

East-West Tie Key Messages / Q&As

BACKGROUND

- The proposed East-West Tie (EWT) Project is comprised of: (i) a new, double-circuit, 230 kV, overhead transmission line that will connect Wawa TS in the Northeast and Lakehead TS in the Thunder Bay area in the Northwest; and (ii) all associated station facilities at Wawa TS, Marathon TS and Lakehead TS.
- The EWT is intended to maintain the long-term reliability of electricity supply in Northwestern Ontario, where industrial activities, particularly in the mining sector, are expected to drive electricity demand growth in the coming decade.
- The proposed in-service date is December 2020, with construction scheduled to begin no later than Q4 2018.
- The project is expected to be executed in stages. The initial stage will provide a firm east-west transfer capability of about 450 megawatts (MW). To increase to its full transfer capability of 650 MW, when the need arises, the following facilities will be added in the future:
 - New static VAR compensator, with its step-up transformer at Marathon TS
 - Upgraded section of the existing 115 kV circuits A5A and T1M
- The EWT was designated a priority project in March of 2016 when the Lieutenant Governor issued an Order in Council (OIC) saying construction of the project was needed.
- On July 31, 2017, Nextbridge Infrastructure (NextBridge) and Hydro One filed applications with the Ontario Energy Board (OEB) for Leave to Construct the EWT. NextBridge would own, construct and maintain the new line, while Hydro One will have operational control.
- The estimated costs for NextBridge to develop the project have increased significantly, rising from \$419-million when the EWT was included in the 2013 Long-Term Energy Plan to an estimated \$777-million today.

- NextBridge has attributed these cost increases to a number of factors. These include new requirements related to the project scope; refinements to the project's development phase; expenses related to maximizing First Nation and Metis participation that were not budgeted for when the project was designated; land acquisition expenses that were not budgeted for when the project was designated; and other unforeseen factors.
- On August 4, 2017, the Minister of Energy instructed the IESO to prepare an updated need assessment for the EWT that is consistent with the scope of previous versions requested by the OEB, and that considers the latest cost estimates and system needs. This need assessment will be focused on how to meet electricity demand in NW Ontario in the most cost-effective way possible, and will not explicitly consider whether or to what extent the EWT is needed to drive economic development in the region.

KEY MESSAGES

- In December 2015, the IESO completed an updated assessment confirming the need for the EWT project and proposing a staged approach to reduce the initial costs. This assessment concluded the EWT was the best option to maintain a reliable and cost-effective supply of electricity to the Northwest over the long term. Construction of the EWT may not provide any material additional capacity to connect renewable generation projects in the NW, nor will it – on its own – facilitate the connection of remote communities to the grid.
- The IESO's evidence, filed as part of NextBridge's Leave to Construct application, did not have to consider the need for the EWT, which was addressed by the Government of Ontario's March 4, 2016 Order in Council (OIC), which declared the project a priority.
- At that time, the IESO's need assessment included a reference case that determined the project would provide a net economic benefit of \$1.1 billion compared to the lowest-cost alternative, a new natural gas-fired facility.
- As instructed by the Minister of Energy, the IESO will update its needs assessment for the EWT to consider the latest cost estimates as well as system needs and deliver it by December 1, 2017.
- The IESO will undertake the same type of engagement for this updated assessment as it did for the December 2015 assessment. The purpose of the engagement will be to seek input on key assumptions in the study, such as the load forecast.

Can other generation in the area fulfill the need that the EWT is addressing?

The IESO's December 2015 need assessment concluded the EWT was the best option to maintain a reliable and cost-effective supply of electricity to the Northwest over the long term. At that time, the reference case in the need assessment determined the project would provide a net economic benefit of \$1.1 billion compared to the lowest-cost alternative, a new gas-fired facility. Using the latest models and data, the updated need assessment will determine if the EWT continues to be the best option for the meeting the reliability needs of this region.

Considering the increase in project costs, does the IESO continue to recommend that the EWT proceed?

The outcome of the IESO's updated need assessment will be a recommendation on whether or not the EWT should proceed, considering the increase in project costs. As part of the updated assessment the IESO will revise its demand forecast, in coordination with affected communities and organizations in the Northwest, and consider all viable alternatives to meet system needs. In addition to the EWT transmission project, these options include generation – e.g., a new, natural gas-fired power plant or biomass- fueled generation – as well as imports from neighbouring systems.

What is the IESO's process for conducting a need assessment?

There are a number of steps in the process. These steps include: updating the demand forecast, which requires seeking input from stakeholders, communities and large customers; updating the capabilities of the existing system in accordance with the latest standards; determining capacity or energy gaps over a 20-year-plus horizon and for different growth scenarios; developing supply options to address the gaps; evaluating any additional benefits of the various supply options (e.g., transmission reinforcements could reduce congestion in the area in addition to addressing any energy gaps); evaluating and comparing options on a technical, economic and environmental basis; developing recommendations and rationales; preparing documentation; and reviewing and finalizing the best approach.

What is the scope of the need assessment?

This assessment will consider electrical needs in NW Ontario for the next 20-plus years for different growth scenarios.

In what way(s) can stakeholders and communities participate in this need assessment?

The IESO will undertake the same type of engagement for this updated assessment as it did for the December 2015 assessment. The purpose of the engagement will be to seek input on key assumptions in the study, such as the load forecast.

How can Ontario ratepayers be assured this project is necessary and appropriate?

The IESO will ensure the electrical system in NW Ontario is planned to current standards, taking into account different growth scenarios. Solutions will be compared using the latest information and the least cost solution will be recommended.

How do you calculate value to ratepayers?

The IESO will continue to plan the electricity system in NW Ontario using the applicable reliability standards, which are consistent across the system. The need for the EWT is primarily driven by the anticipated development of the mining sector and other industrial activity expected in the region. The value to ratepayers comes from enabling more customers to reliably connect in NW Ontario and from reducing production costs when physical constraints on inexpensive generation are alleviated.

Has demand for electricity in NW Ontario changed since the last need assessment was completed?

The short-term demand for electricity has remained relatively constant. However, industrial loads in the NW are large and variable. For example, a large, new gold mine is under development in the Fort Frances area and will be connecting soon, which will impact demand for electricity.

In addition to cost increases, has NextBridge identified any other risks to the project?

In its filing with the OEB NextBridge identified several other risks to the EWT: completion of the Environmental Assessment; delays in receiving crossing arrangements, permits or regulatory approvals; land acquisition and expropriations not being completed in time for construction; fluctuations in commodity pricing; and severe weather conditions.

How will ratepayers in Ontario be affected by the EWT?

NextBridge estimates the monthly bill of a typical residential electricity consumer will increase by 30 cents per month. It's difficult to quantify the impact on ratepayers of Hydro One's work beyond a projected increase of 0.05 percent referenced in its application. In both cases the cost increases are expected to have a duration of 25 years.

NextBridge's projected costs have risen. Have Hydro One's costs increased as well?

Hydro One's costs are higher than what was assumed in the December 2015 assessment. In the December 2015 assessment the costs assumed for the station work totalled \$150 million to give a westward transfer capability on the EW ties of 650 MW. Hydro One's actual costs are \$147 million for a transfer capability of 450 MW, plus an additional \$60 million if the entire 650 MW transfer capability is needed. The IESO, working with Hydro One, has proposed staging the station work in this manner to defer the \$60 million until needed, to reduce the costs of the station work.