of smart grid studies and demonstration projects, 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.

Smart grid study and demonstration project reports will be maintained by the Board in an on-line repository.

Where a report contains information that the distributor believes to be confidential, the distributor should notify the Board, and proceed in the manner described in the Board's Practice Direction on Confidential Filings.

VII. Capital and OM&A Deferral Accounts for GEA Related Expenditures

To allow distributors to begin recording expenditures for certain activities relating to the accommodation of renewable energy or the development of a smart grid, the Board created four new deferral accounts in the Uniform System of Accounts. These deferral accounts are authorized to be used to record the qualifying incremental capital investments or OM&A expenses, respectively, which are described in sections 1 and 2 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.

While the Board has not set a cap on the amounts that can be recorded in these deferral accounts, the Board expects distributors to exercise prudence, and recognize that amounts recorded in the deferral accounts may not necessarily be recovered from customers. Regular reporting of the balances in the deferral

accounts and of the associated rate impacts will enable the Board to monitor the situation.

Appendix A sets out the structure for the four deferral accounts, the categories of capital expenditures or OM&A expenses that can be included in each account and the associated reporting requirements. The Board may issue further instructions regarding these accounts, including in relation to reporting, as required.

Recovery of amounts recorded in the new deferral accounts will be subject to a prudence review.

Recording Expenditures in the Deferral Accounts

1. Renewable Generation Connection Deferral Accounts

The Board, on October 21, 2009, issued amendments to the DSC regarding the assignment of connection cost responsibility between distributors and renewable generators. Under the amendments to the DSC:

- cost responsibility for “expansions” (including the types of work listed in section 3.2.30 of the DSC) is assigned as follows:
 - if the expansion is in a Board-approved plan or is otherwise approved or mandated by the Board, the distributor is responsible for all of the costs of the expansion; and
 - in all other cases, the distributor is responsible for the costs of the expansion up to a cap (determined based on the capacity of the connecting renewable generation facility), and the generator is responsible for all costs above that amount; and
- the distributor is responsible for all of the costs of “renewable enabling improvements”, which are limited to the types of work specifically listed in section 3.3.2 of the DSC.

The types of expenditures that can be recorded in the “Renewable Connection Capital Deferral Account” and the “Renewable Connection OM&A Deferral Account” are those that are associated with expansions to connect a renewable generation facility, and renewable enabling improvements, as defined in the

DSC. The relevant sections of the DSC are included for reference in Appendix B of these Filing Requirements.

In addition, costs that can be recorded in these accounts include the cost of preparing a GEA Plan and the cost of changes to a distributor's Customer Information System to enable the automated settlement of contracts under the FIT program.

The Board recognizes that an investment in a "renewable enabling improvement" 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 described below, with the balance of the costs going to the renewable generation connection deferral accounts.

2. Smart Grid Development Deferral Accounts

At the present time, the legislative and regulatory framework regarding the development and establishment of the smart grid is still under development. Most importantly, the objectives, interoperability requirements and technology standards for the smart grid are not currently known. For that reason, the Board will continue to limit 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:

- smart grid studies or demonstration projects;
- smart grid planning; 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.

Review and Recovery of Deferral Account Balances

The recording of amounts into the four deferral accounts described above does not guarantee recovery of those amounts through rates. Recovery of any balances accumulated in the four deferral accounts will be subject to a prudence review at the appropriate time. This will generally be 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.

VIII. 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@oeb.gov.on.ca

Appendix A

Deferral Accounts

I. Capital

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

Account 1531: Renewable Connection Capital Deferral Account

Investments related to expansions to connect a renewable generation facility and renewable enabling improvements, as defined in the DSC, will be recorded in this capital deferral account (see Appendix B for relevant sections of the DSC).

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

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.

This account may not be used to record expenditures for smart meter-related investments, including advanced metering infrastructure.

II. Expenses

Do not record in the OM&A deferral accounts described below any allocation of general expenses that are not specifically related to the investments that can be recorded in the associated capital deferral accounts.

Account 1532: Renewable Connection OM&A Deferral Account

Incremental operating, maintenance, amortization and administrative expenses directly related to expansions to connect a renewable generation facility, and renewable enabling improvements, as defined in the DSC, will be recorded in this operating deferral account. In addition, costs that can be recorded in this account also 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 contracts.

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 studies or demonstration projects;
- smart grid planning; and
- smart grid education and training.

This includes expenses associated with preparing a GEA Plan.

This account may not be used to record expenditures for smart meter-related expenses, including in relation to advanced metering infrastructure.

III. Reporting

Under section 2.1.1 of the Board's Electricity Reporting and Record Keeping Requirements, distributors are required to report quarterly on the balances of all deferral and variance accounts. Distributors should be reporting any balances in these accounts effective for the quarter ending September 30, 2009 and every quarter thereafter.

In addition, distributors are required to provide, in each quarter, the rate impact of the balances in the deferral accounts, off-set where applicable by the balances in any deferral or variance accounts related to the recovery of a GEA funding adder. The rate impact should be determined for a customer who consumes 800 kWh per month (expressed in dollars) as determined using the Board's model and the inputs from the distributor's latest cost of service decision.

IV. Interest

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

V. Other

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

Appendix B

Relevant Sections of the Distribution System Code

1.2 Definitions

In this Code:...

“expansion” means a modification or addition to the main distribution system in response to one or more requests for one or more additional customer connections that otherwise could not be made, for example, by increasing the length of the main distribution system, and includes the modifications or additions to the main distribution system identified in section 3.2.30 but in respect of a renewable energy generation facility excludes a renewable enabling improvement; ...

“renewable enabling improvement” means a modification or addition to the main distribution system identified in section 3.3.2 that is made to enable the main distribution system to accommodate generation from renewable energy generation facilities;

3.2 Expansions...

3.2.30 An expansion of the main distribution system includes:

- (a) building a new line to serve the connecting customer;
- (b) rebuilding a single-phase line to three-phase to serve the connecting customer;
- (c) rebuilding an existing line with a larger size conductor to serve the connecting customer;
- (d) rebuilding or overbuilding an existing line to provide an additional circuit to serve the connecting customer;
- (e) converting a lower voltage line to operate at higher voltage;
- (f) replacing a transformer to a larger MVA size;
- (g) upgrading a voltage regulating transformer or station to a larger MVA size; and
- (h) adding or upgrading capacitor banks to accommodate the connection of the connecting customer.

3.3 Enhancements ...

3.3.2 Renewable enabling improvements to the main distribution system to accommodate the connection of renewable energy generation facilities are limited to the following:

- (a) modifications to, or the addition of, electrical protection equipment;
- (b) modifications to, or the addition of, voltage regulating transformer controls or station controls;
- (c) the provision of protection against islanding (transfer trip or equivalent);
- (d) bidirectional reclosers;
- (e) tap-changer controls or relays;
- (f) replacing breaker protection relays;
- (g) Supervisory Control and Data Acquisition system design, construction and connection;
- (h) any other modifications or additions to allow for and accommodate 2-way electrical flows or reverse flows; and
- (i) communication systems to facilitate the connection of renewable energy generation facilities.