BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.

Respondent.

DOCKETS UE-240004 & UG-240005 (*Consolidated*)

ROBERT L. EARLE
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

EXHIBIT RLE-3

CONE Penalty Task Force – Proposal

August 6, 2024

Western Resource Adequacy Program
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Prepared by CONE Penalty Task Force:

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Background

The CONE (Cost of New Entry) penalty is intended to strongly motivate Participants to comply with program metrics in the forward showing time horizon. If a Participant fails to meet their forward showing capacity or transmission requirements after the cure period, the forward showing program will assess some multiple of a CONE. The CONE is based on publicly available information (i.e., information provided by the Energy Information Administration) relevant to the estimated annual capital and fixed operating costs of a hypothetical natural gas-fired peaking facility. The CONE value does not consider the anticipated net revenue from the sale of capacity, energy, or ancillary services nor does it consider variable operating costs necessary for generating energy.

Implementation of the CONE charge will be considered in a larger conversation about how to transition into the full, binding RA program; the transition plan will be considered in a separate space and is not scoped within this task force.

Task Force Objectives

1. Propose an approach to CONE calculation for consideration
2. Finalize a framework for calculating CONE and applying penalties to be included in FERC filing

What is Being Approved? - Calculation and Application of CONE

This proposal is limited to the calculation and application of the CONE **NOT** on the timeline for which it will be implemented in association with a failure in the Forward Showing (implementation of the first binding season). This is the long-term solution for the calculation of the penalty and what will be included in the Tariff as the Forward Showing deficiency penalty.

It is the strong desire of WRAP participants that the program only adopt the CONE penalty when:

» participants can secure supply in a competitive environment to pass the Forward Showing
» there are mechanisms to ensure adequate liquidity and ability to contract for capacity in the 8-10 month ahead timeframe
» there has been an assessment of capacity availability prior to the binding season to ensure that all participants can procure enough capacity to pass the Forward Showing

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The program must be workable for all participants and as such is not intended to set up any participant for failure during the initial binding seasons. The CONE penalty is designed to incentivize new build when there isn't sufficient capacity in the market.

Proposed Approach

CONE Value

Below are inputs to the CONE calculation, which results in an Annual CONE of **$91.81 per kW-Year.** The CONE value will be re-evaluated on a yearly basis to ensure that it is still an accurate proxy for the cost of replacement capacity.

Capital Costs	O&M Costs	Financial

• EPC - $713/kW (2020 EIA cost)
• Other capital costs
  • Contingency – 3%
  • Land - $1.5M
  • Legal – $1.25M
  • Development costs - $1.5M
  • Mobilization and related engineering and inspection – $1.75M
	• $7/kW (2020 EIA cost)	• 50/50 debt/equity ratio
		• 20 year project/finance life
		• Cost of debt – 5.25% (Prime rate plus 2%)
		• Effective tax rate – 27% (Federal plus state)
		• After tax return on equity – 13%
		• DSCR – 1.5
		• 3 year average inflation rate – 2.48%

Penalty Mechanics Overview

The proposal contemplates a "Forward Showing Year" or "FS Year". The FS Year is a grouping of a winter and summer forward showing season - e.g. summer 2024 + winter 24-25. The penalty is based principally on the largest monthly failure for the forward showing year * annual CONE * CONE factor. Additional monthly failures are incrementally penalized, but at a monthly rate. The intent is to remove any incentive for additional failures after an initial failure.

If a deficient participant pays the CONE charge, that Participant is considered to have met Forward Showing Capacity Requirement; they are able to participate in the Operations Program (appropriate impacts to their participation in the Operations Program will be further considered in a separate venue).

Detailed Mechanics: FS Year Season 1

1. Identify the maximum monthly deficit from the first (summer) season within a forward showing year (Max Summer Deficit)
2. Determine the "first stage" penalty as follows:
   a. $\textbf{\textit{Max Summer Deficit}} * (\textbf{\textit{Annual CONE}} * \textbf{1000}) * \textbf{\textit{Summer Season Annual CONE Factor}}$
3. The Seasonal CONE Factor scales depending on the programs aggregate deficit for the summer forward showing. The Summer Season Annual CONE Factor can vary from 125% to 200%.
4. Incremental monthly failures within the first season are penalized at a $-kW month rate consistent with the Annual CONE * a CONE factor of 200%.

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5. The penalty is charged immediately after failure to cure capacity deficits by the end of the summer forward showing cure period.

Detailed Mechanics: FS Year Season 2

1. Identify the maximum monthly deficit from the second (winter) season within a forward showing year (Max Winter Deficit)
2. Determine the "second stage" penalty as follows:
   a. $Maximum\ of\ (Max\ Winter\ Deficit - Max\ Summer\ Deficit, 0) * (Annual\ CONE * 1000) * Winter\ Season\ Annual\ CONE\ Factor$
   b. If the winter maximum monthly failure is less than the summer maximum monthly failure, then each failure within the season are penalized at a $-kW month rate consistent with the Annual CONE * a CONE factor of 200%.
3. The Winter Season CONE Factor scales depending on the programs aggregate deficit for the winter forward showing. The Winter Season Annual CONE Factor can vary from 125% to 200%.
4. Incremental monthly failures within the second season are penalized at a $-kw month rate consistent with the Annual CONE * a cone factor of 200%. This includes any portion of a month that ends up being the highest failure in the FS Year that was equal to the Max Summer Deficit.
5. The penalty is charged immediately after failure to cure capacity deficits by the end of the winter forward showing cure period.

Note that the attached excel file provides a practical application that may assist in understanding.

CONE Factor Scaling

The seasonal annual CONE factors are calculated as follows:

Summer Season Annual CONE Factor:

$Summer\%Deficit = Summer\ Program\ Aggregate\ Deficit \div Summer\ Program\ P50\ Load$

- ✓ If the Summer%Deficit is less than 1%, the Summer Season Annual CONE Factor = 125%
- ✓ If the Summer%Deficit is greater than 1% but less than 2%, the Summer Season Annual CONE Factor = 150%
- ✓ If the Summer%Deficit is greater than 2% but less than 3%, the Summer Season Annual CONE Factor = 175%
- ✓ If the Summer%Deficit is greater than 3%, the Summer Season Annual CONE Factor = 200%

Winter Season Annual CONE Factor:

$Winter\%Deficit = Winter\ Program\ Aggregate\ Deficit \div Winter\ Program\ P50\ Load$

- ✓ If the Winter%Deficit is less than 1%, the Winter Season Annual CONE Factor = 125%
- ✓ If the Winter%Deficit is greater than 1% but less than 2%, the Winter Season Annual CONE Factor = 150%
- ✓ If the Winter%Deficit is greater than 2% but less than 3%, the Winter Season Annual CONE Factor = 175%
- ✓ If the Winter%Deficit is greater than 3%, the Winter Season Annual CONE Factor = 200%

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If there is a Summer or Winter Program Deficit in a FS Year, the Summer and Winter Annual Seasonal CONE Factor in the subsequent increases to 200%.

Penalty Revenue Redistribution

On the occasion that a CONE penalty is levied against and paid by a deficient Participant, funds collected would be allocated back to Participants who passed the FS with sufficient resources based on their percentage share of the footprint's total P50 load.

Example

Assume a Participant fails to show sufficient capacity in the summer showing and fails to cure the deficiencies as shown in Figure 1.

Figure 1: Utility with Failures in the Summer FS.

	Month	RA Position
FS Y1	Jun	-20
	Jul	-40
	Aug	-10
	Sep	-30
	Oct	
	Nov	?
	Dec	?
	Jan	?
	Feb	?
	Mar	?

Additionally, assume that the footprint had aggregate failures in the summer showing of 1,200 MW resulting in the following seasonal CONE factor:

Figure 2:Summer Annual CONE Factor

Total Program P50 Load	67,500		% Deficit	Summer Annual CONE Factor
Summer Seasonal Deficit (sum of the highest deficit month for each deficit entity)	1,200		1.78%	150%

The "stage 1" summer penalty would be calculated as shown in Figure 3:

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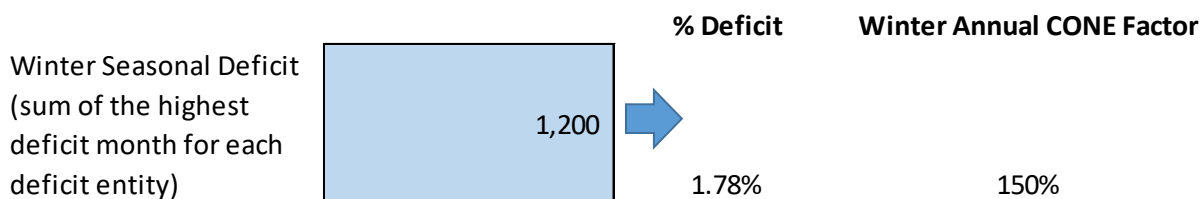*Figure 3: Summer "Stage 1" Penalty*

Monthly Failures
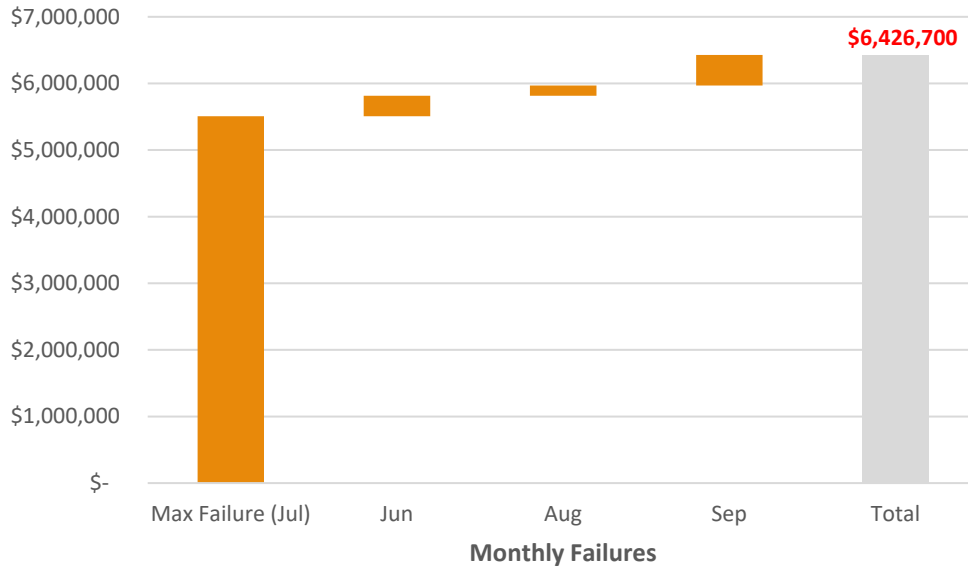
After the entity pays the summer "stage 1" failure penalty, assume it also fails to show sufficient capacity in the winter showing and fails to cure the deficiencies as shown in Figure 4.

Figure 4: Utility with Failures in the Summer & Winter FS.

	Month	RA Position
FS Y1	Jun	-20
	Jul	-40
	Aug	-10
	Sep	-30
	Oct	
	Nov	30
	Dec	20
	Jan	-50
	Feb	-10
	Mar	10

Additionally, assume that the footprint had aggregate failures in the winter showing of 1,200 MW resulting in the following seasonal CONE factor:

Figure 5: Winter Annual CONE Factor

Winter Seasonal Deficit (sum of the highest deficit month for each deficit entity) — 1,200 → **% Deficit** 1.78%   **Winter Annual CONE Factor** 150%
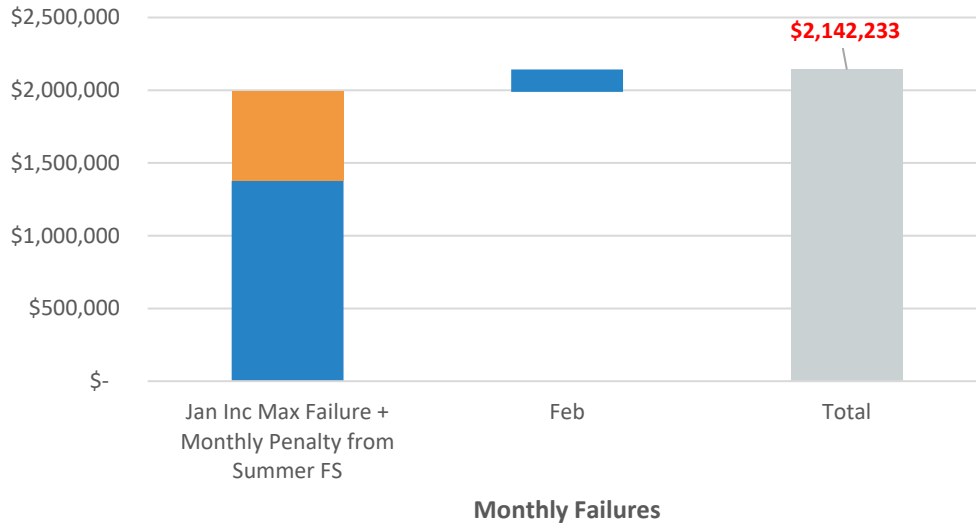
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The "stage 2" winter penalty would be calculated as shown in *Figure 6* below.
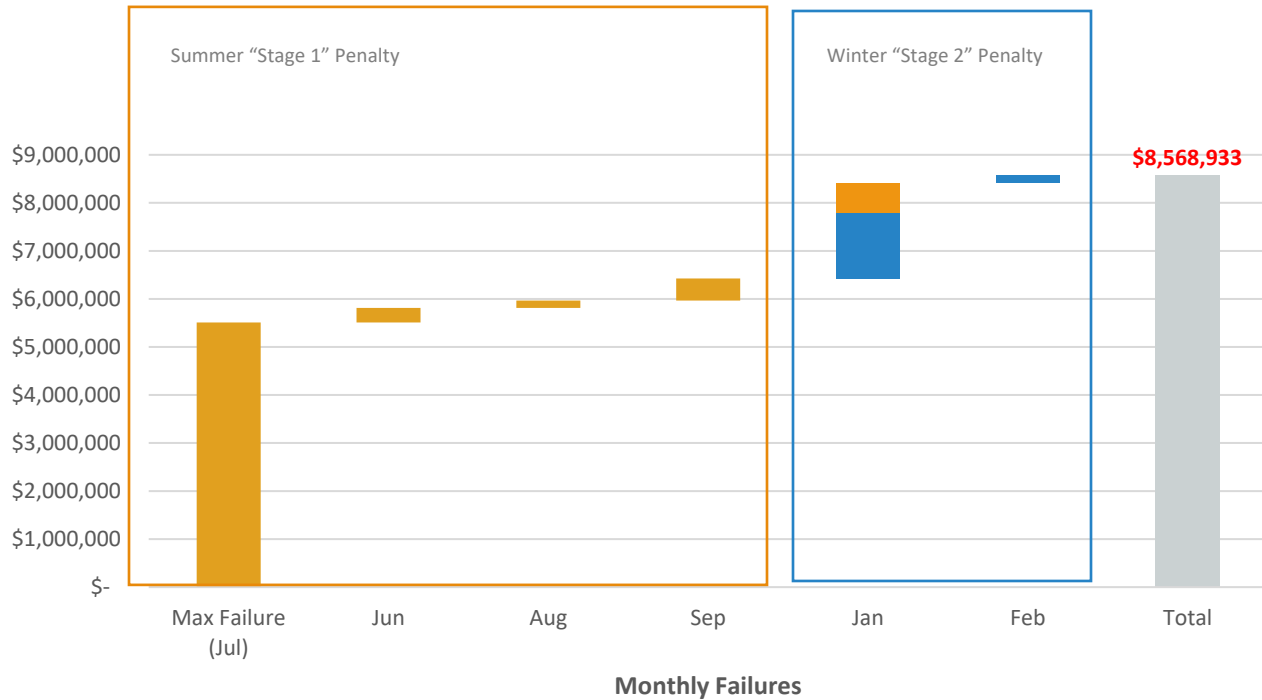
Figure 6: Winter "Stage 2" Penalty

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Figure 7 shows the aggregate forward showing penalty.

Figure 7: FS Year Penalty

Post Forward-Showing Application of CONE for Disqualified Capacity and Error

Participants were concerned about the impact to Capacity prices for those entities procuring capacity after the FS but prior to the end of the cure period. If a WRAP Participant is procuring RA quality capacity during this period, it may indicate something about their RA position and may result in the price of capacity being set at or very near the CONE. This concern is valid especially for those entities who turned in a FS workbook that they believed was compliant through attestation but were later notified by the Program Operator they were deficient due to capacity being disqualified or through error. If a Participant submits a FS workbook that they believe is accurate and meets the FS requirements through attestation and is later found to be deficient the CONE will be scaled according to the following methodology.

1. If the Participant is the only Participant that is deficit in the program, their deficiency is less than or equal to 1% of their FS compliance requirement (P50 + planning reserve margin (PRM)) and they cannot cure the deficiency the CONE factor for the purposes of the above methodology will be set to 50%.

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2. If there are two Participants that are deficit, their deficiency is less than or equal to 1% of their FS compliance requirement (P50 + PRM) and they cannot cure the deficiency the CONE factor for the purposes of the above methodology will be set to 75%.
3. If there are more than two Participants that are deficient the standard methodology will apply.

It is very important to note that the scaling of the CONE applies only to those Participants that attested to submitting a workbook that met the FS compliance requirement (P50 + PRM). This will only be applied in the event that capacity was subsequently disqualified or there was an error in the FS workbook.

Alternatives

In addition to the approach outlined above, the Task Force evaluated two alternatives.

1. The first alternative was to apply the annual CONE value based on a half-year equivalent. The seasonal penalty would be calculated as (assuming a CONE factor of 125%):

    $CONE \; x \; 125\% \; x \; MW \; x \; \frac{1}{2}$

    The Task Force felt that a ½ CONE was not adequate to incentivize compliance with the FS so this alternative was not pursued.

2. The second alternative was to calculate the penalty in the first season as (assuming a CONE factor of 125%):

    $CONE \; x \; 125\% \; x \; MW$

    The penalty in the second season would be calculated as:

    $$(CONE \; x \; 50\% \; x \; Season \; 1 \; MW \; Deficiency)$$
    $$+ \; (CONE \; x \; 125\% \; x \; Additional \; Deficiency \; Above \; Season \; 1)$$

    This alternative was not selected but the use of an incremental charge was incorporated into the proposed approach.