

**2017 LTEP
PO Edits Tracker**

Lead Division	Chapter	Page #	PO Proposed Change / Comment	Accept/Reject	Edits made to LTEP language/ Proposed Counter Edit
All	Exec Summary	3-7	The bullets are fairly technical. Will there be a plain language edit?	Accept	We are pulling together a high level summary of each chapter (short paragraph) as an intro to the technical bullets.
ESP	General		Capacity Auction Language: Need to make language consistent throughout document re: low carbon (PO to discuss with MO further and pass along further context).	Pending	Language can be made consistent, pending any further updates from MO on discussions with PO on this item.
CRED	1	12	Affordability Fund: Need to explain that this is on top of all other existing conservation programs to help people save money, otherwise it sounds it's all we're doing.	Accept	Proposed Addition (in red) Ontario offers a suite of conservation and energy efficiency programs that can help customers manage their energy usage and reduce their costs over the long-term. The Province has recently taken steps to improve the availability of programs so that all Ontarians can take advantage of conservation opportunities (see Chapter 5). Among these, the government has launched an The Affordability Fund to helps those Ontarians not eligible for low-income conservation programs and who have a need for financial assistance to improve the energy efficiency of their homes. The fund is expected to pay for the installation of household improvements such as energy-saving LED light bulbs, power bars, better insulation, and energy efficient window air conditioners and refrigerators. The Affordability Fund is administered by an independent trust that distributes funds to the electricity distributors that apply. Distributors, working with community partners, are in the best position to provide energy efficiency improvements to consumers in need of assistance.
ESP	1	13-14	Existing Help for Business and Industry: “Ontario will continue to explore innovative ways to provide assistance to these mid-sized consumers, while always striving to increase system efficiency. The Province will continue to engage with businesses and industry to explore options that provide them with support for electricity costs and meet communities’ priorities for economic development.”	Accept	Proposed Addition In addition to these measures, Ontario is looking for new ways to provide electricity rate assistance to consumers that are too large to be eligible for the OEB’s Regulated Price Plan (RPP) and too small for the ICI program. For example, the The government and the Ontario Energy Board (OEB) is are working together on potential approaches to regulatory changes, including how considering

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			Are we sure enough that we can do something on this to create that expectation in the document?		changes to the way the GA is charged to these consumers, also known as non-RPP Class B consumers. For these consumers, the GA is a fixed monthly charge that is the same regardless of the time that they consume electricity. A GA charge that varies with time of use would lower prices for some Class B consumers and encourage more efficient consumption. Ontario will continue to explore innovative ways to provide assistance to these mid-sized consumers, while always striving to increase system efficiency. The Province will continue to engage with businesses to explore options that provide them with support for electricity costs and meet communities' priorities for economic development to reduce costs for these customers.
ESP	2	18?	The Need for Flexibility: The market renewal section is not very clear what we're saying re: climate and environmental attributes because it comes up in a few different ways. Need a consistent statement. (PO to discuss with MO further and pass along further context).	Pending	Need further direction from MO/PO.
ESP	2	23	Influence of the Carbon Market (third paragraph): Change "Consumers pay the carbon cost...." to "the price of fossil fuels such as natural gas, gasoline, diesel and propane will include a carbon cost as a result of the cap and trade program"; also add sentence about why we're doing cap and trade – most cost-effective way to reduce emissions. (PO says PO comms has lots of language on this, let DMO know if we need to collect this for you).	Accept	Proposed Addition On January 1, 2017, Ontario implemented a cap and trade program. The cap and trade program is a flexible, market-based program that will be a cornerstone in Ontario's fight against climate change, and is the most cost-effective way of achieving reductions in greenhouse gas (GHG) emissions. Cap and trade will increase the cost of fossil fuels based on their carbon intensity, but and will also influence how Ontario plans the province's energy supply and achieves cost-effective reductions in greenhouse gas (GHG) emissions. Fossil-fuelled generators must now account for the GHG emissions they produce when burning fossil fuels to generate electricity. This carbon cost accounts for part of the price of the electricity they offer into the wholesale market, which increases the relative competitiveness of non-emitting electricity generation and imports of clean energy from neighbouring jurisdictions.

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					Consumers pay the carbon cost of fossil fuels such as natural gas, gasoline, diesel, and propane because of cap and trade. The price of fossil fuels such as natural gas, gasoline, diesel, and propane will include a carbon cost as a result of the cap and trade program. The Ontario Energy Board (OEB) has to approve the costs that regulated natural gas utilities incur when they comply with cap and trade, including the cost of acquiring emission allowances. These costs are then folded into the rates charged to their customers. Natural gas utilities that are not regulated by the OEB and large facilities that must independently comply with cap and trade will decide on their own how to manage their compliance costs.
ESP	2	24	Influence of the Carbon Market: Need to include sentence on money from carbon market all being reinvested in programs to help people and businesses reduce GHGs and save money.	Accept	Proposed Addition On January 1, 2017, Ontario implemented a cap and trade program. The cap and trade program is a flexible, market-based program that will be a cornerstone in Ontario's fight against climate change, and is the most cost-effective way of achieving reductions in greenhouse gas (GHG) emissions. In addition, all proceeds from the cap and trade will be used to fund actions to reduce GHG emissions, such as supporting Ontarians in shifting away from fossil fuels and investing in emerging clean technologies.
ESP	2	25	Natural Gas: Need to tone this section down a bit to not create assumption that status quo will continue on natural gas given we need to target QC or other options to decrease it	Reject	All cost data in the modules will be based on the status quo outlook which is the top of the emissions range. Any initiatives to lower GHGs will add cost to the system, and would have to be reflected in the modules.
ESP	2	25	Refurbishing Nuclear: Suggest scaling back the refurb section because there's lots of unnecessary stuff in it and it's unbalanced with every other supply type ie why is it LTEP's role to talk about what Bruce Power is doing with local community? We don't do that for any other companies. Will storage be upset about not being mentioned as a supply source?	Accept	Remove reference to Bruce Power economic development initiative; however, remaining text for the refurbishing nuclear section is consistently presented for Darlington and Bruce (i.e., reporting on progress since 2013 LTEP, jobs/GDP impact, managing risks/oversight) and in line with existing communications. Nuclear will be the single largest source of generation in Ontario over the long-term (i.e., around 50%). Bruce Power has begun a Nuclear Economic Development and Innovation Initiative with the County of Bruce to maximize the local economic impact of Bruce Power's \$13-billion investment. This program seeks to ensure there are long-term benefits for the

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					counties of Bruce, Grey and Huron by: • asking suppliers to open offices in Bruce, Grey and Huron counties, and hire local people; and • giving preference to suppliers who generate jobs and economic benefit in Ontario and, where possible, operate close to the Bruce nuclear site. This effort will have spin-off economic benefits for the region, such as the construction of new housing and other facilities needed to accommodate the businesses and workers involved in this long-term project.
CRED	3	34-35	Net Metering: Can we mention Oxford County specifically regarding virtual net metering or providing a text box on what they're trying to do?	Reject	Rationale: There are several VNM proposals that have been brought forward to the Ministry for consideration, including from Oxford and various energy proponents. Criteria for deciding which VNM demonstration projects to deploy will be developed in partnership with the IESO [as part of the innovative, renewable distributed generation program to be announced in LTEP]. Program development work is being initiated through the IESO's LTEP implementation direction. As such, ENERGY recommends against highlighting specific demonstration proposals at this time.
SNAP	3	36	Energy Storage (last paragraph): Isn't this what we also said in 2013? Can we just do it this fall instead of making another commitment? They won't take it seriously.	Accept	Proposed addition (in red) The following language is proposed to show progress from the last LTEP. Further language has also been added to link proposals in the "Barriers to Innovation" section directly to energy storage: A March 2016 study by the IESO found that energy storage facilities can provide many of the services that are needed to ensure the electricity system in Ontario operates reliably. The Province also commissioned Essex Energy to study the benefits of storage for distribution networks. The study found that energy storage can provide many benefits, including cost reduction, for larger consumers. Customer-connected energy storage could also provide benefits to

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					the grid, particularly if the LDC partners with these customers to share both the costs and benefits. However, as discussed in the Barriers to Innovation section later in this chapter, the rules are not clear about how these partnerships could work. The Government will move forward with its agencies to provide the right environment for LDCs and customers to partner on storage where it makes sense for both parties. Indeed, the unique aspects of energy storage come into conflict with some of the rules governing the electricity system. We were beginning to understand these challenges in the previous LTEP, and since that time have been engaging with agencies and the energy storage industry to target the barriers that unfairly disadvantage this technology. The Province has now identified these market and regulatory barriers, and is moving forward will propose with updates to its regulations on a priority basis to address them. Concurrently, and it is directing-seeking support from the IESO and OEB to examine take similar steps with their respective codes and rules that may inhibit the cost-effective development of energy storage that where it can provides value to customers and the electricity system.
CRED	5		HERD – Need to reference that this is still being worked on in conservation chapter.	Accept	Proposed addition (in red) Starting July 1, 2018, and phased in over three years, owners of large commercial, multi-unit residential and some industrial buildings will be required to annually report their buildings' use of energy and water and their GHG emissions to the Province. Some of that data will be posted on Ontario's Open Data website every year, so that owners can compare the energy and water usage of their buildings with that of similar facilities, and identify where improvements can be made. The Climate Change Action Plan envisions providing free energy audits for pre-sale homes in order to include energy ratings in real estate listings. The province is examining options to deliver a Home Energy Rating and Disclosure program that would improve customer awareness by allowing homebuyers to compare homes by energy rating and encourage uptake of retrofit incentive programs.

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CRED	5	57	Demand Response: DR section does not yet reflect conversation with Atel. (PO is going to discuss with MO and provide more context).		<i>CRED: TBD based on context/discussions</i>
ESP	6	67-68	Building on a Clean Electricity System: Need to be more explicit that we will look for ways to hold emissions flat or decrease, as discussed, using QC or other options, so that we aim for the lower end of the wedge not higher end.	Accept	Proposed Addition About 90 per cent of the electricity used in Ontario in 2016 was free of GHG emissions, generated from sources such as water, nuclear, wind, solar and bioenergy. Our investments in these types of clean generation sources, along with the elimination of coal-fired electricity generation, have significantly reduced GHG emissions in the province. Thanks to these investments, the province's electricity sector currently accounts for only about two four per cent of Ontario's total GHG emissions and emissions in 2017 are forecast to be more than 80 per cent below 1990 levels. As seen in figure X below, emissions are forecast to remain well below historical levels and to be relatively flat over the planning period. We will continue to look for ways to keep GHG emissions in the electricity sector low, through solutions such as the electricity trade agreement with Quebec, under which imports from Quebec are used to reduce the need for domestic natural gas generation.
New Edits from PO					
CRED	2	24	Renewable Energy: Contracts for over 4,800 megawatts (MW) of wind energy, 2,100 MW of solar energy, and 1,200 MW of hydroelectric generation will expire between 2026 and 2035, with most expiring after 2030. While wind and solar contracts last for 20 years, and hydroelectric contracts for 40 years, wind turbines and photovoltaic panels are often able to still generate electricity after their contracts expire and we know from experience that hydroelectric facilities can operate for as long as a century. Due to the substantial decline in the cost of wind and		

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			solar technologies over the last decade, renewables are increasingly competitive with conventional energy sources and will continue to play a key role in helping Ontario meet its climate change goals. As part of the IESO's ongoing work to find efficiencies and the best value for the ratepayer, the IESO can maximize the existing fleet of renewable assets by adapting contracts to take advantage of uprate technologies, where cost savings can be demonstrated.		
CRED	2	25	Wind and Solar: In many cases, new or more efficient hardware and software uprate technologies technology can be added to upgrade the province's wind and solar energy facilities so they can continue operating, increase their output, and provide additional system benefits.		
ESP	2	18	To meet our long-term needs, the Independent Electricity System Operator (IESO) has begun a Market Renewal initiative to redesign the province's electricity markets. This undertaking is expected to save up to \$5.2 billion between 2021 and 2030^[1] and forms a key component of Ontario's plan to bring down the cost of electricity. The Market Renewal initiative consists of three work streams: energy, operability, and capacity. The IESO will continue its work on the design of mechanisms under these initiatives, in order to maximize the benefits to the system and ultimately fulfil IESO's mandate of ensuring reliability and affordability. When new supply needs are identified, the IESO would use competitive mechanisms to procure new supply resources.		

^[1] Brattle Group, prepared for the IESO, A Benefits Case Assessment of the Market Renewal Project (2017)

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			An example of a market-based mechanism that could be used in an incremental capacity auction. The incremental capacity required to meet Ontario's forecasted requirements for supply and resource adequacy would be in addition to its already contracted resources. Upgrades and expansions to existing generators, demand response providers, and importers and emerging new technologies could all participate in the auction, with the most cost-effective resources winning out. The incremental capacity auction would incorporate services that provide flexibility, reliability and ancillary system benefits into its design to help ensure that all resources can compete on a level playing field.		
CRED	3	34	Net Metering: Can we be more specific about VNM timelines and pilots?		
SNAP	3	36	Energy Storage: Energy storage facilities can provide a wide range of services needed to reliably operate the power system in Ontario including: regulation, voltage control, operating reserve, and flexibility. The IESO should ensure that storage technologies can compete in procurements for these services.		