- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and
- 3) Consolidated Authoritative Document Glossary Definitions "mothball outage" and "supply transmission service".

(collectively, the "Proposed Mothball Rule Amendments").



Date of Request for Comment:

August 25, 2022

Period of Comment:

August 25, 2022

through

September 16, 2022

Stakel	nolder Comments	AESO Replies
Item #1: Do the Proposed Mothball Rule Amendments capture the design proposed in the Design Document? If not, what is missing? Please include references to the specific proposed amendment in your response.		
Capita	l Power	
1.	Capital Power believes that the AESO's explanations that accompany these proposed amendments facilitate a better understanding of the details that remained unclear in the Design Document. As such, while some improvements to the rules and definitions as drafted are suggested below, the general intent of the rule changes are consistent with the Design Document.	1. The AESO acknowledges Capital Power's comment.
<u>ENMA</u>	X Corporation	
2.	Yes, it appears the proposed mothball rule amendments capture what was proposed in the Design Document.	2. The AESO acknowledges ENMAX's comment.
Heartl	and Generation Ltd.	
3.	As the Design Document did not encapsulate many of the concerns that stakeholders had with the Mothball Rule, it does not seem specifically helpful for stakeholders to comment on whether the proposed amendments capture the Design Document.	3. Please see AESO Reply #21.
	Heartland Generation requests that the AESO propose amendments to allow for shorter term outages, i.e., seasonal, as further detailed in response to question 4. This was raised earlier by Heartland Generation during the preceding consultation (see comments submitted on May 25, 2021). ¹	

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and
- 3) Consolidated Authoritative Document Glossary Definitions "mothball outage" and "supply transmission service".



Stakeholder Comments	AESO Replies
¹ Stakeholder comments were published by the AESO on June 8, 2021. Heartland Generation's relevant comments are in response to questions 6, 10, and 12.	
Suncor Energy Marketing Inc.	
4. Suncor opposes the design chosen in the Design Document. See 3 & 7.	4. The AESO acknowledges Suncor's comment.
TransAlta Corporation	
5. No comments at this time.	5. The AESO acknowledges TransAlta's comment.
TransCanada Energy Ltd.	
6. Not completely. The Design Document states that the AESO would provide notification of a potential new connection before the new connection completes Stage 2 of the Connection Process. The proposed amendments do not include any reference to Stage 2 of the Connection Process. TCE recommends that the AESO more clearly specify at which point the notification would be triggered. This is important because such notification should not be triggered simply by a new connection submitting a SASR. If the AESO is concerned with referencing a stage of the Connection Process, the rule could instead reference a specific action that would trigger the notification.	6. Subsection 5(1)(b) of revised final Section 306.7 contemplates that the AESO will provide notification only after the AESO identifies that the mothball asset impacts transmission system access for the new connection. The connection studies required for the AESO to make that determination, which will precede the notification, are conducted in Stage 2 of the Connection Process.
Item #2: Do you agree that the proposed changes to Section 2.4 of the IS Design Document? If not, why?	SO Tariff are required to facilitate the mothball rule design per the
Capital Power Capital Power has no concerns at this time with the AESO's proposed changes to Section 2.4 of the ISO tariff.	7. The AESO acknowledges Capital Power's comment.

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and
- 3) Consolidated Authoritative Document Glossary Definitions "mothball outage" and "supply transmission service".



Stakeholder Comments	AESO Replies
ENMAX Corporation 8. Agree.	8. The AESO acknowledges ENMAX's comment.
Heartland Generation Ltd. 9. The changes to Section 2.4 do not seem necessary to facilitate the mothball rule amendments. In the case of a pool participant electing to permanently discontinue operations as a result of Section 306.7(5)(1), then it would be the pool participant and not the ISO that would apply to modify the STS Agreement as outlined in the proposed subsection 5(3). Heartland Generation presumes that the AESO already has the authority and ability to alter an STS Agreement at the pool participant's request. It is, therefore, unnecessary for the ISO to "limit, reduce, suspend, withhold or terminate system access service in accordance with" the Rules, as according to the proposed Section 306.7 it is the pool participant that would request the STS Agreement modification and the AESO would only be approving the pool participant's request. If the pool participant fails to file the appropriate request for modification to the STS Agreement, then the ISO would be able to "limit, reduce, suspend, withhold or terminate" the system access service under the current/unmodified provisions of Section 2.4 of the ISO Tariff (as the pool participant under those conditions would then fail to comply with an ISO Rule). It is unnecessary under any condition for the ISO to be able to "limit, reduce, suspend, withhold, or terminate" system access service in accordance with the ISO Rules and the proposed changes to Section 2.4 are unwarranted.	9. The revision to subsection 2.4(1) of the ISO tariff is necessary to ensure that the AESO has the authority to reduce STS if the market participant fails to provide confirmation of its decision to return to service or reduce STS to the AESO within 30 days of notification of a new connection whose transmission access is being impacted by a mothball asset. The AESO confirms that the proposed change to subsection 2.4(2) of the ISO tariff is grammatical and an administrative change.
10. Suncor opposes the design chosen in the Design Document. See 3	

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and
- 3) Consolidated Authoritative Document Glossary Definitions "mothball outage" and "supply transmission service".

(collectively, the "Proposed Mothball Rule Amendments").



Stakeholder Comments	AESO Replies
& 7.	 The AESO acknowledges Suncor's comment. Please see AESO Replies #16 and #40.
TransAlta Corporation	
11. TransAlta interprets the change to subsection 2.4(1) of the ISO Tariff as reflecting the newly proposed subsection 5.1 of Section 306.7: <i>Mothball Outage Reporting</i> (Section 306.7). The new subsection contemplates the AESO reducing a mothballed unit's Supply Transmission Service (STS) contract (referred to as withholding service under the tariff) in circumstances where the mothballed unit has been mothballed for more than 24 months and another project requests transmission access that would otherwise be used by the mothballed unit when it returned to service. The AESO's proposed change to the tariff language reflects a circumstance that is not associated with non-compliance in which the AESO may withhold service. If our understanding about the purpose of the proposed change to section 2.4 is not accurate, we ask the AESO to clarify the intent with all stakeholders. The second change to subsection 2.4(2) appears to be entirely grammatical/stylistic and unrelated to the changes to Section 306.7. We do not see any reason for the language change beyond that but ask the AESO to confirm the intent of the change.	11. Please see AESO Reply #9.
TransCanada Energy Ltd.	
12. Yes.	12. The AESO acknowledges TCE's comment.

Item #3: Are there any issues with the Proposed Mothball Rule Amendments as currently drafted? Please explain and include references to the specific proposed amendment in your response.

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and
- 3) Consolidated Authoritative Document Glossary Definitions "mothball outage" and "supply transmission service".



Stakeholder Comments	AESO Replies
Capital Power	
13. Proposed section 3(1) of the AESO's draft Proposed Mothball Rule is missing the word "when" prior to "it provides". If this is not the case, then Capital Power recommends revisiting the language for clarity as the current redline and blackline are grammatically incorrect. Further, the attestation provisions should align with the definition of a mothball outage – please see Capital Power's comments that follow with respect to the definition.	13. The AESO agrees with Capital Power's proposed editorial changes and has incorporated this change into subsection 3(1). The AESO has also clarified that an extension, pursuant to subsection 4(2)(b), is a period less than or equal to 24 months.
Proposed section 4(2)(b) should be revised to clarify that an extension would provide 24 months "in addition to" the term of the original mothball outage. Currently it is unclear if an extension to a mothball of less than 24 months would be extended by 24 months or to 24 months.	
ENMAX Corporation	
14. See comment to Question 5 below.	14. Please see AESO Reply #26.
Heartland Generation Ltd.	
15. Heartland Generation still has concerns with the complete reduction of a mothballed asset's STS capacity to zero, when a new project connection in the area does not require that level of capacity. Without a further level of certainty in the new project past Stage 2 of the connection process, this could invite gaming. For example, a competitor could propose a new project for interconnection at relatively low cost (only the cost of an interconnection study) in order to force a mothballed asset in that area to either come back or retire. Once that decision has been forced upon the mothballed asset, the "new project" can cancel its project without any further consequence to itself, meanwhile the mothballed asset has had to come back at a loss or retire the asset. This has all occurred without any substantial change to the market conditions that had	15. The AESO has a public interest mandate that includes a responsibility to forecast the transmission and reliability needs of Alberta, as well as, to plan the transmission system to provide efficient, reliable, and non-discriminatory system access service in a manner that provides market participants with a reasonable opportunity to participate in the electricity market. Fulfilling this mandate requires balancing competing interests. The AESO has proposed a mothball outage design that, in its view, strikes a reasonable balance between the competing interests of: (i) the mothball asset and (ii) a new connection project that wishes to connect in the same area of the mothball asset, when there is limited transmission capability.

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
- 2) Proposed final amended Section 2.4 of the ISO Tariff ("Section 2.4"); and

both technically feasible (based on units and configurations)

and allows for the new project to still connect.

Inherently a partial mothball derate would only have the STS

capacity reduced for the portion of the asset that is on mothball.

3) Consolidated Authoritative Document Glossary Definitions - "mothball outage" and "supply transmission service".

(collectively, the "Proposed Mothball Rule Amendments").



Stakeholder Comments AESO Replies legitimized the initial decision to mothball the asset. In Alberta's energy-only market, price signals in the market drive entry and exit. At the beginning of this engagement, the AESO Further consideration must be made to prevent gaming by recognized the importance of allowing mothball outages to competitors. The AESO should make the following changes: continue under the energy-only framework to sustainably support Gain greater certainty from the new project: The the Alberta market as the generation fleet evolves. However, mothballed asset should only be approached with the mothball outages should neither be unchecked, nor interfere with decision to return to the market once the GUOC for the new new build signals. A mothball outage is a tool of temporary relief from the obligation to make all capability available in the market to project has been paid. Of course, the mothballed asset allow a legal owner to determine if its source asset should return should be made aware prior, but the certainty criteria of GUOC would prevent any gaming to the detriment of the to service or discontinue operations based on whether it will be mothballed asset. This may require the AESO to amend a economic under forecast market conditions. NID application after it has been approved; a similar situation While on a mothball outage, the mothball asset effectively holds, would apply if an asset were to unexpectedly retire or but is not using, transmission capability that could be utilized by a significantly change its generation profile after a NID new connection. If a mothball outage persists and the mothball application for that area had been approved but not vet asset is permitted to hold the transmission capability, additional constructed. The recent experience with the CETO transmission facilities may need to be built to provide system reaffirmation studies shows that the AESO has kind of access service for the new connection in an area that effectively discretion, and that project planning/timing can occur after the has under-utilized capability. The result could be additional NID application has been approved. connection costs for the new connection, but also potential STS Capacity reductions should be tailored to the increased system-related costs that would be borne by all DTS **individual project**: It is disjointed to have the reduction in ratepayers. STS capacity of the mothballed asset unrelated to the new As noted in the Options and Recommendations Paper, the initial project that is seeking interconnection. For example, if an 800 two-year mothball outage period was determined to be a MW generator with multiple units/configurations is mothballed reasonable timeframe for a mothball asset to make retirement and and a 10 MW new project would face congestion, then the return to service decisions after the start of a period of low pool entire 800 MW should not be reduced to an STS capacity of prices. This determination was based on analysis of the average zero. The AESO should be mandated to work with the duration of low pool price periods in Alberta and the response of mothballed asset to find an STS capacity reduction that is

period.

uneconomic generating units to low pool price conditions.

However, proposed amended Section 306.7 grants additional

flexibility to extend a mothball outage beyond this two-year outage

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Stakeholder Comments

Meaning that same 800 MW asset could have mothballed only a portion of its capacity such that 600 MW were operational, and 200 MW were on mothball. In this scenario the 10 MW new project would only force a decision to reduce STS capacity or return to the market on only 200 MW of the asset's capacity. The Rule needs to have some appreciation for the configurations that are possible for the mothballed asset and limit the STS capacity reduction of what is necessary to accommodate the new project and not seek a costly, binary decision from the mothballed asset.

Minor errors:

Proposed Section 306.7 3(1) is missing the word "if". It should read:

A **pool participant** must, **if** it provides a submission to the **ISO** pursuant to subsection 2(1), or subsection 2(3)(a) where the revision is to extend the duration or increase in MW of the mothball outage, provide an attestation to the **ISO** from a corporate officer of the **pool participant** of the **source asset** that...

AESO Replies

For the above reason, two years was selected as the "line in the sand" for the mothball asset to be on outage without being subject to interruption for transmission access issues. The legal owner of the mothball asset must decide to return to service or discontinue operations if, and only if: (i) the two-year initial outage period has elapsed; (ii) the mothball outage was extended beyond the initial two years; and (iii) the AESO identifies that a new connection results in transmission limitations in the same area.

If this scenario arises, the expectation is that the legal owner's decision to return to service or discontinue operations is still based on pool price expectations and the economics of the mothball asset. If the mothball asset is not economic but the legal owner foresees a longer-term reason to incur a loss to retain STS capacity, then the mothball asset may return to service. Otherwise, the legal owner should discontinue operations so that the existing transmission capability can be effectively utilized.

The AESO confirms that if the legal owner chooses to discontinue operations, STS is only reduced by the "uneconomic MWs". Therefore, Heartland is correct that a partial mothball derate would only have the STS capacity reduced for the portion of the asset that is on mothball outage. If the entire capacity of the source asset is on the mothball outage, STS will be reduced to 0 MW.

As previously explained in the *Rationale Document*, tailoring the STS capacity reduction to the transmission limitation is not feasible because the size of the constraint and STS capacity reduction required are not a one-to-one relationship. Further, suggestions to reduce STS capacity by what is needed to accommodate the new connection are not aligned with the premise of the Alberta energy-only market or the purpose of a mothball outage that are described above. Under the proposed design, a competing interest for transmission capability from a

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Stakeholder Comments	AESO Replies
	new connection is the triggering event to end the extended mothball outage of over two years, where uneconomic MWs should be removed from the market and the transmission capability freed to allow new connections to efficiently locate. If the legal owner chooses to discontinue operations and market conditions improve such that the source asset is economic, a System Access Service Request may be submitted through the Connection Process to reconnect the source asset.
	The AESO evaluated alternatives to: (i) move the decision and action to return to service or reduce STS to a later stage of the AESO Connection Process, such as when the new connection pays the generating unit owner's contribution (GUOC) or (ii) split the decision from the action, such that the legal owner is required to decide to return to service or reduce STS when transmission limitations are identified, but will not be required to act on the decision until the new connection pays GUOC.
	As noted in the AESO's <i>Options and Recommendations Paper</i> and the <i>Rationale Document</i> , certainty around the mothball asset's future state is necessary for the AESO to properly assess and file the need for transmission which includes the preferred connection alternative with the Commission. These steps occur in Stage 2of the Connection Process, whereas GUOC is paid in Stage 3 after the Commission approves the preferred transmission alternative. The risk of the mothball asset changing its decision to return to service or reduce STS before it must execute on its decision: (i) poses unreasonable risks to the connection and regulatory processes and (ii) interferes with new investment in Alberta in a manner that, in the AESO's view, cannot sufficiently mitigated through a fee or contractual remedy. With respect to the CETO NID, the AESO revised the forecasted urgency of the transmission need, not the need itself. The situation is distinct from mothball outages.

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Stakeholder Comments	AESO Replies
	However, the AESO notes that it is actively engaging on "Connection Process Streamlining" and has recommended moving the payment of GUOC up to Stage 2 and condensing current timelines. Should these changes be implemented, in the AESO's view, it would address Stakeholder concerns around certainty.
	In the AESO's view, the proposed design places reasonable limitations on mothball outages when it is still uneconomic for the mothball asset to return to service. It promotes open competition, effective price signals, cost minimization, stability, and fairness in the energy market as it: (i) provides a period for mothball assets to mothball without interruption to weather low pool price conditions and (ii) provides the market and the AESO with reasonable certainty around market re-entry and the available transmission capability.
	The AESO agrees with Heartland's editorial changes to subsection 3(1).
Suncor Energy Marketing Inc.	
 The following comments are in reference to specific sections and pages in the 306.7- Amendment-Rationale-Document. 	16. Regarding Page 1, Item 1, Page 1, Item 2, and Page 7, please see AESO Reply #15.
Page 1, Item 1: Suncor understands that some degree of certainty is required at a relatively early stage. However, potential new connections should not unnecessarily drive retirement decisions. The AESO should consider whether additional commitments from the new proponent might be useful or whether additional flexibilities for the mothballed unit would be possible.	Regarding Page 3, please see AESO Reply #21. The minimu time limit parameter required under new subsection 2(1)(b) of Section 306.7 represents the minimum amount of time that a mothball asset requires to return to service from a mothball outage. To clarify, the <i>maximum</i> time that a source asset may declare as the minimum time limit for it to return to service is 6 months to balance providing sufficient time for a legal owner of mothball asset to perform the necessary maintenance activities bring a generator online and the need for the mothball asset to
Page 1, Item 2: Suncor opposes this recommendation. The mothballed unit should be allowed to retain the maximum STS capacity that would still allow the proposed new project to connect unconstrained. Anything else is unnecessarily restrictive and would	

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Stakeholder Comments AESO Replies lead to inefficient retirement decisions. This is particularly true since return to service as soon as possible to maintain system reliability modeled constraint conditions might not or only rarely occur in real if directed to do so by the AESO. time. Regarding Page 4/5, please refer to AESO Reply #15 for the purpose of and context for mothball outages. The attestation Page 3, Mothball Outage Notification Requirements: The minimum time limit of 6 months prescribed in section 2(1)(c) is unnecessarily remains an important provision of the mothball rule and, in the restrictive. Instead of a firm limit, the minimum time should be tied AESO's view, is consistent with the market framework. In 2018, it to the minimum notice time to return the asset when a mothball was added to Section 306.7 following discussions between the outage is canceled (see page 8, Cancellation of Mothball Outage AESO, the Market Surveillance Administrator ("MSA") and market by a Pool Participant). participants. During the initial scoping of this engagement, the MSA confirmed in its Q3 2020 Report that it will continue to Page 4/5 Attestation: Suncor opposes this entire section of the rule. monitor mothball outages and review forecast revenue and cost Requiring an attestation is contrary to the Alberta Market data that the corporate officer's attestation relies on to Framework and therefore not in the public interest. The Alberta demonstrate that the mothball asset is uneconomic. As a result. market is premised on generating unit owners taking all the risks the attestation and economic test was removed from the scope of associated with their assets and their decision making should be as this engagement. unfettered as possible. With respect, economic considerations of market participants should be completely outside of the AESO's Regarding Page 5, Suncor's interpretation is incorrect. A mothball purview. outage can be extended indefinitely in 24-month increments if the mothball asset is uneconomic and there are no new connections Page 5, Mothball Outage Duration: Suncor understands Section in the same area that result in transmission limitations. The AESO 4(2)(b) to imply that after an initial 24-month duration, a mothball has revised subsection 4(2)(b) to clarify that an extension period outage can only be extended by another 24 months. If that can be "less than or equal to 24 months". interpretation is correct, Suncor is opposed. While a touchpoint after an initial 24 months might be useful, the maximum duration of Regarding Page 9, as stated in the *Design Document* the mothball outages should not be limited. Doing so would only subsequent mothball outage provision seeks to prevent introduce unnecessary inefficiencies. generators from going on long-term mothball outages. The subsequent mothball outage provision is integral in mitigating the

Requirements above.

Page 7, Transmission Access Treatment: Suncor opposes this

Page 8, Cancellation of Mothball Outage by a Pool Participant: See

Page 9, Subsequent Outages: Suncor opposes this section as it

section. See comments regarding Page 1, Item 2 above.

comments regarding Page 3, Mothball Outage Notification

transmission access issue because it prevents the circumvention

of the requirement to potentially return to service or reduce STS if

a new connection faces transmission constraints in the mothball

asset's area after an initial 24-months mothball outage period by returning to service for a short period of time and then taking a

subsequent mothball outage.

- 1) Proposed final amended Section 306.7 of the ISO rules, Mothball Outage Reporting ("Section 306.7");
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Stakeholder Comments	AESO Replies
unnecessarily and inefficiently interferes with a market participants economic decision making.	
TransAlta Corporation	
17. The STS capacity for a mothballed unit should not be reduce to Available Capability (AC) at the end of the mothball outage period; it should only be reduced to the remaining transmission hosting capability after accounting for new projects	17. Please see AESO Reply #15. Subsection 5(4) is a mandatory requirement for the AESO to act if the pool participant fails to provide confirmation of its decision.
Subsection 5(4) of Section 306.7 contemplates the reduction of the STS capacity for a mothball unit all the way down to the AC that it had at the end of the mothball outage period. This means that the STS contract would be reduced to 0 MW for most mothballed units since most mothballed units take have no AC during and at the end of their mothball outage except for partially mothballed units that do not make the choice to return to the market or permanently retire after receiving notice. Reducing the STS contract to 0 MW when there is available transmission capacity is punitive and unnecessarily restrictive as a mothballed unit could return to the market and make efficient use of that existing capacity. Moreover, there is no certainty that the proposed new connection project will go forward and if circumstances change such as the project being cancelled or otherwise changing its connection alternative within or after the notification window, the language in the rule would force the AESO to automatically reduce the mothballed unit's STS contract.	
TransAlta recommends that this provision be changed to: "the ISO <u>may</u> , if the pool participant fails to comply with subsection 5(2), reduce the supply transmission service to reflect the <u>available</u> <u>transmission access capacity</u> and in accordance with the ISO tariff." This would provide latitude for the AESO not to make this	

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Stakeholder Comments	AESO Replies
reduction if the proposed new connection project does not go ahead and allow the mothballed unit to use that capacity when it returns to market.	
TransCanada Energy Ltd.	
18. Yes. Proposed Subsection 3(1) The first clause of this subsection does not read clearly due to some minor typographical errors. TCE recommends the following changes: A pool participant must, if it provides a submission to the ISO pursuant to subsection 2(1), or subsection 2(3)(a) where the revision is to extend the duration or increase their MW of the mothball outage, provide an attestation to the ISO from a corporate officer of the pool participant of the source asset that:	18. The AESO agrees with TCE's editorial changes to subsections 3(1) and 4(2)(a) and has incorporated the changes. Regarding subsection 3(3), the AESO agrees with TCE and has reverted the subsection back to the original language. Regarding subsection 5(1), please see AESO Reply #6. Regarding subsection 5(2) and 5(4), please see AESO Reply #15.
Proposed Subsection 3(3)	
The proposed revision to this subsection removes the clarification that the legal owner is to attest "that the avoidable costs provided to the pool participant in accordance with subsection 8(a) are accurate." Without this clarification it is not clear what the legal owner's attestation is supposed to say. TCE recommends that the AESO either provide such clarification or remove the subsection.	
Proposed Subsection 4(2)(a)	
This clause does not read clearly. TCE recommends the addition of "in accordance with" between the words "service" and "the".	
Proposed Subsection 5(1)	
Please refer to the response to Section 1 above.	

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Stakeholder Comments	AESO Replies
Proposed Subsections 5(2) and 5(4)	
As drafted, a pool participant that receives notice pursuant to subsection 5(1) would be required to either return to service or reduce its STS by the full amount of the volume that was on the mothball outage regardless of the size of the potential constraint. This would be both inefficient and unnecessary. The pool participant of a mothballed unit should have the option to reduce its STS capacity by the amount necessary to relieve the constraint.	
TCE recognizes that the size of the constraint and the necessary STS capacity reduction are not a one-to-one relationship. This is why TCE is recommending that the reduction be the amount necessary to relieve the constraint. TCE submits that it would be counter to the FEOC principles to force a large unit that was currently uneconomic to permanently discontinue operations so as to ensure that a small unit was not constrained. Not only would this be unfair to the pool participant, but circumstances may change whereby the capacity provided by that large unit may be required for the reliability of the system.	
Item #4: Did the AESO overlook any design or implementation consideral Please explain and include references to the specific proposed amendmental and include references.	
Capital Power	
19. Capital Power has no further comments at this time.	19. The AESO acknowledges Capital Power's comment.
ENMAX Corporation	
20. See comment to Question 5 below.	20. Please see AESO Reply #26.
Heartland Generation Ltd.	
21. The AESO has not addressed a gap in the outage definitions, whereby a pool participant cannot effectively notify the market of an	21. The AESO understands that Heartland is seeking: (i) an allowance for mothball outages between 36 hours and 3 months

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Stakeholder Comments

outage that would require greater than 36 hours to return but significantly less than 3 months. This is best shown by an asset that is seeking seasonal outages or derates in response to anticipated, cyclical market conditions. Respectfully, the AESO should include this outage within the rules for a mothball outage (this is Heartland Generation's preference) or introduce a new outage category that would accommodate for outages that fall between long-lead time (a physical constraint to energization) and mothball outages (a physical constraint created by economic market conditions).

Heartland Generation submits that the notification period should be changed from the mandatory 3 months (proposed subsection 6(1)) to align with the return to service timeline specified in proposed subsection 2(1)(c). Long term outages, like a 24-month mothball outage would still require multiple months to realize the savings from avoidable costs. Shorter term outages, like seasonal outages, would retain adaptability (aiding grid reliability) while being able to save a portion of its avoidable costs in the foreseeable shoulder seasons. For example, an owner would be able to store its asset in a semi-mothballed state (avoiding some costs) during a season of anticipated low prices and then be able to return to service within a couple of weeks in order to capture periods of supply tightness and aid overall grid reliability. Most importantly, the pool participant would be able to clearly communicate this intent with the rest of the market.

The current rule is not feasible for these kinds of outages, whereby the outage may be shorter than 3 months. Under the current rule if a pool participant were to mothball an asset for 1-month it would need to provide notification to the AESO of the assets return to service 2 months prior to the asset even being on outage in order to comply with the 3-month notification period.

The notification period should be aligned with the time to return to service (specified in proposed subsection 2(1)(c)). For example, an

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in length; or (ii) another outage category that permits shorter outages for reasons tied to market conditions. The AESO further understands that Heartland's concern about this gap in the outage definitions is rooted in the notification timelines for returning an asset to service.

As noted in the *Options and Recommendations Paper*, a minimum of 3-months' notice is required before an asset can return to service so: (i) the AESO can conduct reliability assessments and (ii) sufficient notice can be provided to the market to respond competitively through modifications to planned generation and transmission outages. For this reason, the minimum 3-months' notification applies even if the asset has a minimum return time of less than 3 months.

The AESO's intention was to provide pool participants with flexibility to request an exception to notification periods through the existing waiver provision in subsection 3(3) of the current version of Section 306.7. However, in reviewing Stakeholder comments, the AESO identified that subsections 2(3)(a), 4, and 6 in the version posted on August 25, 2022, did not: (i) match the design recommendation to align notification timelines for returning a mothball asset to service with the minimum time needed to return the asset to service; and (ii) fall within the scope of the waiver allowance in subsection 2(3).

Specifically, subsections 2(3)(a), 4(2), and 6(1) of the August 25, 2022, version contained the following inconsistencies and gaps:

- Subsection 2(3)(a) required the pool participant to provide a minimum of 3-months' notice to the AESO if it was revising the "dates, times, durations and impact to MW capability for the mothball outage". A revision to this information could be, effectively, a shorter or longer mothball outage duration. Subsection 2(3)(a) overlapped with the notification

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owner that would like to store its asset to be ready to return to service in 2 weeks, would provide notice to the AESO of its intent to fully energize 2 weeks prior to the return to service. This commercial flexibility will be an important tool for the market to react to increasing penetration of renewables, which are beholden to seasonal patterns, while ensuring grid reliability and supply adequacy in the months with expected lower performance from seasonal renewables. The reporting of these type of outages and processes needs to be transparent to the competitive market.	requirement of subsection 6(1), which also required a minimum of 3-months' notice to the AESO if the pool participant sought to cancel the mothball outage earlier than the originally declared end date (i.e., revise the duration).
	 Subsection 6 did not specify that, if the pool participant was returning the asset to service upon cancelling, the cancellation notification timeline should align to the minimum time needed to return the asset to service, subject to a minimum of 3-months' notice.
	 Subsection 2(3)(a) contemplated a waiver to the 3-month period to notify the AESO of a revision to the mothball outage duration, among other things. Subsection 6(1) imposed a mandatory minimum of 3-month notice if the duration was shortened through a cancellation. This created an inconsistency across the two provisions.
	Subsection 4(2) required the pool participant to inform the AESO of its course of action when the mothball outage comes to its declared end. Subsection 4(2) did not specify that, if the pool participant was returning the asset to service upon ending the outage, the timeline to provide this notice should align to the minimum time needed to return the asset to service, subject to a minimum of 3-months' notice.
	 Subsection 4(2) also did not contemplate the possibility of a waiver to the notification period associated with ending a mothball outage.
	The AESO has corrected this drafting to clearly articulate the various mothball notification requirements and the associated timelines. Section 306.7 now contains the following:
	 Subsection 4(1) now defines the contents of the notice to the AESO when the mothball outage is coming to an end. In

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	accordance with subsection 4(2), if the pool participant will return the asset to service at the end of the outage, the notification of such must align with the minimum return to service timeline in subsection 2(1)(b), unless the timeline is less than or equal to 3 months.
	Similar to subsection 4, subsection 6(1) defines the contents of the notice to the AESO in the event that a pool participant cancels the mothball outage prior to the end date declared in accordance with subsection 2(1)(a). Per subsection 6(2)(a) and (b), if the pool participant is cancelling the mothball outage to return the asset to service, the notification of such must align with the minimum return to service timeline in subsection 2(1)(b), unless the timeline is less than or equal to 3 months.
	- Subsection 2(3) clarifies that the notification period for revisions to mothball outage information is subject to the notification periods in subsections 4(3) and 6(2).
	- Subsections 2(3), 4(3) and 6(2) all contain the language "unless otherwise agreed to by the ISO" to contemplate the ability of the AESO to consider a notification period shorter than 3 months to revise mothball outage information, or return the asset to service, if it is reasonable under the circumstances.
	Accordingly, Section 306.7 now provides opportunities for shorter mothball outages and commercial flexibility where appropriate. However, the AESO notes that the purpose of a mothball outage is to provide temporary relief from the obligation to make all capability available in the market when forecast market conditions indicate that it is insufficient for the source asset to recover its avoidable costs to allow a legal owner to determine if its source asset should return to service or discontinue operations. When a

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	pool participant is amending the duration of a mothball outage, it should still be reflective of the economics of the asset based on expected market conditions.
Suncor Energy Marketing Inc.	
 Suncor opposes the design chosen in the Design Document. See 3 & 7. 	22. The AESO acknowledges Suncor's comment. Please see AESO Replies #16 and #40.
TransAlta Corporation	
23. The AESO has designed a rule that can be gamed; the AESO should eliminate the ability for new projects that trigger notification to be put on hold and should impose requirements that place real requirements on such projects to achieve their in-service date	23. Please see AESO Reply #15.
Subsection 5(1) of Section 306.7 provides a mechanism for the AESO to notify a market participant that has been on mothball outage for more than 24 months and impacts transmission access for another project. The AESO has suggested that this mechanism will be triggered in stage 2 of the interconnection process. TransAlta has already expressed concerns with the AESO triggering action from a mothballed unit based an early-stage interconnection project and requested that the AESO impose new requirements for such projects that would trigger a notification to pay its Generating Unit Owners' Contribution (GUOC) to show a serious commitment that will hold the generator to the in-service date they have requested.	
We are concerned that the AESO has designed a rule that can be gamed by market participants to force mothballed units back into the market or otherwise cause adverse outcomes for mothballed units (permanent retirement or loss of STS contract capacity).	
As the AESO is aware, new interconnection projects can be put on	

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(collectively, the "Proposed Mothball Rule Amendments")



(Conectivery, the Proposed Mothball Rule Amendments).	
Stakeholder Comments	AESO Replies
hold in stage 2, which is highly problematic if the AESO has already sent notice to a mothball unit for a new project that has no or limited prospect of achieving its in-service date or being developed at all. At a minimum, a new project that triggers a notification should lose its ability to be put on hold and should have real obligations to achieve its in-service date and face serious consequences if it does not.	
TransCanada Energy Ltd.	
24. TCE has no comment.	24. The AESO acknowledges TCE's comment.
Item #5: Do you agree that the proposed definition of "mothball outage" correctly captures the concept? If not, why?	
Capital Power	
25. Capital Power believes that the level of specificity in the AESO's proposed definition is unnecessary. These details are better left fully outlined in the rule with all the necessary and applicable provisions. Capital Power believes the broader definition proposed	25. The AESO agrees with Capital Power's comment and has revised the definition of "mothball outage".

- in the earlier design document would be appropriate as it captures the general intent of such an outage. There, the AESO proposed the following:
 - ...[c]larify [the] definition of a mothball outage to reflect that a mothball outage is a planned outage where the legal owner of the mothballed asset has attested that the mothballed asset is uneconomic to produce energy.² [Emphasis added]

²[Footnote] AESO April 21, 2022 "Mothball Outage Reporting Rule Amendment: Design Document", pdf 8.

In the alternative, a suggested definition is provided below.:

"mothball outage" means a deliberate reduction equal to or greater than 5 MW in the available capability of a source asset expected in

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anticipation of and to avoid market conditions that would render the mothballed asset uneconomic to produce energy.	
ENMAX Corporation	
26. Given the ongoing development of the Clean Electricity Standard (CES) and related regulations which are expected to be finalized in 2023, it will be important to consider whether the definition of a "mothball outage" will take on a new meaning in the future. For instance, the CES is contemplating that existing units that have reached the end of their prescribed life could continue to generate or provide backup based on a limited number of hours per year. This could impact the existing mothball rule and incent units to mothball and potentially operate on a seasonal basis, thus having 2 or 3 mothball periods of a few months in duration each year. Consideration may be needed to view the idea of mothballing in this context.	The AESO acknowledges ENMAX's comment. The AESO is monitoring the development of the Clean Electricity Standard.
Heartland Generation Ltd.	
 Heartland Generation does not have any direct comments regarding the proposed definition of "mothball outage". 	27. The AESO acknowledges Heartland's comment.
Suncor Energy Marketing Inc.	
28. In Suncor's view, the proposed definition for mothball outage inappropriately contains references to the market participant's economics. This is inconsistent with the Alberta market design framework. Instead, a definition similar to the existing should be maintained.	28. Please see AESO Reply #15.
TransAlta Corporation	
29. The proposed definition of a mothball outage conforms with the	29. The AESO acknowledges TransAlta's comment.

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new draft of the ISO rule.	
TransCanada Energy Ltd.	
30. The proposed definition appears to capture the concept.	30. The AESO acknowledges TCE's comment.
Item #6: Do you agree that the proposed definition of "supply transmission service" correctly captures the concept? If not, why?	
Capital Power	
31. Capital Power would note that the minor change to the definition of "supply transmission service" meets the needs for the mothball rule amendments.	31. The AESO acknowledges Capital Power's comment.
ENMAX Corporation	
32. Agree.	32. The AESO acknowledges ENMAX's comment.
Heartland Generation Ltd.	
33. Assuming this question means " <u>supply</u> transmission service", then Heartland Generation does not have any direct comments regarding the proposed definition of "supply transmission service."	33. The AESO acknowledges Heartland's comment.
Suncor Energy Marketing Inc.	
34. Suncor has no concerns with the proposed definition for "supply transmission service".	34. The AESO acknowledges Suncor's comment.

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Stakeholder Comments	AESO Replies
TransAlta Corporation	
35. The AESO has proposed a change to "supply transmission service" not "system transmission service". If the AESO has introduced another term, "system transmission service", we ask to see that definition. TransAlta does not view the change to the definition of "supply transmission service" to be driven by the Proposed Mothball Rule Amendments or having any meaningful difference than what "supply transmission service" is currently defined as. We ask the AESO to clarify if there is any intended difference in meaning from what currently exists.	35. The reference to "system transmission service" was an inadvertent error in the AESO's comment matrix. The AESO confirms that the proposed changes are to the definition of supply transmission service.
TransCanada Energy Ltd.	
36. Yes.	36. The AESO acknowledges TCE's comment.
Item #7: Please provide any additional comments regarding the Proposed Mothball Rule Amendments.	
Capital Power	
37. Capital Power is concerned with the pace of resolving issues with the mothball rule. This process has taken multiple years with varying levels of focus and priority. This has prolonged the uncertainty on this issue and distracted AESO and industry resources and attention from what Capital Power believes are more critical issues such as addressing reliability concerns that are emerging through the transition of the grid.	37. The AESO acknowledges Capital Power's comment.
ENMAX Corporation	
38. None at this time.	38. The AESO acknowledges ENMAX's comment.

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Stakeholder Comments	AESO Replies
Heartland Generation Ltd.	
39. Heartland Generation appreciates this opportunity to provide feedback on the Proposed Mothball Rule Amendments. If the AESO intends to continue to limit the scope of this engagement to only the Design Document, then it would be appreciated if the AESO could indicate when it will address the concerns of stakeholders that have been raised outside this narrow scope (see response to Question 4). The concerns raised by Heartland Generation and other stakeholders are pressing and timely given the importance of supply adequacy and reliability during the continuing energy transition in Alberta's electricity market. ¹	39. The AESO acknowledges Heartland's comment. As described in the 2023 Budget Development Process (BDP), "Enabling Transformation" will be the prominent focus area for 2023, which includes the priority of identifying required market initiatives to support long-term sustainability and competitiveness of the energy-only market structure, based on output from carbon policy analysis.
¹ From the AESO's Net-Zero Emissions Pathways Report, "Risk is unacceptable in all scenarios if legacy unabated gas units exit the market and are not replaced by supply with similar operating characteristics." Pdf page 9.	
Suncor Energy Marketing Inc.	
40. Suncor considers it concerning that the proposed mothball rule is contrary to the Alberta Market Framework. Under Alberta's framework, generating unit owners carry all risks associated with their assets and accordingly make all decisions regarding their assets without undue restrictions from the AESO and without the need to justify their actions.	40. Please see AESO Reply #15.
One example of a due restriction is a mandate for a generation owner to provide adequate notice of its decision and to inform the AESO of operational consequences of its decision. An undue restriction is the attempt to limit the generation unit owner's decision making to specific economic circumstances.	
Suncor is further concerned about the seemingly arbitrary inefficiencies included in the Proposed Mothball Rule Amendments. While the fixed 3-, 6- and 24-month timelines seem unnecessarily	

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Stakeholder Comments	AESO Replies
restrictive, they are likely causing negligible harm. The requirement to forego the entire STS capacity when a new entrant creates congestion however has the potential to cause more significant harm and is equally unnecessary. Given that the potential for congestion is determined via system studies, it should be easy to determine, which STS level could be maintained by the currently mothballed unit without resulting in congestion. That way the unit could retain some of its STS, improving the likelihood that it won't decommission, which allows at least some, and potentially all, generation to remain available in case it becomes useful or needed in the future, as in real-time there might be no congestion.	
TransAlta Corporation	
41. The AESO needs get back to the principles of the Stakeholder Engagement Framework	41. The AESO acknowledges TransAlta's comment. The AESO held sessions in Winter 2020 and Spring 2021 to scope the mothball
TransAlta is disappointed that our comments on the design document and our previous comments that the AESO has overused its written process were disregarded. The benefit of virtual or inperson sessions are that stakeholders are afforded opportunities to ask questions and clarify proposals in real-time. The use of an entirely written process places a higher burden on stakeholders that have to spend time drafting in questions in hopes that the AESO will understand and answer them and eliminates opportunities for the AESO and stakeholders to understand each other concerns and fully consider all feedback that is provided. Written processes are often less efficient than real-time consultation sessions, which afford better opportunities for all parties to express their views, understand issues, and to raise or consider other alternatives that the AESO may not think of on its own. TransAlta asks the AESO to	outage engagement and discuss the various options for the inscope design items with Stakeholders. As the engagement progressed in 2021 and into 2022, the process was tailored in consideration of the ongoing COVID-19 pandemic as well as, other industry initiatives and proceedings.
	In lieu of additional Stakeholder sessions, the AESO endeavored to provide extensive supporting information and written rationales at each remaining step of the engagement. The process to finalize the Proposed Mothball Rule Amendments was conjunctive, whereby feedback gathered in one stage of development flowed into and was responded to in the next stage. In the AESO's view, this effectively supported the narrowing of options and funneling of issues in consideration of the Stakeholder feedback collected at each stage.
reinstitute engagement practices that better align with the principles it has laid out in its Stakeholder Engagement Framework.	The AESO will take into consideration TransAlta's feedback when designing future engagements.

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Stakeholder Comments	AESO Replies
TransCanada Energy Ltd.	
42. TCE has no further comments.	42. The AESO acknowledges TCE's comment.