

**Response to OEB Staff Discussion Paper**  
**Re. Distributed Generation Rates and Connection**  
**File Number: EB-2007-0630**

Kingston Electricity Distribution Limited (KEDL) would like to thank the Ontario Energy Board (OEB) for raising important issues surrounding Rates and Connection for Distributed Generation through issuance of the EES Consulting report and Staff Discussion Paper. We hope that through this consultation process, the OEB can arrive at a regulatory structure ensuring fair treatment of generators, ratepayers, local distribution companies (LDCs), and the transmission system while helping our province reap the environmental and economic benefits of increased levels of distributed power generation.

Support of distributed generation, especially from renewable or low-impact sources, is a policy objective of our provincial government, and is in line with the expectations of KEDL's shareholders, the City Council of the City of Kingston. Ontario is in need of generation capacity to displace coal-fired power plants, satisfy demand growth, and replace or refurbish its ageing nuclear power, transmission, and distribution assets. Distributed generation (DG) can play a key role in helping our province turn these challenges into an opportunity for creating a more economically and environmentally robust and sustainable energy infrastructure.

The foundations of Ontario's current operating procedures, regulations, and methods of settlement have been designed to support an electricity system feeding electricity generated at large, centralized stations through the transmission system and LDCs to consumers. The emergence of DG as an economically and environmentally viable complement to our legacy system of centralized energy generation presents fundamental challenges to our regulatory structure. We need to adapt the "one way traffic rules" of our electricity infrastructure and regulatory framework to be able to accept electricity from customers, without eroding the financial or operational capability of LDCs and Transmitters that ensure a stable and secure electrical grid able to meet customer demands at all times.

**Recommendation #1**

*From the perspective of those within Ontario's current electricity system, DG is a "disruptive technology". The OEB should take care to ensure that acceptance and acknowledgement of new and/or seemingly unorthodox perspectives be given consideration in the coming consultations and proceedings on DG. Employing the premises that underlie our existing regulatory framework may not help us arrive at the most balanced solution for Ontario's environment, economy, and all players in the existing electricity system.*

Ontario's electricity market is a unique one – its hybrid market structure, existence of a large number of LDCs, and numerous governing, planning, and operating bodies create unique challenges. With so many parties playing a role in our electricity market, it is vital to set up a system for rates and connection that is simple, aligns the interests of these diverse parties, provides incentives for individual parties to act in the best interests of Ontarians, and allows each organization involved the appropriate responsibilities given their resources and mandated function. When attempting to adapt other jurisdictions' models for Distributed Generation rate and connection policies, we must acknowledge the uniqueness of Ontario's system.

The concepts of accepting large amounts of intermittent generation while balancing customer demands is not novel in our province – the Transmission system serves this function at high voltages. The addition of large amounts of DG could have significant transmission system impacts. The Transmitter is owned by our provincial government for the benefit of all Ontarians, and may be an appropriate entity to help encourage behaviour by generators that provides greater system benefits. It also may be the appropriate entity to absorb financial impacts of increased DG. Its regulatory framework may be applicable to discussions regarding DG.

Distributed Generation is an issue that challenges some of the foundations of our traditional regulatory, settlement, and planning frameworks. An increase in DG will affect all players in Ontario's electricity marketplace. Many of the concepts that need to be discussed are complex and technical in nature, both from an engineering, economic, and social perspective. For these reasons, KEDL's recommends to the OEB is that it provide LDCs, Transmitters, generators & load customers, The Ministry of Energy, The OPA, The IESO, and others to talk to one another face to face in a forums where perspectives on this issue can be shared and discussed.

No matter what is decided by the OEB through this proceeding, DG development in this province will mean some level of reduced throughput or slower throughput growth for those who operate Ontario's electricity grid. This may disrupt assumptions that underpin past investment decisions. Financial impacts due to the lack of consideration of DG's potential in past planning processes must be borne by the appropriate parties.

**Recommendation #2**

*Since DG offers the opportunity to fundamentally re-think the way our electricity system is operated and regulated, the OEB should organize a systematic process of consultation that actively engages the players in the Ontario electricity system, including:*

- *The IESO*
- *Transmitters*
- *LDCs*
- *Generators*
- *Customers*
- *The OPA*
- *The Ministry of Energy*
- *Others*

*Many of the concepts surrounding DG are difficult to communicate in written form. Open, face to face meetings where a variety of perspectives can be aired and creative ideas be examined free from public or peer scrutiny may be valuable. The interaction of these agencies' points of view may reveal creative solutions to the regulatory treatment of DG.*

KEDL believes that there are a number of alternative approaches to the rate and connection treatment of distributed generators that have not been mentioned in the EES report and staff discussion paper. The system of applying Standby Rates for load displacement generators may not be the simplest or most efficient way of balancing the needs of LDCs, generators, ratepayers, transmitters, and generators.

KEDL has taken a proactive approach to integrating DG into its distribution system. KEDL staff has consulted with DG experts within Ontario and around the world to develop policies that minimize barriers to DG within our service territory. We have connected a number of micro, small, and large distributed generators within regulated timelines over the past year. KEDL is pioneering operational and safety procedures related to DG, including co-development of the course "Distributed Generation Safety for Linepersons" with St. Lawrence College. Our technical staff developed the metering configuration now recommended for Standard Offer Microgenerators.

Our experience and analysis suggests that a system that separates Load from Generation using existing metering technology simpler to manage, better distributes the benefits and costs related to DG to the appropriate parties, ensures that our LDC would recover rates that allow it to service customer demand regardless of the operating status of DG, and maintains the incentive for load customers to participate in CDM measures. Our conversations with colleagues at Hydro One, The OPA, The EDA, and OSEA seem receptive to this idea and feel that it is consistent with the principles espoused by the DSC, TSC, and RSC; however, the

types of consultations noted in Recommendation #2 are necessary to test its applicability given the roles required of various agencies in such a scheme.

**Recommendation #3**

*The OEB should ensure that the regulatory framework provides ongoing incentives and funding for LDCs to strategically plan for and accommodate distributed generation within their service territories. This may include:*

- *Changes to the connection processes for both generators and load customers.*
- *The institution of gross load billing for customers in combination with advanced metering and incentives for generators to shave system peaks.*
- *Allowing LDCs to capitalize generation connection investments.*
- *Viewing LDC's as demand service entities indifferent to the source of supply to their customers or their system, so long as the demand within their territory is serviced.*
- *A long-term approach to the quantification and realization of DG benefits, with periodic review as empirical evidence reveals proven generation diversity factors that can be relied upon for system planning.*
- *Separation of Load and Generation for customers with embedded generators <500k W connected in series.*

Ontario has the opportunity to become a leader in areas of distributed generation, environmental technology, and electricity transmission and distribution. In order to support our governments' environmental, energy, and innovation policies as realized in programs such as the Renewable and Clean Energy Standard Offer Programs, Demand Response initiatives, and local initiatives such as Partners in Climate Protection, innovative regulatory structures must be considered. It is through the comparison of differing perspectives that the best solution for DG regulations and rates can be arrived at. KEDL looks forward to participating in this process collaboratively with our colleagues at the OEB, OPA, EDA, IESO, Hydro One, generators, and policy makers to help make DG an integral part of our electricity system.

Best regards,

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