

RE: Revised LTEP Modules

From: "Armstrong, Hillary (ENERGY)" <hillary.armstrong@ontario.ca>
To: "Whittington, Matt (ENERGY)" <matt.whittington@ontario.ca>
Cc: "Schlaepfer, Martin (ENERGY)" <martin.schlaepfer@ontario.ca>, "Berry, James (ENERGY)" <james.berry5@ontario.ca>, "Coker, Meaghan (ENERGY)" <meaghan.coker@ontario.ca>, "Campbell, David (ENERGY)" <david.campbell2@ontario.ca>
Date: Wed, 21 Mar 2018 15:26:09 -0400

Hi Matt,

Just so you're aware, the LTEP modules are now up on the OER.

<http://ontarioenergyreport.ca/data-catalogue.php#LTEP Modules>

Thanks,
Hillary

From: Armstrong, Hillary (ENERGY)
Sent: March 20, 2018 7:31 PM
To: Whittington, Matt (ENERGY) <Matt.Whittington@ontario.ca>
Cc: Schlaepfer, Martin (ENERGY) <Martin.Schlaepfer@ontario.ca>; Berry, James (ENERGY) <James.Berry5@ontario.ca>; Coker, Meaghan (ENERGY) <Meaghan.Coker@ontario.ca>; Campbell, David (ENERGY) <David.Campbell2@ontario.ca>
Subject: RE: Revised LTEP Modules

Great, thanks Matt. We'll let you know once they are posted.

Hillary

Sent with BlackBerry Work
(www.blackberry.com)

From: Whittington, Matt (ENERGY) <Matt.Whittington@ontario.ca>
Date: Tuesday, Mar 20, 2018, 7:00 PM
To: Armstrong, Hillary (ENERGY) <Hillary.Armstrong@ontario.ca>
Cc: Schlaepfer, Martin (ENERGY) <Martin.Schlaepfer@ontario.ca>, Berry, James (ENERGY) <James.Berry5@ontario.ca>, Coker, Meaghan (ENERGY) <Meaghan.Coker@ontario.ca>, Campbell, David (ENERGY) <David.Campbell2@ontario.ca>
Subject: RE: Revised LTEP Modules

Ok to post.

Thanks,
Matt

From: Armstrong, Hillary (ENERGY)
Sent: March-20-18 4:59 PM
To: Whittington, Matt (ENERGY)
Cc: Schlaepfer, Martin (ENERGY); Berry, James (ENERGY); Coker, Meaghan (ENERGY); Campbell, David (ENERGY)
Subject: RE: Revised LTEP Modules

Hi Matt,

I wanted to check in to see if you're comfortable with the modules being posted tomorrow with the OER.

Thanks,
Hillary

From: Armstrong, Hillary (ENERGY)
Sent: March 19, 2018 11:35 AM
To: Whittington, Matt (ENERGY) <Matt.Whittington@ontario.ca>
Cc: Schlaepfer, Martin (ENERGY) <Martin.Schlaepfer@ontario.ca>; Berry, James (ENERGY) <James.Berry5@ontario.ca>; Coker, Meaghan (ENERGY) <Meaghan.Coker@ontario.ca>; Campbell, David (ENERGY) <David.Campbell2@ontario.ca>
Subject: RE: Revised LTEP Modules

Hi Matt,

We've done gone through the modules with IESO, and worked through all of the questions/comments.

Attached is a revised word document with our comments and IESO responses. I've removed everything that you previously saw that was already resolved, to focus on what you haven't seen yet. Generally speaking, few changes were needed to the modules, and IESO mostly responded to our questions of clarification.

In response to your question about Directed Supply for solar, IESO provided a response in the attached, but I've also included it below. We've included a note in that tab of the supply module to clarify.

I've also attached the three modules that have been revised based on the comments document, in case you'd like to see those. We're looking into the best way to note that totals may not add up due to rounding, it's something we may just want to note once in each module, but we'll make sure something is included.

In terms of timing, if you are comfortable, we would aim to get these released with the OER on Wednesday. We're working through translation and making the documents accessible now. If timing is too tight, we may need to release these a couple days after the OER, but still this week. We're doing our best though to get everything out at the same time.

Let me know if you're ok with the revised modules and responses, and we'll get the modules finalized.

Thanks,
Hillary

Supply Module:
Ministry Comment

- The 50 MW in 2017 and the additional 150 MW in 2019 in the 'Installed MW Directed' tab appear to be from the 2017 mFIT procurement target, and the FIT 5 procurement. This raises a potential question of how the IESO is counting the 50 MW 2017 mFIT procurement target as directed until such time as everything is contracted? And, at the time the modules were produced, was FIT 5 un-contracted (i.e. still directed)? If the answer to both of those questions is yes, then the table is fine from an accounting perspective.

IESO Response

- Correct. microFIT and FIT 5 were still "Directed" at the time LTEP analysis was done so they are shown in the Installed MW of Directed tab.

Ministry Comment

- However, we may have an interest in accounting for the 50 MW from mFIT and the 150 MW from FIT 5 as 'committed' rather than 'directed' in order to provide a clear message that there are no further renewables procurements planned. 200 MW of Directed MW from 2017 to 2019 appears confusing considering both of the procurements have been run and are closed.

IESO Response

- This is an issue related to the timing of reporting. Suggest keeping microFIT and FIT 5 as "Directed", but indicate that those are the last of the procurements.
- The Ministry agrees, and has added a note in the supply module that says: "Note: Solar includes 50 MW from the 2017 microFIT procurement and 150 MW from the FIT 5 procurement. Both programs have now closed and are no longer accepting applications."

From: Whittington, Matt (ENERGY)
Sent: February 28, 2018 5:23 PM
To: Armstrong, Hillary (ENERGY) <Hillary.Armstrong@ontario.ca>
Cc: Schlaepfer, Martin (ENERGY) <Martin.Schlaepfer@ontario.ca>; Berry, James (ENERGY) <James.Berry5@ontario.ca>; Coker, Meaghan (ENERGY) <Meaghan.Coker@ontario.ca>; Campbell, David (ENERGY) <David.Campbell2@ontario.ca>
Subject: RE: Revised LTEP Modules

Hi Hillary

The only question I have is in the supply module, it shows 200 MW of Directed Supply for solar from 2019 until 2035.

I can't think of what directed supply that would be? Perhaps I'm forgetting something.

Also – a general note that IESO should disclaim that totals may not add up due to rounding.

Thanks,
Matt

**Year End Installed Capacity of Directed Supply
(MW)**

Fuel	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biomass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar	50	50	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Wind	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

From: Armstrong, Hillary (ENERGY)
Sent: February-21-18 4:44 PM
To: Whittington, Matt (ENERGY)
Cc: Schlaepfer, Martin (ENERGY); Berry, James (ENERGY); Coker, Meaghan (ENERGY); Campbell, David (ENERGY)
Subject: RE: Revised LTEP Modules

Hi Matt,

Just checking in to see if MO has had a chance to review the modules.

Thanks,
Hillary

From: Whittington, Matt (ENERGY)
Sent: February-14-18 1:11 PM
To: Armstrong, Hillary (ENERGY); Coker, Meaghan (ENERGY); Campbell, David (ENERGY)
Cc: Schlaepfer, Martin (ENERGY); Berry, James (ENERGY)
Subject: Re: Revised LTEP Modules

Hi Hillary

We haven't had a chance to work through these yet.

We'll try to get them back to you by end-of-week, if that works?

Thanks
Matt

Sent from my BlackBerry 10 smartphone on the Rogers network.

From: Armstrong, Hillary (ENERGY)

Sent: Wednesday, February 14, 2018 12:56 PM
To: Whittington, Matt (ENERGY); Coker, Meaghan (ENERGY); Campbell, David (ENERGY)
Cc: Schlaepfer, Martin (ENERGY); Berry, James (ENERGY)
Subject: RE: Revised LTEP Modules

Hi all,

Just wanted to follow up on the modules and if you're comfortable with us sharing our comments back with IESO.

Thanks,
Hillary

From: Armstrong, Hillary (ENERGY)
Sent: February-09-18 10:46 AM
To: Whittington, Matt (ENERGY); Coker, Meaghan (ENERGY); Campbell, David (ENERGY)
Cc: Schlaepfer, Martin (ENERGY); Berry, James (ENERGY)
Subject: Revised LTEP Modules

Hi all,

Please find attached revised LTEP modules. Since we last shared these late last year, we've worked through some changes with the IESO based on the previous comments we sent back to them, and inputted ministry owned content as well. Here is a bit of a summary of what has changed.

The first document attached is our comments and IESO responses. The unhighlighted content were the comments we sent back to the IESO previously, the green comments are the IESO's responses, and the red comments are the comments we would like to send back to the IESO for this go around.

There are a couple new pieces here that the ministry produced:

- We have added an SGF module, which would likely be combined with the transmission module to be one tx/dx module.
- We have included ministry content into the cost module around OFHP numbers.

Let us know if you're comfortable with the revised content and with us sending our comments back to IESO, and we can try to get those turned quickly and finalize the modules.

Thanks,
Hillary