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and
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Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

September 17, 2021

Dear Leonard and Chuck,

This submission responds to the Independent Electricity System Operator's (IESO's) inaugural Annual Acquisition Report (AAR) that was released on July 19, 2021¹ and IESO's August 26, 2021 *Medium-Term RFP Engagement Kick-Off* presentation² within the Resource Adequacy stakeholder engagement. We have combined these two topics because of their linkages regarding identification of Ontario's future supply needs, corresponding plans to procure resources, and selection of procurement mechanisms to meet these needs.

Power Advisory has coordinated this submission on behalf of a consortium of renewable generators, energy storage providers, and the Canadian Renewable Energy Association (the "Consortium"³).

SUMMARY OF KEY POINTS

The following are key points regarding the AAR and the medium-term Request for Proposals (RFP).

- Ontario's future supply needs may be greater than forecasted in the AAR, especially accounting for potential electrification and retirement of generators post expiry of contracts
- Procurement mechanisms within the Resource Adequacy Framework need to be flexible (e.g., increase eligibility for participation within the medium-term RFP, IESO should procure multiple electricity products and meet multiple goals and objectives (e.g., economic, climate, etc.) as warranted)

¹ See <https://www.ieso.ca/en/Sector-Participants/IESO-News/2021/07/Annual-Acquisition-Report-sets-out-next-steps-to-secure-Ontarios-future-resource-needs>

² See <https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Resource-Adequacy-Engagement>

³ The members of the Consortium are: Canadian Renewable Energy Association; Axiom Infrastructure; BluEarth Renewables; Boralex; Capstone Infrastructure; Cordelio Power; EDF Renewables; EDP Renewables; Enbridge; ENGIE; Evolugen (by Brookfield Renewable); H2O Power; Kruger Energy; Liberty Power; Longyuan; NextEra Energy Canada; Pattern Energy; Suncor; and wpd Canada.

- Clarity is needed regarding continued operations of renewable generators and energy storage facilities post expiry of contracts towards helping to meet future supply needs and broader policy objectives (e.g., economic, climate, etc.) relating to their participation within future procurement mechanisms (e.g., RFPs, ability to re-contract, etc.), to help owners/operators and lenders make sound and timely investment decisions

The sections below provide context regarding these key points and other important matters.

COMMENTARY ON AAR

The Consortium commends IESO for developing the AAR and supports its objectives in defining Ontario's power system needs (e.g., supply) including procurement plans and selection of procurement mechanisms to meet these needs. The Consortium understands that future AARs will necessarily evolve and looks forward to engaging with IESO and other market participants (MPs) and stakeholders on this matter.

Listed below are specific comments organized by select sections within the AAR.

Understanding Ontario's Reliability Needs

The Consortium agrees with IESO's forecasted capacity and energy supply needs, as indicated within the Figures below.⁴

The supply-side factors driving future capacity and energy needs result from planned refurbishment and retirement of nuclear generators and potential for additional retirement of generators post expiry of contracts. Therefore, it is reasonable to expect increasing capacity needs starting in the mid 2020s (coinciding with refurbishment and retirement of nuclear generators) followed by additional capacity and energy needs starting in the late 2020s (coinciding with potential for retired generators post expiry of contracts).

The Consortium believes that IESO's Scenario 1 should be the guide to address future capacity and energy needs, as electricity demand has recovered more quickly than expected from the COVID-19 related economic downturn and demand has been forecasted to increase in the residential, agriculture, and industrial sectors. For example, demand has been forecasted by IESO to increase by approximately 2,000 MW in the West of London Area over the coming years.⁵

⁴ Figure 2 and Figure 4 from AAR

⁵ See *Electricity Planning in the West of London Area* (November 26, 2020) located at <https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Integrated-Regional-Resource-Plan-Windsor-Essex>

Figure 2 | Summer Capacity Surplus/Deficit, without Continued Availability of Existing Resources (MW) – adapted from the 2020 APO

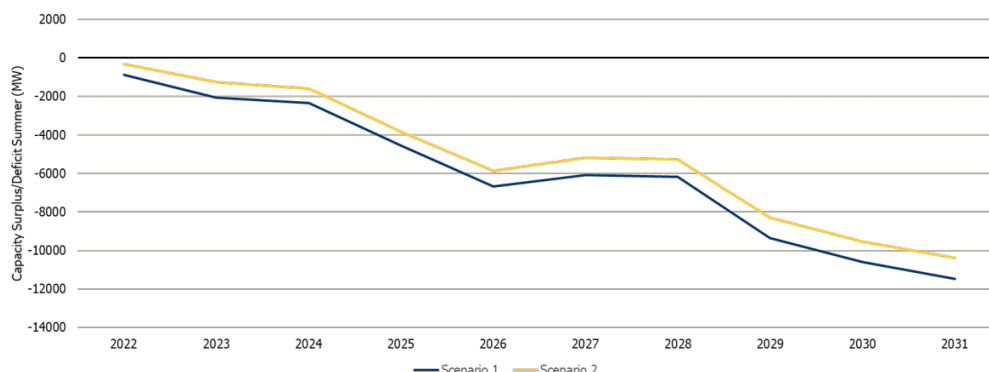
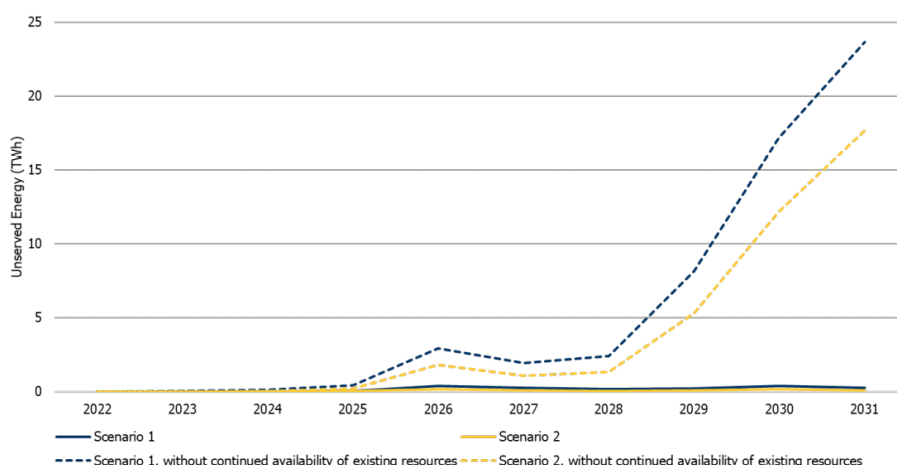


Figure 4 | Potentially Unserved Energy (TWh) – adapted from the 2020 APO



The Consortium agrees with IESO's summary of factors and uncertainties that could alter future capacity and energy needs.

Regarding the demand-side factors and uncertainties, these are common across all electricity markets, where for Ontario the Consortium believes that the probability of demand increasing (e.g., due to economic activity, potential electrification, etc.) is greater than demand decreasing (e.g., due to energy management, etc.). The Consortium believes that demand may increase greater than what IESO has forecasted under Scenario 1 due to the likely potential of future electrification in Ontario.

Regarding the supply-side factors and uncertainties, considering future capacity and energy needs which include IESO's plans to procure new resources to be developed, the Consortium suggests that financing new projects is a factor that should be included. This is especially so considering potential for

existing resources and new projects to face greater merchant exposure and risk within the IESO-Administered Markets (IAM). Merchant risk will increase considering IESO's proposed move away from longer-term contracts, potential to procure just capacity (potentially not procuring other electricity supply products (e.g., energy, etc.)), and the lack of a regulatory framework within Ontario to support renewable energy corporate Power Purchase Agreements (PPAs)⁶ and inability to execute bilateral contracts with other buyers (e.g., utilities, etc.) – both of which are typically used within other jurisdictions to offset merchant risk. Further, the cost of financing projects is a future uncertainty resulting from greater merchant risk within IAM and uncertainties with how IAM will function post implementation of the Market Renewal Program, including certainty of revenue sources within IAM and eligibility to contract with IESO and/or other buyers.

Finally, partially relating to the project financing points above, the Consortium suggests revenue adequacy within IAM should be listed as a supply-side uncertainty. For example, to the extent that operating generators and storage facilities may not be able to recover their costs with an acceptable rate of return on investments from revenues within IAM (assuming these resources are not re-contracted, including for a sufficient period), this could result in retirement of these resources post expiry of contracts and will likely make it economically impractical to make investments in emerging resources, particularly in newer technologies such as energy storage, 'hybrid' renewable generation and storage, and hydrogen.

Ontario does not exist in a vacuum – many other jurisdictions around the world, including Europe, the U.S. (e.g., New York, New England, etc.)⁷, and even next door in Quebec, are offering long-term contracts with favourable investment policies for generation supply. Ontario must compete against those jurisdictions for investment spending, especially from developers with needed experience and track record to meet Ontario's future supply needs alongside meeting policy goals and objectives.

The Resource Adequacy Framework

As stated within previous submissions to IESO relating to the Resource Adequacy stakeholder engagement, at a principled and directional level, the Consortium continues to support the Resource Adequacy Framework.

Regarding planned procurements to meet medium-term supply needs, the Consortium supports IESO's plans to run these procurements on a cyclical basis, and accepts that procurement process details (e.g., provisions and terms within RFPs and contracts, eligibility rules, etc.) will be addressed within future stakeholder engagement initiatives relating specifically to respective procurements. Specific comments relating to the medium-term RFP are provided in the next main section below.

⁶ See Appendix A for more information on corporate PPAs within Canadian and U.S. jurisdictions outside of Ontario

⁷ See Appendix B for select RFPs in New York and New England that will result in execution of long-term contracts for new renewable generation projects. This is occurring alongside the long-standing operations of the NYISO and ISO-NE wholesale electricity markets, including Capacity Markets.

Within the Resource Adequacy Framework, the Consortium recommends that IESO must consider the economic benefits to Ontario's electricity customers when renewable generation and energy storage resources (including hybrid renewable generation and energy storage) are eligible to participate when designing procurement mechanisms to meet medium-term and long-term supply needs. There is no benefit to IESO or Ontario's electricity customers in preventing renewable energy and storage resources from participating in procurement processes. For example, RFPs and contracts are flexible mechanisms where provisions and terms can be tailored from procurement to procurement to better enable effective results. This will best ensure maintaining continued operation of low-cost renewable generators and not result in potential needless decommissioning of these facilities post expiry of contracts. If decommissioning were to occur, IESO will then need to procure more costly sources of energy supply to meet future needs.

Even though details will be addressed within future stakeholder engagement initiatives for respective procurements, the AAR suggests a Resource Adequacy Framework of IESO procuring unforced capacity (UCAP) within Capacity Auctions (CAs) and RFPs/contracts (or enhanced CAs) to meet short-term, medium-term, and long-term capacity needs via no more than 1 year, 3 to 5 year, and 7 to 10 year commitments respectively, with optionality to maybe procure additional electricity products within medium-term and long-term procurements. On surface, this appears very much like the basic Capacity Market construct administered in NYISO, ISO-NE, and PJM, where NYISO procures UCAP mainly on monthly and seasonal bases, ISO-NE and PJM procure UCAP from operating resources in blocks of 3 to 4 years, and ISO-NE procures UCAP from new projects for approximately 7 years. Because of Ontario's resource mix (i.e., higher proportion of renewable generators and distributed energy resources) and unique electricity market structure, IESO should work with MPs and stakeholders to define Ontario-specific procurement mechanisms (e.g., rules, provisions, terms within CAs, RFPs/contracts, etc.) within the Resource Adequacy Framework.

The Consortium recommends that IESO take advantage of the flexible nature of RFPs and contracts within the Resource Adequacy Framework and therefore not tie itself to procuring only UCAP and only for limited amounts of years under circumstances where different provisions and terms could result in more effective outcomes towards meeting multiple procurement goals and objectives including government policies. Further, considering that the resource mix of supply-side and demand-side resources are becoming more inverter-based, fast responding, less greenhouse gas (GHG) emitting, and embedded or distribution-connected, resource adequacy methods and associated electricity products (e.g., UCAP) to be procured to meet traditional reliability standards are becoming less and less adequate and optimal to meet power system needs now and in the future. For example, a recently released report, *Redefining Resource Adequacy for Modern Power Systems*,⁸ by the Energy Systems Integration Group (ESIG), based in the U.S., provides an overview of key drivers that are changing the way resource adequacy needs to be evaluated, identifies shortcomings of conventional resource adequacy approaches

⁸ See <https://www.esig.energy/resource-adequacy-for-modern-power-systems/>

and methodologies, and outlines the following principles for utilities and system operators to consider as they should look to adapt their approaches and methodologies.

- Principle 1 – quantifying size, frequency, duration, and timing of capacity shortfalls is critical to finding the right resource solutions
- Principle 2 – chronological operations must be modeled across many weather years
- Principle 3 – there is no such thing as perfect capacity
- Principle 4 – load participation fundamentally changes the resource adequacy construct
- Principle 5 – neighbouring grids and transmission should be modeled as capacity resources
- Principle 6 – reliability criteria should be transparent and economic

Regarding the decision-making process relating to selection of procurement mechanisms and timing of administering procurements, the Consortium supports IESO's listed decision-making principles.

Planned Actions: Ensuring Adequacy Over Different Timeframes

Regarding IESO plans for bilateral negotiations to sole source contracts for the Lennox generation station (GS) and Brighton Beach GS, the Consortium understands these generators are needed to meet very specific local power system needs. While it appears that IESO applied decision-making principles to help determine that bilateral contract negotiations are the best procurement mechanism, the Consortium requests IESO to publicly release analysis and information regarding other resource options that were explored and assessed towards potentially meeting local power system needs detailed within the AAR. Further, in future, the Consortium recommends that IESO publicly provide identification of all potential resource options to meet specific power system needs – this will more transparently justify any future negotiations of sole-sourced bilateral contracts and selected procurement mechanisms.

Regarding the planned RFP to be initialized in late 2022 for at least 1,000 MW to meet long-term supply needs, the Consortium is concerned about IESO's proposed 7 to 10 year contract term for new projects and/or repowered projects regarding the ability and cost of project financing. If IESO has consulted with lenders (e.g., equity providers, debt providers) on the workability of a 7 to 10 year contract term for new and/or repowered projects, then the Consortium requests IESO to disclose feedback received from lenders. If IESO has not consulted with lenders, the Consortium recommends IESO do so and report back to stakeholders prior to launching a stakeholder engagement initiative regarding the RFP to address long-term supply needs.

As stated within our July 17, 2021 submission commenting on the May 28, 2021 IESO resource adequacy presentation⁹, there are many reasons why IESO should enable future flexibility to procure multiple electricity products (not just UCAP) through contracts resulting from RFPs to meet medium-term and long-term supply needs. The following points are some examples that could arise in the future over the timeframe to which IESO has forecasted that Ontario's power system will need supply (i.e., mid-2020s to mid-2030s) from existing resources and projects to be built – that could justify reasons for needed procurement/contracting flexibility. Many of these examples relate to potential future government policy decisions, which should be considered when designing procurements – especially since IESO has identified government policy decisions as a supply-side uncertainty.

- Maintaining existing capacity and energy supply at cost-effective prices
- Continue utilizing existing sites and grid connections of existing resources for continued operation, re-powering, uprates, expansion, etc.
- Regarding potential re-powering, uprates, expansion, maintaining operations of renewable generators and storage will provide opportunities to develop hybrid projects (e.g., storage co-located with renewable generators, etc.) that could meet multiple power system needs
- Monetizing Environmental Attributes (EAs) (e.g., Renewable Energy Certificates (RECs), etc.) from existing resources and/or new resources, especially considering the growing demand for EAs, RECs, etc.
- Exponential growth of 'corporate' buyers (e.g., commercial customers, industrial customers, etc.) of renewable energy, EAs/RECs,¹⁰ etc., that could be enabled in the future within Ontario if Global Adjustment charges decrease (as projected), additional to potential future emergence of other buyers (e.g., Local Distribution Companies (LDCs) or affiliates of LDCs, retailers, aggregators, co-ops of buyers, etc.)
- Maintaining existing renewable generators and storage facilities helps to maintain Ontario's relatively low GHG emissions within Ontario's electricity market, helping to meet GHG emission targets, goals, objectives
- Maintaining existing renewable generators and storage facilities is in-line with multiple government policies regarding climate change, technological innovation, economic development, etc., including policies set at multiple levels of government (i.e., federal, provincial, municipal)

⁹ See <https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Resource-Adequacy-Engagement>

¹⁰ See Appendix A

Overall, the Consortium believes the above points represent powerful reasons why further stakeholder engagement is required regarding the future of renewable generators and storage resources well before their contracts expire with IESO. Therefore, the Consortium recommends these themes and points be specifically addressed within the Resource Adequacy stakeholder engagement meetings throughout 2021 and 2022.

Additional Comments on AAR

Regarding the resources listed as “Potential Government Policy” in Figure 13, Table 1, and Table 2, the Consortium requests IESO to clearly state what supply is represented (i.e., presumably Oneida Battery Park, Lake Erie Connector, Calstock GS) and how the supply numbers were calculated. If the supply numbers represent aggregate UCAP, then the Consortium requests more information on how IESO may be planning for the potential integration of the Lake Erie Connector within IAM. Considering that the Lake Erie Connector is a 1,000 MW high voltage direct current transmission line, its UCAP value should be much higher than indicated by the supply numbers listed in Figure 13, Table 1, and Table 2 (if Lake Erie Connector was included).

MEDIUM-TERM RFP ENGAGEMENT KICK-OFF AUGUST 26 PRESENTATION

General Comments

The Consortium understands that more details are still to come regarding the medium-term RFP to meet capacity needs in the 2026 to 2029 timeframe. However, based on information from IESO to date regarding this RFP, renewable generators and storage facilities (whether MPs or not MPs within IAM) will be disadvantaged compared to other resource technologies towards their potential participation within this RFP. This is despite wind generation having the lowest levelized cost of energy in Ontario.

Within specific procurement initiatives to contract for resources to meet Ontario's supply needs, including the medium-term RFP, the Consortium recommends that IESO must consider the economic benefits to Ontario's electricity customers when renewable generation and energy storage resources are eligible to participate when designing procurement mechanisms to meet medium-term and long-term supply needs. There is no benefit to IESO or customers in preventing renewable generation, storage, and hybrid renewable generation and storage resources from participating in procurement processes.

As stated in the applicable section above, while the Consortium understands that more details will be addressed within future stakeholder engagements regarding the medium-term RFP to procure up to 750 MW of resources to meet supply needs between 2026 and 2029, it is important to best ensure competition by permitting as many resources as practicable to be eligible for participation within this RFP. The Consortium supports IESO's objective of competitive RFPs, and therefore recommends that co-locating storage projects on sites of contracted and operating renewable generators to form hybrid projects be permitted for participation within the forthcoming RFP. In addition to enhancing

competition, these hybrid projects will be able to meet IESO stated power system needs for 'peaking capacity' and some projects will be very well electrically located to effectively meet local reliability needs.

The AAR states that there is at least 1,000 MW of existing capacity available from resources that could be eligible to participate within the medium-term RFP. The Consortium does not think this is an accurate quantity for IESO to justify likely competition because it does not represent a UCAP value. Therefore, the Consortium recommends that IESO provide an aggregate UCAP estimate of all resources with contracts expiring prior to summer 2027, regarding their eligibility for participation within this RFP. Such a UCAP estimate will be lower than the 1,000 MW aggregate capacity, therefore decreasing potential competition. This is a clear indication as to why IESO should design the RFP and contract provisions and terms to permit a greater number of participants (e.g., enabling hybrid renewable generator and storage projects).

Specific Comments

On slide 10, capacity will be procured via the medium-term RFP for the May 1, 2026 to April 30, 2029 commitment period. Considering that CAs with minimum capacity targets will be administered in parallel to the medium-term RFP, it will be challenging for potential RFP participants to gauge how much aggregate capacity will be procured between both mechanisms. Therefore, it will be challenging to determine what impacts this will have regarding the wholesale energy and ancillary services markets, which could exacerbate merchant risk given the necessary reliance on wholesale energy market revenues. Therefore, the Consortium recommends specific consultations on the interplay between CAs and RFPs.

Further, the Consortium recommends that IESO make public sufficient data and information with required granularity (i.e., hourly) within useable formats relating to key drivers that influence the formulation of existing wholesale prices (e.g., Hourly Ontario Energy Price (HOEP), five-minute Market Clearing Price (MCP), operating reserve (OR) price, etc.) that will influence the formulation of future wholesale prices (e.g., Locational Marginal Price (LMP) for energy and OR), such as, but not limited to: transmission congestion and losses; zonal limits and power flows from zone to zone; zonal demand (actual and forecast); zonal supply (including by MP resource); planned transmission upgrades and expansions; etc. Robust and sufficient data and information will help potential RFP participants to model merchant exposure and risks.

As stated throughout previous sections of this submission, the Consortium is concerned with IESO plans to solely procure UCAP through a capacity style contract, as stated on slide 11. This concern will increase over time, as contracts with renewable generators increasingly expire from the late 2020s through the 2030s. Therefore, considering the plan of a series of cadenced medium-term RFPs, the Consortium recommends that IESO frequently meet with renewable generators and energy storage providers throughout 2021 and 2022 towards workable RFP and contract design solutions for future medium-term and long-term procurement initiatives.

On slide 13, IESO has proposed that eligible resources must have contracts with IESO or the Ontario Electricity Financial Corporate (OEFC) expire by April 30, 2027. Consistent with the point made in the section above regarding eligible supply as indicated within the AAR, the Consortium requests that IESO publicly release a list of all IESO and OEFC contracted resources with contracts due to expire by April 30, 2027, along with the UCAP ratings for each of these resources.

The Consortium understands that details like the definition of “uprate” will be consulted with potential medium-term RFP participants and stakeholders upon release of the draft medium-term RFP. However, slide 15 indicates potential for “uprate” to mean very different things. The Consortium is of the general view that how such key terms will be defined will either create more or less competition.

Building on the point of competition within the medium-term RFP, the Consortium does not agree with IESO’s proposal to exclude new build, expansions (e.g., developing storage on-site of an operating renewable generator as a hybrid resource), directly connected loads with BTM generation, and virtual demand response. Considering that contracts are scheduled to be awarded in Q3/22, some uprate, new build, or expansion projects could be on-line to meet IESO’s May 1, 2026 timeline for capacity supply. This can be enabled, especially so, given site control and minimal (if any) permit and approval requirements for some projects while not requiring amendments to existing contracts. Therefore, the Consortium strongly recommends that IESO reconsider this position.

On slide 23, IESO notes that resources with expired contracts will have options to participate in CAs and medium-term RFPs when eligible – which are two main procurement mechanisms with the Resource Adequacy Framework. The Consortium recommends that more consultation is needed regarding decision rules within the Resource Adequacy Framework to provide clarity on how the procurement mechanisms (i.e., CAs, medium-term RFPs, long-term RFPs, sole sourced bilateral contract negotiations, etc.) will be administered in parallel – what are the linkages to meeting power system needs, linkages from procurement mechanism to mechanism, resource eligibility, etc. This will enable more informed investment decisions on behalf of resource owners/operators and their lenders.

Finally, on slide 27, as stated in the first main section within this submission, there is growing evidence through thorough analysis and research that conventional resource adequacy approaches and methodologies have shortcomings. Therefore, utilities and system operators should consider adaptation of their resource adequacy approaches and methodologies – determining resource adequacy requirements for the power system, supply contribution from different resources and technologies, and procurement mechanisms. While most Consortium members regularly participate within the Capacity Markets administered by NYISO, ISO-NE, and PJM, and therefore have familiarity with UCAP procurement, these markets are presently being challenged in terms of how they effectively ensure resource adequacy – and cost-effectively so on behalf of electricity customers. Therefore, the Consortium recommends that IESO learn from those jurisdictions, acknowledge Ontario’s unique resource mix and market structure characteristics, and therefore design procurement mechanisms in a manner to best meet Ontario’s power system needs and relevant policy goals and objectives that are cost-effective.



The Consortium requests a meeting to discuss the contents of this submission at a mutually convenient time.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Chee-Aloy", enclosed within a thin black rectangular border.

Jason Chee-Aloy
Managing Director
Power Advisory

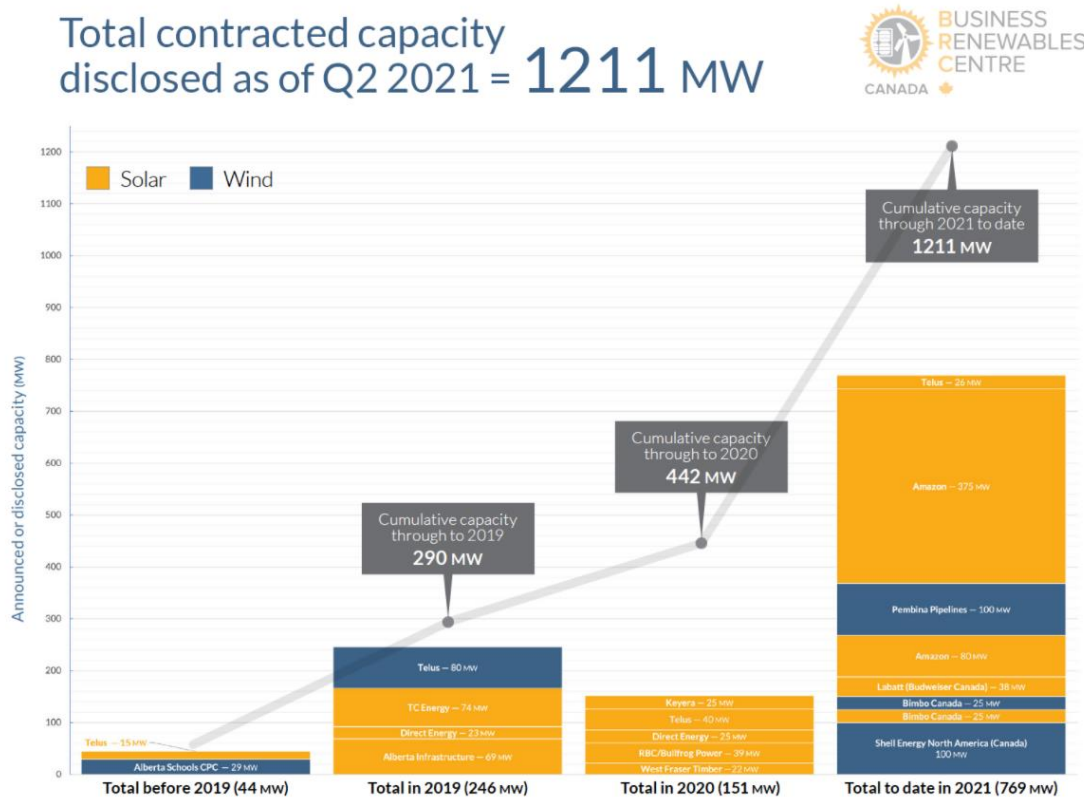
cc:

Candice Trickey (IESO)
Shawn Cronkwright (IESO)
Barbara Ellard (IESO)
Katherine Sparkes (IESO)
Brandy Giannetta (Canadian Renewable Energy Association)
Elio Gatto (Axiom Infrastructure)
Roslyn McMann (BluEarth Renewables)
Adam Rosso (Boralex)
Greg Peterson (Capstone Infrastructure)
Paul Rapp (Cordelio Power)
David Thornton (EDF Renewables)
Ken Little (EDP Renewables)
Lenin Vadlamudi (Enbridge)
Michelle Dueitt (ENGIE)
Julien Wu (Evolugen by Brookfield Renewable)
Stephen Somerville (H2O Power)
JJ Davis (Kruger Energy)
Deborah Langelaan (Liberty Power)
Jeff Hammond (Longyuan)
Cheryl Dietrich (NextEra Energy)
Rob Campbell (Pattern Energy)
Chris Scott (Suncor)
Ian MacRae (wpd Canada)

Appendix A – Renewable Energy Corporate PPAs

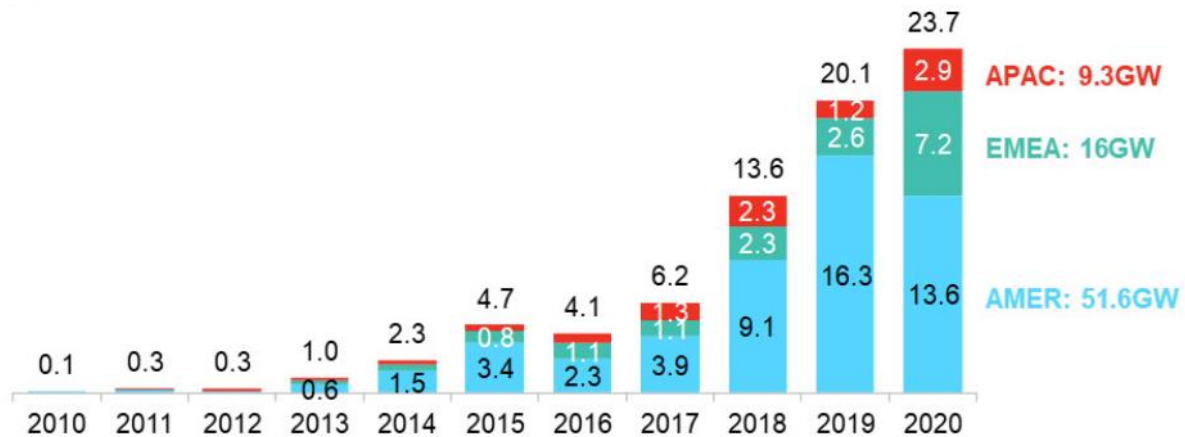
The majority of renewable energy corporate PPAs have been executed in Alberta (see graph below, source: BRC Canada). Alberta based corporate PPAs are partially facilitated by Alberta's wholesale electricity market, as these PPAs are based on wholesale energy prices and the forward price curves based on real-time wholesale energy prices.

Not included in the graph below is the corporate PPA announced by Capital Power and Dow Chemicals on September 15, 2021.¹¹

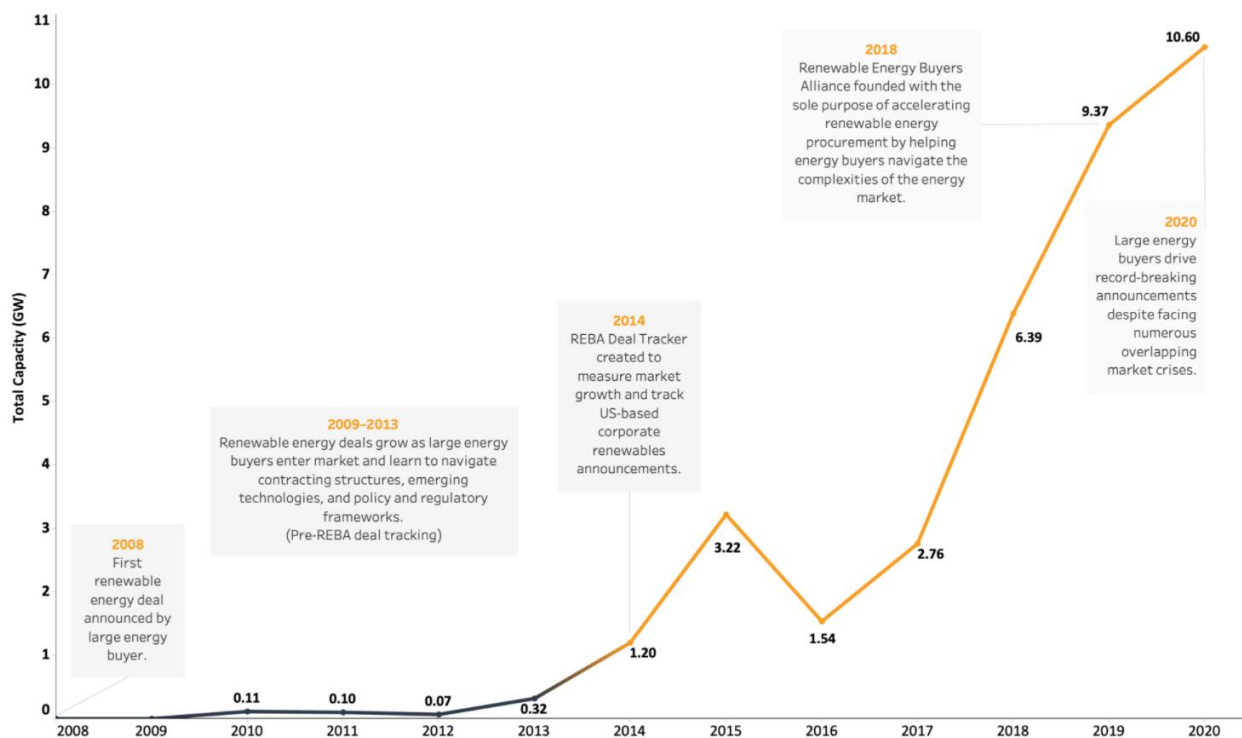


¹¹ See https://www.capitalpower.com/media/media_releases/capital-power-announces-long-term-renewable-power-purchase-agreement-with-dow/. Capital Power and Dow Chemical (Dow) announced a 15-year PPA for 25 MW for renewable energy and associated EAs from the Whitla Wind 2 project that is currently under construction in southeastern Alberta. This 25 MW PPA, in part, serves as a hedge towards the 151 MW Whitla Wind 2 project that will be operational by the end of 2021. Interestingly, Dow is a leading user of clean power in the chemical industry and among the top 20 globally. In 2020, Dow increased contracted renewable energy by 50% to more than 800 MW, surpassing the company's 2025 Sustainability Goal of obtaining 750 MW of its electricity demand from renewable sources.

Renewable energy corporate PPAs are globally growing at an exponential rate (see below, source: BloombergNEF).



The majority of the PPAs are being executed in the U.S. (see below, source: REBA).





Appendix B – Select Renewable Generation Procurements in New York and New England

New York

New York State Energy Research and Development Authority (NYSERDA) RESRFP21-1

- 4,500 GWh (targeted) (~2,300 MW)
- Contracted projects commercial operation date (COD) by November 30, 2023, unless extended to November 30, 2026

NYSERDA RESRFP20-1

- 2,111 MW
- Contracted projects COD by November 30, 2022, unless extended to November 30, 2025

NYSERDA ORECRFP20-1

- 2,490 MW (off-shore wind)
- Evaluated as COD by 2026 but no firm requirement (reflecting uncertainty for offshore wind CODs). Outer Limit Date implies by 2030: "Outer Limit Date – A backstop date upon which the Contract Delivery Term ends regardless of whether the full Contract Tenor has elapsed. If the Contract Tenor is 20 years, the Outer Limit Date is January 1, 2049. If the Contract Tenor is 25 years, the Outer Limit Date is January 1, 2054."

New England – Maine

2021 Tranche 2 RFP – Maine Public Utilities Commission

- 289.5 MW
- No required COD year, contracted new project CODs range from 2022 to 2024

2020 Tranche 1 RFP – Maine Public Utilities Commission

- 502.5 MW
- No required COD year, contracted new project CODs range from 2021 to 2024

New England – Massachusetts

2021 83C III RFP (on-going)

- Electric Distribution Companies (National Grid, Eversource, Unitil) jointly with the Massachusetts Department of Energy Resources
- 400 to 1,600 MW (off-shore wind)
- All proposals must meet COD by January 1, 2030