

Regional Infrastructure Planning

Process Planning Working Group Presentation to Distributors

June 7, 2013

Today's Presentation

Overview/Updates

- Background and key elements in RRFE Board Report
- Description of Regional Planning process
- Key features of Regional Infrastructure Planning Process
- Key LDC Obligations
- OPA and Transmitters deliverables
- Transition and Implementation
- Highlights of Proposed Code Amendments

Context for Regional Infrastructure Planning

- OEB announces need for Renewed Regulatory Framework for Electricity – RRFE (Oct. 2010)
- Board's RRFE Report (Oct.18, 2012) set out 3 main policies
 - 3 Rate Setting Methods for LDCs
 - Planning
 - Distribution Network Planning
 - Regional Infrastructure Planning
 - Defining & Measuring Performance
- 5 Working Groups established
 - Distribution Investment Planning, Performance & Benchmarking, Smart Grid, Regional Infrastructure Planning, Asset Redefinition
- Today's focus - Regional Infrastructure Planning

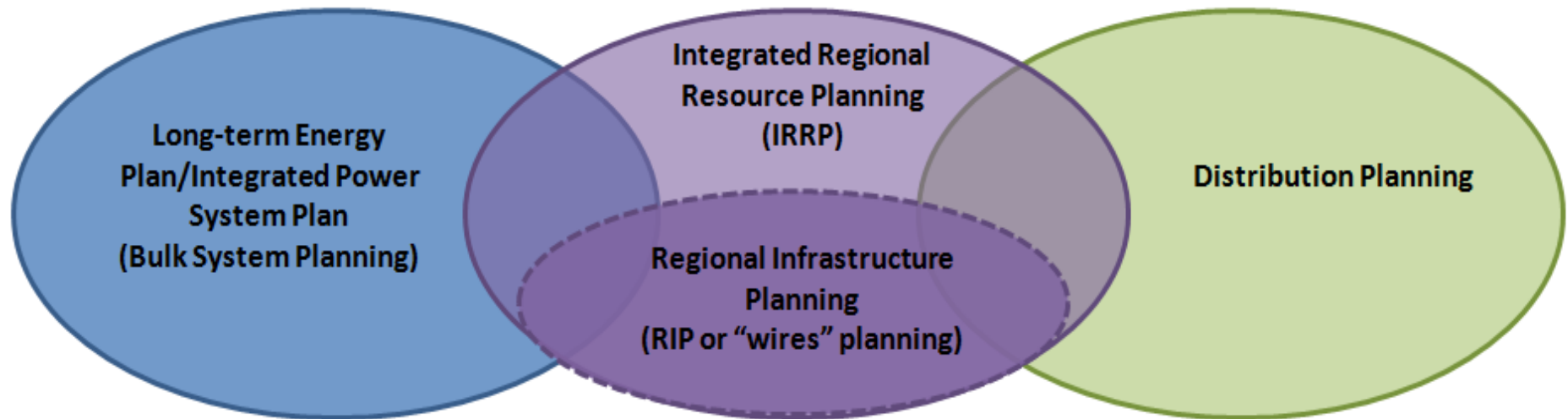
Objectives of Regional Infrastructure Planning Process

- A more structured and transparent approach to Regional Infrastructure Planning
- Timely implementation of required regional infrastructure
- Assessment and planning to support cost effective identification and implementation of solutions
- Coordinated regional planning to ensure cost effective and efficient wires expansion
- Coordinate with the IRRP process to account for integrated (i.e. non-wires) solutions
- Support LDC rate applications
- Support transmitter rate and LTC (S-92) applications
- LDCs expected to participate

Background and Highlights of Planning

- Power system planning involves the assessment of electrical needs (near, mid & long term) and the development of resources (generation & CDM) and wires (to connect and deliver power from resources to loads) to meet those needs
- OPA is currently *mid [5 - 10 years]* & *long term [10 - 20 years]* system planner at the bulk and regional level, including planning for resources and wires
- Transmitter conducts wires planning in coordination with:
 - OPA on Inter-area Network and Local Area facilities; and
 - more directly with customers on mainly connection facilities
- LDCs conduct wires (and resource) planning at distribution level and coordinate with Transmitter and OPA for mainly transmission supply facilities

Regional Planning in Context



Bulk System Planning

- 500 kV & 230 kV transmission
- Interconnections
- Inter-area network transfer capability
- System reliability (security and adequacy) to meet NERC, NPCC, ORTAC
- Congestion and system efficiency
- System supply and demand forecasts
- Incorporation of large generation
- Typically medium- and long-term focused

Regional Planning

- 230 kV & 115 kV transmission
- 115/230 kV autotransformers and associated switchyard facilities
- Customer connections
- Load supply stations
- Regional reliability (security and adequacy) to meet NERC, NPCC & ORTAC
- ORTAC local area reliability criteria
- Regional/local area generation & CDM resources
- Typically near- & medium-term focused

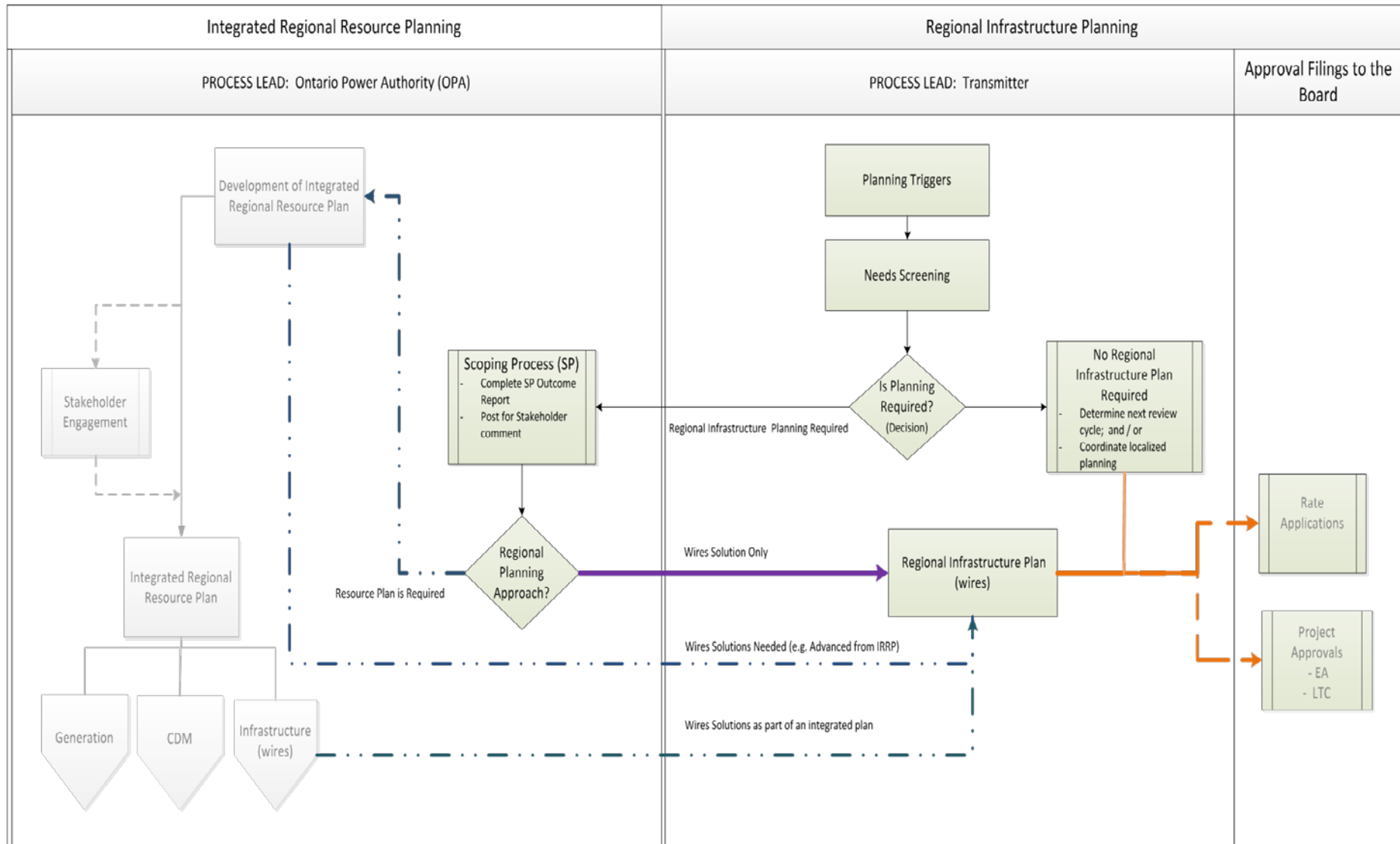
Distribution Network Planning

- Transformer stations to connect to the transmission system
- Distribution network planning (e.g. new & modified Dx facilities)
- Distribution system reliability (capacity & security)
- Distribution connected generation & CDM resources
- LDC demand forecasts
- Near- & medium-term focused

What is Regional Infrastructure Planning?

- **Regional Infrastructure Planning:**
 - Focuses on planning of wires (mainly Tx and some Dx)
 - Where needs are driven by regional considerations, coordinates planning of wire facilities at the bulk transmission and distribution levels
 - Coordinates, where required, transmission supply facilities to LDCs and other customers
- **Regional Infrastructure Planning does not plan:**
 - Bulk transmission facilities except where such facilities are driven by regional needs or provide an alternative solution
 - Distribution facilities except where such facilities are driven by regional needs
 - Resources (i.e. Generation and CDM) at bulk, regional and distribution level

The Regional Planning Process



Regional Infrastructure Planning features (1)

- A structured approach with regular reporting:
 - 21 electrically based regions will help study efficiency and manageability
 - Planning reports for all regions will be done in 3-5 year cycles
 - Support LDC and Transmitter planning activities by the provision of planned solutions to meet regional supply needs
 - RIP annual status updates to the Board
- Increased transparency of plan scoping and development
- Recognizes need for close coordination with OPA's IRRP process

Regional Infrastructure Planning features (2)

- With three possible outcomes, RIP provides for the appropriate level of planning coordination:
 - No regional coordination needed
 - Regional coordination of wires only
 - Regional coordination of resources (CDM & generation) and wires
- Sufficiently flexible to accommodate varying levels of planning complexity, diversity of issues, and timing of needs
- Planning at sub-regional level can be done independently where appropriate
- Seeks to streamline regional planning process, where possible

Transmitter key deliverables

- Intermediate Products
 - Initial steps in Regional Planning process
 - Needs Screening /Assessment Report
 - Determines if regional planning needed and, if so, LDCs to be active participants
- Final Products
 - Planning Status Update Letter
 - Periodic RIP Status Updates to the Board
 - Regional Infrastructure Plan
 - Recommended 'wires' solutions
 - Implementation plan
 - Project timelines and monitoring

OPA key deliverables

- Intermediate Product
 - Scoping Process Outcomes Report
 - Includes preliminary Terms of Reference (will be posted for stakeholder feedback)
 - Identifies planning approach -- IRRP or RIP only – and rationale behind approach
- Final Product
 - Integrated Regional Infrastructure Plan (IRRP)
 - IRRP Stakeholdering where appropriate
 - Hand-off letter to transmitters on need for “wires” solutions
 - Implementation plan
 - Project timelines and monitoring

What does this mean for LDCs?

- Provide requested information
 - All LDCs in region to provide forecast information to lead Transmitter (for Needs Screening/Assessment)
 - Provide any additional forecast information requested by OPA/Transmitter
 - Investment plans, future station requirements, relevant community energy plans, conservation plans
 - Information must be provided and updated in a timely manner
- Transmitter will determine if regional planning/coordination is needed and, if so, which LDCs are to remain involved in process
 - Scoping Process (led by OPA)
 - Regional Infrastructure Planning process (led by Transmitter); and/or
 - Integrated Regional Resource Planning process (led by OPA)
- As an active participant in RIP/IRRP processes, LDCs will be able to:
 - Identify potential distribution solutions in their territory
 - Provide input on investments that affect them

Documentation to support LDC Rate Applications

- Documentation to support applications will vary depending on circumstances
 - Need Screening/Assessment Report
 - where LDC involvement not required in RIP and/or IRRP process
 - Planning Status Letter
 - where LDC involvement is required in RIP and/or IRRP process but RIP not yet complete
 - Regional Infrastructure Plan
 - where LDC involvement is required in RIP and/or IRRP process and RIP completed

RIP Transition and Implementation (1)

- 4 years to complete first cycle
- Regions are prioritized into 3 groups based on expected need, geographic and resource considerations
 - Group 1 - (underway – 2014)
 - Group 2 - (2014 – 2015)
 - Group 3 - (2016 – 2017)
- Regions in Group 1 have planning activities underway for some or all parts of the region

Other activities in roll out

- Letter will be sent to LDCs advising them of regions they belong to and the RIP communication plan and preliminary schedule
- Conference calls and webinars scheduled with LDCs and transmitters
- Webinars will be conducted for broader industry members and other interested parties
- Will offer ad hoc face-to-face meetings with WG as required

RIP Transition and Implementation (2)

To ensure RIP process remains flexible, robust and consistently implemented across province, PPWG recommended establishment of industry led Standing Committee

- Comprised of LDCs, transmitters, OPA and other interest groups
 - OEB staff would observe and facilitate
- Regularly reviews planning process and regions (e.g. timelines)
 - Makes changes based on 'lessons learned'
- Advises industry of any process/region changes
- Similar in nature to EBT Standards Working Group
- Board endorsement of RIP process and Standing Committee

Preliminary 21 Regions

Group 1	Group 2	Group 3
Burlington to Nanticoke	East Lake Superior	Chatham/Lambton/Sarnia
Greater Ottawa	GTA East	Greater Bruce/Huron
GTA North	London area	Niagara
GTA West	Peterborough to Kingston	North of Moosonee
KWCG	South Georgian Bay/Muskoka	North/East of Sudbury
Metro Toronto	Sudbury/Algoma	Renfrew
Northwest Ontario		St. Lawrence
Windsor-Essex		

OEB Proposed Code Amendments: Overview

- Regional Planning

- Intended to ‘support’ process in Working Group Report (i.e., not ‘define’ process)
- Accountabilities of Transmitters and LDCs
- Timelines for major planning steps and information requirements
 - See Attachment 1: Chart setting out proposed timelines
- Identifies supporting documentation for applications

- TSC Cost Responsibility Rule Changes

- Reduce/remove barriers related to regional plan execution
- Capital Contribution “refund” sunset period extended (5 to 15 years)
- Elimination of “otherwise planned” provision (section 6.3.6)

- Asset Redefinition

- Reduce/remove barriers related to regional plan execution
- 115/230 kV auto-transformers consistently defined as “Network”
- Broader “Network” & narrower “Line Connection” definitions
- Assets only to be redefined on *go forward basis* (as upgraded)

OEB Proposed Code Amendments: Next Steps

- Posted for stakeholder comment May 17
- Stakeholder comments due **June 17**
- Final code amendments issued TBD
- *Proposed amendments to OPA Licence issued June 3*
(separate regulatory hearing process)

- Board endorsed process in PPWG Report
 - PPWG Report (Attachment A to Board Notice)

- Notice indicated Working Group to remain in place as *Regional Planning Standing Committee* (after final code amendments issued)

- Board staff will provide more detailed presentations regarding DSC / TSC amendments once finalized

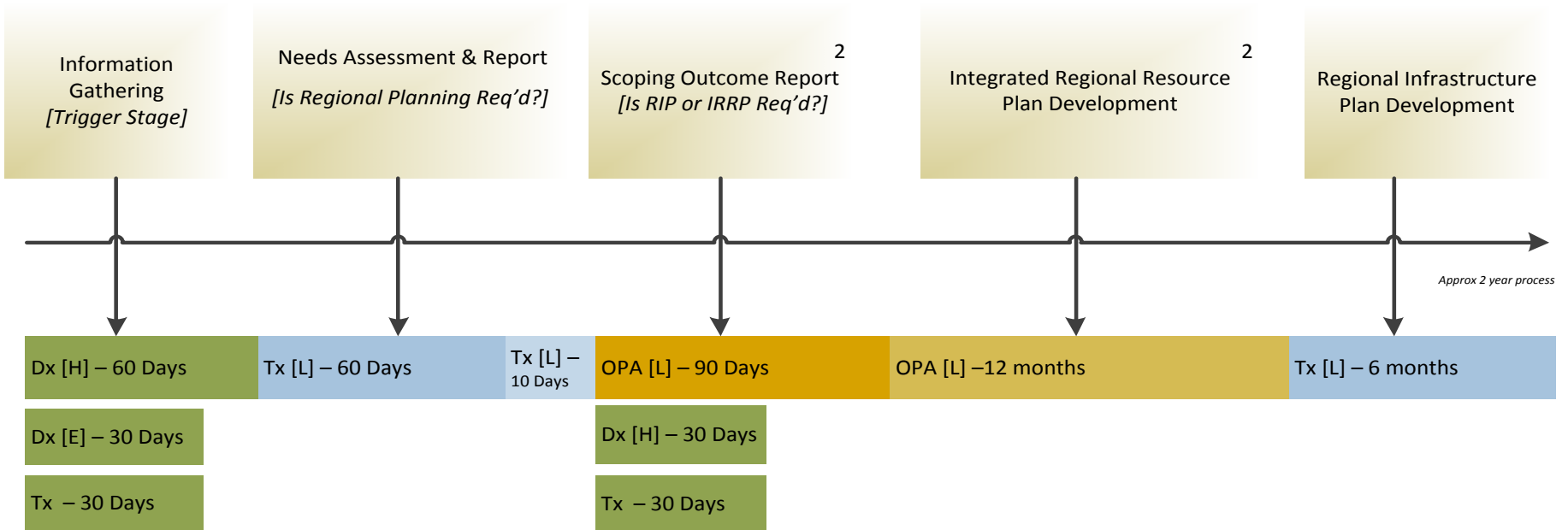
Questions and Feedback?

Attachment 1

Overview of Proposed Timelines in Proposed Code Amendments

Overview: Proposed Timelines in Proposed Code Amendments

Regional Infrastructure Planning Process [w/ IRRP]



Notes

Dx [H] – Host Distributor
 Dx [E] – Embedded Distributor
 Tx [L] – Lead Transmitter
 Tx – Other Transmitter

Note 1: When RIP is not finalized, a Planning Status Letter is provided to Dx within 30 days of the request.
 Note 2: OPA Responsibilities – Scoping Outcome Report / IRRP –reflects proposed licence amendments.
 Note 3: Green boxes denote timelines for provision of information

Note: This chart is intended to provide a high level overview to show how the process and timelines in the Proposed Code Amendments fit together. It is not possible to reflect all proposed timelines. This chart should be used as a guide and the official Notice and Proposed Code Amendments should be relied upon.

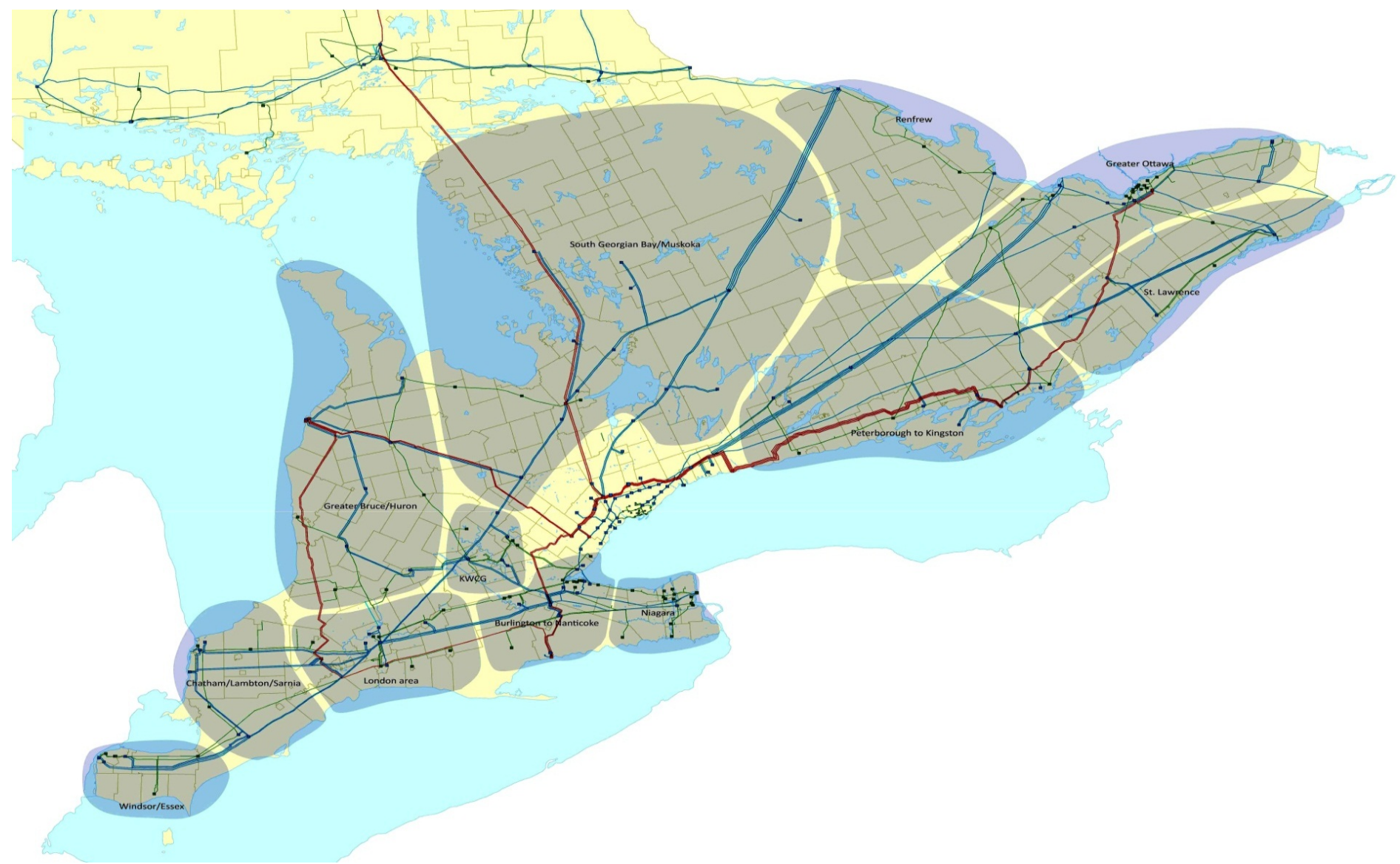
Attachment 2

Maps of 21 Regions

Map 1



Map 2



Map 3



Attachment 3

Process Planning Working Group: Member Organizations

Member Organizations – Planning Process Working Group

- Association of Major Power Consumers of Ontario (AMPCO)
- Association of Municipalities of Ontario (AMO)
- Association of Power Producers of Ontario (APPrO)
- Consumers Council of Canada (CCC)
- Great Lakes Power Transmission Inc.
- Guelph Hydro Electric Systems Inc.
- Hydro One Networks Inc. (Distribution)
- Hydro One Networks Inc. (Transmission)
- Innisfil Hydro Distribution Systems Ltd.
- Milton Hydro Distribution Inc.
- Ontario Power Authority (OPA)
- PowerStream Inc.
- Thunder Bay Hydro Electricity Distribution Inc.