

Feed back on Ontario Long Term Energy Planning Framework

There are large deficiencies in the planning process aligned under three conceptual categories: accountability, transparency, and effectiveness.

Given the increasing importance of regional planning and distributed generation, the overall provincial planning process and decisions by the IESO, OEB and government should be more accountable to community stakeholders and customers. Regions should be encouraged and helped to have localized generation, strong energy efficiency programs, battery storage and other Distributed Energy Resources (DER) to reduce the need for large obtrusive Transmission lines. This will improve the efficiency of the transmission component of the electricity rates and improve the overall system resiliency.

A provincial long-term energy plan should continue to be updated every three years, but the plan should be built around a new more comprehensive regional integrated planning process (see below). The planning process should involve a wider range of stakeholders including municipalities, LDCs, and community representatives. Provincial transmission lines should gradually be redesigned to the interconnection interties between the regions of Ontario, and move away from being one direction corridors from large, centralized power plants to distant consumers.

What overarching goals and objectives should be recognized in a renewed planning framework?

The following are our recommended goals and objectives:

Reliability – Maintain a mix of generation, storage and demand management that ensures that power is available to all customers when they need it

Resiliency – Decrease role of the small number of central generators and long transmission lines. Increase role of distributed generation and regional self-sufficiency.

Enable Distributed Generation

1. Remove barriers – examples of barriers that need to be addressed:
 - Remove the stipulation which limits behind the meter generation to 1% of a distribution system's peak demand;

- Eliminate small scale solar siting restrictions;
 - allow net metered accounts to stay on time of use billing as an option.
2. Facilitate uptake in all LDC's, by means of the following procedural changes:
- Require local distribution companies to have a standardized process to renewable energy connections which standardizes costs;
 - Require LDC's to perform studies and respond connection cost estimates within a maximum time allotment;
 - Enable virtual net metering (community solar) (through the use of credits between residential or commercial 'load' addresses and a remote 'generation' address) and community ownership of renewable energy projects;
 - Include behind the meter generation and storage as CDM measures, and make this eligible for CDM funding.

Zero Carbon Grid – Align planning with Provincial and Federal Climate Change targets. Phase out natural gas generation.


Loss minimization – Further incentivise the deployment of customer CDM and distributed generation.

Least cost – Adjust the supply management policies to prioritize lowest cost generation (including renewable energy and storage), as well as the purchase of low-cost power from other provinces to meet demand. Guarantee market access to conservation or renewable generation through provincial power purchase agreements if it is lower cost than existing generation, as is now being done in Great Britain.

Public and community participation and ownership – Provide a greater and real planning role for municipalities and community stakeholders with the following measures:

- allow municipalities to organize energy procurement mechanisms such as Feed-in-Tariff's (FIT) programs;
- purchase energy from municipality and community owned entities, when these entities have excess supply;
- No additional privatization of assets.

What respective roles should each of the Government, IESO, and the OEB hold in energy decision-making and long-term planning?



Government (Provincial): Setting of goals and objectives, oversight of planning process, facilitation of purchase of power from other provinces when the planning process indicates this is the best option. Integration of different regions through various interties; to ensure diversification of electricity flows in multiple directions to ensure maximum ‘weatherization’ resilience. (As opposed the present overreliance on long and rigid transmission lines from the three nuclear generation locations.

Government (Municipal): Active role in regional planning and approval of regional decisions based on local needs and strategies (e.g., Ottawa’s Energy Evolution) **PLUS** active role in organizing and implementing local procurement strategies. The IESO should not have a monopoly on energy supply to municipalities

Government (First Nations): Active role in regional planning and approval of regional decisions based on local needs and strategies **PLUS** active role in organizing and implementing First Nation procurement strategies. The IESO should not have a monopoly on energy supply to indigenous communities


Local Distribution Companies: Empower LDC’s to respond to municipal supply choices, by means of locally created policies, programs, and services to meet local demand. Empower LDC’s to facilitate virtual net metering and innovative financing tools such Metered Energy Efficiency Transaction Structure (MEETS)


IESO: Undertake management of overall and regional planning processes **PLUS** act as facilitator in support of municipalities that desire to manage energy supplies according to local preferences. Provide over-arching strategic support to the Province, including recommendations on major decisions such as purchase of power from other provinces, Small Nuclear Reactors, phaseout of existing nuclear facilities at end-of-life, and operation of the grid. Maximize interties to neighbouring provinces and between Ontario regions to ensure grid resiliency.

OEB: Continue with regulation of system and rates **PLUS** become a facilitator/licensor for new classes of independent generators and market participants.

What kinds of decisions should be made by technical planners at the IESO and the OEB as regulators?

Technical planners at IESO should make decisions based on the results of the comprehensive regional planning process (see below. Demand forecasts should include expected demand from government policy decisions and targets as well as historical trends, plus forthcoming regional or municipal decisions regarding carbon neutrality status in the decades to come. **Looking backward at recent demand trends will miss the reality of major incoming demand shifts as**





electrification plans get implemented to meet carbon goals over the next 30 years. For example, meeting 2030 GHG targets will involve far greater demand from EVs and building heating than is currently assumed.

What types of decisions should require government direction or approval?

The Provincial Government should provide oversight of the planning process to ensure that it is meeting its overarching goals and objectives (as above), set targets where appropriate based on on-going provincial priorities, and issue directives accordingly.

The Provincial Government should devolve decision making on distributed generation and CDM programming to municipalities and LDCs based on the results of a more comprehensive regional planning process (see below).


Are there gaps in the IESO and the OEB's mandates and objectives that limit their ability to effectively lead long-term planning?


The OEB and the IESO should focus their reviews of Local Distribution Companies (LDC) on the basis of grid cost effectiveness, and the weatherization of the grid to ensure resiliency in the event of climate change induced storms.

Since 80% of the retail electricity bill is for transmission and ancillary services the regulator must prioritize reliable performance of transmission lines and stations, anticipating significant growth in distributed generation. Transmission & ancillary costs are growing at a faster rate than the electricity commodity itself due to aging infrastructure and the need for greater protection and control responding to localized generation.

LDC's should be incentivized to focus on measures that optimize grid efficiency and modernization that allows distributed energy resources. Incentivization should contemplate appropriate returns on LDC capital as well as community capital invested toward these goals. Attached you will find the November 9, 2020 letter from the OEB for the year 2021 to all 'Rate-regulated Electricity Distributors and Transmitters and Ontario Power Generation Inc.' regarding '2021 Cost of Capital Parameters'. Since **Big is not always Better**, from a social capital / local community perspective, incentivization should be tiered according to scale of project, to allow success to flow to smaller, regional and local DER opportunities that are organized within municipalities.

In conjunction with a revised ROE number [**and possibly a regional ROE number**] that is biased toward DER resources, regulations should also be implemented that encourage community owned renewable energy generation, with standardized interface procedures and fees





that are tailored to mid and small scale generation on the distribution side of the Grid. Regulations for the transmission side of the grid should not be transported to the distribution side.

A significant gap in IESO planning is the omission of conservation and demand management (CDM) and behind-the-meter generation/storage from the Regional Integrated Resource Planning process. Currently CDM targets and programs are set by directives from the Ministry of Energy and not included in the IESO IRRP analysis. **Behind the Meter Generation and storage** are addressed by neither the Ministry nor the IESO and are not classified as CDM or self generation measures. This is inappropriate and is not supported by any system or safety mandate.


True **Integrated Resource Planning**, as used everywhere else outside of Ontario, involves the cost comparison of **all resource options**, including the cost of achieving efficiency gains and demand response through CDM programs and behind-the-meter generation incentives, as well as the lifecycle costs of renewable, fossil and nuclear generation and associated transmission/distribution lines. The fact that this is not presently done in Ontario is a strong contributing factor to the rising costs of the provincial electricity costs and the underutilization of the transmission /distribution grid.

The new planning process should use this true IRP process, including CDM programs and behind the meter incentives as discrete options to meet demand, and decisions on these programs should be made on the basis of the results - not directives. This change would ensure all low-cost options are considered in the planning process.

Given the increasing importance of regional planning and distributed generation, decisions resulting from the IRRP process should be implemented regionally, customizing procurement and programming to regional and local needs.

Should certain planning processes or decisions by the IESO, the OEB, or the government receive additional scrutiny, for example through legislative oversight or review by an expert committee?

Given the increasing importance of regional planning and distributed generation plus emerging desires by municipalities to establish energy self-sufficiency and carbon neutrality goals, the overall provincial planning process and decisions by the IESO, OEB and government should be more accountable to community stakeholders and customers. Regional Review Committees made up to these stakeholders should be struck to review and approve decisions affecting their regions. These Regional Review Committee's should report regularly to municipalities on the progress of policy evolution that will allow municipalities to enable their energy supply choices.





How often and in what form should government provide policy guidance and direction to facilitate effective long-term energy planning?

The Provincial Government should recognize emerging desires for local and regional energy autonomy that is coupled to carbon neutrality goals and should provide oversight of the planning process to ensure that it is meeting the collective overarching goals and objectives of Ontario communities. The Provincial Government should set targets where appropriate based on aggregated on-going provincial priorities, recognizing regional and local preferences and choices. Government should report annually on how well these goals are being met and provide policy guidance and direction as needed.

We thank you for the opportunity to provide feedback on behalf of our sustainability-focused co-operatives.

Sincerely,



Nate Preston
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Dick Bakker
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BY EMAIL and WEB POSTING

November 9, 2020

To: All Rate-regulated Electricity Distributors and Transmitters
All Rate-regulated Natural Gas Utilities
Ontario Power Generation Inc.
All Registered Intervenors in 2021 Cost-based Applications
All Other Interested Parties

Re: 2021 Cost of Capital Parameters

The Ontario Energy Board (OEB) has determined the values for the Return on Equity (ROE) and the deemed Long-Term (LT) and Short-Term (ST) debt rates for use in the 2021 cost-based applications (i.e. cost of service and custom incentive rate-setting (custom IR) applications, including any applicable custom IR updates). The ROE and the LT and ST debt rates are collectively referred to as the cost of capital parameters. The updated cost of capital parameters are calculated based on the formulaic methodologies documented in the [Report of the Board on the Cost of Capital for Ontario's Regulated Utilities](#), issued December 11, 2009.

Cost of Capital Parameters for 2021 Rates

For cost of service and custom IR applications with effective dates in 2021, the OEB has updated the cost of capital parameters based on: (i) the July 2020 survey from Canadian banks for the spread over the Bankers' Acceptance rate of short-term loans for R1-low or A (A-stable) commercial utility customers, for the ST debt rate; and (ii) data three months prior to January 1, 2021 from the Bank of Canada, Investment Industry Regulatory Organization of Canada, *Consensus Forecasts*, and Bloomberg LP, for all cost of capital parameters.

The OEB has determined that the updated cost of capital parameters for rate applications for rates effective in 2021 are:

Cost of Capital Parameter	Value for Applications for rate changes in 2021
ROE	8.34%
Deemed LT Debt rate	2.85%
Deemed ST Debt rate	1.75%

Detailed calculations of the cost of capital parameters are attached.

The OEB notes that, since the beginning of the current COVID-19 pandemic, it has been closely monitoring socioeconomic conditions and the financial and operational implications for the sector now and as the recovery proceeds into 2021. Based on currently available data and forecasts to at least the end of 2021, the OEB believes that the COVID-19 pandemic and its implications on the economy, generally, and on the energy sector, do not result in any distortion of the formulaic calculation of the cost of capital parameters set out above and current market conditions and data. The OEB considers the cost of capital parameter values shown in the above table, and the relationships between them, to be reasonable and representative of market conditions at this time.

The OEB updates cost of capital parameters for setting rates once per year. For this reason, the cost of capital parameters above will be applicable for all cost of service and custom incentive rate-setting applications (as applicable) with rates effective in the 2021 calendar year.

The OEB monitors macroeconomic conditions and may issue updated parameters if economic conditions materially change. An applicant or intervenors can also file evidence in individual rate hearings in support of different cost of capital parameters due to the specific circumstances, but must provide strong rationale and supporting evidence for deviating from the OEB's policy.

All queries on the cost of capital parameters should be directed to the OEB's Industry Relations hotline, at 416-440-7604 or industryrelations@oeb.ca.

Yours truly,

Original Signed By

Christine E. Long
Registrar

Attachment

Ontario Energy Board
Commission de l'Énergie de l'Ontario

Attachment: Cost of Capital Parameter Calculations

(For rate changes effective in 2021)

Step 1: Analysis of Business Day Information in the Month

Step 2: 10-Year Government of Canada Bond Yield Forecast

Month:		September 2020				
		Bond Yields (%)			Bond Yield Spreads (%)	
Day		Government of Canada		A-rated Utility	30-yr Govt over 10-yr Govt	30-yr Util over 30-yr Govt
		10-yr	30-yr	30-yr		
1	1-Sep-20	0.58	1.10	2.55	0.52	1.45
2	2-Sep-20	0.55	1.06	2.50	0.51	1.44
3	3-Sep-20	0.54	1.04	2.49	0.50	1.45
4	4-Sep-20	0.59	1.10	2.55	0.51	1.45
5	5-Sep-20					
6	6-Sep-20					
7	7-Sep-20					
8	8-Sep-20	0.57	1.08	2.55	0.51	1.47
9	9-Sep-20	0.59	1.10	2.56	0.51	1.46
10	10-Sep-20	0.56	1.08	2.54	0.52	1.46
11	11-Sep-20	0.55	1.06	2.52	0.51	1.46
12	12-Sep-20					
13	13-Sep-20					
14	14-Sep-20	0.55	1.06	2.52	0.51	1.46
15	15-Sep-20	0.55	1.08	2.53	0.53	1.45
16	16-Sep-20	0.57	1.11	2.56	0.54	1.45
17	17-Sep-20	0.57	1.09	2.55	0.52	1.46
18	18-Sep-20	0.58	1.10	2.56	0.52	1.46
19	19-Sep-20					
20	20-Sep-20					
21	21-Sep-20	0.55	1.08	2.55	0.53	1.47
22	22-Sep-20	0.55	1.08	2.57	0.53	1.49
23	23-Sep-20	0.55	1.08	2.57	0.53	1.49
24	24-Sep-20	0.55	1.08	2.59	0.53	1.51
25	25-Sep-20	0.54	1.07	2.59	0.53	1.52
26	26-Sep-20					
27	27-Sep-20					
28	28-Sep-20	0.55	1.10	2.62	0.55	1.52
29	29-Sep-20	0.54	1.08	2.61	0.54	1.53
30	30-Sep-20	0.57	1.11	2.66	0.54	1.55
31						
		0.56	1.08	2.56	0.523	1.477

Sources: Bank of Canada Bloomberg L.P.

Source: Consensus Forecasts	Survey Date: September 14, 2020
September 2020	3-month 0.700 12-month 1.000 Average 0.850 %

Step 3: Long Canada Bond Forecast

10 Year Government of Canada Concensus Forecast (from Step 2)	③ 0.850 %
Actual Spread of 30-year over 10-year Government of Canada Bond Yield (from Step 1)	① 0.523 %
Long Canada Bond Forecast (LCBF)	④ 1.373 %

Step 4: Return on Equity (ROE) forecast

Initial ROE	9.75 %
Change in Long Canada Bond Yield Forecast from September 2009	
LCBF (September 2020) (from Step 3)	④ 1.373 %
Base LCBF	4.250 %
Difference	-2.877 %
0.5 X Difference	-1.438 %
Change in A-rated Utility Bond Yield Spread from September 2009	
A-rated Utility Bond Yield Spread (September 2020) (from Step 1)	② 1.477 %
Base A-rated Utility Bond Yield Spread	1.415 %
Difference	0.062 %
0.5 X Difference	0.031 %
Return on Equity based on September 2020 data	8.34 %

Step 5: Deemed Long-term Debt Rate Forecast

Long Canada Bond Forecast for September 2020 (from Step 3)	④ 1.373 %
A-rated Utility Bond Yield Spread September 2020 (from Step 1)	② 1.477 %
Deemed Long-term Debt Rate based on September 2020 data	2.85 %

**Ontario Energy Board
Commission de l'Énergie de l'Ontario**

**Attachment: Cost of Capital Parameter Calculations
(For rate changes effective in 2021)**

Step 1: Average Annual Spread over Bankers' Acceptance

Step 2: Average 3-month Bankers' Acceptance Rate

Once a year, typically in September, OEB staff contacts prime Canadian banks to get estimates for the spread of short-term (typically 90-day) debt issuances over Bankers' Acceptance rates. Up to six estimates are provided.

Calculation of Average 3-month Bankers' Acceptance Rate during month of September 2020

A.	Average Spread over 90-day Bankers' Acceptance Rate (basis points)		Date of input
Bank 1	150.0	bps	Aug. 2020
Bank 2	178.75	bps	Aug. 2020
Bank 3	150.0	bps	Aug. 2020
Bank 4	130.0	bps	Aug. 2020
Bank 5			
Bank 6			

B.	Discard high and low estimates If less than 4 estimates, take average without discarding high and low.	
Number of estimates	4	
High estimate	178.75	bps
Low estimate	130.0	bps

C.	Average annual Spread	150.000	bps	①
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Step 3: Deemed Short-Term Debt Rate Calculation

Calculate Deemed Short-term debt rate as sum of average annual spread (Step 1) and average 3-month Bankers' Acceptance Rate (Step 2)

Average Annual Spread	1.500	%	①
Average Bankers' Acceptance Rate	0.251	%	②
Deemed Short Term Debt Rate	1.75	%	

Month:	September 2020	
Day	Bankers' Acceptance Rate (%) 3-month	
1	1-Sep-20	0.25 %
2	2-Sep-20	0.25 %
3	3-Sep-20	0.25 %
4	4-Sep-20	0.24 %
5	5-Sep-20	
6	6-Sep-20	
7	7-Sep-20	
8	8-Sep-20	0.25 %
9	9-Sep-20	0.25 %
10	10-Sep-20	0.26 %
11	11-Sep-20	0.25 %
12	12-Sep-20	
13	13-Sep-20	
14	14-Sep-20	0.25 %
15	15-Sep-20	0.25 %
16	16-Sep-20	0.25 %
17	17-Sep-20	0.25 %
18	18-Sep-20	0.25 %
19	19-Sep-20	
20	20-Sep-20	
21	21-Sep-20	0.25 %
22	22-Sep-20	0.25 %
23	23-Sep-20	0.25 %
24	24-Sep-20	0.25 %
25	25-Sep-20	0.25 %
26	26-Sep-20	
27	27-Sep-20	
28	28-Sep-20	0.26 %
29	29-Sep-20	0.25 %
30	30-Sep-20	0.26 %
31		
		0.251 % ②

Source: Investment Industry Regulatory Organization of Canada (IIROC)