

The OPA's Regional Planning Process

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In the Board staff information session on the Renewed Regulatory Framework held on December 8/9, 2011, it became clear that there is a desire by stakeholders for clarification of the OPA's current regional planning process. This paper responds by describing the current regional planning process.

It is the OPA's view that regional planning is best addressed as an integrated, forward-looking process that engages key stakeholders in developing solutions that address near-term and long-term needs. In recent years, the OPA has developed a formalized approach to regional planning to ensure consistency in the basic framework and approach, while allowing room for individual studies to be tailored to satisfy unique local requirements and circumstances. While there are some commonalities across regions, each is unique in terms of its electricity requirements, anticipated growth, economic development potential, age and configuration of existing infrastructure, resource and demand management opportunities, and community acceptance of proposed solutions.

Under the OPA's process, each regional plan is developed by a study team consisting of representatives of the OPA, affected LDCs and transmitters, and the IESO. The study team, which is lead by the OPA, is responsible for establishing the Terms of Reference for the study, gathering data, identifying needs, proposing integrated solution options, conducting consultation, and establishing preferred plans.

The Terms of Reference defines the objectives, scope and key assumptions of the study, and outlines the roles and responsibilities of the study team members.

The data collected for the study typically includes load forecasts provided by LDCs, conservation forecasts and information on local generation provided by the OPA, and where applicable the LDC, and technical system information provided by the IESO and Hydro One. In addition, studies consider other inputs such as municipal or regional growth, infrastructure, or energy plans, LDCs' conservation activities and distribution plans, sustainment plans for distribution and transmission infrastructure, and any other information relevant to the area. As the study lead, the OPA reviews and coordinates these inputs and ensures data quality and consistency. The OPA also leads the assessment of needs based on the study inputs.

Draft solution options are contributed by all study team members and may consist of conservation, local generation, transmission or distribution alternatives. These alternatives are defined at a sufficient level of detail to perform feasibility studies and obtain cost estimates to support economic (NPV) analysis that can facilitate decision-making. Any options that are not technically feasible or have poor cost performance are screened out.

The identified needs and draft solution options are then brought to community stakeholders and local First Nations and Métis communities for their input. Consultation on the regional plan is supported by the OPA and LDCs, as well as the IESO and Hydro One as appropriate. OPA support includes providing

technical expertise as well as assistance coordinating efforts to ensure a consistent approach is undertaken across the planning area. This dialogue informs the development of the final regional plan.

Decision criteria for selecting options are decided upon by the study team, and may include such factors as cost, input received through consultation, and other factors. The draft options are assessed according to these criteria in order to develop the final plan for the region, which includes a recommended set of solutions and course of action.

Regional plans developed through this process:

- focus on meeting the IESO's Ontario Resource and Transmission Assessment Criteria (ORTAC) to ensure regional reliability;
- consider short circuit capabilities, reactive power requirements, major end-of-life asset replacements, and generation incorporation;
- consider and integrate all feasible options to meet local electricity needs, including conservation, generation, transmission and distribution options;
- take a long-term view, typically 20 years or more;
- consider broader system impacts;
- align with local initiatives such as Community Energy Plans, Official Plans, and other municipal planning considerations;
- take into account feedback from community stakeholders and local First Nation and Métis communities; and
- include considerations of cost responsibility, affordability, feasibility, and environmental impacts.

Additional considerations may be included, depending on the specific needs and goals of the local community.

The outcome of this process is a formalized regional plan to guide infrastructure and resource procurement decisions for the region. The plan's recommendations are typically organized into three timeframes: near term (first 5 years), medium term (5-10 years out) and long term (10-20 years or longer).

- Solutions to address near-term needs are presented as action items for immediate or early deployment.
- Solutions to address medium-term needs are identified along with the conditions that would trigger them (e.g., reaching a threshold level of load growth) based on anticipated lead time for implementation. For longer lead-time options, preliminary work may be recommended if required to preserve the option.
- For the long term, the plan provides general recommendations to ensure that options remain available to address future needs if and when they arise. For example, long-term growth projections may form the basis for working with municipal or Provincial planning agencies to establish joint-use corridors along proposed transportation corridors, as outlined in the

Provincial Policy Statement, ensuring that transmission right-of-ways are established ahead of or coincident to urban development.

The OPA anticipates that plans may be filed with the OEB for information and reference, and would form the basis for future Leave to Construct or rate application filings.

Once finalized, the plan enters the implementation phase. This involves carrying out any near-term actions, monitoring load growth and local resource development to determine when work should begin on medium-term solutions, and laying the groundwork for longer-term objectives. The roles and responsibilities of various parties in implementing the plan are clearly established in the final plan. Individual facility approvals are sought as needed through Leave to Construct or rate applications, with the regional plan providing overall context for the investments. As required, the OPA will support the need for transmission investments identified through regional plans in OEB approval processes.

The OPA is currently leading joint regional planning studies in the following areas: Kitchener-Waterloo-Cambridge-Guelph, Windsor/Essex, Central-Downtown Toronto, York Region, and Ottawa. The OPA continuously monitors load growth throughout the province to identify areas with local supply needs that are good candidates for a regional planning process. Areas where future regional plans are currently being considered for development include London, Hamilton, Niagara, Southwest GTA and Southeast GTA. Regional plans may also be initiated in response to requests from LDCs, transmitters, or other parties.

The OPA recognizes that distributors and transmitters conduct ongoing connection planning activities that are associated with growth in demand, connecting generators, or addressing reliability issues, and that are more local in nature than the OPA's joint regional planning studies. These planning activities are typically driven by specific customer requests where dedicated connection facilities are required, and where upstream transmission network capacity is available. The expectation is that transmitters will advise the OPA of such planning activities and of their outcomes.

The OPA expects that regional plans will be updated on a regular basis (e.g., every 3-5 years) or as needed if conditions change.