October 28, 2016

Alberta Electric System Operator
Calgary Place
2500, 330 – 5th Ave SW

Dear Mr. Chow:

RE: **ATCO Power Comments on Mothball Outages and Issues Related to Phase 1**

On August 23, 2016 the Alberta Electric System Operator (AESO) invited stakeholders to provide written comments with regard to ISO Rule 306.7, *Mothball Outage Reporting*. This first written process addressed if mothball outages should be a feature of the Alberta market design framework. Following written process, the AESO held a stakeholder working session on September 23, 2016. At the working session participants discussed whether mothball outages should be implemented as a permanent feature in the Alberta market design ("Phase 1"). The AESO requested further written feedback on Phase 1 by October 28, 2016. The AESO requested that in this response participants address four (4) specific questions. Before answering the questions, ATCO would like to provide the following introductory remarks.

Alberta's market design is based on an energy only market. That means participants have to recover their capacity costs through energy sales. That also means neither consumers nor the AESO have purchased any rights to generation capacity.[1] In this framework, suppliers make all the decision regarding the operational availability of their assets. For reliability reasons, certain constraints have been accepted. These fall into three broad categories:

1. Proper Notification – Suppliers are required to reflect the operational availability of their units. In real-time, this is known as the must-offer obligation; with regard to outages the details are described in outage reporting rules.
2. Timely Notification – Suppliers are required to adjust their real-time availability as soon as practical and have to provide adequate notice to the AESO regarding planned outages.
3. Dispatches/Directives – The AESO can dispatch/direct units to come online and participants have to comply with these dispatches/directives.[2] If the unit was already real-time available, compensation comes solely from energy sales; if the unit has to be made available, e.g. by aborting an outage, the supplier is eligible for compensation from the AESO.

[1] Of course individual consumers may have entered into bilateral contracts with individual suppliers; however these arrangements exist outside the market.
[2] To the extent possible in light of potential safety, environmental, etc. restrictions.

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In summary, participants are required to report timely and accurately and have to follow AESO instructions. In line with the market framework, if the instructions involve incurring cost in order to make capacity available, the participant is compensated for these costs.

ATCO Power submits that given this framework, the discussion of whether mothball outages should be a feature of the Alberta market is misguided. The AESO has no right to unduly interfere with economic decisions of suppliers regarding the availability of their assets. The AESO can however, within limits, provide reasonable reporting and notification restrictions. The AESO can further clarify under what circumstances mothball outages may be canceled by the AESO, which will include fair compensation. This should appropriately occur through a Mothball Outage Reporting Rule. As such, Phase 1 should be concluded immediately and consultation should move onto Phase 2, which will determine the specific reporting requirements and details around compensation.

In light of the submissions above, ATCO Power considers the AESO's questions to be of limited value. In order to be helpful, ATCO Power nonetheless provides the following responses:

What is the impact of mothball outages on the price signal? Does allowing for mothball outages impact the effectiveness of the price signal to indicate correct supply/demand fundamentals?

The price signal is unaffected by mothball outages. Providing clear and accurate information to the market by clarifying the reporting of mothball outages improves the price signal and increases its effectiveness.

Mothball outages do not distort the price signal, and could allow participants to better react to that same price signal. During a time of depressed prices, the price signal would indicate an oversupply of generation that is operating in the market. Mothball outages allow participants to react to an oversupply price signal without having to make a permanent and possibly irreversible decision akin to retirement and STS cancellation. A unit can go on mothball outage while the price signal indicates an oversupply in the market, and if market conditions change re-entry may be warranted in the future. If the price signal, however, was indicating an increase in demand or that the market was undersupplied, those units on mothball outage would be able to readily react to that price signal. Efficient entry and entry in a decreased amount of time, when compared to conventional entry of newly constructed units, would become possible when the price signal indicates an increase in demand. Mothball outages do not directly impact the price signal; moreover, mothball outages allow participants to better and more readily, i.e. more efficiently, react to the price signal.

Does allowing or disallowing mothball outages present a barrier to entry?

In the current market framework, mothball outages are not a barrier to entry; attempts to disallow suppliers to make decisions regarding the availability of their units are a barrier to entry. It would signal to investors that their assets may be "hostage" to the market during poor market conditions. This inappropriate risk would be a barrier to entry. Further, imposing this risk on existing investment would be patently unfair and unjust.

Clarifying mothball outage reporting lowers barriers to entry. It provides potential investors with better information regarding the overall state of the generation fleet, which would allow them to

better predict the likely behavior of the fleet.[3] The way that a mothball outage is reported has potential to add clarity with regard to investment and entry. The uncertainty present with mothball outages would then be in line with uncertainty around offer behavior of a current participant, or around queued projects entering the market sooner or later than expected. Mothball outage reporting lowers uncertainty and thereby reduces barriers to entry.

How do mothball outages relate to physical and/or economic withholding?

Mothball outages are by definition a method of economic withholding. A unit is allowed to withhold its capacity, if it desires to do so, given the economic conditions. If the economic conditions were to improve, a unit can choose to once again operate in the competitive market by canceling its mothball outage. The economic decision to cut costs by taking a mothball outage is at the discretion of the market participant. The capacity provided by market participants is not contracted for in the current Alberta market design.

What are the alternative market actions available to market participants in the absence of allowances for mothball outages?

Mothball outages have always been a feature of the Alberta market; it was, and to some extent it still is, however not clear how to report mothball outages. Eliminating the Mothball Outage Reporting Rule would be inefficient. Trying to eliminate mothball outages would be unfair and unjust.

If the outage reporting rule were to be eliminated, mothball outages would likely be reported as planned outages. This would reduce transparency and thereby also reduce efficiency.

If the AESO attempted to eliminate mothball outages, participants would be left with poor alternatives. A unit experiencing a market where average prices are lower than their costs, indicating the facility would operate at a loss, could then only choose either retirement or cancelling the STS contract. At the working session the AESO was asked to provide clarity on the related but differentiated terms of "cancelling the STS contract," "retiring a unit," and "decommissioning a unit." Upon receiving clarification on these matters, there may be more alternatives to mothball outages. Mothball outages allow for an intermediate measure between operating the unit at a material loss and retiring and decommissioning the unit fully, stranding any remaining fixed costs.

ATCO Power would like to clarify that these comments are only pertaining to the existence of a mothball outages as a permanent feature in the Alberta electricity market. Any comments within this document are not necessarily in support of the ISO Rule 306.7, *Mothball Outage Reporting*, in its current state. It is ATCO Power's opinion that mothball outages are an intrinsic feature of the Alberta market, but that Phase 2 is requisite in improving the ISO rule so that it becomes usable by and useful for market participants.

Sincerely,

- original signed by –

Horst Klinkenborg
Manager, Regulatory & Compliance

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[3] For example investors would know that if price was to rise above a specific threshold units on mothball outage would, with a certain probability, cancel their outage and return to active participation.