

Message

From: David Barrett [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=EF6F3B035CEB494099260E6FA7603F36-DAVID BARRE]
Sent: 2018-03-16 11:41:43 AM
To: Bronwen Smith [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=adb6b113ea4d46b3bdfd6e1bb805d047-Bronwen Smi]; Nik Schruder [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fdeb9248bb1744b2aeefb2feb782a99-Nik Schrude]; Bashir Bhana [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f7ca92bb3384495d95f56b96eed74290-Bashir Bhan]
CC: Chuck Farmer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=aa83ad66edf341b4a48c3f852b674355-Chuck Farmer]; Simon Zhang [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3f293b2300524a9babd5abfeef83386d-Simon Zhang]; Joyce Poon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3093c75378834fd195c6a07d2c0aded1-Joyce Poon]
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Comms is finalizing

From: Bronwen Smith
Sent: March 16, 2018 10:42 AM
To: David Barrett; Nik Schruder; Bashir Bhana
Cc: Chuck Farmer; Simon Zhang; Joyce Poon
Subject: RE: Foreward to Achievable Potential Study Addendum 1

I'm just getting caught up from being on vacation. Has this been posted now? Let me know if you require any additional action from us.

Thanks,
Bronwen

From: David Barrett
Sent: March 09, 2018 12:08 PM
To: Nik Schruder; Bashir Bhana; Bronwen Smith
Cc: Chuck Farmer; Simon Zhang; Joyce Poon
Subject: RE: Foreward to Achievable Potential Study Addendum 1

I'll get this to the comms team.

From: Nik Schruder
Sent: March 09, 2018 9:41 AM
To: Bashir Bhana; David Barrett; Bronwen Smith
Cc: Chuck Farmer; Simon Zhang; Joyce Poon
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Bronwen and I are both on vacation – but I believe we didn't have any additional comments, other than changing the date.

I presume it's ready to be published on our website?

Thanks
Nik

Nik Schruder | Director, Energy Efficiency | Policy, Engagement and Innovation

From: Bashir Bhana
Sent: March 09, 2018 9:08 AM
To: David Barrett; Bronwen Smith
Cc: Nik Schruder; Chuck Farmer; Simon Zhang; Joyce Poon
Subject: RE: Foreward to Achievable Potential Study Addendum 1

I've cleaned up the document and updated the date on the cover. The attached version is good to go from my end.

Nik/Bronwen – what is the game plan for rolling this out and by when?

Thanks,
Bashir

Bashir Bhana, P.Eng. | Manager, Resource Integration
Planning, Acquisition, and Operations
Independent Electricity System Operator (IESO)
120 Adelaide Street West, Suite 1600 | Toronto, Ontario, M5H 1T1
416-969-6263 | bashir.bhana@ieso.ca | www.ieso.ca

From: David Barrett
Sent: March 05, 2018 9:58 PM
To: Bashir Bhana; Bronwen Smith
Cc: Nik Schruder; Chuck Farmer
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Here it is. It's in final view, so change tracking still visible if you show markup - do what you need to do to finalize.

From: David Barrett
Sent: March 05, 2018 5:40 PM
To: Bashir Bhana; Bronwen Smith
Cc: Nik Schruder; Chuck Farmer
Subject: Re: Foreward to Achievable Potential Study Addendum 1

I'll review some files on my end to see what I can find

Sent via IESO mobile (905) 601-6481

On Mar 5, 2018, at 13:11, Bashir Bhana <Bashir.Bhana@ieso.ca> wrote:

This version was superseded a few times.

Bashir Bhana, P.Eng. | Manager, Resource Integration
Planning, Acquisition, and Operations
Independent Electricity System Operator (IESO)
120 Adelaide Street West, Suite 1600 | Toronto, Ontario, M5H 1T1
416-969-6263 | bashir.bhana@ieso.ca | www.ieso.ca

From: Bronwen Smith
Sent: March 05, 2018 12:52 PM

To: David Barrett; Bashir Bhana
Cc: Nik Schruder; Chuck Farmer
Subject: RE: Foreward to Achievable Potential Study Addendum 1

I only have the original version that Glenna sent to the Ministry on Nov 27th.

Bronwen

From: David Barrett
Sent: March 02, 2018 9:31 AM
To: Bashir Bhana; Bronwen Smith
Cc: Nik Schruder; Chuck Farmer
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Nor do I. Bronwen, I think you and Nik have the pen?

From: Bashir Bhana
Sent: March 02, 2018 9:06 AM
To: David Barrett; Bronwen Smith
Cc: Nik Schruder; Chuck Farmer
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Thanks David.

The date on the cover page should be updated before posting. Not sure if I have the MS Word version of the document sent to the Ministry.

Bashir Bhana, P.Eng. | Manager, Resource Integration
Planning, Acquisition, and Operations
Independent Electricity System Operator (IESO)
120 Adelaide Street West, Suite 1600 | Toronto, Ontario, M5H 1T1
416-969-6263 | bashir.bhana@ieso.ca | www.ieso.ca

From: David Barrett
Sent: March 01, 2018 9:40 PM
To: Bronwen Smith; Bashir Bhana
Cc: Nik Schruder
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Post it where it makes sense for the visibility you want. My two cents is the CFF page in the APS section. Web publishing would be able to advise.

Last version I have is attached

From: Bronwen Smith
Sent: March 01, 2018 1:59 PM
To: David Barrett
Cc: Bashir Bhana; Nik Schruder
Subject: FW: Foreward to Achievable Potential Study Addendum 1

David – what are the next steps for this? Do you want us to post it on our 2016 APS webpage?

From: Schwab-Pflug, Emma (ENERGY) [<mailto:Emma.Schwab-Pflug@ontario.ca>]
Sent: February 28, 2018 11:48 AM

To: David Barrett
Cc: Syed, Usman (ENERGY); Edwards, Matthew (ENERGY); Anthony Lovachis; Nik Schruder; Bronwen Smith
Subject: RE: Foreword to Achievable Potential Study Addendum 1

Hi David,

The Ministry is comfortable with the Achievable Potential Study: Long Term Analysis (Addendum 1- Market Achievable Potential) and Market Achievable Potential: Foreword to Addendum 1 (Foreword) being made public.

Many thanks,
Emma

From: David Barrett [<mailto:david.barrett@ieso.ca>]
Sent: January-16-18 6:46 AM
To: Qureshi, Musab (ENERGY)
Cc: Schwab-Pflug, Emma (ENERGY); Edwards, Matthew (ENERGY); Anthony Lovachis; Syed, Usman (ENERGY)
Subject: RE: Foreword to Achievable Potential Study Addendum 1

Musab, here's an updated foreword. Consider this the final draft.
Thanks,
David

From: Qureshi, Musab (ENERGY) [<mailto:Musab.Qureshi@ontario.ca>]
Sent: January 02, 2018 9:36 AM
To: David Barrett
Cc: Schwab-Pflug, Emma (ENERGY); Edwards, Matthew (ENERGY); Anthony Lovachis; Syed, Usman (ENERGY)
Subject: RE: Foreword to Achievable Potential Study Addendum 1

Hi David,

Hope you had a restful holidays.

Just wanted to get an eta on when you expect to share the final version of the APS foreword with us? Would it be possible to share the final version before the end of the week?

Thanks,

Musab

From: David Barrett [<mailto:david.barrett@ieso.ca>]
Sent: December-19-17 3:48 PM
To: Qureshi, Musab (ENERGY)
Cc: Schwab-Pflug, Emma (ENERGY); Edwards, Matthew (ENERGY); Anthony Lovachis; Syed, Usman (ENERGY)
Subject: RE: Foreword to Achievable Potential Study Addendum 1

Musab, we won't be sharing the foreword today – most likely in the new year. If we can share it earlier, it will be.

Thanks,
David

From: Qureshi, Musab (ENERGY) [<mailto:Musab.Qureshi@ontario.ca>]
Sent: December 19, 2017 9:34 AM
To: David Barrett

Cc: Schwab-Pflug, Emma (ENERGY); Edwards, Matthew (ENERGY); Anthy Lovachis; Syed, Usman (ENERGY)
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Hi David,

We were wondering if it's possible to share with us the final versions of the Foreword and the Addendum today.

We can then quickly share with our Deputy Minister's Office and have this all wrapped up before the holidays.

Thanks,
Musab

Musab Qureshi | Senior Policy Advisor
Energy Conservation Policy
Ontario Ministry of Energy
Tel.: 416-212-4283

From: Syed, Usman (ENERGY)
Sent: December-15-17 12:10 PM
To: David Barrett (david.barrett@ieso.ca)
Cc: Schwab-Pflug, Emma (ENERGY); Qureshi, Musab (ENERGY); Edwards, Matthew (ENERGY); Anthy Lovachis
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Hi David,

Thanks for the edits, they look great.

We have one final comment. Could the IESO make the following edit to the footnote on page 4

The planning outlook assumes under the cap and trade program, the carbon price ranges from \$18/tonne in 2017 to \$40/tonne by 2035, averaging \$30/tonne throughout the planning period. ~~Further information can be found in LTEP Module X~~ <add link>.

Our recommendation is that the addendum be released prior to the release of the modules. Hence it would not be appropriate for the Foreword to reference a document that hasn't yet been published.

Once the above change has been made, could the IESO share with us final versions of the Foreword and the Addendum that you intend to publish. We'd like to do a final check in with our Deputy Minister's Office before the documents are released, thanks...

- Usman

From: David Barrett [<mailto:david.barrett@ieso.ca>]
Sent: December-15-17 8:00 AM
To: Schwab-Pflug, Emma (ENERGY)
Cc: Syed, Usman (ENERGY); Qureshi, Musab (ENERGY); Edwards, Matthew (ENERGY); Anthy Lovachis
Subject: RE: Foreward to Achievable Potential Study Addendum 1

Hi Emma, I've attached the updated foreward, FYI. Comments back in order of yours:

- This was clarified, thanks
- Added the item in red with an increment of \$9.5B
- Thanks, changes were made to restructure this
- Clarified this as an average over the planning period. We recommend including the carbon price outlook in the LTEP modules and the foreword can then refer to the module. The revised module shortly will be sent over shortly.

- Thanks, this was clarified as a maximum value.

David

From: Schwab-Pflug, Emma (ENERGY) [mailto:Emma.Schwab-Pflug@ontario.ca]

Sent: December 07, 2017 4:12 PM

To: David Barrett

Cc: Syed, Usman (ENERGY); Qureshi, Musab (ENERGY); Glenna Ford; Edwards, Matthew (ENERGY)

Subject: FW: Foreward to Achievable Potential Study Addendum 1

Hi David, please find below our feedback on the foreword to the APS addendum. We understand IESO is looking to post this before the LTEP modules are released. We'd be happy to discuss.

Thank you,
Emma

ENERGY Feedback on Foreword to APS Addendum

- Given that the publication date for the Foreword is after LTEP 2017, it will be important to clarify whether the analysis in the Foreword incorporates 2017 LTEP supply and demand assumptions. It is also important to clarify that the impact of the Ontario Fair Hydro plan is not considered in the analysis, and to explain why. Suggest these details be added upfront to the Background section.
- Suggested edit to page 1 (in red): "The MAP identified that 29 TWh of cost-effective achievable conservation potential are available by 2035 at a cost of approximately \$15 billion. This represents an incremental potential of 11.2 TWh and an incremental budget of \$14.5 billion relative to the Budget-Constrained Achievable Potential."
- Page 3: "A variety of electricity resources could help meet needs under each outlook. Higher levels of conservation savings would tend to reduce the need for such resources."
 - The reading flow is a bit awkward here since by design the MAP outlook considers higher conservation savings. Is there a better way to structure this?
- Page 4: "The average cost of this incremental GHG reduction ranges from \$100 to \$200/tonne, compared to the economic value of cap and trade of about \$30/tonne throughout the planning period."
 - Could we add a footnote to this indicating that \$30/tonne is an average for the planning period. Please also include the source for this estimate.
 - For comparison purposes, suggest also referencing the cost per tonne estimates included in the Climate Change Action Plan
- Page 4: "As the incremental conservation in the MAP Outlook begins to ramp up in 2021 after the current CFF ends, the incremental cost of the MAP would exceed the avoided cost of supply resources between 2021 and 2030, leading to an average \$600 million per year increase in the total cost of electricity service during this period."
 - This statement is misleading. Our understanding is that \$600 million is a maximum per year amount rather than an average amount between 2021 and 2030 (May 24 IESO deck, slide 3). Please correct – we had seen \$100-\$200 million in the May deck.

From: Glenna Ford [<mailto:Glenna.Ford@ieso.ca>]
Sent: December-01-17 3:23 PM
To: Schwab-Pflug, Emma (ENERGY)
Cc: matthew.edward@ontario.ca; David Barrett
Subject: FW: Foreward to Achievable Potential Study Addendum 1

Emma:

Do you know if the ministry will be providing feedback on this document today?

Thank you.

Glenna

From: Glenna Ford
Sent: November 27, 2017 11:59 AM
To: emma.schwab-pflug@ontario.ca; 'usman.syed@ontario.ca'; 'kaili.sermat-harding@ontario.ca'
Cc: 'matthew.edwards@ontario.ca'; David Barrett
Subject: Foreward to Achievable Potential Study Addendum 1

All:

Please find attached a draft of the foreword that is to accompany the 2016 IESO Market Achievable Potential (MAP) study to be posted on the IESO website. The purpose of the forward is to provide context for the addendum and to summarize the IESO's assessment of the merits of increasing the conservation targets at this time. The assessment indicates that a need does not exist today to increase conservation targets; however, we should continue to look for opportunities to maximize the value conservation resources provide.

We would ask that you provide your feedback on this document by EOD Friday, December 1.

Many thanks.

Glenna

This e-mail message and any files transmitted with it are intended only for the named recipient(s) above and may contain information that is privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient(s), any dissemination, distribution or copying of this e-mail message or any files transmitted with it is strictly prohibited. If you have received this message in error, or are not the named recipient(s), please notify the sender immediately and delete this e-mail message.