

Comments on LTEP Discussion Guide

Page	Suggested Change
General	Inconsistency throughout between using “%” and “per cent”. Please replace all references with the word “percent”.
Throughout	Change abbreviation for megatonne to “Mt” where it currently is “mT” or “mt”.
General	Page 5 (para 1), 6 (para 4), 9 (para 1), 28 (para 2), 32 (para 3), 36 (para 1), 43 (question box), 45(para 2) : capitalize « Province »
2	Main heading of Chapter 2: Remove “Ontario’s Electricity Future”.
2	Heading 3, second sub-heading: Revise to say “Use of Fossil Fuels”
2	Fourth heading, second sub-heading: revise heading to say “Demand Forecasts for Fossil Fuels”
2	Main Heading of Chapter 5: Change “Energy Prices” to “Energy Pricing”.
2	Sub-Heading 2 of Ch. 5: Change “Electricity Pricing- Mitigation” to “Electricity Pricing – Rate Mitigation”
2	Sub Heading 3 of Ch. 5: Add “Pricing” so it reads “Fossil-Fuels Pricing - Overview”.
2	Sub-Heading 4 of Ch.5: Add “Price” so it reads “Fossil-Fuels Pricing – Rate Mitigation”.
4	Para 2: add “next” so it reads “We have a robust supply of all forms of energy for at least the next ten years”.
5	Para 2: change “on-line” to “online” so it reads “... Ontarians to use the online Environmental Registry”.
5	Para 2: Capitalize “Town Halls”.
5	Para 2: Revise text to say “The government also encourages Ontarians to use the on-line Environmental Registry to submit written-proposals-for comments and for consideration.”
5 (para 4) 6 (para 4) 30 (para 2) 35 (para 2) 35 (para 4) 42 (para 3)	Propose changing these references of “the Ministry” to “the Ministry of Energy” unless it was recently referenced.
6	Para 2: Remove “technical” after Fuels Technical report so it reads “..also released the <i>Fuels Technical Report</i> (FTR), a technical report that examines..”
6	Para 1: Revise wording to say “With the next LTEP, the Ministry of Energy intends to expand the discussion of Ontario’s energy future by including a comprehensive review of the province’s fuels sector and the supply of fuels such as oil, gasoline, propane and natural gas.”
6	Par 2: Revise wording to say “The Ministry of Energy also released the <i>Fuels Technical Report</i> (FTR), a technical report that examines the supply and demand for fuels such as oil, gasoline, propane and natural gas in Ontario.”
7	Para 2: Remove “s” at the end of “its” so it reads “The CCAP will play a key role in the development of the 2017 LTEP, as its intends to...”
7	Para 5: Revise text to say “Ontario produces very little of the oil, gasoline

	and natural gas it uses.”
7	Para 5: Revise text to say “Previous provincial governments have not focused on oil, gasoline and natural gas the way they have on the electricity produced in the province.”
8	Para 5: Revise wording to say “Ontario produced 160 Terawatt-hours (TWh) of electricity in 2015 in order to meet the needs of the province’s residents and businesses. ”
9	Figure 1: Revise title to say “ Figure 1: Ontario Electricity Production (<i>Source: Ontario Planning Outlook, 2016</i>)”
9	Para 1: Revise wording to say “To reduce the GHG emissions that cause climate change and improve Ontario’s air quality, the province eliminated the use of coal by closing three coal plants and converting the remaining two plants to cleaner biomass plants. ”
9	Para 2: Add “capacity” so it reads “the share of wind, solar and bioenergy capacity in our supply mix has grown”.
9	Para 1: Add the word “to” after and, so it reads “To reduce the GHG emissions that cause climate change and to improve Ontario’s air quality,…”
10	Revise heading to say “”Use of Fossil Fuels”
	Para 1 and 2: Revise text to say: Ontario consumed approximately 2,700 petajoules (PJ) of fossil -fuels in 2015. These types of fuels include gasoline, diesel, natural gas, propane, wood and natural gas liquids. Alternative fuels include renewable and low-carbon fuels like biomass and biofuels. Ontarians use fossil -fuels for cooking, heating, transportation, electricity generation and industrial production. Fuels also provide the energy needed to refine petroleum and manufacture pulp and paper, steel and cement. They are the raw material in the production of plastics, fertilizers and chemicals. Ontario’s fossil -fuels sector underwent considerable change recently, driven by new sources of supply, new technologies and the use of new, low-carbon biofuels such as ethanol and bio-based diesels. The significance of biofuels in the transportation fuel sector has tripled over the past decade, growing from less than one per cent of the fuel used in 2005 to nearly three per cent in 2015.
10	Para 3: Revise text to say “Ontario’s fossil -fuels sector is well positioned to adapt to any changes in the supply and demand for fossil -fuels, and contribute positively to Ontario’s GHG emission reduction targets.”
10	Figure 2: Spell out “NGL” to read “natural gas liquids”
10	Figure 2: Capitalize “Source”
11	Para 1: Revise wording to say “Closing the province’s five three of the province’s coal-fired generating plants and converting the remaining two plant to biomass facilities was the continent’s largest single reduction effort…”
11	Para 1: Since the release of the 2013 LTEP, emissions from electricity production declined by another to 7.1 megatonnes…
11	Last para: Revise wording to say: By 2020 , Ontario expects to generate....”

11	Para 3: Remove “has” so it reads “Ontario has also established a cap and trade program...”
11	Figure 3” Capitalize “Source”
12	Para 2: Uncapitalize O in “outlooks” so it reads “ the IESO examined four possible futures, or outlooks”
12	Figure 4 Capitalize “Source”
13	Revise title to say “Demand Forecasts for Fossil Fuels” Para 1: Revise wording to say “The discussion of future demands for fossil fuels is outlined in the FTR. The report’s five scenarios are based on the same primary assumptions contained in the IESO’s OPO. As such, the projections for fuel demand in the FTR are the reverse of the projections for electricity demand. For example, an OPO forecast of an increase in the number of electric vehicles would trigger a corresponding decrease in the fossil fuels consumed within the transportation sector.”
13	Figure 5: Please remove the reference to -23% and the arrow.
13	First bullet: Revise text to say “Outlook B estimates a demand for fossil fuels of 2,377 Petajoules (PJ) by 2035.”
13	Sub-bullet 3: Change “demand side management” to “DSM” as it’s spelt out two bullets above
13	Figure 3: Capitalize “Source”
13	Sub-bullet 3: End of sentence is missing. It should read “The demand for fossil fuels in 2015 in Outlooks E and F is estimated to be 2,037 PJ and 1,842 PJ, respectively, in 2035.”
14	Para 2: Uncapitalize O in “outlooks” so it reads “ in the flat demand outlook”
15	Revise text to say: “They pay the Hourly Ontario Energy Price, the Global Adjustment, Delivery and Wholesale Market Service Charges and the Debt Retirement Charge.”
16	Revise text to say: “Deferring the construction of two new nuclear reactors at Darlington. This was in response to the supply and demand expectations of the 2013 LTEP, and will avoiding an estimated \$15 billion in new construction
16	Revise text to say “Deciding on a later start for the refurbishments at the Bruce nuclear generating station. Work will begin in 2020 instead of 2016. This will make the best use of our existing nuclear fleet and save \$1.7 billion compared to what was forecasted in the 2013 LTEP forecast .”
16	Change title to read “Electricity Pricing – Rate Mitigation”
16	Bullets: Remove “and” at the second as list continues beyond sub-bullet 3. Add semi-colon after bullet 3. Add “; and, after bullet four.
17	Sub-bullet 6: Bold “program” in “saveONenergy for Home Program” to make it consistent with the rest of list.
17	Sub-bullet 6: Revise so reads “Rebates are also available”
18	First bullet (ICI description): change “shifting electricity consumption” to “reducing electricity consumption during peak hours”
18	Last paragraph: Revise text to say “If proposed regulatory changes are approved, the Industrial Conservation Initiative would be expanded to include the agricultural sector and smaller participants in the commercial and institutional sectors. ”

18	Last paragraph revise text to say: “More than 300 businesses already use the Industrial Conservation Initiative to save electricity, and these proposed changes would make another more than 1,000 businesses eligible for reductions.”
19	Revise Heading to say: Fossil Fuels Pricing Overview Para 1: Revise text to say “The wholesale prices for fossil -fuels in Ontario, such as gasoline, diesel, propane and natural gas, are determined in an integrated and competitive North American market”
19	Change title to read: “ Fossil Fuels Pricing – Overview ”
20	Revise heading to say: Fossil Fuels Price Mitigation
20	Change title to read: “ Fossil Fuels Pricing – Rate Mitigation ”
20	Para 3: Revise text to say “The Enbridge Gas Distribution Home Winterproofing Program is free to its eligible low-income customers. Enbridge Gas Distribution will pay the cost of energy efficiency improvements such as insulation and draft proofing measures.”
20	First sub-bullet: the word “distribution” should not be bolded.
21	Change sub-heading to read “Distribution and Grid Modernization ”
21	Para 1: Revise language to read “Energy storage, smart homes, microgrids, distributed energy resources, electric vehicles, and the increasing electrification of transit and transportation will change the way utilities interact with how their customers and manage their systems.”
22	Discussion question 1: add “the” so it reads “What are the significant challenges facing utilities and what can the government do to meet them?”
22	Separate the two bullets with “; and ”
23	Para 1: Change ‘and’ to ‘which’ so it should read: “...sometimes over long distances, and which can affect the reliability of their supply”
23	Para 1: Add “the” so reads: “These have traditionally been connected to single power lines, sometimes over long distances, and that can affect the reliability of their supply.”
23	Para 2: Change so reads: “It is a network that takes electricity generated from sources such as solar panels, energy-storage , or a combined heat and power plant and distributes it to local users in houses, schools or offices.”
23	Para 3: Remove “to” so reads – “It is expected to that innovation and the technical expertise gained from commercial scale demonstrations will drive a decline in the cost of microgrids.”
25	Proponents are moving ahead on planning and implementing these projects, and are seeking the necessary regulatory approvals. [INSERT PARAGRAPH BREAK] The existing electricity transmission system, including the projects already underway, is expected to be sufficient to meet current levels of electricity demand.
25	Third paragraph “In Outlooks with high demand,” remove the comma after “demand”.
25	Third paragraph, “northern” should be capitalized.
25	Para 3: Decapitalize “Outlooks” to “outlooks”
26	5 th bullet: revise text to say “Projects should provide demonstrable economic benefits and opportunities to the people of Ontario, over both

	the short and long term; and”
26	Sub-bullet 5: remove dash in the word ‘demonstrable’
27	In consideration box revise text to read: “Is the current “user pay” model an effective way to meet Ontario’s needs? Does it act as a barrier to economic development? Does it appropriately balance the goals of economic development and protecting ratepayers?”
27	In consideration box revise so reads: “If not, wWhat considerations should be taken into account?”
29	Revise text to say “ To compliment the IESO report, The Ministry of Energy will publish an follow-up independent study this fall on the value of storage at the distribution level.”
28	Image 1 Capitalize “Source”
30	Image 2: capitalize “Source”
30	Para 3: Change “de-carbonise” to “decarbonize” to make it consistent with glossary.
30	Para 3: 2 nd last sentence remove hyphen from “fossils-fuel” (i.e. fossils fuel)
31	3 rd para: Revise text to say: “The fossil fuels sector in Ontario is owned and operated by commercial interests who meet the differing energy needs of the province’s residential, commercial, industrial and transportation sectors.”
31	First paragraph: remove quotations around “carbon neutral”.
32	Bullets: Add colon after first bullet, and “; and” after second bullet.
33	Image 3: Capitalize “Source”
34	Image 4: Capitalize “Source”
36	Para 5: Revise text to read “The province is investing \$100 million as part of its <i>Climate Change Strategy</i> to enhance the existing home energy audits and retrofit programs offered by Enbridge Gas Distribution and Union Gas Limited. Homeowners across Ontario who heat their homes with natural gas, oil, propane or wood can apply for rebates towards home energy audits and energy efficiency retrofits. This investment is expected to enable audits and retrofits of approximately 37,000 homes across the province and save approximately 1.6 mT Mt of GHG emissions.”
38	Para 3: Revise language to read “Ontario firms are now poised to challenge beat-out foreign competition and export their products and expertise just as other jurisdictions, like other jurisdictions, to accelerate their efforts to procure clean energy technologies following the 2015 United Nations Climate Change Conference in Paris (COP21).”
38	Para 4: Revise text to read: “the updated net metering regulation would support renewable energy developments that are better integrated into the electricity system”
39	First bullet: Add a semi-colon after the first bullet instead of a period.
40	4 th para: revise text to say “Discussions with our provincial neighbours on potential electricity trade agreements were guided by the goals of reducing emissions...”
41	Second para: Recommended changing to “As Ontario investigates opportunities for electricity trade agreements, the impact...”

	Third Question: Recommend changing to: “What factors should Ontario focus on as it pursues opportunities for electricity trade agreements with nearby provinces and states?”
42	Map 2: Capitalize “Source”
43	Para 2: Revise first sentence so that ends with a period after “ varieties. ”
43	For bullets, close first three bullets with a semi-colon, and the fourth bullet with “ ; and ”.
43	Revise to read: “Since community engagement is an important part of regional planning, a Local Advisory Committee also provides recommendations on how to develop the regional plans and advises on aspects of broader community engagement.”
45	Para 4: “technological” is spelt wrong.
46	Para 2: De-capitalize “Outlook” to “outlooks”
46	2 nd Para: Revise text to say “The government will continue to apply these principles in developing the next LTEP, while acknowledging the impact the <i>Climate Change Action Plan</i> will have on both the electricity and fossil -fuels sectors. Given the range of Outlooks for the future demand for electricity and fossil -fuels, the need for flexibility in long-term planning is of particular importance.”
46	4 th para: Revise text to say “When it comes to fossil -fuels, the government’s climate change policies are expected to put downward pressure on the demand for traditional fuels, while increasing the opportunity to use electricity and new cleaner fuels such as renewable natural gas or biofuels. How this transformation is accomplished over the next twenty years will have implications for customers’ costs and the use of the province’s existing delivery infrastructure for fossil -fuels.”
46	Para 3: Revise text to read “The OPO illustrates these choices with options that include mixes of wind, solar , hydroelectricity, natural gas, bioenergy, demand response, nuclear and long-term contracts for imports.”
47 – Distribution System definition	“Distribution System” definition should read: “a distribution system that takes electricity..”
47	Climate Change Mitigation and Low Carbon Economy Act, 2016 definition: Italicize the definition heading, since it’s a piece of legislation.
47	Baseload generation definition: Replace definition with “ Generation sources designed to operate more or less continuously through the day and night and across the seasons of the year. Nuclear and many hydro generating stations are examples of baseload generation. ”
47	Bioenergy and bio-diesel definition: Replace definition with “ Energy produced from living or recently living plants or animal sources. Sources for bioenergy generation can include agricultural residues, food process by-products, animal manure, waste wood and kitchen waste. ”
47	Cap and trade definition: Revise to say “a program to reduce GHG emissions climate change. ”
47	Capacity Auction: revise definition to say “A competitive market that commits a supplier to provide capacity meet possible demand for electricity... ”
47	Clean Imports definition: revise definition to say “imports of electricity from non-emitting sources through contractual agreement hydro- ”

	electricity from neighbouring provinces such as Quebec, Manitoba or Newfoundland”
48	Fuels Technical Report (FTR) definition: Revise to say “A report prepared for the Ontario Ministry of Energy that reviews the current supply and demand for fossil fuels in Ontario, and the possible changes that could occur through to 2035.”
48	GHG definition: Replace definition with “ Gas that contributes to the capture of heat in the Earth’s atmosphere. Carbon dioxide is the most prominent GHG. It is released into the Earth’s atmosphere as a result of the burning of fossil fuels such as coal, oil or natural gas. GHGs are widely acknowledged as contributing to climate change ”
48	Kilowatt definition: Replace with “ A standard unit of power that is equal to 1,000 watts (W). Ten 100-watt light bulbs operated together require one kW of power ”
48	Energy East definition: Revise definition to say “A proposal from TransCanada Corporate Pipelines Limited... ”
48	Heat pumps definition: Revise definition so that it reads: “ Technology Device that heats or cools buildings by absorbing heat from one area and transferring it to another a cold space and releasing it to a warmer one. Heat pumps can replace the need for furnaces and air conditioners.”
49	Megawatt definition: Replace with “ A unit of power equal to 1,000 kilowatts (kW) or 1 million watts (W) ”
49	Local Advisory Committee definition: Remove “An” and replace with “A”, so reads “ An committee of local community representatives...”
49	Peak Demand: Replace definition with “ Peak demand, peak load or on peak are terms describing a period in which demand for electricity is highest. ”
49	Regional Infrastructure Plan definition: Remove comma after “plan”.
50	Terawatt Hour definition: Delete “ A kWh is the same as one kilowatt (1 kW) of power being used for one hour. ”