Meeting Summary

Engagement Information	
Date:	September 21, 2016
Location:	Town of Newmarket Municipal Offices
Subject:	York Region Local Advisory Committee Meeting #4
Attendees:	**Committee Members** Dr. Alis Kennedy Avia Eek Behdad Bahrami Brent Kopperson Debra Scott Harry French Teresa Cline Jason Unger Tony Iacobelli Peter Miasek Brian Defriatas Matt Hopps Stephen Kitchen **Regrets** Dr. Anita Tucker Chief Donna BigCanoe Graham Seaman Marc Pourvahidi Norm Vézina Tricia Myatt **Newmarket-Tay Power** Larry Herod Ted Wojcinski **PowerStream** Riaz Shaikh Neetika Sathe **Hydro One** Charlie Lee Ajay Garg **IESO** Chuck Farmer Luisa Da Rocha Amanda Flude Bob Chow Alexandra Barrett Bernice Chan Kim Veeneman **Additional Attendees**
Meeting Materials	http://www.ieso.ca/Pages/Participate/Regional-Planning/GTA-North/York-Region.aspx *A copy of all presentations are available at the LAC Meeting Materials Link above.*

	Key Topics	*Follow up Actions
	Welcome, Introductions and Administrative Items • Larry Herod, Director, Distribution Services at Newmarket Hydro introduces himself and welcomes everyone to the meeting. Larry will moderate the meeting and keep everything running timely. He then introduces Chuck Farmer, Director, Stakeholder & Public Affairs from the IESO. • Chuck also welcomed everyone and spoke about since the last meeting and how we had an opportunity to reflect, listen to the feedback provided and look at how we can make these forums more effective going forward. Chuck mentioned that today's meeting would be discussing the strategy of this particular LAC, where we want to go, what are the priorities of the working group and what are the priorities of the LAC members so that we can appropriately set up the future meetings to address this and find the balance.	

The working group has also been very busy since the last meeting; they have been using the time as an opportunity to further plan the commitments that were made in a letter that was sent to the committee back in June. In the letter we spoke about making sure that we further engage municipalities, confirm growth forecasts and needs for the region and working towards a more strategic and transparent engagement process. Chuck mentions that the government announces its plan to go into a long term energy planning process and now we will have regional planning and provincial planning happening concurrently. In order to kick the process off, the IESO has released this planning outlook for the province and basically assess how ready the electricity is to meet those. This is being used a starting point for the government to have these discussions the communities and the sector in its consultation which will lead to a long term energy plan. Chuck encourages everyone to get involved in the long term energy planning process that will be happening in Toronto once the government announces the consultation schedule. We need to have these kinds of conversations about what the community wants and what are the options that will meet the needs now in order to see the affects later. Input from you and other trusted stakeholders are incorporated in the next iteration of the York Region IRRP which we expect to initiate in 2017.

- Bernice Chan, Planner, IESO provides recap of the past year and some of the activities that have gone on within the York region. The main focus has been on the Richmond Hill and Markham areas and what the options available for that particular need. The last meeting in February the working group put forward a recommendation that we pursue the implementation of a transmission distribution system option for this particular area. We also heard from the members that it's important that we work closer together as we address the longer term needs of this region. A couple of things that we did since the last meeting we had Powerstream reach out to the city of Markham, York Region and the town of Richmond Hill all to confirm underlining growth assumptions that will be used to develop our electricity demand forecast. Secondly, the IESO along with the local utilities spent time meeting with communities across York region in order to give the community a sense of where we are in the planning process but more importantly how they can get involved in the longer term needs in the Vaughan and York region. The IESO would then prepare a handoff letter to Powerstream and Hydro One to start the project development for the Markham and Richmond Hill reinforcement project. Infrastructure takes a long time to develop even though the needs are not until the early 2020's based on the forecast. At the same time we are doing all this community engagement a new development related to a feasibility study that Powerstream and the IESO have been looking at potentially implementing residential solar and storage technology in the southern York region. This study will help us determine costs, technical feasibility and perhaps if there is opportunity for us to use a community based solutions to help defer the infrastructure needs for the longer term for the area. Given this new development and the fact that this feasibility study is expected to come out before the end of this year, as a working group we thought it would be worthwhile to wait and see the results from the study before we proceed with the handoff letter.

Questions and Comments from LAC members:

- Within transportation planning there are a large number of EA (environmental assessments) and assume electricity planning does the same during their processes. Transportation finds it extremely helpful to set up a Stakeholder Advisory Committee including common citizens to bounce ideas off of. They find it of great value. Do the proponents (Hydro One & Powerstream) have such a plan to create a SAC?
    - We have discussed but not something that we have pursued any further but think it's a good idea.

Summary of PowerHouse Feasibility Study in York Region:

Presentation of Powerhouse delivered by Neetika Sathe, Powerstream.

- Powerhouse project was recently deployed which was largely funded by the IESO conservation fund. The powerhouse pilot is 20 homes equipped with 5kw of solar on the roof and 11.4kw hours of battery storage in the basement or the garage. Provides customers saving money on your bill because you are generating power from your roof and get outage protection from battery storage solution while you are creating clean energy. On the system side, it gives us the opportunity to study this type of deployment to serve some of the system needs like grid ancillary services, demand response, peak shaving, distribution transmission etc. LDC's are given the opportunity to aggregate these 20 homes and orchestrate them as if they were one single generating entity which is called virtual power planting. The next question was can something similar to Powerhouse help alleviate the growth needs in the York Region? We looked at network constraints, house constraints and customer restraints and the costs of storage. Part of the study to monitor the expenses keeping in mind that storage today is where solar was about five years ago and we expect it to go down. We don't expect the storage installation process to decline that much but we do expect that we can streamline the process. We started the economic feasibility study back in late June early July and expect that we can complete the report before the end of the year. When we started this exercise, we knew the handoff letter was coming but we knew we had something good and wanted to wait for a little while so we can see if this will be adopted in the marketplace and under what conditions. We want to make this work because there are so many new things out in the market like the Climate Change Action Plan which is focusing on the reduction of GHG, there is a lot of distributed energy and this project just hits home runs on everything from energy efficiency to greenhouse gas reduction.

Questions and Comments from LAC members:

- Is there a cost per house that's being projected and is this only being projected for residential customers with no opportunity for businesses at this time?
  - We asked for $3500 upfront from each customer even though its utility owned. This was their cost of getting into the program and they are also paying $20 per month maintenance fee. They will make back this $3500 plus tax within 5 years; this is a commitment from us at Powerstream.
- What's the subsidy that the customers are receiving from the IESO?
  - The IESO is funding about half the cost of the program. Not sure of the cost per house but it's roughly $500K of the total subsidy towards the overall project.
- This is 5kw of solar and 11.4kw of battery storage. Is the grid involved?
  - Absolutely, this is a grid connected.
- When you were to roll this out are you looking at homes with existing solar panels?
  - That is definitely a possibility and we will also be looking at retrofit verses new development. When we look at the numbers there are very few homes have solar that is not currently linked to microFIT. If you have a microFIT contract then all of that is in front of the meter and not behind the meter.
- The pilot I guess any rollout would be islanded within a single utility, is there anything to be learned interconnection from utility to utility?
  - Think of this as next generation utility evolution and you put these distributed energy resources and you put an aggregation on top of a virtual power plant then you can go beyond a connected utility. We are morphing ourselves into more of an energy service provider and the service we are providing the resources of the solution and the customer makes the choices whether to produce power or sell back to the grid depending on their objectives.

Update on Municipal Engagement

Presentation delivered by Amanda Flude, Sr. Advisor

Presented an overview of the engagement since last meeting. Met with York Region municipalities and communities, presented to regional caucus meetings to local MPPs, attended ECOP (Energy Planning Alignment) session for York Region and also have scheduled an upcoming presentation to Richmond Hill's committee of the Whole in November. These meetings provided good feedback and different ways on how to engage local communities which we will try to do going forward. It was way to talk to municipalities and working group members to identify ways that we can be aligning better with regional planning and community energy plans. Best practices and how we can enhance this going forward. Also through this process we were able to get new LAC members, welcome Stephen from the township of King and Tony from the City of Vaughan. Making these contacts and developing these relationships not only help build two way information sharing but also to introduce some of the regional planning initiatives, the whole concept of it and who we are, to communities and municipals that we are not always able to bring to the table in a forum such as this and just provide them a touch point going forward. We look forward to doing a lot more of that.

Questions and comments from LAC members:

- What exactly would have been the message to Markham for example that you gave?
  - There was a series of meetings and first and foremost it was said "let's confirm these demand forecasts and do we have it right?" in the case of Markham the forecast was actually higher than what we had initially said. The other thing is that it's important to loop in the right municipal staff because there are different moving parts to this.
- Would you have alerted them that there was likely a need for more transmission for their area?
  - Yes, absolutely.
- Were the meetings with municipal staff, councillors, combination of both or was the community involved?
  - These were more municipal staff, i.e. planning staff, policy staff and even engineering staff.

Presentation and Discussion: Longer-term needs in the Vaughan & Northern York Region

Presentation delivered by Bernice Chan, Planner

Bernice provides brief overview of the types of electricity planning, the scope of regional electricity planning and speaks to how we get our planning forecasts that are used to assess the electricity needs over the 20 year timeframe. Provided review of the electricity planning process, the current electricity systems available and whether this current system is adequate enough to supply the growth we are forecasting for the York region over the next 20 years. Regional planning is not new to this area and has been underway for a number of years now. There was a planning implementation plan put forward in 2005 with a number of recommendations for the Northern York region. We revisited this plan in 2015 through a more formalize regional planning process and took a broader scope and looked at the entire York region as a whole. A number of near-term investments which includes things like a number of switches being installed and of course the new transformer system that is being installed in the Vaughan area. These are the things that came out of the plan and what has encouraged the discussions for the longer term and immediate needs for the area. The government recently put forth Ontario's Climate Action Plan that lays out the policy directions related to the reduction use of fossil fuels. So it relates

	to greater electrification, the adoption of AV's or even fuel switching in terms of electric space heating. All of these things have major impact on the electricity system whether it's the way we use electricity and even increasing the amount of electricity we use. In companion to this plan, the IESO released the Ontario Planning Outlook and part of it there are a number of futures that were forecasted, two of which reflects different levels of electrification depending on the policy changes that are made for that area. This is going to be important for us to monitor and consider as all these things on the provincial level affect and have impact on the local level as well. On top of all this local communities are busy developing their Community Energy Plans. It becomes increasing important for us to monitor these energy plans so we understand where the communities are growing and responds accordingly for these areas. Taking a look at two system reinforcement options that are being considered to address the needs in the Vaughan and Northern York region. Both options will require two transformer stations and a combination of transformer and distribution lines. One other potential option that exists is in the GTA West corridor and that gives you Kleinburg to Kirby and not only could provide some supply to the York region but could also help address some of the longer term needs in the GTA West corridor area. We don't want to be doing planning in isolation and we want to be speaking to the lead planners for the GTA West and make sure that we coordinate with them especially since there could a transportation corridor with them and make sure that we monitor this situation as we develop these high level options. Next steps will have the working group work with the LAC and affected communities to identify opportunities to defer the longer-term needs using community based solutions. Input from LAC and affected communities will be incorporated into the next iteration of the York IRRP expected to be initiated in 2017. **Questions and comments from LAC members:** • When you are talking future infrastructure corridors are you talking about right aways on highways as opposed to hydro right aways that already exist? o Generally we are talking about the infrastructure corridors which could be highways, roads or utilities. It's an opportunity to share the corridors on a project development basis. • How often do the LDC's have to prepare conservation plans, how often do they update them? o The new framework was just completed last year and these are visited yearly to see how we are doing verses plan. We also have a midterm review to make sure we meet our numbers. • When you are taking into account the forecasts for the future needs and the anticipated growth, are you also considering any existing or FIT programs about to come on to the system? o Yes	
	LAC Framework Discussion: • Amanda discusses the feedback heard from last meeting and is looking to provide the LAC members with a clearer direction of what the committee was all about. Where are we headed? What are the kind of things are going to be talking about? What is the end result? Where's the opportunity for the LAC to provide input? From these past meetings the mapping document was developed. Amanda walks through the newly developed mapping document, the end goals identified to help inform the next IRRP (Q4 2017) and the scope of topics to be discussed along the way. Amanda conducts a group brainstorming session with LAC members to help identify priorities members want to discuss at future meetings.	The list will be sent out to LAC members in a separate email and then through a doodle poll process where the top priorities will be identified for discussion at future meetings.

	General Public Questions: • The York Energy centre power generation station as a possible source of power, how would leverage this availability for future power needs and reliability? ○ This is an existing resource and its characteristic and capability are factored into the assessment. The presence of that plant has kept that area reliable for the past 10 years. We have limited capacity on that system to supply anymore load as that facility has met its maximum load. No further questions received and Larry Herod provides closing remarks and the meeting is closed.	
	Meeting closed at 8:30 pm **Next meeting – exact timing TBD and will be communicated by the IESO**	