Stakeholder Comments to Design Document and Rationale

The AESO published the *Mothball Outage Reporting Rule Amendment: Design Document* ("Design Document") on April 21, 2022 and received feedback from Stakeholders on May 13, 2022. The AESO reviewed all Stakeholder feedback, identified the key high-level themes below and is providing further clarity on its proposed recommendation.

1. *Requests that the mothballed asset should be required to return to service or reduce supply transmission service ("STS") when the new connection pays Generating Unit Owner's Contribution ("GUOC") or energizes instead of the AESO's proposal that the mothballed asset must execute its decision before the new connection completes Stage 2 of the Connection Process.*

The AESO recommends that if a new connection has transmission access issues when it wishes to connect in the mothballed asset's area (after an initial mothball outage period of 2 years), the AESO will require the mothball asset return to service or reduce STS when the new connection is in Stage 2 of the Connection Process. Stakeholders proposed that the requirement to return to service or reduce STS should occur after the new connection pays GUOC or energizes.

In the AESO's view, the requirement to return to service or reduce STS should occur at Stage 2 of the Connection Process immediately after the decision has been made is a necessity as certainty is required on the mothball asset's future state for the AESO to properly assess connection alternatives. If the requirement to return to service or reduce STS timeline is moved to a later stage in the Connection Process where the new connection pays GUOC or energizes, the mothballed asset may change its decision to return to service or reduce STS before it must execute on its decision. This would cause major issues and delays for the new connection and the AESO, as new studies will be required to determine the appropriate transmission solution in the area and any AUC facility application will have to be revised, which would create an additional barrier to entry for the new connection in terms of time and cost.

2. *Recommendations that the mothballed asset should have its STS reduced based on the impact that the new connection project would have on transmission constraints in the mothballed asset's area instead of the mothballed asset's available capability during the mothball outage.*

The AESO recommends that if the legal owner of the mothballed asset is notified of a new connection, it would have the option to either: (i) reduce STS to the available capability of the asset when it is on mothball outage, or (ii) return to service. Some Stakeholders proposed that the STS reduction be based on the amount of capacity forecasted to relieve the transmission constraints in the mothballed asset's area.

The AESO is of the view that the need for the connection capacity by a new project triggers a decision point for the mothballed asset that has been on mothball outage for more than 2 years. The mothballed asset's decision to return to service or reduce STS after 2 years of being on mothball outage should be based on economics, not the transmission access capability required by the new connection. Further, due to the dynamic nature of the system and the in-service dates of new projects, the power flow in the area with a new connection and the resulting transmission constraint is not a one-to-one relationship. Thus, it is not reasonably feasible to reduce STS by only the amount of the resulting transmission constraint.

3. *Clarification on the treatment of Distribution Connected Generation ("DCG") by Distribution Facility Owners ("DFO") on mothball outage.*

One Stakeholder questioned how the treatment of DCG on mothball outage would vary based on the local DFO and DFO tariffs. The AESO expects DCG to follow the mothball rule requirements specified under Section 306.7 of the ISO Rules, *Mothball Outage Reporting* ("Section 306.7"), as applicable, and does not expect mothball outage requirements to be covered by DFO tariffs. The requirement for DFOs to maintain an accurate STS is a general requirement unrelated to mothball outages under Section 5.2(2) of the ISO tariff. This requirement was noted in the Design Document for DFOs as the notification to return to service or reduce STS given a new connection would not apply to DCG because these assets do not hold STS contracts.

Section 306.7 of ISO rules, *Mothball Outage Reporting*

Proposed Substantive Amendments	Overview of Proposed Changes
Applicability **1** Section 306.7 applies to: (a) a **pool participant** with a generating **source asset** with a **maximum capability** ~~of five (5) MW~~greater than or ~~higher~~equal to 5 MW; (b) the **legal owner** of a **source asset** described in subsection 1(a); and (c) the **ISO**.	Administrative amendment to subsection 1 to align number references across the ISO rules.
Requirements ~~**General**~~ ~~**2** A **pool participant** must, for any **mothball outage** that results or will result in a change in **available capability** of five (5) MW or greater:~~ ~~(a) comply with the notification requirements in subsection 3; and~~ ~~(b) comply with the attestation requirements in subsection 4.~~	The AESO proposes to remove subsection 2 as compliance to proposed amended subsections 2 and 3 is redundant. Reference to mothball outages of 5 MW or greater has been moved to proposed amended subsection 2.

Mothball Outage Notification Requirements ~~3~~2**(1)** A **pool participant** must, in respect of any **mothball outage** that will result in a change in **available capability** equal to or greater than 5 MW, submit to the **ISO**: (a) the dates, times, durations and impact to MW capability for the **mothball outage**; (b) a designation of the **mothball outage** as "Derate-Planned" or "Outage-Planned"; (c) the minimum time, which must be no more than ~~six (~~6~~)~~ months, that is required for the generating **source asset** to return to full capability ~~if issued a **directive** by the **ISO** in accordance with subsection 3~~; and (d) a list of contact **persons** who are in a position of authority to resolve with the **ISO** any issues or concerns regarding the **mothball outage**. **(2)** A **pool participant** must, by the first **day** of every **month** after the date of **energization**, submit the information set out in subsection ~~3~~2(1) to the **ISO** related to **mothball outages** that, as of the time of the submission, are planned to occur at any time within the next ~~twenty-four (~~24~~)~~ **months**. **(3)** A **pool participant** must, with respect to: (a) any revisions to the information submitted to the **ISO** under subsection ~~3~~2(1); or (b) a **mothball outage** that is not included in the submission set out in subsection ~~3(~~2(2); submit such information or **mothball outage** as soon as practicable but no later than ~~three (~~3~~)~~ **months** prior to the **day** the revision takes effect or the **mothball outage** is to start, unless otherwise agreed to by the **ISO** in writing. **(4)** A **pool participant** must submit information required to be provided to the **ISO** pursuant to this subsection ~~3~~2 through the Energy Trading System, except that the information required to be provided in accordance with subsection ~~3~~2(1)(c) and (d) is to be provided directly to the **ISO**, in writing.	The AESO proposes to remove the reference to ISO directives from subsection 2(1)(c) to expand the requirement to submit minimum return times to all instances where a mothballed asset is returning to service following a mothball outage. In the AESO's view, this proposed change is required to provide more transparency to the market on the return to service timeline for the mothballed asset, in alignment with fair, efficient, and openly competitive market principles and requirements. The changes also provide consistency regarding the minimum required timeline to return to service for all instances where a mothball outage is cancelled. Administrative amendments to subsections 2(2) and 2(3) to align number referencing across the ISO rules.

Attestation **43(1)** A **pool participant** must, ~~if~~it provides a ~~notification is provided~~submission to the **ISO** pursuant to ~~subsections 3~~subsection 2(1), or ~~3~~subsection 2(3)(a) where ~~such notification results in an extension to~~the revision is to extend the duration or increase in MW of the **mothball outage** ~~originally submitted pursuant to subsection 3(1),~~, provide an attestation to the **ISO** from a corporate officer of the **pool participant** of the **source asset** that: (a) based on its reasonable assessment of forecast market prices and market conditions at the time the attestation is provided, such forecast market prices and market conditions are insufficient to recover avoidable costs for the **source asset** for the duration of the **mothball outage**; and (b) the **mothball outage** will be cancelled if, based on its reasonable assessment of forecast market prices and market conditions, such forecast market prices and market conditions become sufficient to recover avoidable costs for the **source asset** for the remaining duration of the **mothball outage**. **4(2)** A **pool participant** must provide an attestation in accordance with subsection 43(1~~):~~) on the **day** that a ~~notifications~~submission is provided to the **ISO** pursuant to subsections ~~3~~2(1) or ~~3~~2(3)(a~~), if such notification is received after May 28, 2018; and~~). ~~(a) when the notification pursuant to subsections 3(1) or 3(3)(a) is provided to the **ISO** more than three (3) **months** prior to the **day** the **mothball outage** is planned to start, on the last **business day** that is three (3) **months** prior to the **day** the **mothball outage** is planned to start.~~ ~~4(3)~~ **(3)** A **pool participant** must, if it is not the **legal owner** of the **source asset**, provide to the **ISO** on the **day** that the **pool participant** submits an attestation in accordance with subsection	The AESO determined that subsection 3(1) continues to reflect the need to have pool participants conduct an objective assessment of the forecast market prices and market conditions and to have a corporate officer provide an attestation to that effect. Such assessments must be conducted in a manner that would be considered reasonable, including commercial considerations where appropriate. Administrative amendments to subsection 3(1) to streamline and provide clarity. The reference to May 28, 2018 in subsection 3(2)(b) is not relevant going forward. The date was included when the attestation requirement was introduced into the rule. No assets are currently on mothball where this requirement applies. As a result, the AESO is proposing to remove subsection 3(2)(b) to eliminate redundancy with subsection 3(2).

~~4~~3(2), an attestation from the **legal owner** of a **source asset** ~~that the avoidable costs provided to the **pool participant** in accordance with subsection 8(a) are accurate~~.	

Mothball Outage Duration **4(1)** A **pool participant** may take a **mothball outage** for a period less than or equal to 24 **months**. **(2)** A **pool participant** must, prior to the end of the **mothball outage** period, inform the **ISO** in writing that the **pool participant** will fully or partially: (a) return the capability of a **mothball outage** to service the minimum time declared in subsection 2(1)(c); (b) extend the **mothball outage** up to 24 **months**; or (c) permanently discontinue operation of the **source asset**.	Proposed new subsection 4: (i) outlines the 2-year duration period as explained and consulted on in the Design Document; and (ii) includes the requirements that a pool participant is subject to at the end of an initial mothball outage period. The AESO's decision to maintain the mothball outage duration at a maximum of 2 years is based on the following rationale: 1. The AESO observed in its internal pool price analysis that retirements and mothball outages generally occurred within 2 years of the start of a period of low pool prices. 2. The maximum duration of a mothball outage balances: (i) providing flexibility for existing pool participants to remove generators from service during periods of low prices; (ii) certainty regarding the availability of transmission access on the system for new generation projects that wish to connect; and (iii) the efficient use of the transmission system. A mothball outage may be extended beyond the initial duration of 2 years subject to confirmation from the AESO that there are no transmission access issues. This option to extend a mothball outage period allows a mothballed asset to remain on a mothball outage – either partially or fully – if it is not economic for the source asset to return to service. The 3-month notification requirement referenced subsection 4(2): (i) aligns with the notification timeline for planned outages in Section 306.5 of the ISO rules, *Generation Outage Reporting and Coordination*; and (ii) provides market participants time to adjust to the new information. The option under subsection 4(2)(iii) to "permanently discontinue the operation of the source asset" mirrors the retirement provisions of the *Hydro and Electric Energy Act* and applies to both Transmission Connected Generators ("TCG") and Distribution Connected Generators ("DCG").

Transmission Access Treatment **5(1)** The **ISO** must, if: (a) a **source asset** that is directly connected to the **transmission system** has been on a **mothball outage** for more than 24 **months**; and (b) the **ISO** identifies that the **source asset** on the **mothball outage** impacts **transmission system** access for a project in the **ISO**'s connection process; notify the **pool participant** of the **source asset** on **mothball outage** as soon as practicable. **(2)** The **pool participant** must, within 30 **days** of receiving the notification in subsection 5(1) inform the **ISO** in writing of its decision to: (a) return the capability on **mothball outage** to service in accordance with the minimum time declared in subsection 2(1)(c); or (b) permanently discontinue operations. **(3)** The **pool participant** must, if the **pool participant** elects to permanently discontinue operations, submit to the **ISO** the prescribed forms to reduce the **supply transmission service** to the **source asset**'s applicable **available capability** with the written notification provided in accordance with subsection 5(2)(b). **(4)** The **ISO** must, if the **pool participant** fails to comply with subsection 5(2), reduce the **supply transmission service** to reflect the **available capability** of the **source asset** at the end of the **mothball outage period** as soon as practicable and in accordance with the **ISO tariff**.	In accordance with the Design Document, if the AESO determines that a new connection would result in transmission access issues in the mothballed asset's area based on studies conducted in the AESO's Connection Process, proposed new subsection 5 requires a pool participant to decide to: (i) return to service; or (ii) reduce STS. As described in the Design Document, the transmission access issue may result in additional costs for new generators seeking to connect in the area, and for loads that pay for transmission service. As outlined in proposed new subsection 5(1), the mothballed asset will only face the decision to return to service or reduce STS if it has been on mothball outage for more than 2 years and when there is a new connection in the mothballed asset's area. This strikes a balance between providing flexibility for an uneconomic source asset to remain out of service and fair access to the transmission system for new connection projects. Subsection 5(4) addresses the situation where the legal owner of the mothballed asset fails to notify the AESO of its decision under subsection 5(2). If this occurs, the AESO will have the ability to reduce or terminate the STS of the mothballed asset under the ISO tariff.

Cancellation of Mothball Outage by a Pool Participant ~~56~~**(1)** A **pool participant** must provide the **ISO** with a minimum of ~~three (3)~~ ~~**months**'~~ ~~written~~ 3 **months** notice prior to cancelling a **mothball outage**. ~~**(2) A pool participant** must cancel a **mothball outage** no later than twenty-four (24) months after the date of commencement of the **mothball outage**, unless otherwise agreed to by the **ISO**, in writing.~~ ~~(~~3(2)**)** A **pool participant** must take one of the following actions upon either fully or partially cancelling a mothball outage: (a) return the generating **source asset** to service~~;~~ in accordance with the minimum time declared in subsection 2(1)(c); or ~~(b) terminate the **supply transmission service** contract for~~ (b) permanently discontinue operation of the generating **source asset**.	The requirements in proposed new subsection 6 are the same as in the current subsection 5(1) and 5(3) of the existing version of Section 306.7. The option under subsection 6(2)(b) to "*permanently discontinue the operation of the source asset*" was amended from "*terminate the supply transmission service ('STS') contract for the generating source asset*" to ensure that the rule language for retiring a mothballed asset applies to both TCGs and DCGs, as DCGs do not hold an STS contract.

Subsequent Outages **7(1)** A **pool participant** must not~~:~~ ~~(a)~~ schedule a **planned outage** ~~immediately~~less than 3 **months** after a **mothball outage**~~; or~~. (~~b) schedule a~~ **2)** A **pool participant** is not eligible for subsequent **mothball outage** ~~less than three (3) months after a~~ for at least the same length of time as the **pool participant**'s previous **mothball outage** for a minimum period of 3 months and up to a maximum period of 12 months.	Proposed amended subsection 7(1) clarifies the requirement under current subsection 5(4)(a) where the pool participant must not "*schedule a planned outage immediately after a mothball outage*" after cancelling a mothball outage to mean that an asset must not schedule a planned outage less than 3 months after a mothball outage. Proposed amended subsection 7(2) prevents a pool participant that has returned a source asset to service, either fully or partially, to go on another mothball outage immediately after returning to service from an initial mothball outage. As set out in the Design Document, the rationale for the ineligibility of a subsequent mothball outage for a certain amount of time is to: 1. create an incentive for legal owners of mothballed assets to either: return to the market long-term or permanently discontinue operations if the pool participant decides not to return to service; and 2. require a pool participant to be in service for at least 1 year prior to requesting another mothball outage. Based on the AESO's internal pool price analysis, the AESO considers that 1 year is the amount of time that historical pool prices will rebound after periods of low pool price conditions.

Authority to Issue ~~an~~a Mothball Outage Cancellation Directive ~~6~~8**(1)** The **ISO** may, if after: (a) completing the procedures set out in subsections ~~7~~9(2) through ~~7~~9(5) the **ISO** determines that there remains: (i) an immediate need on a short term basis for services provided by certain **source assets** to maintain the necessary level of **reliability** or **adequacy**, as the case may be; and (ii) a high probability that the situation will not be alleviated in a voluntary manner: (A) by any **pool participants** amending or revising outage plans; or (B) through the ordinary course operation of the market; and (b) taking into account the factors described in subsection ~~7~~9(4) below, issue a **directive** to cancel a **mothball outage**. **~~(~~2(2)** The **pool participant** must, if the **ISO** issues a **directive** in accordance with subsection 8(1), return the capability of the **source asset** on **mothball outage** to service in accordance with the minimum time declared in subsection 2(1)(c). **(3)** The **ISO** must not issue a **directive** canceling a **mothball outage** without the authorization of the Chief Executive Officer of the **ISO** or ~~his~~their designee.	The AESO included proposed new subsection 8(2) to reflect the requirement under subsection 2(1)(c) for a mothballed asset to return to service within the timeline declared at the start of the mothball outage after receiving a directive by the AESO. Administrative amendment to subsection 8(3).

Mothball Outage Cancellation Directive Procedure ~~7~~9**(1)** The **ISO** must, in order to assist in determining whether to issue a **directive** canceling a **mothball outage**, assess the adequacy of supply as described in subsection 2 of ~~section~~Section 202.6 of the **ISO Rules**, *Adequacy of Supply*. **(2)** The **ISO** must, prior to issuing a **directive** canceling a **mothball outage**, comply with the outage cancellation procedures described in subsection 7 of ~~section~~Section 306.5 of the **ISO rules**, *Generation Outage Reporting and Coordination*. **(3)** ~~In~~The **ISO** must, in performing the assessments described in ~~section~~Section 306.5, ~~the **ISO** must~~ take into account all **mothball outage** plans submitted to the **ISO** under subsection ~~3~~2 of this ~~section~~Section 306.7. **(4)** ~~In~~The **ISO** must, in addition to the factors set out in subsection 7(7) of ~~subsection~~Section 306.5, ~~the **ISO** must~~ consider the length of time of any outage the **pool participant** has previously submitted to the **ISO** under the reporting requirements set out in this ~~subsection~~Section 306.7 in its determination as to whether or not to issue a directive cancelling a **mothball outage**. **(5)** ~~Notwithstanding~~The **ISO** may, notwithstanding subsection 7(8) of ~~section~~Section 306.5, ~~the **ISO** may~~ issue a **directive** cancelling a **mothball outage** at any time by providing notice equivalent to or greater than the minimum time that is required for the generating **source asset** to return to service provided under subsection ~~3~~2(1)(c).	Administrative amendments to update the applicable references in this subsection of the rule.

Timely Information from Legal Owner ~~8~~10 A **legal owner** of a **source asset** must, if it is not the **pool participant** for that **source asset**: (a) provide such timely and complete information to the **pool participant** for such **source asset** to enable the **pool participant** to comply with its obligations under subsection ~~3, 4~~2, 5, and ~~5~~6; and (b) provide an attestation to the **pool participant** from a corporate officer of the **legal owner** of such **source asset** to enable the **pool participant** to comply with its obligations under subsection ~~4(~~3~~).~~.	Administrative amendments to subsection 10(a) to update the applicable references to other subsections of the rule. Amendments to subsection 10(b) to be to be consistent with amendments made to subsection 3.

Proposed Amended Definitions Related to Section 306.7

Proposed Amended Definitions	Overview of Proposed Changes
"mothball outage" means ~~a~~ an anticipated reduction equal to or greater than 5 MW in the **available capability** of a **source asset** ~~which is anticipated~~ based on an assessment from the **pool participant** that forecast market prices and ~~occurs as a result~~market conditions are insufficient to recover the avoidable costs of ~~deliberate manual action and is not a **planned outage**~~the **source asset**.	Amended the definition of a mothball outage to better reflect the nature of the outage and parameters of when a mothball outage can be taken.
"supply transmission service ~~(STS)""~~" means service under Rate ~~*Schedule*~~STS of the **ISO tariff**, *Supply Transmission Service.*	Amended the definition of supply transmission service to reflect the appropriate reference in the ISO tariff. Removed the acronym from the definition.

Proposed Amended Section 2.4 of the ISO tariff, *Provision of System Access Service*

Proposed Substantive Amendments	Overview of Proposed Changes
Withholding Service **2.4(1)** The **ISO** may limit, reduce, suspend, withhold or terminate **system access service** in accordance with, or if a **market participant** fails to comply with, the **ISO rules**, **reliability standards**, or the **ISO tariff**. **2.4(2)** The **ISO** must provide a written explanation for a decision to limit, reduce, suspend, withhold or terminate **system access service**~~,~~ that is based on a finding of non-compliance pursuant to subsection 2.4(1) above, to an affected **market participant** who submits a written request to the **ISO** for those details.	Amended to provide clarity to facilitate the addition of proposed new subsection 5(4) in Section 306.7.