

Message

From: Andrew Dow [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6268B334C119488B888395BBA8B155D9-ANDREW DOW]
Sent: 2017-09-26 5:29:46 PM
To: John Cannella [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cd667c6d53774dd0a749783bb02ae89d-John Cannel]; David Barrett [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ef6f3b035ceb494099260e6fa7603f36-David Barre]
CC: Jordan Penic [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7d23bcd450594583bb40b447b35485da-Jordan Peni]; Mary Bernard [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7e3e3e8d7f9345c2b0aab3e0fd7a79f2-Mary Bernar]
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Nothing else from me. I think this is the best we've got. I'd suggest throwing it on IESO letterhead and removing the parts that are about the OPSE report, which I can do tomorrow.

Andrew Dow | Communications Strategy Advisor
Independent Electricity System Operator (IESO) | T: (416) 506-2827

From: John Cannella
Sent: September 26, 2017 5:16 PM
To: David Barrett
Cc: Jordan Penic; Mary Bernard; Andrew Dow
Subject: Fwd: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Dave--sent this to the wrong Dave.

iPhones....

Sent from my iPhone

Begin forwarded message:

From: John Cannella <John.Cannella@ieso.ca>
Date: September 26, 2017 at 5:12:39 PM EDT
To: Jordan Penic <jordan.penic@ieso.ca>, David Wilson <David.Wilson@ieso.ca>
Cc: Andrew Dow <Andrew.Dow@ieso.ca>, Mary Bernard <Mary.Bernard@ieso.ca>
Subject: Fwd: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

As per your email. The attached has some messages on SBG.

Andrew--anything else you can share?

Sent from my iPhone

Begin forwarded message:

From: Andrew Dow <Andrew.Dow@ieso.ca>
Date: June 29, 2017 at 1:51:27 PM EDT
To: John Cannella <John.Cannella@ieso.ca>, Jordan Penic <jordan.penic@ieso.ca>, Mary Bernard <Mary.Bernard@ieso.ca>
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Good set of notes John!

I've taken some key points throughout and brought them up to the top to create a mini narrative for Chuck. Let me know what you think.

I also added a brief section at the bottom on the interruptible retail pricing proposal – essentially we are in favour of transparent prices that reflect system conditions and costs. But retail pricing is the domain of the OEB.

Andrew Dow | Analyst, Issues Management
Independent Electricity System Operator (IESO) | T: (416) 506-2827

From: John Cannella
Sent: June 29, 2017 1:10 PM
To: Jordan Penic; Mary Bernard; Andrew Dow
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes
Importance: High

Attached is the briefing note for Chuck's interview at 2 p.m.

Andrew—can you please include anything I may have missed and include Tom and Barb's take on how MR addresses the voluntary interruptible retail market idea.

Jordan, Mary—in the interest of time, can you please take a look at what I've put together so far. I didn't have much time to do a thorough spell check, so apologies if there are some spelling errors.

I'll also see what messaging we have on the storage pilots in the meantime.

John

From: Jordan Penic
Sent: June 29, 2017 12:07 PM
To: Kate Longmoore; Mary Bernard; John Cannella
Cc: Andrew Dow
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

More detailed transcript. Can we also include a bullet on our storage pilot programs?

From: Jordan Penic
Sent: June 29, 2017 12:02 PM
To: Kate Longmoore; Mary Bernard; John Cannella
Cc: Andrew Dow

Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

See attached transcript

From: Kate Longmoore
Sent: June 29, 2017 11:27 AM
To: Mary Bernard; Jordan Penic; John Cannella
Cc: Andrew Dow
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

What do we think about Leonard?

Kate Longmoore | T: (416) 506-2805 | C: (905) 510-4769

From: Mary Bernard
Sent: June 29, 2017 11:25 AM
To: Jordan Penic; John Cannella
Cc: Andrew Dow; Kate Longmoore
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

I agree a call might be best for this one. Do we want to check on Chuck's availability or someone else?

Mary

From: Jordan Penic
Sent: June 29, 2017 11:17 AM
To: John Cannella; Mary Bernard
Cc: Andrew Dow; Kate Longmoore
Subject: RE: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Thanks John.

Can you two also prepare messaging for:

- exports and how they work,
- messaging around oversight that responds with a combination of the new planning process (focus on the 2016 OPO), and market renewal
- agree with the idea of building out our single bullet re market renewal and the future efficiencies (also \$s) that could be achieved instead of commenting on the voluntary interruptible retail market.

-Jordan

From: John Cannella
Sent: June 29, 2017 11:09 AM
To: Jordan Penic; Mary Bernard
Cc: Andrew Dow; Kate Longmoore
Subject: Media request--QP Briefing--Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes
Importance: High

As mentioned—here is the request from QP Briefing.

Andrew—can we coordinate on our SBG messages. I'll pull up what we have from past requests on SBG. Can you also pull up what you have. Thanks.

Not sure we'd want to get into too much detail on his second question regarding OSPE's role in planning the design of the sector but it may be a good opportunity to work in market renewal and the active engagement with stakeholders we are undertaking with market renewal.

I think a phone call is best for this one but I will defer to you on how you wish to approach this one.

From: Reynolds, Christopher [<mailto:creynolds@qpbriefing.com>]

Sent: June 29, 2017 11:00 AM

To: John Cannella

Subject: FW: Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Hi John:

I was hoping to chat with an expert today on whether this take on clean electricity waste holds up.

Also looking to learn more about surplus energy sold at a discount, and the Ontario Society of Professional Engineers' suggestions for how to deal with that excess clean energy. (Those suggestions include reducing rates and establishing a "voluntary interruptible retail electricity market.")

OSPE argues the government "must restore the oversight of professional engineers in the detailed planning and design of Ontario's power grid." Would be great to hear IESO's take on that too.

I was looking to speak with someone today if possible (the sooner the better on our end).

Thanks very much,
Chris

Christopher Reynolds
Reporter
QP Briefing
416-212-5816
@ChrisAReynolds

From: Patrick Sackville [<mailto:patrick@ospe.on.ca>]

Sent: Wednesday, June 28, 2017 11:20 PM

Subject: Engineers: Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

For Immediate Release

June 29, 2017

Ontario Wasted More Than \$1 Billion Worth of Clean Energy in 2016, Enough to Power 760,000 Homes

Toronto, ON – Following a detailed analysis of year-end data issued by the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG), the Ontario Society of Professional Engineers (OSPE) is reporting that in 2016, the province wasted a total of 7.6 terawatt-hours (TWh) of clean electricity – an amount equal to powering more than 760,000 homes for one year, or \$1 billion.

“This represents a 58 per cent increase in the amount of clean electricity that Ontario wasted in 2015 – 4.8 TWh – all while the province continues to export more than 2 million homes-worth of electricity to neighbouring jurisdictions for a price less than what it cost to produce,” said Paul Acchione, P.Eng., energy expert and former President and Chair of OSPE.

OSPE shared these findings with all three major political parties, and will be at Queen’s Park this morning to speak to media regarding the importance of granting professional engineers more independence in the planning and designing of Ontario’s power system.

So why is Ontario wasting all this energy?

“Curtailment is an industry term that means the power was not needed in Ontario, and could not be exported, so it was dumped. It’s when we tell our dams to let the water spill over top, our nuclear generators to release their steam, and our wind turbines not to turn, even when it’s windy,” said Acchione.

“These numbers show that Ontario’s cleanest source of power is literally going down the drain because we’re producing too much. Speaking as an engineer, an environmentalist, and a rate payer, it’s an unnecessary waste of beautiful, clean energy, and it’s driving up the cost of electricity.”

In addition to curtailment, surplus hydroelectric, wind, and nuclear generation was exported to adjoining power grids in 2014, 2015, and 2016 at prices much lower than the total cost of production. This occurs because Ontario produces more clean electricity than it can use, so it is forced to sell off surplus energy at a discounted rate. Total exports in 2016 were 21.9 TWh compared to 22.6 TWh in 2015, and a significant portion was clean, zero-emission electricity.

“Taken together, those total exports represent nearly enough electricity to power every home in Ontario for an entire year,” said Acchione. “OSPE continues to assert that the government must restore the oversight of professional engineers in the detailed planning and design of Ontario’s power grid to prevent missteps like this from happening.”

Engineers have solutions

Because Ontario is contractually obligated to pay for most of the production costs of curtailed and exported energy, OSPE believes it would be better to find productive uses for the surplus clean electricity to displace fossil fuel consumption in other economic sectors. In the summer of 2016, OSPE submitted

an advisory document to the Minister of Energy and all three major political parties detailing 21 actionable recommendations that would deliver efficiencies and savings, including reducing residential and commercial rates by approximately 25 per cent, without the creation of the subsidy and deferral account under the Ontario Fair Hydro Act.

OSPE also recommended the establishment of a voluntary interruptible retail electricity market in order to make productive use of Ontario's excess clean electricity. This market would allow Ontario businesses and residents to access surplus clean power at the wholesale market price of less than two cents per kilowatt-hour (KWh), which could displace the use of fossil fuels by using things like dual fuel (gas and electric) water heaters, and by producing emission-free hydrogen fuel.

Ontario is currently in the process of finalizing its 2017 Long Term Energy Plan (LTEP), a multi-year guiding document that will direct the province's investments and operations related to energy. This presents a key opportunity for the government to reduce Ontarians' hydro bills by making surplus clean electricity available to consumers.

"It is imperative that we depoliticize what should be technical judgments regarding energy mix, generation, distribution, pricing and future investments in Ontario," said Jonathan Hack, P.Eng., President & Chair of OSPE. "We are very concerned that the government does not currently have enough engineers in Ministry staff positions to be able to properly assess the balance between environmental commitments and economic welfare when it comes to energy."

"Professional Engineers must be given independence in planning and designing integrated power and energy system plans, which will in turn benefit all Ontarians."

About the Ontario Society of Professional Engineers (OSPE)

OSPE is the voice of the engineering profession in Ontario, representing more than 80,000 professional engineers and 250,000 engineering graduates, interns, and students.

OSPE's 2012 report *Wind and the Electrical Grid: Mitigating the Rise in Electricity Rates and Greenhouse Gas Emissions* detailed the mounting risk of hydraulic spill, nuclear shutdowns, and periods of negative wholesale electricity prices during severe surplus base load generation.

While curtailment will decrease during the nuclear refurbishment program that began in October 2016 and the retirement of the Pickering reactors scheduled to occur from 2022 to 2024, it will rise again when the refurbished reactors return to service, unless the government takes action.

OSPE's Energy Task Force has provided strategic engineering input to Ontario's Ministry of Energy for more than ten years. The majority of OSPE's recommendations have been fully or partially implemented over the past five years, saving consumers hundreds of millions of dollars per year. But more can be done if government engages Ontario's engineers to optimize the use of the province's clean electrical power system.

Media Contact:

Carolyn Skinner, Manager, Strategic Communications & Public Affairs
(647) 981-4494, cskinner@ospe.on.ca