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February 2, 2010

BY EMAIL & BY COURIER

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge St, Suite 2701  
Toronto ON M4P 1E4

Dear Ms. Walli:

**Board File No. EB-2009-0397**  
**Consultation on Distribution System Plans under the Green Energy Act**  
**Comments of Energy Probe**

Pursuant to the letter from the Board, dated December 18, 2010, describing the Board's process for determining Filing Requirements related to Distribution System Plans under the Green Energy Act, Energy Probe Research Foundation (Energy Probe) is hereby providing three hard copies of its Comments for the Board's consideration. An electronic copy of this communication in PDF format is being forwarded to your attention.

Should you have any questions or require additional information, please contact me.

Yours truly,

David S. MacIntosh  
Case Manager

cc. Peter Faye, Counsel to Energy Probe (By email)

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EB-2009-0397

# **Ontario Energy Board**

## **Filing Requirements:**

### **Distribution System Plans under the Green Energy Act**

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**COMMENTS OF  
ENERGY PROBE RESEARCH FOUNDATION  
("ENERGY PROBE")**

**February 2, 2010**

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## **Filing Requirements: Distribution System Plans under the Green Energy Act**

### **Comments of Energy Probe Research Foundation**

#### **Background**

1. By its December 18, 2009 letter to Ontario licensed Electricity Distributors and other Interested Parties, the Ontario Energy Board (“Board”) invited written comment on the draft Filing Requirements document issued by the Board on that date, relating to plans to be filed by electricity distributors pursuant to the deemed conditions of licence added by the Green Energy and Green Economy Act, 2009..

#### **Summary of Comments**

2. Energy Probe has reviewed the draft filing guidelines and agrees with most of the content. The following summary recommendations are offered to focus the efforts of distributor GEA plans in areas that will be beneficial to generators and minimize unproductive work.

- Distributor GEA plan content should respond to demonstrated demand for connection from renewable generators.
- Distributors with no demand for connection from renewable generators should be exempted from filing anything other than a declaration to that effect.
- The content of the Basic GEA plan needs to be better defined.
- The time period covered by the plans should be two years initially.
- The content of Detailed GEA plans is good but a couple of additional requirements are recommended.

## **Distributor plans driven by generator demand**

3. It is generally acknowledged by stakeholders that demand from generators to connect to distributor systems will not be uniform throughout the province. Some distributors will see strong interest from generators because their service territories have good wind, solar and hydro resources. Others will have little of these resources and can expect little interest from generators.

4. The same condition may apply within a distributor's territory. Hydro One's territory, for example, includes many areas with excellent wind, solar and water resources and other areas with none of these attractions. It seems wasteful to require analyses on every feeder in the system when generation interest may be focused on only those areas that have the requisite renewable resources.

5. Energy Probe recommends that distributors be allowed to focus their readiness analyses on those areas of their systems that have the resources generators need. As generator interest expands to other areas of their systems, distributors can update their plans to reflect that interest.

6. This approach is consistent with the purposes of GEA plans as set out on page 4 of the guidelines. The first of these is to provide information about the ability of a distributor's system to accommodate renewable generation. This objective is addressed by assessing the readiness of those parts of the system that are of interest to a generator. Assessing parts of the system that are not of interest does not contribute to the purpose.

7. Because detailed assessment of a distributor's system is likely to be a costly exercise, it makes sense to focus that effort only on the areas that are likely to be productive for generator connection. This will minimize the resources and time a distributor needs to devote to its GEA plan without compromising the ability of its plan to meet the objectives the Board has set out.

8. Similarly, the second purpose is to provide evidence for capital and OM&A expenditures in rate applications. That evidence will consist of project descriptions and cost estimates for system modifications that are necessary for generator connection. Developing project plans in areas of the system not likely to host generators will not contribute useful evidence for supporting capital and OM&A expenditures but will likely confuse the process of defining what is actually required.

9. The same argument applies to the third purpose of providing a basis for cost allocation between a distributor's customers and provincial customers. Since only those projects that actually facilitate generator connection will be eligible for the provincial cost recovery mechanism, it is not productive to consider projects that could never qualify.

10. The problem is, of course, how to identify the areas of a distributor's system that should be analyzed. Energy Probe suggests that the FIT contract process will identify the appropriate areas for a distributor to concentrate on. As generators identify locations with the resources they wish to exploit, the FIT program will provide that information for distributors who can then direct their efforts on their GEA plans accordingly. Updating of plans can be undertaken as generator interest develops so that the plans evolve over time and incorporate the experience gained to date.

### **Plan Different for Different Distributors**

11. In the middle of page 5, the statement is made that *“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.”*

12. Energy Probe agrees that a distributor's GEA Plan should respond to the anticipated demand for renewable generation in its service territory. In service territories where Feed in Tariff contract interest is high, a distributor should provide more extensive analyses of its system. Conversely where interest is low, the expectations of its GEA Plan should be lower.

13. The first part of the statement suggests that the GEA Plan should be "*appropriate to the size and resources of the distributor*". Energy Probe takes this to mean that distributors without the technical resources to analyse their systems should be held to a lower standard in the content of their GEA Plans. This, in Energy Probe opinion, is problematic. Lack of distributor resources should not be an obstacle to renewable generation development. If the FIT program shows generator interest in a distributor's service territory, the distributor's GEA Plan needs to be sufficiently detailed to facilitate connection and evaluate cost allocation between the distributor's customers and the provincial recovery mechanism. This should apply regardless of the distributor's ability to provide the analyses. If a distributor lacks technical resources to prepare a plan to the required standards then it should find consulting help rather than be allowed to submit a substandard plan.

14. At the same time, Energy Probe believes that only those distributors whose systems are the focus of Feed in Tariff contract interest should be required to submit GEA Plans with any significant detail. This subject is discussed further in the next section of these comments.

## **Distributor Plan Content Related to Generator Demand**

15. Section III of the draft guidelines require all distributors to file, at a minimum, a Basic GEA Plan. Some distributors, though, may experience no demand from generators to locate in their service territories. In order to minimize the cost of complying with the guidelines in these circumstances, Energy Probe recommends that the Board consider providing a mechanism to effectively exempt those distributors from any detailed analysis of their systems.

16. The basis for applying the mechanism should be an absence of interest in the OPA's Feed in Tariff program in the distributor's service territory. If no FIT contracts are proposed for the distributor's territory, the distributor should be allowed to file a supporting statement to that effect from the OPA as its response to the Basic GEA Plan filing requirements. To guard against changing conditions in the future, a distributor could be required to update its exemption annually by filing a current statement from the OPA that the lack of FIT contract interest in the distributor's territory continues to apply.

## **Content of Basic GEA Plans**

17. The content of the Basic GEA Plan is set out on page 8 of the draft guidelines.

18. The first requirement is a "description of the distribution system's current capacity to accommodate generation from renewable energy generation facilities, including the available capacity to connect generation;"

19. This requirement needs elaboration to indicate what level of detail is necessary. For example, a qualitative description of a distributor's system might include the number of distribution stations and feeders with some rule of thumb assumptions about how much generation the system might be capable of connecting. A quantitative description, by contrast, would include a feeder by feeder analysis to determine actual capacity to connect generation on various parts of the distributor's system.

20. The objectives of the Basic GEA Plan at the bottom of page 7, it is to provide *“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”*.

21. This wording suggests a level of analysis more consistent with a quantitative description of the distributor's system under Section IV. A qualitative description may not be sufficient to satisfy the test of *“readiness ... to accommodate connection of renewable generation”* referred to in the last excerpt. The need to evaluate what *“expansion or reinforcement”* is necessary to accommodate renewable generation also suggests a more detailed examination than would apply in a qualitative analysis.

22. Energy Probe suggests that the overriding principle of actual need for information should govern what a distributor must provide in its GEA Plan. If there is broad interest in a distributor's territory from the FIT program, then the distributor's plan should respond with sufficient detailed analysis to support that interest. If there is little interest, the distributor should be allowed to focus its detailed analyses only on those areas of its system that merit it and the rest of the system should be covered only in a general qualitative way. This will focus the distributor's system planning resources where they are likely to be needed and avoid wasting them in areas where they may never be needed.



## Time Period covered by the Plans

23. Both the Basic and Detailed plan guidelines require distributors to prepare forecasts of system development to accommodate renewable generation over a five year period. Energy Probe questions the usefulness of a five year forecast particularly at this early stage of renewable generation connection to distribution systems.

24. The first problem distributors will face in compiling a five year forecast is identifying what, if any, generator interest will materialize in their systems. OPA contracts under the FIT program are the only firm indicator, in Energy Probe's view, of generator interest and these are unlikely to span a five year planning horizon. Distributors will be forced to speculate then on what activity will occur on their systems. As the plan extends further into the future, the accuracy of any forecasts will decline and be less useful for accomplishing the objectives of the plan.

25. The second problem distributors face is defining what projects will be needed to accommodate generation. Without an explicit generation project, the distributor cannot realistically define what projects it will have to undertake and therefore cannot expect to accurately predict costs or direct benefits to its customers. Without those elements, any estimate of cost allocation between a distributor's customers and the provincial recovery mechanism will be too speculative to be useful.

26. Hydro One, in its EB-2009-0096 rate application, provided an alternative way of quantifying costs. This was by project type. For example, connection of generation may require an express feeder to be overbuilt on an existing line or it may require a single phase line to be converted to a three phase one or it may require an increase in operating voltage for a feeder. All of these kinds of projects can be estimated based on average feeder information with some confidence in the cost on a per km of line basis. However, the application of any particular expansion or reinforcement would have to await a specific generation project to decide the type of system modification necessary and the extent of that modification.

27. The best a distributor can do with this approach is to estimate costs based on some experience of what previous generator connections required. However, that experience has yet to be gained for most distributors. Hydro One may have some experience from RESOP programs that can be applied to its system but that experience may not be transferable to municipal utilities that have quite different distribution systems and different cost structures.

28. For the purposes of gaining some appreciation for the order of magnitude of expenditures that may be needed to implement the GEA at the distribution level, the kinds of estimates just referred to may be somewhat useful. Combined with FIT program information from the OPA it may be possible to “ballpark” the likely expenditures. However, ballpark estimates will not be useful for the Board’s prudence review or for allocating costs between a distributor’s customers and the provincial recovery mechanism. For that reason, Energy Probe does not support the five year planning proposal in the guidelines.

29. Because five year forecasts are likely to be so inaccurate as to be useless, Energy Probe recommends that the planning horizon for GEA Plans be set at two years initially. Distributors should be required to update their plans annually and, as experience is gained by them and the Board, the planning horizon can be stretched appropriately.

### **Content of Detailed GEA Plans**

30. For those distributors that have sufficient hard data to define specific projects, the information requirements proposed in this section of the guidelines are appropriate and sufficiently detailed, in Energy Probe’s view, to allow the Board to assess prudence of the expenditures with the following additions.

31. In the “Description of projects and activities” section on page 11, Energy Probe recommends that a distributor be required to identify the alternatives it considered in arriving at its proposed project. For example, if a generator can be connected by converting a line from single to three phase and the distributor has chosen instead to build a new line, some justification for the added expense of that option should be provided.

32. Distributors should be required to include in subsequent updates of their plans, an analysis of projects undertaken in the previous planning period. The analysis should describe each of the projects undertaken and provide cost information that can be used to compare relative costs between distributors. This will assist the Board in its prudence assessment of distributor expenditures on renewable generation connection as well as providing an easily accessible means of distributors learning from each others’ experiences.

33. Finally, Energy Probe particularly supports the Board’s proposal that only costs from year one of a GEA plan will be approved for inclusion in rates in a cost of service application. This is consistent with the cautionary approach discussed above and will allow the Board opportunities to adapt its approval processes as experience is gained in generation connection at the distribution level.

34. Energy Probe Research Foundation appreciates the opportunity to comment on these most important issues.

**ALL OF WHICH IS RESPECTFULLY SUBMITTED**

**February 2, 2010**

**Peter Faye**

**Consultant to**

**Energy Probe Research Foundation**