Capital Power Corporation 1200, 401 9th Ave. SW Calgary, AB T2P 3C5 T 403.717.4600 www.capitalpower.com



December 21, 2020

Mr. Shawn Cronkwright Director, Market Renewal Operations Independent Electricity System Operator 1600-120 Adelaide Street West Toronto, ON M5H 1T1

Dear Mr. Cronkwright,

Re: Market Renewal Program ("MRP") and Proposed Reference Level Framework

Capital Power appreciates the opportunity to provide comments in response to materials presented by the Independent Electricity System Operator ("IESO") on November 27th, 2020. This session was intended to provide owners and operators of thermal units the opportunity to discuss in further detail the process for establishing reference levels prior to MRP implementation. Comments provided here are incremental to feedback previously submitted and should be considered to form part of Capital Power's overall feedback relating to MRP. Previous feedback has acknowledged the notable efforts undertaken by IESO staff to provide opportunities for engagement, review, and discussion of detailed design elements – efforts which include the November 27th session. Earlier comments from Capital Power have also highlighted the following:

- Economic terms and principles used to guide the development of market rules should be defined with an appropriate amount of detail to provide meaningful guidance for all stakeholders. For example, terms such as "unrestricted competition" should be defined in the context of the IESO Administered Market ("IAM").
- Design decisions and resultant market rules must provide a reasonable opportunity to earn a competitive return, which includes the opportunity to recover costs.
- Materials provided to stakeholders should explain how changes to the IAM are expected to impact
 or interact with design decisions being considered under what is now the Resource Adequacy
 engagement. This detail is necessary so that all stakeholders may understand the overall impact
 of market rule changes to fleet operations and economics (i.e. available mechanisms and
 opportunities to earn a return of and on capital).
- The continued advancement of sound market design requires ongoing efforts by both the IESO
 and stakeholders to openly consider the economic function of the IAM under MRP, the effect of
 future changes on commercial operations, the need for a Resource Adequacy framework capable
 of incentivizing efficient and competitive investment, and a commitment to transparent planning
 and forecasting activities.

With regards to the materials covered on November 27th and the subsequent independent review document, Capital Power is pleased to submit the following comments and questions.

1. The process for updating the effect of ambient conditions on performance factors should be automated.

Given the wide variations that will occur in heat rates and output based on ambient conditions, the performance factors in section B.3 should be automatically updated to reflect known changes deemed to affect output. Capital Power also suggests the IESO consider setting a seasonal reference level for Summer and Winter, and allowing for a sufficient tolerance band to reduce unnecessary administrative burden on both the IESO and the market participant.

2. The Market Power Mitigation ("MPM") threshold of \$25 dollars should be automatically updated where there is a change to the cost inputs used to derive the threshold.

The \$25 threshold appears to be set based on offer behavior from thermal resources in recent history. This level may be appropriate given recent natural gas prices, foreign exchange, and carbon prices but these variables are expected to fluctuate over time. Capital power recommends the threshold be designed to reflect durable trends reflecting changes in the prices for natural gas, carbon, and currency.

3. Incremental heat rate curves need should not limit a resource's ability to reflect its economics through its offer laminations, which, are required to be monotonically increasing.

For a thermal Generator, the heat rate curve will indicate the least efficient point on the curve is at minimum load. A generator may become more efficient as the output rises to their maximum output (up to duct burner) but price quantity pairs must be monotonically increasing. It's not understood how the IESO will apply reference levels for output above MLP given the limits on offer structures and a participant's inability to know ahead of time what output level they will be scheduled at Capital power recommends that the only a MLP reference level should be established.

4. Fuel commodity cost for Quick Start Thermal Units must reflect real-time fuel pricing.

Quick start units will not be committed in the DAM timeframe and these units receive schedules in real-time, under short notice. More flexibility is required around establishing a reference index where fuel must be procured intra-day as these units are not able to estimate their fuel usage in the day ahead time frame.

5. Foreign Exchange

Certain costs used in establishing reference levels may be denominated in USD. It is unclear from the design documents if the reference levels will be adjusted daily based on foreign exchange rates.

6. Independent Review Process

A number of questions remain outstanding regarding the Independent Review Process ("IRP"). Capital Power expects that answers to these questions will need to be reviewed and discussed further as part of future engagements. Outstanding issues and questions include:



- On what basis has the IESO concluded that the costs of the IRP should be shared? From the
 detailed design itself, it is not clear why market participants would be required to contribute to the
 costs of independent review.
- Will market participants have input into selecting the roster of approved consultants? As
 proposed, there are readily apparent governance concerns with an independent review process
 that would limit the appointment of an independent reviewer to those firms pre-selected by the
 IESO.
- What is the process for determining the assignment of an independent reviewer to a market participant's submission?
- Does the market participant bear the risk that an independent reviewer may recommend more restrictive parameters than agreed to prior to initiation of the IRP?
- Can the IESO confirm that the details of the IRP will be set out through an amendment to the market rules?

Capital Power looks forward to participating in future stakeholder engagement sessions on these matters. Should the IESO have any questions or wish to discuss the feedback above, please feel free to contact me directly at

Best regards,

Chris Sutherland Director, Commercial Management

