

Key Themes from Feedback

- Needs in the Markham area are clear; they should be referred to as the Markham/Richmond Hill needs ✓
- Additional information is desired by LAC members
 - PowerStream presented on Conservation (Item 4)
 - IESO to provide information on how Markham/Richmond Hill need feeds into broader regional need (Item 6)
- A broad range of criteria should be used in evaluating options ✓

To be addressed in next presentation (Item 6)

- Options should be evaluated in the context of the broader regional needs to ensure there are no unintended limitations created for addressing needs in other areas
- Discussions should be undertaken in partnership with the municipalities and utilities; plans for these discussions should be based on LAC feedback

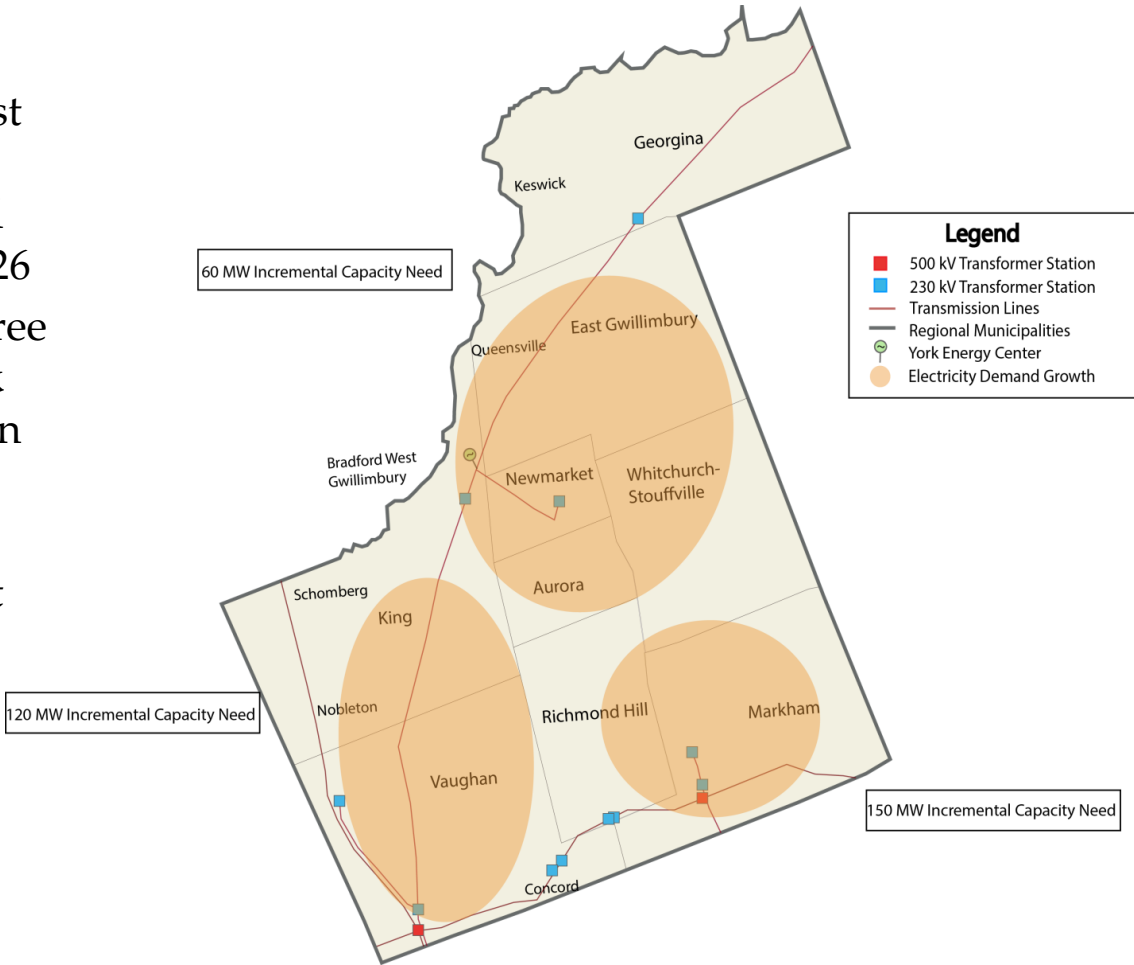
Markham/Richmond Hill in the Context of Broader Regional Needs

York Region Local Advisory Committee
Meeting #3

February 25, 2016

Update on Region-Wide Electricity Needs

- Based on PowerStream’s latest information, new stations in Southern York Region are forecast to be needed in Markham/Richmond Hill around 2023, and in Vaughan around 2026
- Based on discussions with the three LDCs, the need in Northern York Region is expected to be later than previously forecast (2023)
- These needs are based on net demand forecasts, which account for targeted conservation that would offset almost 40% of demand growth

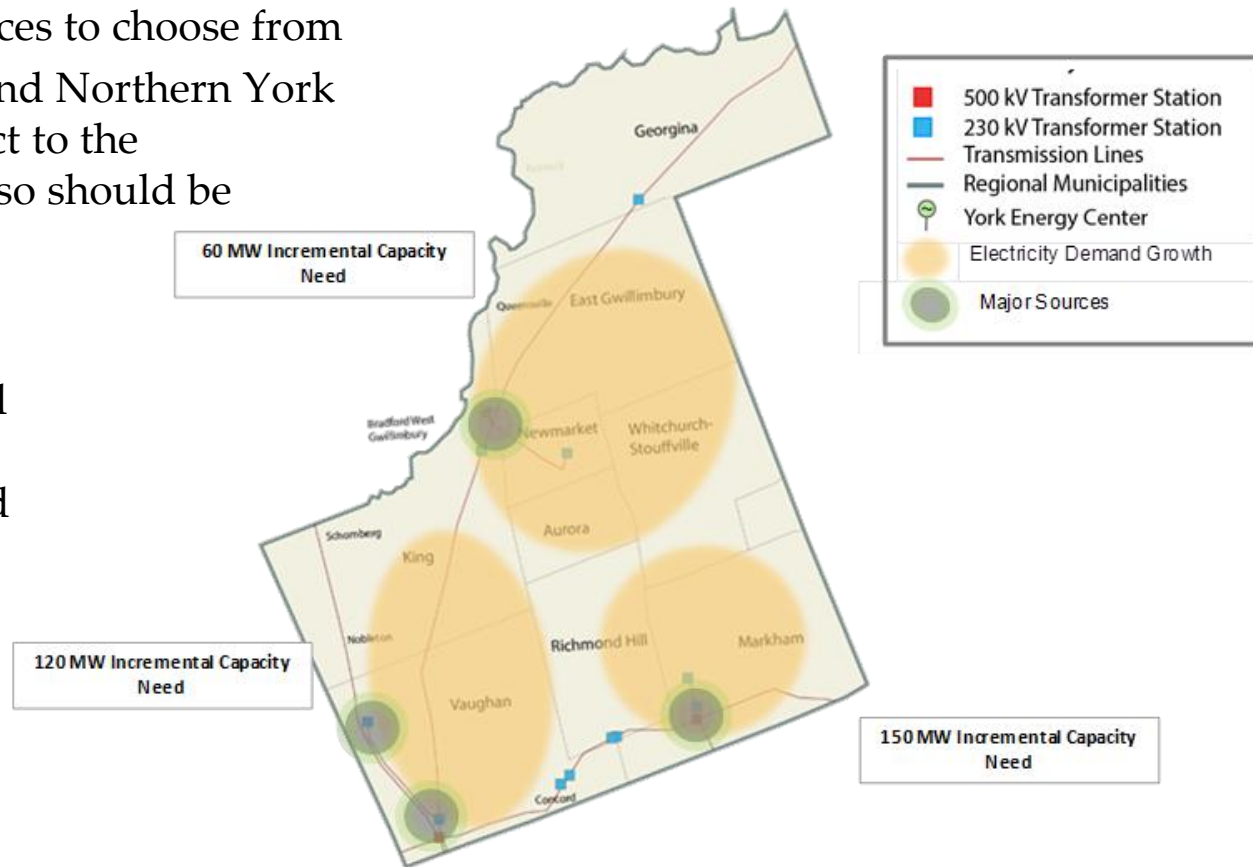


System Needs Associated with New Stations

- As discussed previously, connecting a new station in the Markham/Richmond Hill area would require some combination of distribution and transmission lines, depending on the location of the station
- For Northern York Region and Vaughan, it will not be possible to connect new stations to the existing transmission system without reinforcement
- Community-based solutions may be able to defer these needs for a few years

Potential Supply Sources

- Reinforcing the system typically involves connecting areas of need to supply sources
- There are a number of sources to choose from
- New stations in Vaughan and Northern York Region would likely connect to the Claireville-to-Minden line, so should be considered together
- Because the Markham/Richmond Hill need is sooner, and as it is supplied from a different part of the system, it can be considered separately
- A solution to address Markham and Richmond Hill's needs will not cut off options for Vaughan or Northern York Region



Markham/Richmond Hill Needs - Discussion

- Because the Markham/Richmond Hill area's needs are sooner than the rest of the Region, and because a solution there will not impact options elsewhere, the working group proposes to focus first on developing a solution for Markham/Richmond Hill
 - The needs in Vaughan and Northern York Region, and options to address them, will be addressed in future LAC meetings
- The Working Group has evaluated the options for Markham/Richmond Hill and has found:
 - Conservation/Community-Based Solutions:
 - PowerStream's 2015 -2020 Conservation and Demand Management Plan includes a comprehensive set of programs and initiatives to reduce electricity demand in Markham and Richmond Hill. While these initiatives are effective and will lower demand, they are already accounted for in the demand forecast.
 - PowerStream and Newmarket-Tay Power are also working on pilot programs for community-based solutions. Learnings from these pilots will help lay the foundation for future options, but will not significantly reduce demand in the near term.
 - Additional community-based solutions of the magnitude required to avoid a wires solution (approx. 12 MW/year for 12 years) is not, in our view, feasible within the timeframe required

Markham/Richmond Hill Needs – Discussion (cont'd)

- Generation Solution:
 - A local generation option could avoid the need to reinforce a short section of the transmission supply to the area, and could provide additional reliability benefits, but it would not avoid a wires solution
 - A new station and associated wires infrastructure would still be required in addition to local generation
- Wires Solution:
 - A new station and associated wires infrastructure can provide the required 150MW of electricity supply
 - The types of wires needed (i.e., transmission vs. distribution) would depend on the location of the station
 - This solution would not limit options to address needs in other parts of the Region
- As a result of this analysis, and due to the timing of the need, the Working Group believes that a wires solution is required for the Markham/Richmond area
- What do you recommend as the next steps for the Working Group given this recommendation?