Ontario

MINISTRY OF
ENERGY

Infrastructure Funding for Regional Economic Development Priorities

PO Briefing

August 2, 2017

CONFIDENTIAL DRAFT

Overview

- Through consultations and engagement sessions in support of the development of the Ministry's Long-Term Energy Plan, many communities highlighted that regional differences in electricity infrastructure are hindering economic development. Concerns included:
  - The impact of declining reliability on load customers
  - The impact of connection constraints and the costs of system expansion or enhancement for:
    - load customers looking to increase their load profile or set up new facilities
    - generation customers siting new renewable generation.
- The Ministry of Energy is proposing to seek provincial and federal capital funding for electricity transmission and distribution infrastructure that supports economic development and job creation and develop a program and delivery mechanism.
- Funding could target:
  - Reliability upgrades: Enhancements to single-circuit lines which lack redundancy, power quality improvements including back up generation, ride-through equipment and micro-grids, and upgrades from single-phase to 3-phase power
  - Connection of new load customers: Expansions and enhancements of transmission and distribution infrastructure to enable load customers to grow or establish a new connection.
  - Facilitating connection of renewable generation: Enhancements to infrastructure to eliminate connection constraints to advance clean energy projects.
- The Ministry of Energy is targeting release of the LTEP in late September/early October and is seeking approval to include exploratory language in the LTEP document.
- Reasonable certainty with respect to availability of a funding source or program is necessary as such a statement would significantly raise stakeholder expectations.

Federal Infrastructure Funding

- The 2017 federal budget includes line items that could be used to support electricity infrastructure:

Delivery Mechanism	Total Funding Amount	Ontario Allocation	Criteria
Bilateral Agreements (Negotiated directly with P/Ts)	$9.2 billion for green infrastructure	TBD [Approx. $2.5 billion]*	Priority projects, including those that reduce greenhouse gas emissions, help communities prepare for challenges that result from climate change and help build cleaner, better-connected electricity systems.
	$2 billion for infrastructure projects for rural and northern communities	TBD [Approx. $500 million]*	A broad range of infrastructure projects including the renewal and replacement of energy systems in northern communities, so that remote communities can reduce their reliance on diesel.
Canada Infrastructure Bank	$35 billion using loans, loan guarantees and equity investments	TBD	Focus on large, transformative projects such as regional transit plans, transportation networks and electricity grid interconnections.
	− Including $5 billion for green infrastructure.	TBD	Green infrastructure projects, including those that reduce greenhouse gas emissions, deliver clean air and safe water systems, and promote renewable power.
National Programs	$220 million to reduce reliance on diesel south of 60^{th} parallel	TBD	To reduce the reliance of rural and remote communities south of the 60th parallel on diesel fuel, and support the use of more sustainable, renewable power solutions.
	$4 billion to improve Indigenous communities, including $2 billion for green infrastructure	TBD	To build and improve housing, water treatment systems, health facilities, and other community infrastructure
	$2 billion for a Disaster Mitigation and Adaptation Fund	TBD	To support national, provincial and municipal infrastructure required to deal with the effects of a changing climate.

* Estimate based on the base and per capita funding provided to Ontario 2014 Building Canada Fund Provincial-Territorial Infrastructure Component. Ontario received approximately 28 per cent ($2.7 billion) of the total P/T allocations of $9.6 billion.

Provincial Prioritization

- The Ministry of Infrastructure (MOI) is seeking input from other ministries on priorities for federal infrastructure funding.
- Energy is proposing capital funding for electricity transmission and distribution infrastructure that supports economic development on the list of provincial priorities for federal infrastructure funding.
  - Given Ontario's significant investments to reduce GHG emissions in the province's supply mix, funding could help to boost economic development by expanding and enhancing access to clean power through investments in transmission and distribution infrastructure.
- Federal funding would likely require an equivalent provincial contribution.
- MOI has indicated that any new provincial infrastructure funding is likely to be communicated in the 2017 Fall Economic Statement.

LTEP 2017

- LTEP 2017 provides an opportunity to suggest that the government will explore infrastructure funding for transmission and distribution infrastructure.
- As the language will raise expectation with stakeholders, there should be a reasonable likelihood that funding can be found, otherwise it may be preferable to omit reference in LTEP, but continue to pursue the funding outside of LTEP timelines.

LTEP could include the following draft language:

Supporting Regional Economic Development

Electricity transmission and distribution infrastructure is built on a “beneficiary pays” basis. This is done so the cost of any improvement benefitting only certain customers is not borne by all ratepayers. Customers that require an expansion or enhancement of the system must pay the cost themselves of upgrading their connections.

In some cases, however, improved electricity infrastructure provides broader community and regional benefits by supporting, for example, economic development and job creation. There may be specific electricity infrastructure projects that could unlock the economic potential of a region but face barriers due to the “beneficiary pays” approach.

Ontario will explore ways to use federal or provincial infrastructure and economic development funding to support electricity transmission and distribution infrastructure that supports regional economic development. This approach balances the need to support economic development with the protection of ratepayers.

LTEP 2017: Timeline

- The Ministry of Energy is targeting release of the LTEP in Fall 2017.

Sept. 2016
Technical Reports

- IESO published its Ontario Planning Outlook (OPO) on Sept 1/16
- The Ministry published the Fuels Technical Report (FTR) on Sept 30/16

Oct. 2016 – Jan. 2017
LTEP Engagement

- Included 17 in-person sessions, 17 indigenous sessions, online tools, and *EBR* posting

Feb. 2017-June 2017
Policy Development

- Ontario's Fair Hydro Plan policies developed and announced; implementation begins
- ENERGY developed LTEP initiatives

July 26, 2017
Cabinet Approval- LTEP Initiatives

- ENERGY seeking approval on policy and program initiatives to prepare final LTEP and implementation directives

Aug. 31, 2017
Cabinet Approval- LTEP Outlooks

- ENERGY will seek Cabinet approval of supply, demand, emissions and price outlooks for inclusion in final LTEP

Sept/Oct 2017
Table LTEP

Sept/Oct 2017
Table Agency Directives

- Ministry to table LTEP document and implementation directives

Sep/Oct 2017
Publish LTEP

- Final LTEP published on Ontario.ca
- Minister issues Cabinet-approved implementation directives to IESO and OEB

Fall 2017
Legislative frameworks

- Propose legislative amendments to enable the province-wide implementation of Green Button and the expansion of Ontario's Net Metering initiative

Fall 2017
Implementation Plan Development

- IESO and OEB develop implementation plans based on directives

Dec. 2017
Implementation Plan Approval

- Implementation plans submitted to Minister of Energy for approval

Appendix

Program Design Considerations

- An overview of program design considerations is included in the chart below. Program design and delivery is highly dependent on the source of funding, which may include specific targeted priorities.

Focus Areas	Reliability upgrades: Enhancements to single-circuit lines which lack redundancy, power quality improvements including back up generation, ride-through equipment and micro-grids, and upgrades from single-phase to 3-phase power Connection of new load customers: Expansions and enhancements of transmission and distribution infrastructure to enable load customers to grow or establish a new connection. A fund could also target only location-constrained loads, such as mines, which are often located in remote areas without access to existing infrastructure. Facilitating connection of renewable generation: Enhancements to infrastructure to eliminate connection constraints to advance clean energy projects.
Eligibility Criteria	Projects could be evaluated based on criteria such as: − Number of jobs created − Amount of private sector investment − Supported by or aligned with regional and/or community energy plans and regional growth plans − Ownership by or partnership with Indigenous communities − Alignment with environmental objectives (i.e. reducing natural gas behind the meter generation or diesel back up)
Scale	Depending on the amount of funding available, the program could target a few large, high impact projects, many smaller projects or include streams targeting projects of different size and impact. − For comparison purposes, the proposed 230 kV line in Greenstone is estimated at approximately $110 million, with a potential benefit to present and future companies. Resolving a power quality issue caused by sensitive electrical equipment, such as those identified by Kimberly Clark in Muskoka could be in the $0.5 million range, though the benefit would be only to one company.
Federal/Provincial Contribution	Provincial and federal governments could contribute a percentage of overall project costwhile still requiring capital investment from the benefiting customer(s). Depending on the nature of the infrastructure, the fund could be rebalanced by payments from customers who benefit from the infrastructure later.
Regional and Indigenous Representation	The program could target projects province-wide or include dedicated regional streams and/or a dedicated stream for Indigenous communities.

Program Delivery Considerations

- Program delivery considerations include the delivery model, application process and governance.
- Delivery considerations are highly dependent on the source of funding, which may include specific delivery mechanisms.

Delivery Model	The Ministry could deliver the program or capitalize on existing economic development programs with a new electricity infrastructure stream. Existing programs supported by MEDG and MNDM, such as the Northern Ontario Heritage Fund's Strategic Economic Infrastructure Fund or the Ontario Economic Development Funds could be leveraged to deliver the program. Existing programs contribute in the range of $1-10 million per project, depending on the number of jobs created.
Application Process	Depending on the nature and amount of the funding, the program could include a single "one time" application window, or rolling applications over a number of years.
Governance/ Oversight	Depending on the delivery model, financial oversight of committed funds will need to be considered. Capitalizing on existing delivery mechanisms would eliminate the need to create new oversight procedures.