Essex Power Corporation's Position on ERO 019-9285: Integrated Energy Resource Plan Consultation

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Policy Coordination and Outreach Branch

Ministry of energy and Electrification

77 Grenville Street

Toronto, ON, M7A 2C1

RE: ERO 019-9285: Integrated Energy Resource Plan Consultation

The Essex Power Corporation (EPC) would like to thank the Ministry of Energy and Electrification for the opportunity to provide our perspectives on ERO 019-9300. In the Windsor-Essex Region, there have been recent, considerable power constraints that have been detrimental to economic development. As a utility representing 33,000 rate payers, we understand the importance of reliable, affordable and available energy that is needed to power the growth of our communities.

There are 2 main economically active sectors in the region, which are the manufacturing and industrial sectors as well as that of agrifood. The region is fortunate to have one of the largest EV manufacturers in North America, Stellantis-LG Energy Solutions, partner and invest $5 B to build the NEXTSTAR battery plant – an investment that has created a positive cascade of supply chain investment activity. Additionally, the region is home to nearly 4,500 acres of greenhouse fruit and vegetable production that creates over 32,000 jobs while generating $1.6 B in exports and contributing nearly $4 B to the province's Gross Domestic Product (GDP). The industrial & manufacturing and agri-food sectors are positioned for considerable growth over the next 10 years in Essex County with the right partnerships and investments in place. Critical infrastructure such as access to power is necessary to realize these growth opportunities.

EPC appreciates the efforts in regional planning which the IESO and Hydro One play critical roles in completing. As the region continues considerable growth, a forward-looking approach to developing, building and connecting new businesses to infrastructure is essential. EPC is optimistic that the regional planning process can become even more effective through the current ERO 019-9285. Historically, the beneficiary-pays, first-mover principle has challenged and, in some instances, stifled growth, as seen in the local greenhouse sector or the event which saw LG Chem build an Electric Vehicle (EV) component plant in Michigan instead of Windsor. A proactive lens must be applied to regional planning that optimizes communication amongst municipalities, Local Distribution Companies (LDCs), transmitters, government agencies like the IESO and ministries like Energy and Electrification.

Planning for Growth

Overarchingly, policy consideration should create an environment where LDCs are enabled to be an increased part of the solution relative to regional, last-mile transmission. Additionally, distributor and funding allocation of energy-related programs (such as conservation and demand management, but increasingly DER integration) should reside primarily at the local level. Enabling LDCs to have a significant role in last-mile connections would facilitate the building of more homes and streamline economic development investments. Designating LDCs as the financial controller of Conservation and Demand Management (CDM) framework funds and allocating funds to LDCs through a lens of high-growth and opportunity (ie. Economic Development) would result in better uptake and adoption by consumers in the service territory. As LDCs best understand their regions, with a clearer picture of current and anticipated load growth, decentralization of CDM administration is necessary for more targeted approaches that will yield highest value per dollar.

The Electrification and Energy Transition Panel's report, *Ontario's Clean Energy Opportunity* identifies and promotes a policy need for implementation of an integrated resource plan. The cross ministerial call to action is critical, as the opportunity for economic investments in high growth regions requires an all-of-the-above, all-hands-on-deck approach so far as to the Ministry of Energy and Electrification directly engaging with government agencies like Invest Ontario, Infrastructure Ontario, as well as Economic Development, Job Creation and Trade (MEDJCT), Municipal Affairs and Housing (MMAH) and Treasury Board. This certainly will help develop and mobilize the proposed clean energy economy planning and implementation body that is recommended. This model would be strengthened with the inclusion of non-governmental entities such as the Independent Electricity System Operator's (IESO) Strategic Advisory Council (SAC) and LDC's operating in high-growth regions.

Alignment and coordination within government to help inform the crafting of policy and regulations at the provincial level will ensure the clean energy opportunities in Ontario, as well as power export and revenue opportunities both across inter-provincial interties as well as to the United States. We are in strong agreement that the planning process should encourage better communication regarding policy alignment and regulatory policy development across government and agencies , IESO and OEB, while respecting each organization's distinct roles. The integrated long-term energy plan and subsequent technical considerations should be undertaken at an efficient pace and be based on dynamic and iterative analyses using multiple growth scenarios. Although EPC is not a natural gas utility, the Windsor-Essex region contains several larger power producers (ie. Capital Power,

Windsor West, TransAlta) and a network of small-medium generators that utilize combined heat and power (CHP) systems. The flexibility and dispatchability of these assets is critical to ensuring a consistent supply, especially at peak, and reduces the risks of brownouts while animating Distributed Energy resources (DER) for the regional utilities to mobilize.

There is a significant opportunity to leverage the proposed Comprehensive Local Energy Planning frameworks. We agree that communities can effectively contribute to Ontario's energy transition in ways that suit their needs and reflect their local strengths, opportunities, and priorities. Developing comprehensive Local Energy Plans with transparency on cost implications and ratepayer impacts would help to align community planning (i.e. municipal awareness and decision making) with provincial policy objectives, while also establishing a table for aligning and resolving key policy issues and priorities – e.g., housing, transportation, land use planning and energy – in a way that both recognizes municipalities' leadership role and ensures a level of local accountability. Enabling local utilities to allocate CDM funding would further ensure the regions are best-equipped with funds that can drive innovation, transform and optimize both distribution and transmission operations. Opportunities to align and participate with a streamlined OEB "regulatory sandbox" could be an additional platform that would de-risk changes such as those proposed above and continue to modernize regional power systems planning.

Further, as the Windsor-Essex region is one of the fastest growing in Ontario and EPC a trailblazer in innovation, we would like to volunteer to participate in the proposed Energy Transition Advisory Council. Moreover, we suggest that government and the IESO to continue encouraging experimentation by utilities, innovators, and new market entrants through platforms, such as the Grid Innovation Fund and the Innovation Sandbox program and ensure appropriate resourcing of these programs. An example of a current program EPC has seen strong progress on and achieved significant learnings is the currently operating Distribution System Operator (DSO) project PowerShare, which examines DER flexibility and mobilization within a local market.

EPC would generally be supportive of the OEB employing all tools within its existing mandate to implement activities consistent with the province's goals for a clean energy economy and the requirements of the energy transition for Ontario while enhancing risk-based approaches to regulatory oversight, consistent with best practice. It is agreed that this would enable more agency resources to be focused on emerging energy areas and economize on traditional regulation, while improving the agility and responsiveness of the OEB. Although the IESO should be empowered, within the broad direction established by government, to independently procure electricity resources and lead bulk-system planning (including potential use of interties) and regional electricity system planning, the local utilities with the

necessary capabilities to conduct such activities should drive the planning process for their service territories when appropriate, allowing the IESO greater resources and flexibility (i.e. time) to spearhead transmission planning. There are LDCs in the province that could be extremely helpful in last-mile connections due to their understanding of regional business development opportunities as well as current or anticipated load constraints. Although aspirational, the complexities in how a standard framework for LDCs to participate in such as capacity is certainly achievable. The OEB should provide regular procedural review of IESO-led planning and procurement, to be set out in legislation while encouraging increased and improved communications of LDC-LDC and LDC-transmitter activities.

It is critical that cost allocation and recovery policies be modernized for electricity connections to eliminate discrepancies between how up-front capital contributions are assessed and how they can be collected. For example, the review should include: examining the differences in the economic evaluation period (known as a revenue horizon) to determine capital contributions as well as the ability to collect the capital contribution as a surcharge on rates versus an upfront contribution, which currently is being evaluated and consultation ongoing in ERO 019-9300. Enabling LDCs to have a larger role in system asset development, such as new transmission stations and lines, while deploying innovative models on upfront cost contribution and allocation, would provide a significant opportunity and benefit to new and existing job-creating business investors, municipalities and ratepayers.

EPC agrees that the Ministry of Energy and Electrification, working with the OEB, IESO, LDCs, municipalities and gas utilities, should develop a formal and transparent co-ordination framework that sets out the scope and objectives for enhanced at the bulk, regional, and distribution levels in order to effectively pace and facilitate the fuel switching, system optimization and enhanced levels of energy efficiency required by the clean energy transition. Also, EPC agrees that this framework should ensure that each party's technical expertise is respected and utilized appropriately to achieve the desired policy outcomes. This would include any required directives, regulatory changes, oversight mechanisms, and a clear and agreed upon understanding of specific roles and responsibilities for the entities involved. The development of standardized approaches to gas/electric coordination and demand forecasting at the distribution level, including coordination between Conservation and Demand Management (for electricity) and Demand Side Management (for natural gas) should be a significant part of Ontario's Comprehensive Local Energy Planning approach.

To enable distribution-sector innovation, build capacity and encourage reasonable risk-taking to maximize customer and community value, the government, IESO and OEB should work with utilities to develop a vision and clear pathway for system-wide application to realize the maximum capability of the distribution system and DERs. The OEB should

support LDC applications in grid modernization, establishing a process and technical threshold to determine which LDCs will be enabled to locally procure and dispatch DERs. LDCs should be required to enhance their capabilities to procure and actively manage DERs as Non-Wires Alternatives to meet distribution level needs. This would have a significant impact on transmission system planning, enabling a greater amount of job-creating customer connections at the distribution level, without concomitant upgrades at the bulk level, ultimately reducing costs for new loads and provincial ratepayers. Modernized tools that aid in increasing agility and readiness for business attraction and residential development is vital. EPC's Smartmap and similar technologies that can heatmap and identify DERs and map constraints will enable more informed site selection for business development, identifying where load can be delivered and connected. Enabling LDC coordination through communication and innovation (DSO) would reduce constraints and optimize system functionality.

In consideration of reactive versus proactive planning, EPC supports the concept of increased risk-taking by the IESO, OEB in so far that the rapid shift to electrification and the transformation toward a clean energy economy has shifted risk-return balance between proactive build-out of energy infrastructure and reactive planning. This would ensure that planning, permitting and approvals processes are clear, predictable, effective and efficient and lead to timely decisions and project development that has the support of local and Indigenous communities.

In the energy sector, the government should consider which existing and emerging technologies and sub-sectors are likely to play a critical role in a future clean energy economy and where Ontario can maintain or develop long-term competitive advantages. This will require realistic assessments of existing and emerging strengths, as well as technological and economic potential. In the Windsor-Essex Region, specifically Kingsville-Leamington, there are several CHP assets that can readily be integrated into both distribution and transmission systems. Leveraging these assets provides a triple win, where the greenhouse sector can continue to expand and give space for , other economic investments to occur in Ontario and not in other jurisdictions.

Through technological upgrades to the system required, local demand response initiatives and power export capabilities will become feasible. Distribution-led, last-mile transmission connection projects could be executed as a pilot approach that is well aligned with the government's position that there should be a clear policy vision for how electrification and the energy transition will be funded, including a realistic assessment of the distributional impacts of funding choices on different groups particularly where the leveraging and/or requirement of private funding is available.

Ultimately, it is the LDCs that can facilitate the pace at which many customer connections can occur in high-growth areas. LDCs understand the region, and insights from the ownership municipalities will assist in determining where assets should be located to realize growth opportunities. Increasing the LDCs role in transmission and ownership of transmission assets will result in greater benefit for the system, the LDC and municipalities. Projects such as the one proposed as a pilot by EPC to connect large-volume consumers can help shape innovation and transformation in the electricity sector.

Through modernizing the capital contribution beneficiary pays model for transmission assets, significant economic investment can be realized faster and cheaper, such as what has been proposed in ERO 019-9300. The approach being taken by some LDCs will be a trailblazer when considering infrastructure innovation, de-risking projects that are scalable and replicable in other regions of Ontario. . This approach can also incorporate planning to quickly offer a streamlined approach for increasing capacity and connection opportunities to facilitate new load growth in high-growth regions.

Affordable and Reliable Energy

Ensuring the proposed IRRP is agile, responsive and impactful can be strengthened by empowering LDC's to become more involved in aspects of grid operations that they historically have not. Increased transmission competition would result in the faster and cheaper building of transmission assets and expedite last-mile connections. A larger role for LDC's in transmission planning and expansion would help Hydro One and the IESO continue to focus on the bulk system, move power further distances faster, while empowering local utilities to play a more active, supportive role in connecting new load in their service territories.

Increased education for and communication with consumers necessary. Assisting ratepayers in understanding emissions creation and reduction, as well as emission intensities by fuel type would be useful in developing a base knowledge level. Additionally, better insights provided to ratepayers in consideration of how power is used in their households or small/medium sized businesses would improve informed decision making, particularly around installation of natural gas or electric-based appliances.

Considering the continued and likely long-term transition and implementation of electric vehicles, a similar approach involving LDC-led regional communication to the consumer base would be beneficial. Informing prospective EV purchasers of the current state of infrastructure, vehicle efficiency, and possible housing retrofits to aid in overnight charging should occur. Further, it would be beneficial for LDCs to have an amount of control over the charge rate of EV's so that in neighborhoods or communities where EV density is high, there

exists the ability to prevent transformers from tripping or short circuiting when the load has exceeded capacity.

As EVs can play an increasingly role in grid resiliency, a significant driver in EV adoption is similar to that of the installation of other innovative technologies to generate and store power – financial incentives. There has to be a direct benefit to the rate base, or communication of a cost, energy or environmental savings to increase uptake. An example that saw considerable solar uptake was the FIT and MICRO-FIT contracts that significantly rewarded homeowners to install solar panels. We are not asking the government for comparable types of financially incentivizing programs, but there should be a beneficial price signal to drive adoption. LDCs can play a role in this as the disperser of CDM funds for their service region.

Using an all-of-the-above approach to generation, conservation, integration and connection, leveraging underutilized generation assets in addition to virtual net metering could provide significant benefit to the system. Novel concepts such as block energy, whereby implementing battery storage and/or solar generation in each new housing development fortifies grid resiliency, and LDCs ability to influence where and what types of technology make most sense, would be a strong step towards the overarching goals of energy transition and planning. These technologies and approach would positively impact areas of high growth that are constrained and can have risks mitigated at the distribution level by the LDC.

EPC would define DERs as any type of resource that is readily dispatchable, agnostic of technology which upon receiving a signal can synchronize in real-time to the grid for a financial incentive that is controlled by the LDC. Regulatory reform around Power Purchase Agreements (PPAs) to provide better control and coordination of assets, proper rate base mechanisms to offset or account for new costs, and technical considerations when building new infrastructure (ie. Transmission stations with neutral reactors and feeder lines with built-in short circuit prevention) can reform and enable local resiliency, DER-generation and job growth. Additionally, tax incentives through either a deduction or credit would be powerful tools to drive adoption and innovation.

Improved coordination and communication between government, IESO, OEB, LDC-LDC and LDC-Transmitter is imperative to the success of any IRRP. This will drive the adoption and access of more DERs that LDCs can invest in and integrate into the regional system, while enabling municipalities to plan and build at the speed of business.

In the Windsor-Essex region, there are significant resources that are under-utilized. Although opportunities exist to enhance the province's approach to electrical generation procurement, infrastructure expansion and modernization is essential to be able to fully

maximize an asset's potential. Recent capacity procurements, specifically the Expedited Long Term 1 (E-LT1) and Long Term 1 (LT1) resulted in minimal local generation opportunities that could connect at either distribution or transmission level due to the technical constraints at the regional transmission stations. We would recommend new infrastructure be built to absorb and transport electrons bi-directionally. Decentralizing procurement and enabling LDCs to play a larger role in regional procurement would optimize regional generation while leveraging under-utilized assets, possibly through value-stacking contracts. In consideration of power exports and cooperative engagement with other jurisdictions, EPC is prepared to play a leadership role in developing, expanding and executing innovative transmission-generation projects that can lead facilitate realizing the vision of the Ministry in terms of power export to the United States, with an innovative plan for regional development that would catalyze opportunities such as a new seabed intertie across Lake Erie to the PJM network.

LDCs are growing to become more integrated so that decision making and planning can be agile and operate at the speed of business. Through a lens of economic development and investment opportunities, distributors want to accelerate the pace of system expansion and customer connection while reducing the risk of oversizing and overbuilding. EPC along with our LDC colleagues believe in delivering safe, affordable power as best as we can, while continue to build in cost-optimizing opportunities and adding transmission to our service territory, which currently is not something we have coordination or control over. This disconnected level of control has challenging impacts on the LDC cost-recovery equations in comparison to that of transmitters. LDCs want to enable consumer choice and collectively work together to leverage innovation and local generation to power regional growth and generate prosperity.

Although EPC, in addition to many other LDCs, participates in the regional planning exercises, there can be a disconnect between what is communicated versus what is incorporated into the final plan. The opportunities that become available when increased flexibility, such as inclusion of unknown but valid forecasts, are recognized is considerable. If we are only planning for what is certain and not accounting for what could be with the appropriate planning and preparation, we are failing to prepare for all future economic potential. An acceptance of short-term slack in the system to account for long-term economic opportunities is critical. Including opportunity costs within the public interest (i.e. jobs created).

EPC appreciates the opportunity to engage on these important consultations with the Ministry of Energy and Electrification and would be pleased to continue participating in the

discussion so that collectively we may continue to build more homes faster and grow Ontario.

Sincerely,

John Avdoulos
President and Chief Executive Officer
Essex Power Corporation

Summary of Recommendations

1. Optimized LDC-LDC coordination and communication
2. Enhanced LDC-Transmitter coordination and communication
3. Lens of economic development and investment opportunity is critical
4. Increased coordination and planning with agencies such as Invest Ontario, Infrastructure Ontario, MEDJCT, MMAH and others could be achieved through Comprehensive Community Engagement Groups
5. Plan in such a way where risk is shared, assets are built, and regions are positioned for known and unknown load growth that will create investment conditions
6. Enable LDCs to have larger responsibility of the allocation of Conservation and Demand management (CDM) funding