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July 7, 2009

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-2009-0152**  
**Consultation on The Regulatory Treatment of Infrastructure Investment**  
**Comments of Energy Probe**

Pursuant to the letter from the Board, dated June 10, 2009, please find attached the Comments of Energy Probe Research Foundation (Energy Probe) 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. Lisa Brickenden, Ontario Energy Board (By email)  
Peter Faye, Counsel to Energy Probe (By email)

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# Ontario Energy Board

**THE REGULATORY TREATMENT OF  
INFRASTRUCTURE INVESTMENT FOR  
ONTARIO'S ELECTRICITY  
TRANSMITTERS AND DISTRIBUTORS**

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

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July 7, 2009

# **THE REGULATORY TREATMENT OF INFRASTRUCTURE INVESTMENT FOR ONTARIO'S ELECTRICITY TRANSMITTERS AND DISTRIBUTORS**

**Comments of Energy Probe Research Foundation**

**EB-2009-0152**

## **Background**

By its June 10, 2009 letter to Ontario licensed electricity transmitters and distributors, other rate-regulated entities and other interested stakeholders, the Ontario Energy Board (“Board”) initiated a broad consultation process to examine more innovative approaches to cost recovery for electricity infrastructure projects.

The stated intent of the consultation was to consider the need for more innovative approaches to cost recovery, primarily in relation to infrastructure investments relating to the accommodation of renewable generation and smart grid development. Comments were sought from participants in respect of a Board staff discussion paper which sets out a range of mechanisms for the regulatory treatment of infrastructure investment that could be used to support the setting of rates, mechanisms that are to be examined as alternatives to the Board’s current approach to cost recovery from ratepayers for capital investment.

The Consultation is in response to the Green Energy and Green Economy Act (the “GEGEA”) which will increase the amount of infrastructure investment required by the Ontario government to be made by electricity utilities. Further, the GEGEA adds objectives for the Board relating to the promotion or facilitation of renewable energy generation and the development of a smart grid.

With this background in mind, Energy Probe has responded to the Issues brought forward by Board staff for comment.

## Comments of Energy Probe on Discussion Paper Issues

**Issue # 1** Should the framework and mechanisms identified in this Discussion Paper apply to other rate-regulated entities? If so, why and for what types of projects?

Besides electricity transmitters and distributors, the Board regulates rates for gas utilities, some generation companies, the Ontario Power Authority (the OPA”), and the Independent Electricity System Operator (the “IESO”).

The discussion paper is motivated by a need to stimulate investment in electricity infrastructure to meet government policy set out in GEGEA. In the absence of comparable investment needs in the natural gas transmission and distribution industry, there do not appear to be any drivers to support changes in the current rate setting policies of the Board. Such drivers might arise should the government expand its focus on renewable sources of electricity generation to include high efficiency natural gas fired generation such as District Energy. In that case, incentives like the ones proposed in the paper could be used to stimulate development of gas infrastructure to encourage District Energy developments.

Ontario Power Generation’s (the “OPG”) nuclear facilities and large hydro electric plants on the Niagara River and the St. Lawrence River are subject to rate regulation. It is possible that incentives such as the ones proposed in the paper could be used to stimulate investment in additional nuclear or hydro capacity. However, the existing regulations that apply to prescribed facilities rate setting appear to be sufficient to guarantee OPG recovery of its prudently incurred costs and provide it with a reasonable return on equity. Therefore, the need for additional incentive mechanisms is not apparent at this time.

**The OPA is subject to regulation on recovery of its operating costs but does not make capital investments in the electricity system. Therefore, there is no reason to consider incentives for this agency unless its mandate changes to include direct investment in infrastructure.**

**The IESO is also subject to rate regulation. Unlike the OPA, the IESO does have to make capital investments in operating and control facilities to allow it to manage the grid. Therefore, incentives might be appropriate if the agency finds itself unable to properly finance the projects necessary to facilitate operations in the smart grid future. However, Energy Probe is not aware of any shortcomings in the Board's rate setting process for the IESO that would require incentives at this time.**

**Issue # 2 Are there other broad classifications for investment, beyond “routine”, “non-routine incremental” and/or “GEGEA-related” that should be considered? If so, what are they and what are the specific underlying drivers for such investment?**

**It is the submission of Energy Probe that investments made by transmitters and distributors can be fitted comfortably into one or more of the three classifications.**

**Issue # 3 Should the mechanisms identified in this Discussion Paper apply to the recovery of costs incurred by electricity transmitters or distributors for investments to accommodate renewable generation or to develop the smart grid or both? Why or why not?**

**Energy Probe does not support some of the mechanisms outlined in the paper. However, to the extent that the ones it does support help to achieve the objectives of incorporating renewable generation or developing the smart grid, Energy Probe sees no reason not to use them for both objectives as appropriate. Given that both objectives are contained in GEGEA, the Board should not limit its options for supporting those objectives by restricting use of the mechanisms to one or the other. Comment offered on other issues in the Paper will clarify and expand on Energy Probe's position on this subject.**

**Issue # 4** Should the mechanisms set out in this Discussion Paper be applied to infrastructure investment if the cost of the investment is potentially recoverable through a Province-wide cost recovery mechanism. Why or why not?

Energy Probe's understanding of the province-wide recovery proposals is that the customary tests that the Board applies to capital investment recovery would apply. Therefore, investments would have to be used and useful, reasonable in the circumstances and prudently incurred. Some of the mechanisms proposed in the Discussion Paper deal with the potential for investments that may not meet those tests. For example, investments in infrastructure reasonably and prudently made might still end up abandoned if the generation projects that they are intended to serve do not materialize. In that case, the "recovery of costs of abandoned facilities" mechanism might be required to ensure that infrastructure investments get made in the face of some risk. Therefore, as a general proposition, Energy Probe supports use of appropriate mechanisms in the Paper regardless of whether the investment would be potentially recoverable through the Province-wide recovery mechanism.

**Issue # 5** Should the mechanisms set out in this Discussion Paper be applied to infrastructure investment in smart grid technology while it is at an early stage of development and where governing standards are yet to be developed. Why or why not?

The mechanisms proposed in the Discussion Paper are intended to encourage investment in infrastructure by transmitters and distributors that might otherwise not be made. If smart grid technologies fall into this category, then withholding investment support might have the undesirable affect of discouraging progress toward a smart grid. Deployment of an unproven technology in an operating environment is often the only way of determining whether or not it will succeed. If investment is initially restricted to pilot installations to evaluate the technology, the prospective losses from failed projects can be controlled.

At the same time, it will be important not to encourage reckless investment in technologies that have a high likelihood of failing. The Board's review of a transmitter's or distributor's plans for deploying smart grid technology could mitigate the risk of reckless investment, though. Therefore, Energy Probe supports appropriate use of the mechanisms for investment in smart grid technology with appropriate oversight of the Board.

**Issue # 6** Should "routine" investment made by a transmitter or distributor be eligible for one or more of the alternative treatments identified in this Discussion Paper? Why or why not?

The mechanisms proposed in the Paper appear to have been prompted in part by the Board's concern that current cost recovery mechanisms for infrastructure investment by transmitters and distributors might be lacking. In addition, the requirements of GEGEA will create additional pressures on existing infrastructure and require new investments to accommodate renewable generation and smart grid technology.

One way of coping with the financial demands of meeting GEGEA requirements would be to forego routine investment to free up capital for the more urgent demands of GEGEA. This could lead to gradual deterioration of the transmission and distribution systems affected.

Although it is clear that Hydro One will have a large role to play in meeting GEGEA objectives, it is not apparent how many municipal distributors will have to make large capital investments under the Act. Many urban distributors, for example, will likely find that few if any renewable generation projects are located in their service territories. Therefore, the added pressure of accommodating renewable generation will probably fall on only a few distributors.

Smart grid technologies include Smart Meters for which the Board has already developed a cost recovery mechanism. The balance of smart grid technology deployment will probably develop at a more measured pace and may not impose heavy burdens on distributor financial resources.

Energy Probe is not fundamentally opposed to the use of appropriate mechanisms to fairly recover the cost of routine investment. However, most of the mechanisms proposed will put upward pressure on transmission and distribution rates. Where there is not a persuasive case for offering new cost recovery mechanisms, ratepayers should not be burdened unnecessarily. Therefore, Energy Probe proposes that the Board permit transmitters and distributors to request use of the new mechanisms but that the test for approval be set relatively high. This test should require the applicant to demonstrate that its routine capital investment will suffer and that there will be adverse reliability or service implications for ratepayers unless one or more of the new mechanisms is made available.

**Issue # 7** Should the mechanisms identified in this Discussion Paper be presumed to apply to certain types of investments (for example to accommodate renewable generation)? Why or why not? If so, to which investments?

Previous comments indicate that investments to accommodate renewable generation are not likely to impact all distributors equally. Therefore, it should not be presumed that any mechanism(s) will automatically apply to certain types of investments. For example, an urban distributor that is requested to connect a few wind or solar generators on a modern 27.6 kV distribution system may not find the capital investment a burden. Conversely, a rural distributor being asked to connect even a single moderately sized generator on an 8.3 kV line might find it impossible without investing significant capital. Therefore, distributors and transmitters should be required to apply for support of the mechanisms on a case by case basis and demonstrate that the renewable generation they must connect puts them in a financial position that justifies the mechanism requested.



**The same principle applies to other types of investments like smart grid pilots. Until the Board gains sufficient experience with the demand for new mechanisms and their impact on ratepayers, their use should be decided on a case by case basis.**

**Issue # 8    Should the Board be more prescriptive as to which type of investment may qualify and which will not? If so, what criteria might the Board use to make a determination on which type of investment would qualify?**

**As previously commented, use of the new cost recovery mechanisms is likely to put upward pressure on rates. Therefore, the use of the mechanisms should be based on needs clearly demonstrated by the transmitter or distributor and the requirement to balance those needs with the interests of consumers. Energy Probe submits that at this early stage of increasing infrastructure investment there is not sufficient evidence of transmitter and distributor financial needs or of the eventual impact of new cost recovery mechanisms to make prescriptive rules.**

**Issue # 9    Should the Board permit applicants to request confirmation from the Board that prudently-incurred costs associated with any abandoned projects will be recoverable in rates if such abandonment is outside the control of management? Why or why not?**

**Energy Probe suggests that the Board develop a policy on cost recovery of abandoned projects on which all transmitters and distributors can rely to mitigate the risk of investing in potential useless projects. The policy could set out the tests the Board will use to evaluate whether or not an abandonment is outside the control of management. It would then be up to the applicant to prove how it falls within the intended scope of the policy at the time of its next rate application. If the issue was more urgent, it could be addressed as a Z factor or by other special application to the Board. This would avoid the need to respond to multiple requests for individual project assurances and reduce the regulatory burden.**

**Issue # 10** Should the Board allow for full or partial CWIP to be placed in rate base during the construction of transmission facilities to accommodate the connection of renewable generation and/or develop the smart grid? Why or why not? Should the Board allow this particular treatment for distribution investment? If so, on what basis?

Generally, transmission projects have always been lengthy endeavors because of the complicated public interest issues that are engaged. If there has not been a demonstrated need for CWIP in rates in the past, Energy Probe questions whether the new requirements of GEGEA will necessarily create that need.

However, if the need is demonstrated, Energy Probe agrees with Board staff's comment that this incentive would be appropriate only to projects that span a number of years and require significant capital investments. An example would be constructing enabler transmission lines to remote areas of the province in which large wind resources are available for development. At the distribution level, there are not likely to be projects requiring multi year capital investments either for accommodating renewable generation or for smart grid development and allowing CWIP into rate base prior to completion is unnecessary.

In all cases where an applicant requests this mechanism, it should be required to demonstrate that its financial condition will be materially impacted without the concession and that the costs to date meet the tests of prudence.

**Issue # 11** Should the Board allow depreciation to be adjusted to match a contract term or the useful life of the connecting renewable generation facility? Why or why not?

Generation facilities that rely on renewable energy sources are not exposed to the same risk of early retirement that affects other more conventional generators. For example, oil fired thermal plants became uneconomic in the 1970s sometimes even before they were placed in service because of sharply higher oil prices.

Conversely, hydro electric generating stations in the province have far exceeded their presumed useful lifetimes at the time they went in service. It is likely that new renewable projects will experience the same extended lifetime and that contract terms will be extended. Therefore, assumptions concerning the useful life of many renewable generators are likely to understate their actual operating lifetime. Allowing depreciation to be accelerated on that basis will unnecessarily burden current ratepayers and cause intergenerational fairness issues. Energy Probe does not support accelerated depreciation of distributor or transmitter assets unless there is a clearly demonstrated case justifying it.

**Issue # 12** In light of a legislative context in which the Board may mandate infrastructure investments, are incentives necessary or appropriate in Ontario?

Energy Probe agrees with Board Staff's analysis of the legislative context for incentives in Ontario and submits that incentive mechanisms are neither necessary nor appropriate.

**Issue # 13** If the Board were to provide for incentives, should it allow project specific ROE? If so, should the Board consider adopting a range rather than a specific adder? Further how might the Board determine an appropriate range or ROE adder?

The rationale for providing an increased return on equity appears to be that some projects in which a transmitter or distributor might invest have an increased risk associated with them compared to routine system investments. Those risks can be separated into two categories:

1. The risk that the project might never go in service because it turns out to be unnecessary.

Lines constructed in the expectation that renewable generation will need connection could end up stranded if the generation does not materialize. If the transmitter or distributor will *not* be allowed to include the capital investment in rate base in that situation, there would be an argument to provide for the risk in a higher ROE. However, if the Board decides to provide for this eventuality in the “recovery of costs of abandoned facilities” incentive there does not appear to be any increased risk associated with such projects and therefore, no need for an ROE adder.

2. The risk that the project will not work as intended because it employs new technology or unproven construction techniques.

In the case of accommodating renewable generation, some improvements to the transmission or distribution system such as increasing circuit capacity or providing new circuits are not likely to require innovative or unproven technologies. Other improvements, such as protection and control systems to permit two way power flow, prevent islanding or to create a smart grid control system might involve technology that has not previously been proven on transmission or distribution systems. In those cases, an ROE adder might be appropriate to recognize the increased risk of losing part or all of the capital investment.

Therefore, as a general principle, the ROE adder mechanism should not be available for incorporating renewable generation into transmission or distribution systems. Smart grid technologies do present additional risks, however, and the adder mechanism could be available in those projects that have demonstrated risks exceeding the normal capital investment risks of transmitters and distributors. However, use of an ROE adder might introduce complexity into the ratemaking process that is not justified if alternative means of mitigating investment risk are available. For example, use of the “abandoned facilities cost recovery” mechanism or the “accelerated cost recovery” mechanisms could be applied to mitigate risk of technological immaturity.

The ROE adder mechanism would also require periodic review of technological risk to determine the point at which a technology has become proven and should no longer attract an ROE premium. The increased regulatory burden associated with those reviews may not be justified by the benefits of the mechanism.

For these reasons, Energy Probe does not generally support application of an ROE adder mechanism for accommodating renewable generation or for smart grid development.

**Issue # 14** If the Board were to provide for incentives, should it allow project-specific capital structures?

Like the ROE adder, project specific capital structures introduce complexity into the rate setting process that may not be justified given the benefits of the mechanism. Other proposed mechanisms as discussed in the ROE adder comments would appear to be sufficient to provide for variable project risks. Therefore, use of this mechanism for projects to accommodate renewable generation or for smart grid development is unnecessary.

**Issue # 15** What other alternative mechanisms, if any, might the Board consider be made available to applicants? Why?

It is the submission of Energy Probe that in a regulatory environment where the utility is *required* to make the infrastructure investment to support the Ontario government's initiatives under the GEGEA, the Discussion Paper has explored more than enough alternative mechanisms.

**Issue # 16** In addition to the potential considerations identified, are there any other matters that the Board might consider in making decisions on requests for alternative treatment?

In the case of a distributor, the Board might consider if the effect of granting a request for alternative treatment would make the utility a more attractive or less attractive candidate for amalgamation with another distributor. It would seem counter intuitive to grant alternative treatment if the result impedes the movement toward distributor consolidation in Ontario.

**Issue # 17** What performance conditions, if any, should be established?

Energy Probe submits that the conditions for granting alternative treatment need to be considered for each mechanism employed by the Board on a case by case basis. Multi-year projects will be, in almost all cases, transmission projects.

To date, transmission projects have proceeded successfully without alternative treatment. If the Board decides that alternative treatment is to be granted, Energy Probe suggests that the project would be extraordinary either in the amount of investment required or in the length of project time required. The alternative treatment granted should be phased in, based on percentage completion targets being achieved by the utility.

**Issue # 18** Are the reporting requirements suggested appropriate and adequate?

It is the submission of Energy Probe that in addition to the suggested reporting requirements described in the Discussion Paper, the reports filed should be on “the public record”, the reporting should be standardized in both detail and reporting date, and the reports are filed using the corporate name of each utility.

**Issue # 19** Are there any other conditions that the Board might need to establish in relation to an approved alternative mechanism referred to in this Discussion Paper to protect ratepayer interests?

When a transmitter or distributor comes before the Board for rebasing, or with an application that includes seeking an Incremental Capital Module, any previously approved alternative mechanism is an issue which may be tested for continuing need in the proceeding.

**Issue # 20** Beyond those already reflected in the Board's existing filing guidelines (e.g., the Z-factor test of causation, materiality, and prudence) and in the Board's jurisprudence, is there a specific test that successful applicants should be required to meet in order to be granted an alternative treatment?

It is the submission of Energy Probe that "need" for the alternative treatment is the specific test, that without the alternative treatment, the transmitter or distributor will be unable to meet its GEGEA-related obligations and it should be required to demonstrate that its financial condition will be materially impacted.

**Issue # 21** Are the Board's existing filing guidelines for electricity transmitters and distributors sufficient to support the case-by-case approach discussed in this Discussion Paper? If not, what additional information should an applicant provide?

No. Energy Probe suggests that the response to Issue # 20 above covers this Issue.

**Issue # 22** Should the process for applying for the regulatory treatment of infrastructure investment discussed in this Discussion Paper be more prescriptive (e.g., the timing, sequencing, and/or combining of applications)? Should it be combined with the process for approving infrastructure investment plans? If so, why and in what way?

It is the submission of Energy Probe that it would prefer the transmitter or distributor to decide on the timing and composition of the applications that it brings before the Board. However, in the IRM model being pursued by the Board, Energy

Probe believes that it must lean toward efficiency in the process so that the Board is not overwhelmed.

If the utility is scheduled to appear for rebasing, that would be the most preferable timing for an application for alternative treatment. Otherwise, it appears more efficient to have the application for alternative treatment to occur during the process of the Board reviewing and approving the infrastructure investment plan of the utility.

**Issue # 23** Should the Board permit applicants to seek approval prior to construction of the facilities to determine whether the facilities qualify for the requested alternative treatment(s)? Why or why not?

Rather than permit it, Energy Probe submits that the Board should indicate that is the appropriate timing for seeking alternative treatment, not after construction has commenced.

**Issue # 24** What are the implications, if any, of using the single-issue rate review process?

Energy Probe submits that a single-issue rate review process is a less desirable procedure for determining the “need” of the utility for alternative treatment and should be avoided by the Board.

**Issue # 25** Is the use of rate riders an appropriate approach for implementing rate adjustments associated with the alternate treatments identified in this Discussion Paper? Alternatively, should the adjustments be made directly to base rates?

Energy Probe has no objection to the use of specific rate riders for implementing the adjustments associated with alternative treatments if granted by the Board.



**Issue # 26** Should the Board allow applicants to seek approval of multi-year rate riders or should the applicant be required to apply every year to adjust its rate riders to reflect any changes in project costs?

Energy Probe submits that the applicant should be required to apply every year to adjust its rate riders to reflect any changes in project costs associated with alternative treatments granted by the Board.

### **Concluding Submissions of Energy Probe**

In responding to the Issues as brought forward by Board staff for comment, Energy Probe has to some extent withheld judgment on the problems, outlined in the Discussion Paper, which the Board staff is attempting to solve through the use of alternative treatments for cost recovery. It is the submission of Energy Probe that the mandate of the Board is best carried out through its continued focus on cost-based ratemaking principles.

As a concluding submission, it is the position of Energy Probe that it has not been convinced that a rationale has been provided for the need for alternative treatments for cost recovery as presented in the Discussion Paper, with the exception of providing greater certainty of recovery in certain circumstances, as supported in our comments on the Issues.

Energy Probe sees no need to provide incentives to Ontario utilities to encourage them to implement the Ontario government's policy objectives in respect of renewable generation and the development of the smart grid laid out in the GEGEA. The GEGEA provides the Board with the power to mandate investments in these areas.

**These alternative treatments for cost recovery are, for the most part, solutions in search of a problem. Energy Probe has discussed this position with other parties in this consultation as responses to the Issues were being developed.**

**Energy Probe did have the opportunity to review the comments of Mr. Aiken on behalf of the London Property Management Association (“LPMA”) as our submissions were being drafted.**

**Respectfully submitted at Toronto, Ontario this 7<sup>th</sup> day of July 2009.**

**Energy Probe Research Foundation**