



RESOLUTION NO. U-11366

1 A RESOLUTION authorizing the Director to execute a new Western Resource
2 Adequacy Program Agreement (WRAPA) to enable Tacoma Power's
3 participation in the Western Resource Adequacy Program (WRAP),
4 contingent upon approval of the proposed Amended WRAP Tariff by the
5 Federal Energy Regulatory Commission without changes.

6 WHEREAS the Department of Public Utilities, Light Division, (d/b/a
7 "Tacoma Power"), requests authority for the Director to execute a new Western
8 Resource Adequacy Program Agreement (New WRAPA), contingent upon the
9 Federal Energy Regulatory Commission (FERC) approving the Amended
10 WRAP Tariff without changes, and

11 WHEREAS, at the Board's meeting of November 16, 2022, the Board
12 adopted Resolution U-11363 authorizing the Director to execute the initial
13 proposed WRAPA contingent upon the initial proposed WRAP Tariff being
14 approved by FERC without changes, and

15 WHEREAS FERC issued a Deficiency Letter concerning the original
16 proposed WRAP Tariff with questions seeking further clarification and potential
17 changes to the WRAP Tariff, and

18 WHEREAS the Western Power Pool (WPP) has submitted an Amended
19 WRAP Tariff with further clarification in response to FERC's Deficiency Letter,
20 and

21 WHEREAS the changes to the original WRAP Tariff that are set forth in
22 the Amended WRAP Tariff will not have a material impact on Tacoma Power
23 and thus Tacoma Power recommends that the Board authorize the Director to
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execute the New WRAPA contingent upon FERC approving the Amended
1 WRAP Tariff without changes,

2 WHEREAS execution of the New WRAPA will enable Tacoma Power to
3 participate in the Western Resource Adequacy Program (WRAP) administered
4 and provided by the Western Power Pool (WPP), and
5

6 WHEREAS, because the changes to the Amended WRAP Tariff are not
7 material, the detailed discussion of the reasons for the WRAP, the description
8 of the WRAP, and the discussion of the WRAP programs found in Resolution U-
9 11363 remains accurate and applicable to the New WRAPA and the Amended
10 Wrap Tariff, and
11

12 WHEREAS Parties signing the New WRAPA agree to be bound by the
13 terms, conditions, and rate provisions of the Amended Western Resource
14 Adequacy Program Tariff, and
15

16 WHEREAS the New WRAPA signatories: (1) certify that they are qualified
17 to participate in the WRAP and comply with all applicable terms and conditions,
18 (2) agree to pay all costs associated with WRAP, (3) agree that WRAP
19 participation is voluntary subject to the terms and conditions of the New
20 WRAPA and Amended Tariff, (4) may withdraw from the New WRAPA by
21 providing 24 month written notice prior to the next binding Forward Showing
22 Program period, (5) do not waive their non-jurisdictional status and are not
23 required to take any action or participate in any filing or appeal that could confer
24 FERC jurisdiction over the signatory but the non-jurisdictional signatories
25
26



acknowledge that FERC has jurisdiction over the WRAP and participant's activities in the WRAP, and

WHEREAS, certain aspects of the WRAP arguably invoke FERC's jurisdiction over the WRAP, therefore, the WRAP design needs to satisfy various statutory and FERC regulatory standards including being just and reasonable, and not unduly discriminatory or preferential, and

WHEREAS, Tacoma Power requests that the Board authorize the Director to execute the New WRAPA, committing Tacoma Power to compliance with the Amended WRAP Tariff filed with FERC in August and amended on December 12, 2022, conditioned on FERC accepting the Amended WRAP Tariff with no modifications, and

WHEREAS the New WRAPA will be effective January 1, 2023, conditioned on FERC approving the Amended WRAP Tariff without changes,

WHEREAS if the Amended WRAP Tariff is not approved by FERC without changes, the Board's authorization to participate in the WRAP under the Amended WRAP Tariff will expire and Tacoma Power's obligations under the New WRAPA would be unwound, and Tacoma Power staff will provide an overview of any revised tariff and determine whether to recommend approval of a further modified tariff, Now, Therefore,

BE IT RESOLVED BY THE PUBLIC UTILITY BOARD OF THE CITY OF TACOMA:

Tacoma Power is authorized to participate in the Western Resource Adequacy Program under the Amended WRAP Tariff contingent upon FERC's approval of the Amended Western Resource Adequacy Program Tariff without



changes, and the Director is authorized to execute the new Western Resource Adequacy Program Agreement, substantially in the form on file with the Clerk of the Board and as approved by the City Attorney, contingent upon FERC approval of the Amended Western Resource Adequacy Program Tariff without changes.

Approved as to form:

/s/
Chief Deputy City Attorney

Chair

Secretary

Clerk

Adopted _____



Board Action Memorandum

TO: Jackie Flowers, Director of Utilities
COPY: Charleen Jacobs, Director and Board Offices
FROM: Ray Johnson, Assistant Power Manager
MEETING DATE: December 14, 2022
DATE: December 8, 2022

STRATEGIC DIRECTIVE ALIGNMENT (select as many that apply):

Please indicate which of the Public Utility Board's Strategic Directives is supported by this action.

- | | |
|--|--|
| <input type="checkbox"/> SD1 – Equity & Inclusion | <input type="checkbox"/> SD8 – Telecom |
| <input checked="" type="checkbox"/> SD2 – Financial Sustainability | <input type="checkbox"/> SD9 – Economic Development |
| <input type="checkbox"/> SD3 – Rates | <input type="checkbox"/> SD10 – Government Relations |
| <input type="checkbox"/> SD4 – Stakeholder Engagement | <input checked="" type="checkbox"/> SD11 – Decarbonization/Electric Vehicles |
| <input type="checkbox"/> SD5 – Environmental Leadership | <input type="checkbox"/> SD12 – Employee Relations |
| <input type="checkbox"/> SD6 – Innovation | <input type="checkbox"/> SD13 – Customer Service |
| <input checked="" type="checkbox"/> SD7 – Reliability & Resiliency | <input checked="" type="checkbox"/> SD14 – Resource Planning |

SUMMARY:

Tacoma Power requests authority to execute an amended version of the Western Resource Adequacy Program Agreement (WRAPA).

In August 2022, the Western Power Pool (WPP) filed a tariff with the Federal Energy Regulatory Commission (FERC) to gain approval for the Western Resource Adequacy Program (WRAP). On 11.21.2022 the WPP received a deficiency letter from FERC staff that included several questions and requests for additional information. On 11.30.2022 the WRAP participants committee met and agreed to add language to the tariff along with several accompanying narrative explanations in response. These changes help clarify several elements of the filing; they do not have any material impacts to program design. The WPP will file an amended tariff with FERC the week of December 4th and then distribute a new WRAPA for execution. Below is a brief summary of the tariff modifications:

Modification 1

- The modifications clarify rules related to the transmission forward showing. Specifically, an entity may seek one of four exceptions to allow it to procure less than 75% of firm transmission capacity typically required to satisfy its forward showing requirements. The clarification provides that if the only transmission available for purchase is for a term longer than one year, an entity may not utilize two of the exceptions for the same transmission path in the same season in the subsequent year.
- This does not impact Tacoma Power because we expect to have sufficient firm transmission to cover over 100% of our forward showing requirement. We do not expect this modification to have an impact on the effectiveness of the program.

Modification 2

- The second modification adds new language clarifying which data sources WPP can look at when evaluating the exception request of a participant. We do not expect this modification to have an impact on the effectiveness of the program.



Board Action Memorandum

The Public Utility Board granted the Director authority to execute the original WRAPA on 11.16.2022. The proposed resolution will authorize the Director to execute the new WRAPA and commit the utility to the provisions of the amended WRAP tariff, conditioned upon approval by FERC without changes. *The Director will be granted authority to immediately execute the new WRAPA, with an effective date of January 1, 2023 conditioned upon FERC approval of the Amended WRAP Tariff without changes.* Executing the new WRAPA now will ensure continued funding and planning to implement the WRAP as soon as it is approved by FERC.

BACKGROUND:

Today, resource adequacy planning is conducted on utility-by-utility basis under individual utility Integrated Resource plans. Varying levels of emphasis are placed on regional factors. There is no uniform/standardized method for measuring resource adequacy or sufficient reliability. Utility-specific planning can make assumptions about regional capacity availability that may not be realistic. There is insufficient market/price signals to construct new capacity when utilities are procuring/building for their specific IRP needs based on their own load forecasts and assessments of available capacity. Planning on a utility-by-utility basis fails to account for regional diversity in peak loads (e.g., winter vs. summer) and resource contributions (e.g., wind rich vs. solar rich areas). *In response to these challenges, the Western Power Pool (WPP) has created the Western Resource Adequacy Program (WRAP).*

Joining WRAP provides multiple benefits and is aligned with the Public Utility Board's Strategic Directives:

1: Increased Reliability

- WRAP establishes a capacity "backstop". Tacoma Power can access pooled capacity when loads are high and/or if we unexpectedly lose a generating unit for a long duration. As generating capacity becomes scarce in the region it is not a safe assumption that that market will always be available to make up shortfalls.
- **Aligned with Strategic Directive #7: Reliability & Resiliency**

2: Investment Savings

- The Program unlocks cost savings from overall regional reductions in planning reserve margins compared to localized approach, and from helping optimize reliance on existing capacity. This means Tacoma Power needs less capacity by being in the program vs. operating outside of it. The cost of building new "Clean Firm" capacity is high and uncertain; being in the program helps shield Tacoma Power customers from large resource acquisition costs.
- **Aligned with Strategic Directive #2: Financial Sustainability**

3: Decarbonization

- As the West transitions to a zero-carbon generation mix and decarbonizes the economy, it is critical that sufficient dispatchable generation capacity is maintained to ensure reliability. Utilities must fulfill energy and capacity demands created by electrification of transportation, buildings, and industry. WRAP will support investment in emerging generation and storage technologies needed to meet environmental objectives.
- **Aligned with Strategic Directive #11: Decarbonization**

4: Coordinated Regulation

- WRAP represents a unique west-wide collaborative effort. If this effort fails, it is likely that individual States will implement a patchwork of resource adequacy regulation. The Federal Energy Regulatory Commission (FERC) is concerned about resource adequacy as well. It has voiced support for WRAP and has urged



Board Action Memorandum

western utilities to implement it as soon as possible. If this effort fails, it is likely that FERC will introduce resource adequacy regulation.

- Aligned with Strategic Directive #14: Resource Planning

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? No

IF THE EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW IT IS TO BE COVERED.

The costs could result in a small variance to the budget, but they will likely be offset by other benefits. The costs of WRAP program dues (approximately \$240,000 per year) are very small relative to Tacoma Power's annual power supply budget.

IF THE ACTION REQUESTED IS APPROVAL OF A CONTRACT, INCLUDE LANGUAGE IN RESOLUTION AUTHORIZING \$200,000 INCREASE IN ADMINISTRATIVE AUTHORITY TO DIRECTOR? Yes

ATTACHMENTS:

Amended WRAP Tariff (filed at FERC on 12.12.2022)

Amended WRAPA

FERC Deficiency Letter (received on 11.21.2022)

Tariff modifications and narrative responses (filed at FERC on 12.12.2022)

Resolution U-11363 (approved on 11.16.2022)

CONTACT:

Contact and Presenter:

Ray Johnson, Assistant Power Manager, 253.502.8025.

Supervisor:

Clay Norris, Power Manager, (253) 320-0786.

For the Responses to Questions 2 and 3

16.3.2 A Participant may include in its Forward Showing Submittal a request for an exception from a limited part of its FS Transmission Requirement, provided the exception request meets the terms, conditions, and limitations of one or more of the following four exception categories:

16.3.2.1 Enduring Constraints. Participant is unable to demonstrate sufficient NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights on any single segment of a source to sink path for a Qualifying Resource; and Participant demonstrates that no ATC for such transmission service rights is available (either from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less; and Participant submits a Senior Official Attestation that Participant has taken commercially reasonable efforts to procure firm transmission service rights, and that Participant has posted Firm Transmission Requirements on a relevant bulletin board prior to the FS Deadline. In the event such transmission service rights are only available for a duration of more than one year (whether from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Enduring Constraints exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. In addition to the foregoing, Participant must further demonstrate that there was remaining available transmission transfer capability (i.e., non-firm ATC after the fact) for all CCHs in the same season of the most recent year for which CCHs have been calculated; or, if the path was constrained in at least one CCH of the CCHs in the same season of the most recent year for which CCHs have been calculated, Participant in that case must demonstrate either that it is constructing or contracting for a new local resource for at

least the amount of the exception requested, or that it is pursuing long-term firm transmission service rights by entering the long-term queue and taking all appropriate steps to obtain at least the amount of the exception requested.

16.3.2.2 Future Firm ATC Expected. Participant demonstrates that ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not posted or available prior to the FS Deadline (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less, and that the transmission service provider has, after the FS Deadline, released additional ATC for such transmission service rights in every one of the CCHs of the most recent year for which CCHs have been calculated on the applicable path. In the event ATC for such transmission service rights is only posted or available prior to the FS Deadline for a duration of more than one year (whether from the transmission service provider or through a secondary market) on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Future Firm ATC Expected exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. The Participant must also demonstrate that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.3 Transmission Outages and Derates. Participant demonstrates that an applicable segment of its existing transmission service rights from its source to sink path for its Qualifying Resource is expected to be derated or out-of-service and the ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not otherwise available, and that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.4 Counterflow of a Qualifying Resource. Participant demonstrates that either: (i) Participant's use of firm

transmission service in connection with the delivery of capacity from Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to Participant's load (or other qualifying delivery point permitted by the WRAP) or (ii) a second Participant's use of firm transmission service in connection with the delivery of capacity from the second Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the second Participant's load (or other qualifying delivery point permitted by the WRAP) provides a direct and proportional counterflow transmission that supports the first Participant's delivery of capacity from the first Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the first Participant's load (or other qualifying delivery point permitted by the WRAP) Qualifying Resource to their load. If the exception is requested under subpart (ii) of this subsection, the Participant requesting the exception shall include a written acknowledgement from the second Participant that it is aware of such exception request.

As more fully set forth in the Business Practice Manuals, such exceptions may be subject to overall WRAP limits, and shall be supported by a Senior Official Attestation. WPP will consider the exception category terms, conditions and limitations set forth above, and may consider the completeness of the exception request, information from transmission service providers, OASIS data, and data readily available to WPP from other reliable and validated sources concerning the duration, timing, firmness and quantity of available transmission service or equivalent options (including transmission construction) and other relevant data and information, in determining whether to grant or deny a transmission exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such transmission exception request. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

A Participant granted a transmission exception under either Section 16.3.2.1 or Section 16.3.2.2 must complete a monthly transmission exception check report demonstrating that either (i) the

circumstances necessitating the exception have not changed; (ii) transmission has become available and the Participant has acquired it; or (iii) the Participant has acquired a different resource, and associated transmission service rights, and no longer requires the exception. Failure to timely submit a required monthly report will result in assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance.

For the Response to Question 4

- 5.1 WPP shall engage an Independent Evaluator to provide an independent assessment of the performance of the WRAP and any potential beneficial design modifications. The Independent Evaluator shall report directly to the Board of Directors.
- 5.2 The Independent Evaluator shall conduct an annual review of the WRAP, including but not limited to analyzing prior year program performance, accounting and settlement, and program design.
- 5.3 The Independent Evaluator shall prepare an annual report of its findings, and any recommended modifications to WRAP design, and present its findings to the WRAP committees and the Board of Directors, subject to any necessary confidentiality considerations. Any data included in the Independent Evaluator's report shall be reported on an aggregated basis as applicable to preserve confidentiality. The Independent Evaluator's annual reports shall be available to the public, except to the extent they contain information designated as confidential under this Tariff, or information designated as confidential by the Independent Evaluator.
- 5.4 The Independent Evaluator shall not:
 - 5.4.1 Evaluate individual Participants.
 - 5.4.2 Possess any decision-making authority regarding the WRAP or design modifications.
 - 5.4.3 Evaluate WPP's day-to-day operations of the WRAP (except as part of review of prior year program performance).

ATTACHMENT A

Western Resource Adequacy Program Agreement

January 1, 2023, conditioned on FERC acceptance of the WRAP Tariff as filed on August 31, 2022 and amended on December 12, 2022, without further modification
This Western Resource Adequacy Program Agreement (“Agreement”) dated as of _____ (“Effective Date”) is entered into by and between Western Power Pool Corporation (“WPP”) and _____ (“Participant”). WPP and Participant are each sometimes referred to in the Agreement as a “Party” and collectively as the “Parties.”

In consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree as follows:

1. The Parties agree that this agreement shall be governed by the rates, terms, and conditions of the Western Resource Adequacy Program Tariff (“Tariff”) and all such rates, terms, and conditions contained therein are expressly incorporated by reference herein. All capitalized terms that are not otherwise defined herein shall have the meanings ascribed by the Tariff.
2. Participant wishes to participate in the Western Resource Adequacy Program (“WRAP”) administered by WPP under the Tariff.
3. Participant certifies that it satisfies all of the following qualifications:
 - 3.1 Participant is a Load Responsible Entity as that term is defined in the Tariff.
 - 3.2 Participant commits to complying with all applicable terms and conditions of WRAP participation as set forth in the Tariff and Business Practice Manuals adopted thereunder, including all Forward Showing Program and Operations Program requirements.
4. Participant will register all resources and supply contracts and shall disclose any other obligations associated with those resources and supply contracts.
5. Participant represents and warrants that it is authorized by all relevant laws and regulations governing its business to enter into this Agreement and assume all rights and obligations thereunder.
6. It is understood that, in accordance with the Tariff, WPP, as authorized by its independent Board of Directors, may amend the terms and conditions of this Agreement or the Tariff by notifying the Participant in writing and making the appropriate filing with FERC, subject to any limitations on WPP’s authority to amend the Tariff as set forth therein.
7. Participant agrees to pay its share of all costs associated with the WRAP, as calculated pursuant to Schedule 1 of the Tariff. The manner and timing of such payment shall be as specified in Schedule 1 of the Tariff.
8. WPP agrees to provide all services as set forth in the Tariff.

9. Term and termination. This Agreement shall commence upon the Effective Date and shall continue in effect until terminated either by WPP by vote of its Board of Directors or by Participant's withdrawal as set forth herein. WPP and Participant agree that participation in the WRAP is voluntary, subject to the terms and conditions of this Agreement and the Tariff. The date upon which a Participant's withdrawal is effective and its participation in the program terminates is referred to as the "Withdrawal Date."
- 9.1 Normal Withdrawal: In general, Participant may withdraw from this Agreement by providing written notice to WPP no less than twenty-four months prior to commencement of the next binding Forward Showing Program period. Once notice has been properly given, Participant remains in a "Withdrawal Period" until the Withdrawal Date.
 - 9.1.1 During Participant's Withdrawal Period, Participant remains subject to all requirements and obligations imposed by the Tariff and this Agreement, including but not limited to all obligations imposed in the Forward Showing Program and Operations Program and obligation to pay Participant's share of all costs associated with the WRAP.
 - 9.1.2 All financial obligations incurred prior to and during the Withdrawal Period are preserved until satisfied.
 - 9.1.3 During the Withdrawal Period, Participant is not eligible to vote on any actions affecting the WRAP that extend beyond the Withdrawal Period.
- 9.2 Expedited Withdrawal: Participant may withdraw from this agreement with less than the required twenty-four month notice as set forth below. Participant shall negotiate with WPP regarding the timing of the Expedited Withdrawal.
 - 9.2.1 Extenuating Circumstances: The following such events and circumstances shall constitute "extenuating circumstances" justifying a withdrawal on less than twenty-four months. Participant invoking an extenuating circumstance shall negotiate with WPP regarding potential ways to minimize the impact of the expedited withdrawal on all other Participants and WPP. Such extenuating circumstances and any mitigation plan to minimize the impact of the expedited withdrawal must be reviewed and approved by the Board of Directors prior to termination of Participant's WRAP obligations. Regardless of the extenuating circumstance, all financial obligations incurred prior to the Withdrawal Date remain in effect until satisfied.
 - 9.2.1.1 A governmental authority takes an action that substantially impairs Participant's ability to continue to

participate in the WRAP to the same extent as previously; provided, however, that Participant shall be obligated to negotiate with WPP regarding potential ways to address the impact of the regulatory action without requiring a full withdrawal of Participant from the WRAP if possible.

9.2.1.2 Continued participation in the WRAP conflicts with applicable governing statutes or other applicable legal authorities or orders.

9.2.1.3 Participant voted against a RAPC determination and disagreed with a Board of Directors decision to release composite or aggregated data under Section 10.2.1 of the Tariff, provided that such right to expedited withdrawal is exercised promptly after the first time that the Board of Directors determines that the form and format of composite or aggregated data sufficiently protects against the release of confidential or commercially sensitive Participant data. Failure to exercise this right promptly upon the first occurrence of the Board of Directors voting on a specific form and format of composite or aggregated data shall constitute a waiver of the right to expedited withdrawal for any future disclosures of composite or aggregated data in the same or substantially similar form and format.

9.2.1.4 FERC or a court of competent jurisdiction requires the public disclosure of a Participant's confidential or commercially sensitive information, as further described in Section 10.5 of the Tariff; provided however that such right to expedited withdrawal shall be exercised promptly upon the exhaustion of all legal or administrative remedies aimed at preventing the release.

9.2.2 Exit Fee: If the impact of Participant's withdrawal on WRAP operations can be calculated with a high degree of confidence and mitigated by the payment of an "exit fee" to be calculated by WPP, an expedited withdrawal will be permitted. Such exit fee shall include (but not be limited to): (i) any unpaid WRAP fees or charges; (ii) Participant's share of all WRAP administrative costs incurred up to the next Forward Showing Program period; (iii) any costs, expenses, or liabilities incurred by WPP and/or the Program Operator directly resulting from Participant's withdrawal; and (iv) any costs necessary to hold other participants harmless from the voluntary expedited withdrawal. The exit fee may be waived to the extent that it would violate any federal, state, or local statute, regulation, or ordinance or exceed the statutory authority of a federal

agency. The exit fee shall be paid in full prior to the Withdrawal Date.

9.2.3 Amendments to Section 3.4 of the Tariff: In the event that amendments to Section 3.4 of the Tariff are approved by the RAPC and Board of Directors, a Participant that voted against such a change may withdraw with less than the required twenty-four month notice, provided that the Participant satisfy all obligations in the Forward Showing Program and Operations Program and satisfy all other financial obligations incurred prior to the date that the amendments to Section 3.4 of the Tariff are made effective by FERC.

9.2.4 Expulsion: The Board of Directors, in its sole discretion, may terminate Participant's participation in the WRAP and may terminate this Agreement with Participant for cause, including but not limited to material violation of any WPP rules or governing documents or nonpayment of obligations. Prior to exercising such right to terminate, the Board of Directors shall provide notice to Participant of the reasons for such contemplated termination and a reasonable opportunity to cure any deficiencies. Such Board of Directors termination shall be after an affirmative vote consistent with the Board of Directors standard voting procedures. Such termination shall not relieve the Participant of any financial obligations incurred prior to the termination date, and WPP may take all legal actions available to recover any financial obligations from Participant.

10. No Waiver of Non-FERC-Jurisdictional Status. If Participant is not subject to the jurisdiction of FERC as a public utility under the Federal Power Act, Participant shall not be required to take any action or participate in any filing or appeal that would confer FERC jurisdiction over Participant that does not otherwise exist. Participant acknowledges that FERC has jurisdiction over the WRAP, including Participant's activities in the WRAP.

Northwest Power Pool, d/b/a Western
Power Pool

Company

By: _____

By: _____

Name

Name

Title

Title

Date

Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

OFFICE OF ENERGY MARKET REGULATION

In Reply Refer To:
Northwest Power Pool
Docket No. ER22-2762-000

Issued: November 21, 2022

Paul M. Flynn
Wright & Talisman, P.C.
1200 G Street N.W., Suite 600
Washington, DC 20005-3898

Reference: Deficiency Letter

On August 31, 2022, Northwest Power Pool¹ submitted, pursuant to section 205 of the Federal Power Act² and section 35.12 of the Commission's regulations,³ a proposed tariff (Tariff) to establish the Western Resource Adequacy Program (WRAP) in the Western Interconnection. WPP explains that the WRAP is a voluntary resource adequacy planning and compliance framework designed to take advantage of and maximize regional diversity in resources and load to enhance reliability for customers across the WRAP footprint.⁴ The WRAP consists of: (1) a forward showing program, under which participants must demonstrate in advance that they have sufficient capacity resources to serve their peak load and their share of the WPP-established planning reserve margin; and (2) a real-time operations program, through which participants are requested to hold back excess capacity during critical periods for potential use by other participants who do not have sufficient resources to serve their load. WPP states that, in the binding phase of the WRAP, participants are obligated to comply with the forward showing and operations

¹ Hereafter, this letter generally refers to Northwest Power Pool (the entity that submitted the filing) as Western Power Pool (WPP), as the proposed tariff and transmittal in this proceeding generally refer to the entity as Western Power Pool or WPP.

² 16 U.S.C. § 824d.

³ 18 C.F.R. § 35.12 (2021).

⁴ WPP Filing, Transmittal at 1.

program requirements or be subject to deficiency charges.⁵

Please be advised that the filing is deficient, and that additional information is necessary to process the filing. Please provide the information requested below:

1. Under the operations program, participants will make and settle energy deployments (and the associated holdback requirement) bilaterally where the Tariff prescribes the price for these participant-to-participant transactions. WPP states that “entities will need to obtain, or have in place, market-based rate authority to engage in such transactions to the same extent they would require market-based rate authority if they conducted the same bilateral wholesale transaction for a non-WRAP purpose.”⁶ Regarding the operations program, WPP states that transactions will occur under “the existing framework of Commission jurisdiction and market-based rate authority.”⁷
 - a. Please explain how the WRAP operations program will interact with existing market-based rate authority, including where a market participant has market-based rate mitigation or does not have market-based rate authority.
 - b. WPP explains that two of the mechanisms used to determine operations program compensation are the Total Settlement Price and the Make-Whole Adjustment, both of which are partly based on price indices.⁸ Given that the formula for both partly derive from applicable sub-regional price indices, please explain how the program design will accommodate WRAP participants without market-based rate authorization in a specific market, or with market-based rate mitigation.
 - c. Please identify any applicable Tariff provision(s) that addresses how participants with market-based rate mitigation or those without market-based rate authority will be treated in the WRAP operations program. To the extent these procedures are not described in the Tariff yet, please describe where WRAP might address the circumstances described above.

⁵ *Id.* at 5.

⁶ *Id.* at 41.

⁷ WPP Filing, attach. F (Roy Aff.) at P 23.

⁸ WPP Filing, Transmittal at 39-40, attach. F (Roy Aff.) at P 14; Proposed Tariff §§ 21.2.5 and 21.2.6.

2. Under the proposed forward showing program, participants must demonstrate that they have secured firm transmission service rights sufficient to deliver at least 75% of the MW quantity of the participant's forward showing capacity requirement.⁹ Participants may include in their forward showing submittal a request for an exception to this requirement, which WPP will grant or deny.¹⁰ WPP states that, for two of the exceptions (i.e., the Enduring Constraint and Future Firm ATC Expected exceptions), participants will be limited to having the exceptions for one year under certain circumstances.¹¹
 - a. Please clarify what the time limitation is for each exception and identify whether the limitations are specified in the Tariff. If the limitations are not specified in the Tariff, please explain where they would be specified, and why it would be appropriate to specify the limitations outside of the Tariff.
3. WPP explains that it intends to deny participants repeated exceptions to the transmission service requirement. WPP also states that "it is within the ambit of its discretion to consider 'other relevant data and information, in determining whether to grant or deny a transmission exception request,' which the Tariff contemplates will be 'more fully set forth in the Business Practice Manuals.'"¹²
 - a. Please explain what "other relevant data and information" WPP will rely on when granting or denying exceptions to transmission service requirements.
4. The Tariff provides that WPP will engage an independent evaluator to provide an independent assessment of WRAP's performance by conducting an annual review of prior year program performance, accounting and settlement, and program

⁹ Proposed Tariff § 16.3.1.

¹⁰ Proposed Tariff §§ 16.3.2, 16.3.2.4.

¹¹ WPP Filing, attach. D (Hendrix Aff.) at PP 47-48 (citing Proposed Tariff §§ 16.3.2.1, 16.3.2.2).

¹² WPP Answer at 19.

design. The independent evaluator will prepare an annual report and present its findings to WRAP committees and the Board of Directors.¹³

- a. Please clarify whether the independent evaluator's reports will be made public or available to stakeholders.

This letter is issued pursuant to delegated authority, 18 C.F.R. § 375.307(a)(1)(v) and is interlocutory. This letter is not subject to rehearing pursuant to 18 C.F.R. § 385.713. Northwest Power Pool must respond to this letter within 30 days of the date of this letter by making an amendment filing in accordance with the Commission's electronic tariff requirements.¹⁴

The filing requested in this letter will constitute an amendment to the filing, and a new filing date will be established, pursuant to *Duke Power Company*, 57 FERC ¶ 61,215 (1991), upon receipt of Northwest Power Pool's electronic tariff filing. A notice of amendment will be issued upon receipt of the response.

Failure to respond to this deficiency letter within the time period specified, and in the manner directed above, may result in an order rejecting the filing. Until receipt of the amendment filing, a new filing date will not be assigned to this case.

Issued by: Carlos D. Clay, Acting Director, Division of Electric Power Regulation – West

¹³ Proposed Tariff §§ 5.1-5.3.

¹⁴ *Electronic Tariff Filings*, 130 FERC ¶ 61,047, at PP 3-8 (2010) (an amendment filing must include at least one tariff record even though a tariff revision might not otherwise be needed). The response must be filed using Type of Filing Code 180 – Deficiency Filing.

December 12, 2022

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

**Re: Northwest Power Pool d/b/a Western Power Pool, Docket No. ER22-2762-00_
Response to Deficiency Letter**

Dear Secretary Bose:

Northwest Power Pool d/b/a Western Power Pool (“WPP”) submits for filing this response to the letter¹ dated November 21, 2022, in this proceeding requesting additional information concerning WPP’s August 31, 2022 filing² pursuant to section 205 of the Federal Power Act (“FPA”)³ of a tariff⁴ to establish a Western Resource Adequacy Program (“WRAP”) in the Western Interconnection. This response also transmits minor clarifying Tariff revisions to resolve questions raised in the November 21 Letter.

I. REQUESTED EFFECTIVE DATE AND ACTION DATE

WPP respectfully renews its request for an effective date of January 1, 2023 for the WRAP Tariff. Good cause exists to grant WPP’s requested effective date. First, the Federal Energy Regulatory Commission (“Commission”) often permits applicants to retain their original requested effective date when a filing is made in good faith to cure a deficiency.⁵ Second, the August 31 Filing provided the required notice of the WRAP Tariff, and this filing gives notice of WPP’s desire to retain that date. Third, while this

¹ Northwest Power Pool, Deficiency Letter, Docket No. ER22-2762-000 (Nov. 21, 2022) (“November 21 Letter”).

² Submission of Tariff to Establish a Western Resource Adequacy Program of Northwest Power Pool d/b/a Western Power Pool, Docket No. ER22-2762-000 (Aug. 31, 2022) (“August 31 Filing”).

³ 16 U.S.C. § 824d.

⁴ Western Resource Adequacy Program Tariff of Northwest Power Pool d/b/a Western Power Pool (“Tariff” or “WRAP Tariff”).

⁵ See, e.g., *Midwest Indep. Transmission Sys. Operator, Inc.*, 105 FERC ¶ 61,076 (2003) (granting originally requested effective date where a supplemental filing in response to deficiency letter included clarifications that required revisions to the originally filed language).

filing includes minor clarifying revisions to the WRAP Tariff to resolve the questions posed in the November 21 Letter, the revisions are taken from WRAP stakeholder decisional materials that provided the substantive source material for much of the Tariff, and that were unanimously endorsed—well before the August 31 Filing—by the prospective Participants⁶ in the WRAP. As such, no party will be prejudiced by adoption of the originally requested effective date. Fourth, adoption of the originally requested effective date will send a strong Commission signal of support for the timely implementation of the WRAP.

WPP further respectfully requests that the Commission issue an order accepting the August 31 Filing, with the clarifying Tariff revisions in this filing, no later than February 10, 2023. This action date, which reflects the minimum notice required by the FPA, will provide much needed certainty to WPP, Participants, states, and other stakeholders on the continued timely implementation of the WRAP.

WPP clarifies that it will not transition to a new independent board (the prospective members of which have already been identified publicly) until the WRAP Tariff, and WPP's resulting public utility status, have been accepted and established by the Commission in an order free of unacceptable revisions or conditions. If WPP receives such an order by February 10, 2023, it will seat the new independent board as soon as practicable after issuance of that order.

WPP also notes that it is in the process of securing interim arrangements with Participants that will continue funding WPP's ongoing work on the WRAP initiative using terms that mirror the Tariff's administrative cost recovery provisions, and that will continue Participant review procedures which mirror the Tariff's Resource Adequacy Participants Committee ("RAPC") review and voting procedures. As WPP and stakeholders stand up additional committees, those bodies likewise will adopt the Tariff's proposed rules to govern their conduct. Commission adoption of the proposed January 1, 2023 effective date will thus facilitate this effort by WPP and the stakeholders to conduct these important implementation activities (i.e., project funding and stakeholder process) in a manner consistent with the proposed Tariff. WPP notes that these project development funding and stakeholder process rules, which are the same type of WRAP development activity that has been ongoing for several years, do not, standing alone, trigger the Commission's FPA jurisdiction, but WPP again urges the Commission to issue its final order on this filing by February 10, 2023, to provide needed certainty to the many stakeholders actively involved in the WRAP initiative.

⁶ Capitalized terms used in, but not otherwise defined in, this transmittal have the meaning provided by the Tariff.

II. RESPONSES TO THE NOVEMBER 21 LETTER'S SPECIFIC QUESTIONS⁷

November 21 Letter Question:

- 1. Under the operations program, participants will make and settle energy deployments (and the associated holdback requirement) bilaterally where the Tariff prescribes the price for these participant-to-participant transactions. WPP states that “entities will need to obtain, or have in place, market-based rate authority to engage in such transactions to the same extent they would require market-based rate authority if they conducted the same bilateral wholesale transaction for a non-WRAP purpose.” Regarding the operations program, WPP states that transactions will occur under “the existing framework of Commission jurisdiction and market-based rate authority.”**
 - a. Please explain how the WRAP operations program will interact with existing market-based rate authority, including where a market participant has market-based rate mitigation or does not have market-based rate authority.**
 - b. WPP explains that two of the mechanisms used to determine operations program compensation are the Total Settlement Price and the Make-Whole Adjustment, both of which are partly based on price indices. Given that the formula for both partly derive from applicable sub-regional price indices, please explain how the program design will accommodate WRAP participants without market-based rate authorization in a specific market, or with market-based rate mitigation.**
 - c. Please identify any applicable Tariff provision(s) that addresses how participants with market-based rate mitigation or those without market-based rate authority will be treated in the WRAP operations program. To the extent these procedures are not described in the Tariff yet, please describe where WRAP might address the circumstances described above.**

WPP Response to Subpart (a):

As detailed below, the WRAP Operations Program “interact[s] with existing market-based rate authority,” by encouraging Participants to resort to the existing bilateral market—where Commission-jurisdictional sellers already have market-based rate authority or Commission-approved market power mitigation—to source their needs. For Participants

⁷ For ease of reading, the internal citations in the November 21 Letter are omitted from the copies of those questions in this response. To be clear, however, WPP’s responses are to the questions as posed in the November 21 Letter.

that must rely on the Operations Program on a given day, the Operations Program design contains several features, such as reliance on established liquid price indices and cost-based components (via the Make Whole Adjustment based on opportunity costs), to check the ability of *all* selling Participants, whether they possess market-based rate authority or not, to exercise market power or influence over the price, quantity, or obligation to provide Energy Deployments when needed.

1. *The Commission's Well-Established Policy Is that Sales Are Permitted at Market-Based Rates if Sellers Do Not Have Market Power or Market Power Is Adequately Mitigated.*

The Commission's longstanding policy is to "allow[] power sales at market-based rates if the Seller and its affiliates do not have, *or have adequately mitigated*, horizontal and vertical market power."⁸ The Commission's analysis focuses on "whether a market-based rate seller or any of its affiliates has market power in generation or transmission and, if so, *whether such market power has been mitigated.*"⁹ Important within that policy is that sellers have the opportunity to make sales at market-based rates even if they fail the Commission's market power screens, so long as the Commission's concerns about the potential for market power abuse can be mitigated through the adoption of certain mitigation mechanisms. While the Commission's default mitigation measure for sellers with market power is cost-based rates, "the Commission's policy allows 'applicants to propose case-specific *mitigation tailored to their particular circumstances* that eliminates

⁸ See, e.g., *Refinements to Horizontal Market Power Analysis for Sellers in Certain Regional Transmission Organization and Independent System Operator Markets*, Order No. 861, 168 FERC ¶ 61,040, at P 5 (2019) (emphasis added) (citing *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, 119 FERC ¶ 61,295, at PP 62, 399, 408, 440, *clarified*, 121 FERC ¶61,260 (2007), *order on reh'g*, Order No. 697-A, 123 FERC ¶ 61,055, *clarified*, 124 FERC ¶ 61,055, *order on reh'g*, Order No. 697-B, 125 FERC ¶ 61,326 (2008), *order on reh'g*, Order No. 697-C, 127 FERC ¶ 61,284 (2009), *order on reh'g & clarification*, Order No. 697-D, 130 FERC ¶ 61,206 (2010), *aff'd sub nom. Mont. Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011)), *order on rehearing & clarification*, Order No. 861-A, 170 FERC ¶ 61,106 (2020).

⁹ Order No. 697 at P 3 (emphasis added).

the ability to exercise market power,”¹⁰ and “the alternative mitigation...could include cost-based rates *or other mitigation that the Commission may deem appropriate.*”¹¹

Indeed, in adopting its policy as set forth in Order No. 697, the Commission expressly authorized sellers to propose “market-based” mitigation measures, “*such as the use of an index or [a locational marginal price] proxy, for Commission consideration on a case-by-case basis based on their particular circumstances,*”¹² rather than simply defaulting to cost-based rates. Thus, the Commission’s policy for market power mitigation contemplates the possibility that a seller with market power could mitigate its market power by making sales at an index-based price rather than adopting default cost-based rates.

2. The Operations Program Design Mitigates Market Power by Preventing Sellers from Exercising Control Over the Material Elements of WRAP-Required Transactions.

The WRAP by design mitigates the ability of sellers to exercise market power in the relevant “products” implicated by the Commission Staff’s question—i.e., Holdback Requirements and Energy Deployment. As WPP explained in its transmittal letter and the Affidavit of Mr. Ryan Roy, Director of Technology, Modeling and Analytics, the design of the WRAP Operations Program “prevents sellers from exercising control over price, quantity, or the Tariff-triggered obligation to make the sale,”¹³ all of which, if left up to a seller’s control, could be used to exercise of market power.

As the Tariff makes clear, “Participants *shall* provide energy during an hour . . . in accordance with WPP’s calculation of the Energy Deployment for such hour.”¹⁴ The Tariff further provides that “WPP *shall advise* each Participant with a required Energy Deployment for an hour of *the required MWh quantity and delivery point of such Energy Deployment* by no later than ninety minutes before the start of such hour.”¹⁵ Likewise,

¹⁰ *Id.* at P 625 (emphasis added) (quoting 107 FERC ¶ 61,018, at P 148); *see also id.* at P 622 (stating that the Commission will “allow[] sellers to propose case-specific tailored mitigation, or adopt the default cost-based rate” (citing 107 FERC ¶ 61,018, at P 148)).

¹¹ *Id.* at P 625 (emphasis added) (citing 107 FERC ¶61,018 at P 148 n.142).

¹² *Id.* at P 698 (emphasis added).

¹³ August 31 Filing at 45; *see also id.*, Attachment F, Affidavit of Ryan L. Roy ¶ 27 (“Roy Aff.”).

¹⁴ Tariff § 20.4.1 (emphasis added).

¹⁵ *Id.* § 20.4.4 (emphasis added).

settlement prices will be as dictated by the Tariff;¹⁶ and “[t]he WPP will calculate and post settlement quantities and prices based on the Energy Deployment and Holdback Requirement.”¹⁷

Participants do not submit offers for any of these WRAP-directed transactions; rather, Participants are required to provide Holdback Requirements and Energy Deployments based on their expected surplus during the hour of a Sharing Event, based on the Participant’s WPP-calculated positive Sharing Calculation.¹⁸ In other words, sellers have no ability to influence, through offers, the price to be paid for Holdback Requirements or Energy Deployments, because there are no such offers.

Similarly, sellers lack the ability to engage in withholding as to the Energy Deployment because the Tariff obligates them to comply with Energy Deployment directives or face substantial Delivery Failure Charges for failure to do so.¹⁹

In short, sellers do not control the key terms of transactions in the Operations Program, including the price, quantity, and obligation to sell. Each of these key levers to the potential exercise of market power are dictated by the Tariff and calculated by WPP and external price indices, rather than influenced by seller offers.²⁰ By removing the ability of a seller to influence these key components of the sale, the WRAP Tariff design mitigates the ability of sellers to exercise market power, even with respect to sellers the Commission previously has determined possess the ability to exercise market power in certain control areas for certain products within the geographic area that will comprise the WRAP Region.

3. *The WRAP Operations Program Design Also Mitigates Market Power by Incenting Participation in the Existing Bilateral Market (Including the Existing Market’s Protections Against the Exercise of Market Power.*

As Mr. Roy explained in his affidavit, the Operations Program is intended to be a *last resort*, with prices designed to encourage deficient Participants to procure outside of the WRAP the energy and capacity they need to serve their load, by utilizing the existing bilateral markets in the West, which are subject to the Commission’s market-based rate regime.²¹ The Tariff explicitly states that Operations Program pricing is “designed to

¹⁶ See *id.* § 21.2.

¹⁷ *Id.* § 21.1.3 (emphasis added).

¹⁸ See *id.* § 20.1

¹⁹ Roy Aff. ¶ 24; see Tariff § 20.7.

²⁰ Roy Aff. ¶¶ 5, 24.

²¹ *Id.* ¶ 23.

incent Participants to resolve any forecast Operating Day deficiencies before the Operating Day, including through transactions outside the Operations Program”;²² and *presumes*, before setting any Holdback Requirement²³ or any Energy Deployment²⁴ that a Participant calculated to be deficient *will* resolve its deficiency *outside* the Operations Program. The Holdback and any associated Energy Delivery made available in the WRAP Operations Program is thus intended to be a backstop to Participants’ ability to access the wholesale bilateral market where the Commission has a robust framework to perform market power analysis and establish market-based rate authority or appropriate mitigation.

Consistent with this intended reliance on transactions outside the Operations Program, WPP is required to provide indicative results starting seven days in advance of the Operating Day,²⁵ giving deficit Participants ample time to utilize the bilateral market. The WRAP settlement is designed to *encourage the use of the bilateral market* (in which all Commission-jurisdictional sellers are required to have market-based rates or acceptable mitigation), *not to shift* supply and counterparties *away from the bilateral market*.

4. *The Proposed WRAP Pricing Is Based on Index Price and Opportunity Cost Features that the Commission Has Previously Found Adequately Mitigate Market Power.*

The Operations Program design further protects against the exercise of market power by prescribing prices—when Energy Deployments *do occur* under the program—that are based on approaches the Commission has previously found adequately mitigate market power, i.e., reliance on competitive price indices and recognition of legitimate opportunity costs.²⁶

²² Tariff § 18.3.

²³ *See id.* § 20.2.1 (precondition to WPP determining a Holdback Requirement is that “the Participant(s) found to be deficient for such hour(s) by the Sharing Calculation confirms to the WPP . . . such Participant’s need for capacity for such hour(s).”).

²⁴ *See id.* § 20.4.2 (precondition to WPP determining an Energy Deployment for any hour of an Operating Day is that the Participant calculated to need such assistance “confirm[s], by no later than 120 minutes before the start of such hour, the quantity of Energy Deployment for which it requires delivery for such hour”; and if the Participant does not so confirm, it “will be deemed to waive all deliveries of Energy Deployment under the Operations Program for such hour.”).

²⁵ *Id.* §§ 18.2, 19.1.

²⁶ Roy Aff. ¶¶ 25-26.

As Mr. Roy explains, seller compensation for both Holdback Requirements and Energy Deployments is derived from the Total Settlement Price.²⁷ The Total Settlement Price, in turn, is patterned directly on the maximum import bid pricing that the Commission approved for the California Independent System Operator (“CAISO”).²⁸ CAISO’s approved proposal sets the maximum bid price for certain imports into California by taking the greater of the Mid-Columbia (“Mid-C”) or Palo Verde (“PV”) index prices, multiplying the index by an hourly shaping ratio, and multiplying that number by 110%.²⁹ CAISO supported its proposed use of the Mid-C and PV price indices on the grounds that “they are the primary liquid trading hubs for bilateral transactions in the Western Interconnection and provide representative electric prices for the bilateral market outside CAISO’s balancing authority area.”³⁰ WPP agrees³¹ with CAISO’s characterization of the Mid-C and PV indices, and intends to use those two indices to set the Total Settlement Price, with the only difference that WRAP will use an average of those two indices as the basis for determining the Total Settlement Price.³²

The Commission’s acceptance of use of the Mid-C and PV hubs in *CAISO* to set prices for resources located in the WECC area outside California is consistent with the Commission’s prior recognition of those two trading hubs as having sufficient liquidity to represent competitive prices at those two hubs.³³

WPP’s two proposed adjustments³⁴ to these index prices are identical to the adjustments the Commission found just and reasonable in *CAISO*, i.e., the hourly shaping factor and

²⁷ *Id.* ¶ 13.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *See Calif. Indep. Sys. Operator Corp.*, 175 FERC ¶ 61,076, at P 8 (2021) (“*CAISO*”).

³¹ August 31 Filing at 39.

³² Roy Aff. ¶ 14.

³³ *See, e.g., El Paso Elec. Co.*, 148 FERC ¶ 61,051, at P 7 (2014) (showing use of PV price to set imbalance charges); *Idaho Power Co.*, 121 FERC ¶ 61,181, at P 27 (2007) (showing use of Mid-C price to set imbalance charges); *PacifiCorp*, 95 FERC ¶ 61,145, at 61,465 (2001) (including Mid-C and PV in group of “four major western interfaces” used to set energy imbalance rate); *Pinnacle W. Energy Corp.*, 92 FERC ¶ 61,248, at 61,791 (2000) (showing use of PV price to set prices for affiliate transactions because the PV index is a recognized market hub with competitive prices).

³⁴ *See* Tariff § 21.2.6.

the 110% multiplier. As in *CAISO*, the 110% multiplier reasonably captures some of the potential variations between published electric price indices and individual transactions.³⁵ The hourly shaping factor, which divides the day-ahead market system marginal energy cost for the CAISO Balancing Authority Area (“BAA”) by the average day-ahead market system marginal energy cost in all on-peak hours of the same previous representative trading day, reasonably scales the hourly price up or down relative to the daily hub price in hours where the system marginal energy cost is, respectively, greater or lesser than the daily average.³⁶ The Commission found that CAISO’s resulting pricing approach “represents a balanced approach between allowing high prices during times when prices in the Western Interconnection are high and ensuring bids by resource adequacy resources reflect prevailing market conditions.”³⁷ Notably, CAISO specifically proposed this approach—which WPP is adopting here—to address concerns that certain import bids “could exercise system-level market power.”³⁸

Aside from this reliance on competitive price indices, the only other element of the WRAP settlement pricing which could increase compensation paid to sellers is the Make-Whole Adjustment.³⁹ But that adjustment, as Mr. Roy explained, is “a textbook example of an opportunity cost”;⁴⁰ and, as the Commission itself has observed, it “has long recognized opportunity costs as a legitimate component of just and reasonable rates.”⁴¹

More specifically, the Commission has recently adopted an opportunity cost framework to mitigate the potential exercise of market power, which requires a demonstration that the seller “had an opportunity to sell power above the [price otherwise permitted] that it declined to make in favor of the consummated sale.”⁴² In particular, “the opportunity cost framework requires evidence of[: (1)] alternative sales options, including details on the

³⁵ See *CAISO* at P 9.

³⁶ See *id.* at P 7 n.16.

³⁷ *Id.* at P 43.

³⁸ *Id.* at P 5.

³⁹ See Tariff § 21.2.5.

⁴⁰ Roy Aff. ¶ 17.

⁴¹ *ConocoPhillips Co.*, 175 FERC ¶ 61,226, at P 16 (2021) (citing *Cal. Indep. Sys. Operator Corp.*, 163 FERC ¶ 61,211, at P 11 (2018) (approving default energy bid formulas for hydro resources [in CAISO] with storage take into account these resources’ opportunity to sell energy outside of CAISO)).

⁴² *Id.* at P 17.

timing, location, quantity, and likely price of the alternative sale[; and (2)] the ability to deliver at the time of the actual transaction to the point of sale.”⁴³

The Make-Whole Adjustment satisfies these principles. The Tariff prescribes⁴⁴ that the Make-Whole Adjustment

is applied in the event that the settlement revenue and the estimated value of the non-dispatched energy is less than the estimated revenues the selling entity would have received had such entity not been subject to a Holdback Requirement and had sold a day-ahead block of energy with a MW value equal to the maximum amount of Holdback Requirement for the hours in the block.

The Tariff’s formula⁴⁵ and Mr. Roy’s affidavit⁴⁶ provide additional details and explanation for the Make-Whole Adjustment. As can be seen, the Tariff uses the same Applicable Price Index, i.e., the same pricing hub, for both the WRAP-required sale and the foregone day-ahead market sale. The timing of the two sales is the same—i.e., the foregone block sale must include the hour of the Energy Deployment sale—and the quantity is the same—i.e., the day-ahead block sale must have a megawatt (“MW”) value equal to the maximum amount of Holdback Requirement for the hours in the block. Similarly, the WRAP provisions that require a seller to have firm transmission⁴⁷ also establish “the ability to deliver at the time of the actual transaction to the point of sale”⁴⁸ as contemplated by the Commission’s opportunity cost framework. The Make-Whole Adjustment also is careful to recognize and account for the factors that would reduce the seller’s opportunity costs from foregoing the day-ahead block sale, such as revenue opportunities in the real-time market.⁴⁹

Mr. Roy provides solid support for basing these opportunity costs on a forgone block sale. As he explains, “day-ahead sales are commonly made in the form of multiple hour blocks during the Operating Day; [and] the on-peak (sixteen hour) and off-peak (eight hour)

⁴³ *Id.* at PP 18-19.

⁴⁴ Tariff § 21.2.5.

⁴⁵ *Id.*

⁴⁶ Roy Aff. ¶¶ 16-17.

⁴⁷ *See* Tariff § 20.6.

⁴⁸ *ConocoPhillips* at P 19.

⁴⁹ *See* Roy Aff. ¶ 16.

blocks are among the most liquidly traded products in the day-ahead energy markets for both Mid-C and PV.”⁵⁰

In sum, when a Participant with a deficit on the Operating Day has no other recourse but a WRAP Energy Deployment, WRAP’s settlement pricing is just and reasonable and relies on elements—competitive index prices and legitimate opportunity costs—that the Commission has found adequately mitigate the potential exercise of market power. This mitigation, by definition, is sufficient whether or not the affected seller has market-based rate authority for its sale to the affected buyer: mitigation of such potential market power is precisely the point of using these mitigation approaches to cap allowable prices.

5. Requiring a Different Mitigation Approach, i.e., the Seller’s Production Cost, Would Seriously Undermine Important WRAP Objectives.

Because the proposed Operations Program already includes the important elements detailed above that mitigate the potential exercise of market power, the Commission does not need to order WPP to adopt the remaining mitigation approach the Commission has recognized as a means to justify sales prices, i.e., basing price on the seller’s generation production costs. Indeed, ordering WPP to adopt that mitigation approach in lieu of the mitigation approaches discussed above could, and likely would, seriously undermine important WRAP objectives.

First, setting a price for WRAP settlements that disregards the relevant index prices and the applicable legitimate opportunity costs would almost certainly result in a WRAP settlement price that is below—perhaps far below—the price a Participant with a deficit for an Operating Day would pay in the bilateral market to resolve its deficiency. The prices for bilateral market sales in the WRAP Region are highly likely to be influenced by the dominant trading hub index prices in the northern and southern (or eastern) parts of that region, i.e., Mid-C and PV, respectively. Moreover, because on-peak and off-peak blocks tend to be the most liquid products at these hubs,⁵¹ the buyer seeking to resolve its deficit would likely face a cost that is significantly influenced by that trading reality. Adopting instead a mitigation approach that is based on an individual seller’s cost of production would very likely result in a lower cost for a buyer with a supply deficit to resolve that deficit through WRAP than to resolve it through the bilateral market. That would be directly opposed to the fundamental character⁵² of WRAP settlement as a sale of last resort, not a sale of first resort.

Second, that approach would, as applied here, be manifestly unjust and unreasonable. In the Operations Program, the seller assigned a Holdback Requirement or an Energy

⁵⁰ *Id.* at ¶ 17.

⁵¹ *See id.*

⁵² *See id.* ¶ 23.

Deployment *has no choice in taking on that Holdback Requirement or that Energy Deployment*. The Operations Program mandates the quantity, timing, location, and price for that transaction. In any other circumstance where price mitigation is applied, a seller would have an opportunity to decide whether it wants to make a particular sale, at a particular time, at a particular location based on its cost of production. The Operations Program does not allow a seller that type of choice.⁵³

Third, such an alternative mitigation approach would create a substantial disincentive to certain Participants joining the program. Why would a seller to which such production-cost mitigation might be applied join a program that compels it to make a below-market sale during the very time when adverse demand or supply conditions are causing elevated prices? That would be a very hard sell, and could result in substantial gaps in the area served by the WRAP, in terms of both supply/load diversity and available transmission, thereby diminishing the value of the program for all Participants.

Fourth, that alternative approach to mitigation could significantly undermine the Program's proposed optimized use of available transmission in the most efficient manner by preventing in many cases the “nearest neighbor cluster” element of the buyer-seller matching algorithm in the Operations Program.⁵⁴ This is because sellers with locational limits on their market-power authority usually have such limits as to sales to buyers in their own BAA or in an adjacent BAA. But those are the very transactions that can make the most efficient use of the region's available transmission. And that type of efficient matching reduces the overall cost of meeting resource adequacy objectives, to the general benefit of all Participants.

WPP Response to Subpart (b):

As explained in WPP's response to subpart (a), the Operations Program design will accommodate WRAP Participants without market-based rate authorization in a specific market or with market-based rate mitigation through the multiple features that will adequately mitigate the potential exercise of market power, e.g., removing from a seller the ability to influence the quantity, price, location, and counter-party to its sale, and using prices capped at the prices set by liquid price indices, with just and reasonable price adjustments, or by the seller's legitimate opportunity costs, when a sale must occur.

⁵³ While Participants can transfer their Holdback Requirement or Energy Deployment obligations, they need a willing counter-party to do so. But any counter-party would presumably be just as loath as the first seller to make a below-market sale at times when demand is high and supply is low.

⁵⁴ See Tariff § 20.4.1.2.

WPP's Response to Subpart (c):

WPP's response to subpart (a) identifies and discussed in detail the applicable Tariff provisions that address how Participants with market-based rate mitigation or those without market-based rate authority will be treated in the WRAP Operations Program.

November 21 Letter Question:

2. **Under the proposed forward showing program, participants must demonstrate that they have secured firm transmission service rights sufficient to deliver at least 75% of the MW quantity of the participant's forward showing capacity requirement. Participants may include in their forward showing submittal a request for an exception to this requirement, which WPP will grant or deny. WPP states that, for two of the exceptions (i.e., the Enduring Constraint and Future Firm ATC Expected exceptions), participants will be limited to having the exceptions for one year under certain circumstances.**
 - a. **Please clarify what the time limitation is for each exception and identify whether the limitations are specified in the Tariff. If the limitations are not specified in the Tariff, please explain where they would be specified, and why it would be appropriate to specify the limitations outside of the Tariff.**

WPP Response:

The question slightly misstates the concern at issue, as WPP understands it. The exceptions to the FS Transmission Requirement do not have a time limitation. Participants must show they satisfy the FS Transmission Requirement for each Binding Season and must do so in their Forward Showing Submittal that must be provided seven months before the Binding Season. Participants that cannot meet the FS Transmission Requirement for a Binding Season may seek an exception. Any exception requested, therefore, is specific to the FS Transmission Requirement for a particular Binding Season and does not apply to any other Binding Season.

The Tariff describes certain parameters of an exception request, including that a Participant need only show that it sought, but could not obtain, firm transmission service for a duration of one year or less. In other words, if the only firm transmission service available is for a duration of more than one year, the Participant can still qualify for the exception even if it chose not to obtain that longer-term service. Implicitly, however, a Participant should not be permitted an automatic recurring waiver if it is disregarding reasonable alternative options available to the Participant to meet the FS Transmission Requirement. For this reason, if a Participant obtains an exception for the Binding Season in one year even though transmission service with a duration of more than one year was available at that time, that choice—to not take available longer-term service—should be taken into account if the Participant still lacks necessary transmission service for the same season the following

year, and seeks the same exception for that year. If longer duration service remains an option for that second year, it is reasonable to expect the Participant to obtain that longer-term service to resolve what is clearly a longer-term deficiency. This is not a time limitation or sunset on the availability of an exception. Rather, it is a particular scenario where a reasonable option is available to address what is evidently an ongoing transmission deficiency—that is, the purchase of longer-term service—and the Participant is declining to take that option. In those circumstances, the balance should favor the exercise of the longer-term option to ensure the Participant is satisfying its responsibility to ensure firm deliverability of its Qualifying Resources—just as all other Participants are doing. On this set of facts, granting a waiver under the WRAP diminishes the value and importance of the firm transmission requirement to ensuring the resource adequacy objectives of the program.

In short, when evaluating a transmission exception request, WPP should be able to consider whether a Participant is submitting routine or repeated requests for exceptions that the Participant could have avoided by taking advantage of reasonably available alternatives.

That said, in response to the Commission’s question, WPP proposes to resolve the specific type of repeated exception requests at issue here by adding language to the two relevant transmission exceptions in the Tariff addressing this particular scenario. In both exceptions, WPP proposes to add two sentences following the provision that states the Participant need only show that transmission service with a duration of one year or less was not available. The first added sentence makes explicit what that provision logically implies, i.e., if transmission service is only available for more than one year, the Participant can still qualify for the exception and does not need to obtain that longer duration firm service. The second added sentence provides a caveat to that general rule, i.e., that if the Participant declines to take available longer-term service in one year, and receives an exception, it cannot obtain the exception for the following year if longer term service is still available.

Thus, for the “Enduring Constraints” exception, WPP proposes to add:

In the event such transmission service rights are only available for a duration of more than one year (whether from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Enduring Constraints exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year.

Similarly, for the “Future Firm ATC Expected” exception, WPP proposes to add:

In the event ATC for such transmission service rights is only posted or available prior to the FS Deadline for a duration of more than one year (whether from the transmission service provider or through a secondary market) on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Future Firm ATC Expected exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year.

As can be seen, the added language is nearly the same for both exceptions; the only differences are slight wording changes for the second exception, which concerns the posting of Available Transfer Capability (“ATC”) prior to the FS Deadline.

WPP notes that in both cases, the added language makes clear that the limitation on seeking the exception applies only to the second year (and not all subsequent years). Theoretically this might permit a Participant to seek an exception every other year. Such conduct would be incompatible with the program’s resource adequacy objectives, and with Participants’ mutual reliance on one another to advance resource adequacy for the region. However, the Tariff clarifications proposed here are intended to be sufficient to encourage Participants to plan to meet their transmission needs on a sustained basis.

Importantly, these clarifying additions to both the “Enduring Constraints” and “Future Firm ATC Expected” exceptions track the agreements reached among all prospective Participants when the substantive FS Transmission Requirement and transmission exception rules were adopted. Specifically, the Transmission Demonstration and Exceptions Working Group included in its report⁵⁵ the following language as to both the “Enduring Constraints” exception and the “Future Firm ATC Expected” exception:

If transmission service is only available for more than one year (either from TSP or through secondary market) at applicable OATT rate or less, participant can seek an exception, but if granted will be ineligible for an exception on the same path (or across same constraint) in following year.

The final report was endorsed unanimously by the RAPC on April 28, 2022.

⁵⁵ See Resource Adequacy Participants Committee, *RAPC Meeting Minutes*, Western Resource Adequacy Program, Transmission Demonstration and Exceptions Draft Proposal, 3 (Apr. 28, 2022), https://www.westernpowerpool.org/private-media/documents/2022-04-28_RAPC_Meeting_Minutes.pdf.

November 21 Letter Question:

3. **WPP explains that it intends to deny participants repeated exceptions to the transmission service requirement. WPP also states that “it is within the ambit of its discretion to consider ‘other relevant data and information, in determining whether to grant or deny a transmission exception request,’ which the Tariff contemplates will be ‘more fully set forth in the Business Practice Manuals.’”**
 - a. **Please explain what “other relevant data and information” WPP will rely on when granting or denying exceptions to transmission service requirements.**

WPP Response:

In the specific context here, it would be relevant to a request for an exception from the FS Transmission Requirement that a Participant with a claimed inability in successive years to obtain transmission had an opportunity to obtain longer term service in the first year that would have met its needs for firm transmission service for both years but chose not to do so. A Participant should not use an exception as a routine substitute for arranging for firm deliverability of its committed resources—particularly in the specific scenario contemplated by WPP’s answer, i.e., where longer term firm transmission service was in fact available to the Participant in the prior year, and the Participant declined to purchase it.

Beyond that specific scenario, the proposal to allow WPP’s exception review to consider “other relevant data and information” beyond the items listed in the immediately preceding Tariff language was simply intended to reflect that individual exception requests could to some extent be fact-specific, and so the preceding list of items WPP “may consider” was not intended to prohibit WPP from considering other data and information that may be relevant to the specific request. In context, “relevant” means information similar to the information more specifically noted in the Tariff, i.e., information about the transmission alternatives reasonably available to the Participant that would have allowed it to meet the FS Transmission Requirement instead of seeking an exception.

As explained in WPP’s response to Question 2, WPP now proposes to add language to the Tariff to address explicitly the scenario raised in that question. If WPP’s proposed Tariff language is accepted, WPP would no longer need to rely on the “other relevant data and information” clause to consider that specific scenario. But given that the November 21 Letter separately questions this clause, WPP is proposing here to add language making clear that it will consider other reliable information concerning the transmission alternatives that the Participant could have employed to meet the FS Transmission Requirement instead of seeking an exception.

Specifically, WPP proposes to delete “and other relevant data and information” and insert in its place “and data readily available to WPP from other reliable and validated sources concerning the duration, timing, firmness, and quantity of available transmission service or equivalent options (including transmission construction).” This language more clearly conveys what is meant by “relevant” data, and also reinforces the implicit assumption of the preceding Tariff language that “information from transmission service providers [and] OASIS data” is reliable, validated, and readily available to WPP, and therefore other data of the same nature that WPP may consider should meet those same standards of being “readily available to WPP from other reliable and validated sources.”

November 21 Letter Question:

- 4. The Tariff provides that WPP will engage an independent evaluator to provide an independent assessment of WRAP’s performance by conducting an annual review of prior year program performance, accounting and settlement, and program design. The independent evaluator will prepare an annual report and present its findings to WRAP committees and the Board of Directors.**
- a. Please clarify whether the independent evaluator’s reports will be made public or available to stakeholders.**

WPP Response:

The Independent Evaluator’s annual reports are intended to be made public, subject to protections for any confidential information included in those reports. Proposed Tariff section 5.3 assumed this by stating that the reports “will be presented to the WRAP committees and the Board of Directors, subject to any necessary confidentiality considerations,” given that the meetings of such bodies will typically be open. Reflecting this same assumption, the January 2022 WRAP Governance Proposal, which was approved by the RAPC unanimously on January 13, 2022, explicitly stated:⁵⁶

To be effective, independent program monitoring and evaluation must be transparent. Every effort should be made to aggregate data in order to preserve confidentiality, while still effectively communicating program results and performance to stakeholders. The non-confidential portions of the IE’s annual report will be made available to the public.

To eliminate any doubt in this regard, WPP proposes to add to the end of section 5.3 a sentence stating that “[t]he Independent Evaluator’s annual reports shall be available to the

⁵⁶ Resource Adequacy Participants Committee, *RAPC Meeting Minutes*, Western Resource Adequacy Program, 2 (Jan. 13, 2022), https://www.westernpowerpool.org/private-media/documents/2022-01-13_RAPC_Agenda_Minutes.pdf (stating in Ongoing Business Governance V4 was “[a]pproved unanimously at 10:40 for immediate posting to NWPP website”).

public, except to the extent they contain information designated as confidential under this Tariff, or information designated as confidential by the Independent Evaluator.” This coordinates the provision with the confidentiality provisions of the Tariff,⁵⁷ while also allowing for the possibility that the Independent Evaluator might independently have a need to designate as confidential some item (or items) of information it relied upon in preparing its report.

III. ADDITIONAL INFORMATION

A. Information Required by the Commission’s Regulations⁵⁸

1. Documents Submitted with this Filing:

In addition to these responses, the following documents are included:

Attachment A	Clean revised versions of the affected sections of the WRAP Tariff, with the clarifying revisions described in these responses; and
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Attachment B	Redlined revised versions of the affected sections of the WRAP Tariff showing changes to the WRAP Tariff previously submitted in the August 31 Filing.
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2. Effective Date:

As noted above, WPP requests that the Commission accept this filing effective January 1, 2023.

⁵⁷ See Tariff § 10.

⁵⁸ To the extent necessary, WPP requests a waiver of the following requirements under the Commission’s regulations: (1) 18 C.F.R. § 35.12(b)(1), estimates of the transactions and revenues under an initial rate schedule; (2) 18 C.F.R. § 35.12(b)(2)(ii), summary statement of all cost computations involved in arriving at the derivation of the level of the rate; (3) 18 C.F.R. § 35.12(b)(5) requirement to submit information required under 18 C.F.R. § 35.13(h)(37). WPP further requests waiver of any other Commission regulation the Commission deems necessary and appropriate. Good cause exists to grant these waivers as the information requested is not applicable to the WRAP Tariff, which sets forth the terms and conditions for the WRAP.

3. *Service:*

In addition to serving all persons on the Commission's service list for this proceeding, WPP will post a complete copy of this filing on the WPP web site: www.westernpowerpool.org.

4. *Description of Filing and Basis of Proposed Tariff:*

The description and justification of the sections of the of the WRAP Tariff that are proposed to be revised by this filing are set forth in the responses above.

5. *Requisite Agreements:*

Currently, there are none, but each Participant will be required to execute a Western Resource Adequacy Program Agreement to participate.

6. *Comparison of the Proposed Initial Rate with Other Rates of the Filing Utility:*

There are none.

7. *Specifically, Assignable Facilities Installed or Modified:*

There are none.

IV. CONCLUSION

For all of the foregoing reasons, WPP respectfully requests that the Commission accept these responses to the questions in the November 21 Letter as resolving the deficiencies that prompted the issuance of the November 21 Letter, and accept the proposed WRAP Tariff, as set forth in the August 31 Filing and as revised by this filing, as just and reasonable effective January 1, 2023, without modification or condition. WPP further requests that the Commission issue an order accepting this filing by February 10, 2023, which is 60 days after the date of this filing.

Respectfully submitted,

/s/ Paul M. Flynn

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***Attorneys for Northwest Power Pool
d/b/a Western Power Pool***

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC, this 12th day of December 2022.

/s/ Paul M. Flynn
Paul M. Flynn

Attachment B

5. Independent Evaluator

- 5.1 WPP shall engage an Independent Evaluator to provide an independent assessment of the performance of the WRAP and any potential beneficial design modifications. The Independent Evaluator shall report directly to the Board of Directors.
- 5.2 The Independent Evaluator shall conduct an annual review of the WRAP, including but not limited to analyzing prior year program performance, accounting and settlement, and program design.
- 5.3 The Independent Evaluator shall prepare an annual report of its findings, and any recommended modifications to WRAP design, and present its findings to the WRAP committees and the Board of Directors, subject to any necessary confidentiality considerations. Any data included in the Independent Evaluator's report shall be reported on an aggregated basis as applicable to preserve confidentiality. The Independent Evaluator's annual reports shall be available to the public, except to the extent they contain information designated as confidential under this Tariff, or information designated as confidential by the Independent Evaluator.
- 5.4 The Independent Evaluator shall not:
 - 5.4.1 Evaluate individual Participants.
 - 5.4.2 Possess any decision-making authority regarding the WRAP or design modifications.
 - 5.4.3 Evaluate WPP's day-to-day operations of the WRAP (except as part of review of prior year program performance).

16. Components of the Forward Showing

16.1 FS Capacity Requirement. The FS Capacity Requirement shall be determined for each Participant on a monthly basis by applying the applicable Monthly FSPRM for a Month to such Participant's peak load forecast for that Month. The Participant's peak load forecast for a given Month of a Binding Season will be the P50 Peak Load Forecast for the Binding Season multiplied by a shaping factor based on the historic relationship, for such Participant, of the seasonal peak for the Winter Season or Summer Season, as applicable, and the monthly peaks for the Months in such season, as more fully described in the Business Practice Manuals.

16.1.1 P50 Peak Load Forecast. The P50 Peak Load Forecast is a peak load forecast prepared on a basis, such that the actual peak load is statistically expected to be as likely to be above the forecast as it is to be below the forecast. The Business Practice Manuals shall specify an approved load forecasting methodology for use by all Participants for their WRAP-required load forecasts which shall include (i) a base monthly peak derived from a recent historic period that recognizes additions and removals of load during the historic period, (ii) adjustments for known additions and removals of load during the forecast window; and (iii) a specified load growth factor.

16.1.2 FS Planning Reserve Margin

16.1.2.1 The FSPRM is an increment of resource adequacy supply needed to meet conditions of high demand in excess of the applicable peak load forecast and other conditions such as higher resource outages, expressed as a percentage of the applicable peak load forecast. The FSPRM shall be determined based on probabilistic analysis, taking account of uncertainties in generation and load, as the margin above peak load that provides an expectation of no more than a single event-day of loss of load in ten years (sometimes referred to herein as the "1-in-10 LOLE" or 0.1 annual LOLE). The FSPRM shall be determined in a manner that accounts for the governing principles of QCC value determinations set forth in Section 16.2.5 of this Tariff and shall employ the applicable peak load for the applicable Binding Season and Months. Additional details, assumptions, methodologies, and procedures for determination of the FSPRM shall be as set forth in the Business Practice Manuals.

16.1.2.2 WPP shall calculate in the Advance Assessment process the recommended Monthly FSPRM for each Month of each Binding Season, for approval by the Board of Directors as set forth in this Part II.

16.1.2.3 The FSPRM shall employ (i) a simulated resource stack using capacity accreditation principles consistent with those used for WRAP QCC determinations; (ii) an adjustment in the total WRAP-required QCC value as needed to meet a 1-in-10 LOLE, and (iii) while maintaining the 1-in-10 LOLE in (ii), include a monthly reduction of capacity to ensure that each Month has at least 0.01 annual LOLE. The FSPRM for a Month shall be the simulated QCC as adjusted to meet the 1-in-10 LOLE minus the P50 Peak Load Forecast for the Month, divided by the P50 Peak Load Forecast for the Month.

16.1.2.4 The FSPRM shall include an approximation of Contingency Reserves as set forth in the Business Practice Manuals.

16.1.3 Contingency Reserves Adjustment. A Participant's FS Capacity Requirement will be adjusted as set forth in the Business Practice Manuals to account for changes in Contingency Reserve requirements resulting from energy contract purchases and contract sales.

16.1.4 A Participant responsible for loads located in a Subregion for which an FSPRM value has been determined that is higher than the FSPRM value determined for a different Subregion may, in lieu of demonstrating a MW increment of Portfolio QCC otherwise required to satisfy such Participant's FS Capacity Requirement for a given Month, demonstrate in its Forward Showing Submittal, in accordance with the procedures and requirements set forth in the Business Practice Manuals, transmission service rights, which such Participant will make available during all hours of such Month for purposes of regional diversity sharing under the WRAP, of the type required by the FS Transmission Requirement, in a quantity, in addition to that required by the FS Transmission Requirement, that is no greater than the difference in the two FSPRM values multiplied by the Participant's P50 Peak Load Forecast, with the point of delivery in the Subregion with the higher FSPRM value and the point of receipt in the Subregion with the lower FSPRM value. The MW quantity of the additional transmission so demonstrated shall reduce for such Month, by the same MW quantity, the Portfolio QCC the Participant would otherwise be required to demonstrate to satisfy its FS Capacity Requirement for such Month. Each such offer shall identify the MW quantity, Month of service, point of receipt, and point of delivery of such transmission service rights, and such other information as specified in the Business Practice Manuals, and shall verify that the offered rights are NERC Priority 6 or NERC Priority 7 firm point-to-point transmission service. No Participant is obligated to offer any such transmission service rights, but any offer so made and not withdrawn before the deadline specified in the Business Practice Manuals shall be considered a binding offer of the identified

transmission service rights which may not be withdrawn before the end of the last Day of the Month for which such transmission service is offered.

16.2 Qualified Capacity Contribution

- 16.2.1 For each Participant and each Binding Season, the Forward Showing shall show and support the Portfolio QCC, which shall be the sum of the QCC of the Participant's Qualifying Resources ("Resource QCC"), the QCC of its contracted capacity ("Net Contract QCC"), and any transfers of capacity already accredited by another Participant ("Total RA Transfer," which could be positive or negative). The Portfolio QCC effective for a Binding Season shall be the value determined by WPP.
- 16.2.2 A resource will not be assigned a Resource QCC or counted toward Portfolio QCC unless it is a Qualifying Resource. Qualifying Resources are those that, before they are included in a Forward Showing Submittal, are first registered with WPP. A Participant seeking registration of a resource must submit a request for registration providing the resource information described in the Business Practice Manuals.
- 16.2.3 The minimum resource size for registration of a resource is 1 MW, provided, however, that Participants with responsibility for individual resources of less than 1 MW may aggregate them to meet the 1 MW minimum requirement, under the conditions and limitations specified in the Business Practice Manuals.
- 16.2.4 A Participant may include in its Forward Showing Submittal a request for an exception from its FS Capacity Requirement for an insufficiency of its Portfolio QCC solely due to (i) a catastrophic failure of one or more Qualifying Resources due to an event of Force Majeure as defined by Section 8.1 of this Tariff that (ii) the Participant is unable to replace on commercially reasonable terms prior to the FS Deadline as a result of the timing and magnitude of such catastrophic failure and its consequences. As more fully set forth in the Business Practice Manuals, such exception request shall be supported by a Senior Official Attestation. The exception request must include complete information on the nature, causes and consequences of the catastrophic failure, and must describe the Participant's specific, concrete efforts prior to the FS Deadline to secure replacement Qualifying Resources for the applicable Binding Season. WPP will consider the exception criteria established by this section, the information provided in the exception request, the completeness of the exception request, and other relevant data and information, in determining whether to grant or deny an FS Capacity Requirement exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such FS Capacity Requirement exception request. A Participant granted an exception hereunder must complete a monthly exception check report

demonstrating that either the circumstances necessitating the exception have not changed; or that Qualifying Resources have become available, and the Participant has acquired them and no longer requires the exception. Failure to timely submit a required monthly report will result in assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

16.2.5 QCC: WPP shall determine QCC values for the resource types specified below in accordance with the governing principles specified below for each resource type, and consistent with further details specified for each resource type in the Business Practice Manuals.

16.2.5.1 For resources that use conventional thermal fuels, including but not limited to, coal, natural gas, nuclear, and biofuel, WPP will determine QCC based on an Unforced Capacity methodology that employs resource-specific capability testing and capability requirements to determine an Installed Capacity value, and a forced outage calculation methodology based on historic performance during Capacity Critical Hours over a specified multi-year period (excluding outages properly reported as “outside management control”), or based on class-average forced outage data, as specified in the Business Practice Manuals, if there is insufficient data on historic performance.

16.2.5.2 For resources that are Variable Energy Resources, including, but not limited to, wind and solar resources, WPP will determine QCC based on an ELCC methodology, that accounts for synergistic portfolio effects within and among VER types at different resource penetration levels that influence the extent to which the WRAP Region can rely on those VER categories to meet overall capacity needs.

16.2.5.2.1 For such purpose, a separate ELCC value will be calculated in the aggregate for all VER resources of a given type in an identified VER Zone, to be delineated in the Business Practice Manuals based on factors such as geography, performance, meteorological considerations, and penetration.

16.2.5.2.2 As more fully described in the Business Practice Manuals, the zonal aggregate VER-resource-type value will be calculated by (i) conducting a benchmark LOLE study that includes all resource types except the VER resource type being studied, employing a model and assumptions consistent with those used to calculate FSPRM, and adding, or subtracting, the same MW quantity of Pure Capacity to every hour of the applicable Binding Season until, respectively, an initial LOLE value above 0.1 day per year becomes 0.1 day per year, or an initial LOLE value below 0.1 day per year becomes 0.1 day per year; (ii) conducting an LOLE study that includes all resource types including the VER resource type being studied, employing a model and assumptions consistent with those used to calculate FSPRM, and adding, or subtracting, the same MW quantity of Pure Capacity to every hour of the applicable Binding Season until, respectively, an initial LOLE value above 0.1 day per year becomes 0.1 day per year, or an initial LOLE value below 0.1 day per year becomes 0.1 day per year; and (iii) subtracting the Pure Capacity value determined under subpart (ii) from the Pure Capacity value determined under subpart (i) (for which calculation a Pure Capacity value subtracted from each hour in either subpart (i) or subpart (ii) will be assigned a negative value; (iv) repeating steps (i) through (iii) for each year of the study period employing historic, or as necessary, synthesized, data; and (v) basing the aggregate value of the studied VER resource type for the studied VER Zone on the results of the calculation in step (iii) for the years studied, which may include differential weighting of the years studied as appropriate to improve the quality and predictive capacity of the final result.

16.2.5.2.3 The aggregate capacity calculated for each VER resource type in each VER Zone will then be allocated to VERs of that type in that VER Zone based on each such resource's average historical performance if at least three years of historical performance or three years of synthesized forecast data during the WRAP Region's CCH is available at the time of such allocation. If three years historical performance or synthesized forecast data

is not then available, the average ELCC from the VER Zone will be assigned.

- 16.2.5.3 For resources that are Energy Storage Resources, WPP will determine QCC based on an ELCC methodology comparable to that used for VERs. The ELCC methodology will model Energy Storage Resources at the level of their usable capacity that can be sustained for a minimum duration of four hours. An Energy Storage Resource need not have a nameplate rating that assumes a minimum of four hours in order to receive a QCC determination, but the QCC in that case will be scaled to reflect the capability that can be sustained for four hours, as more fully described in the Business Practice Manuals.
- 16.2.5.4 For Demand Response capacity resources, WPP will determine QCC by multiplying the load reduction in MWs by the number of hours the resource can demonstrate load reduction capability divided by five. To be a Qualifying Resource, a Demand Response capacity resource also must satisfy certain testing requirements; must be controllable and dispatchable by the Participant or by the host utility; and must not already be used as a load modifier in the Participant's load forecast, as further specified in the Business Practice Manuals.
- 16.2.5.5 For Storage Hydro Qualifying Resources, the Participant will calculate a QCC based on a methodology detailed in the Business Practice Manuals that: (i) considers each resource's actual generation output, residual generating capability, water in storage, reservoir levels, and flow or project constraints over the previous ten-year historical period; (ii) determines the project's QCC by assessing the historical generation during CCHs on any given day and ability to increase generation during CCHs on the same day, subject to useable water in storage, inflows/outflows, and expected project operating parameters/constraints and limitations; (iii) incorporates forced outage rates; and (iv) determines QCC as average contribution to the CCH for each Winter Season and Summer Season over the previous ten years. If ten years of historic data is not available for the Storage Hydro Qualifying Resource, the Participant may alternatively employ data on the same metrics from a demonstrably comparable facility or apply another method that provides reasonable confidence in the reliability of the predicted values, as more fully set forth in the Business Practice Manuals. The Participant's QCC calculation shall be subject to review and validation by WPP. In connection with such review, the Participant shall provide WPP with the following information necessary to calculate a QCC for

Storage Hydro Qualifying Resources: (i.a) historic reservoir elevation levels; (ii.a) historic plant generation; (iii.a) elevation versus capacity curves; (iv.a) any minimum or maximum reservoir level constraints; (v.a) forced outage rates; (vi.a) volume of water versus reservoir elevation storage tables; and (vii.a) turbine discharge versus generation efficiency curve.

16.2.5.6 For Run of River Qualifying Resources, WPP will determine QCC based on the monthly average performance of such resource during Capacity Critical Hours, as further specified in the Business Practice Manuals

16.2.5.7 For resources that (i) are not within the meaning of any of Sections 16.2.5.1 through 16.2.5.5, and that (ii) either (a) are not dispatchable; or (b) require the purchaser of energy from the resource to take energy as available from such resource, including but not limited to a qualifying facility as defined under the Public Utility Regulatory Policies Act of 1978, WPP will determine QCC based on the monthly average performance of such resource during Capacity Critical Hours, as further specified in the Business Practice Manuals.

16.2.6 Net Contract QCC: WPP shall determine Net Contract QCC for the agreement types specified below in accordance with the governing principles specified below for each agreement type, and consistent with further details specified for each agreement type in the Business Practice Manuals. Net Contract QCC may be either positive or negative, to take account of, for example, a Participant's agreements for the sale of capacity to any other party.

16.2.6.1 Absent one of the exceptions described and limited below, capacity supply agreements qualifying for a Net Contract QCC in the WRAP must be resource specific, and therefore must include, among other requirements, an identified source, an assurance that the capacity is not used for another entity's resource adequacy requirements, an assurance that the seller will not fail to deliver in order to meet other supply obligations, and affirmation of NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource to the point of delivery/load. The specific resources identified in a capacity supply agreement qualifying for Net Contract QCC shall meet the same Resource QCC accreditation requirements for the given resource type, as specified in Section 16.2.5.

16.2.6.2 A system sales contract can qualify for a Net Contract QCC value, provided that if the seller is not a Participant, the system

capacity that is the subject of the agreement must be deemed surplus to the seller's estimated needs, there must be an assurance that the seller will not fail to deliver in order to meet other commercial obligations, and there must be NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource) to the point of delivery/load. Surplus status may be demonstrated by a Senior Official Attestation with pertinent supporting details for such surplus status, including written assent of the non-Participant Seller, secured by the purchasing Participant. Such attestation is not required if the seller is a Participant, because the information needed to verify surplus status is already available.

16.2.6.3 A supply agreement entered into prior to October 1, 2021 ("Legacy Agreement") can qualify for a Net Contract QCC value; provided that where a legacy agreement does not identify the source, it must be possible for WPP to presume a source or sources for the contract, including with the written assent of the supplier under such Legacy Agreement, conveyed in the form and manner set forth in the Business Practice Manuals. A Legacy Agreement for which such resource determination cannot be reasonably made will not be counted as adding to the Portfolio QCC.

16.2.7 Total RA Transfer: A Participant may agree with another Participant on a transfer of a portion of their FS Capacity Requirement ("RA Transfer"), provided that the details and duration of such transfer are reported to WPP for validation in accordance with procedures and information requirements specified in the Business Practice Manuals. Where such transfers have been duly reported and validated, an RA Transfer will be added to the purchasing Participant's Portfolio QCC and subtracted from the selling Participant's Portfolio QCC.

16.2.8 Planned Outages: Participants shall include in their Forward Showing Submittal for a Binding Season information on all Qualifying Resources that are currently out of service with a scheduled return date that falls during the Binding Season. Capacity associated with such resources must be deducted from Participants' Portfolio QCC as specified in the Business Practice Manuals to ensure no credit is granted for such resources during the planned outage. The aggregate of any additional outages that are planned to occur during the Binding Season but have not yet begun at the time of submission must be within the Participant's remaining surplus (or replaced with other supply). Participants may provide information on all Qualifying Resources that are planned to be out of service but if such data cannot be supplied with reasonable specificity, a Participant may provide a Senior Official Attestation at the time of the submission of its FS

Submittal that it expects the sum of planned outages to be equal to or less than the surplus stated in its FS Submittal throughout the Binding Season.

16.2.8.1 If a Qualifying Resource is planned to return to service within the first five days of a Binding Season, WPP may approve a qualified acceptance of the FS Submittal, provided the deficiency is less than 500 MW.

16.2.8.2 A planned outage shall not justify a waiver of or exception to a Participant's holdback or energy delivery obligations under Part III of this Tariff. Participants will be expected to procure the necessary capacity or energy to meet the Operations Program requirements, regardless of planned outage schedules or FS Submittal acceptance.

16.3 FS Transmission Requirement

16.3.1 As part of its Forward Showing Submittal for a Binding Season, each Participant must demonstrate, as specified in the Business Practice Manuals, that it has secured firm transmission service rights, including under supply arrangements with a third party that holds or has committed transmission service rights, sufficient to deliver a MW quantity equal to at least 75% of the MW quantity of its FS Capacity Requirement. To the extent a Participant holds transmission service rights with a point of receipt at a Qualifying Resource, or in connection with an RA Transfer to such Participant, any such rights from such point in a MW quantity, respectively, in excess of the QCC of such Qualifying Resource, or in excess of the value of such RA Transfer, shall not contribute toward satisfaction of such Participant's FS Transmission Requirement. The FS Transmission Requirement must be met with NERC Priority 6 or NERC Priority 7 firm point-to-point transmission service or network integration transmission service, from such Participant's Qualifying Resource(s) or from the delivery points for the resources identified for its Net Contract QCC or for its RA Transfer to such Participant's load. Notwithstanding the foregoing, authorized use of Capacity Benefit Margin will satisfy the FS Transmission Requirement. Demonstration of the FS Transmission Requirement shall not, in and of itself, relieve any Participant of responsibility for a Delivery Failure Charge as determined under Section 20.7 if such Participant's failure to obtain or maintain firm transmission service of the type and quantity expected by the Operations Program, as described in Section 20.6 of this Tariff, caused or contributed to an Energy Delivery Failure.

16.3.2 A Participant may include in its Forward Showing Submittal a request for an exception from a limited part of its FS Transmission Requirement, provided the exception request meets the terms, conditions, and limitations of one or more of the following four exception categories:

16.3.2.1 Enduring Constraints. Participant is unable to demonstrate sufficient NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights on any single segment of a source to sink path for a Qualifying Resource; and Participant demonstrates that no ATC for such transmission service rights is available (either from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less; and Participant submits a Senior Official Attestation that Participant has taken commercially reasonable efforts to procure firm transmission service rights, and that Participant has posted Firm Transmission Requirements on a relevant bulletin board prior to the FS Deadline. In the event such transmission service rights are only available for a duration of more than one year (whether from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Enduring Constraints exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. In addition to the foregoing, Participant must further demonstrate that there was remaining available transmission transfer capability (i.e., non-firm ATC after the fact) for all CCHs in the same season of the most recent year for which CCHs have been calculated; or, if the path was constrained in at least one CCH of the CCHs in the same season of the most recent year for which CCHs have been calculated, Participant in that case must demonstrate either that it is constructing or contracting for a new local resource for at least the amount of the exception requested, or that it is pursuing long-term firm transmission service rights by entering the long-term queue and taking all appropriate steps to obtain at least the amount of the exception requested.

16.3.2.2 Future Firm ATC Expected. Participant demonstrates that ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not posted or available prior to the FS Deadline (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less, and that the transmission service provider has, after the FS Deadline, released additional ATC for such transmission service

rights in every one of the CCHs of the most recent year for which CCHs have been calculated on the applicable path. In the event ATC for such transmission service rights is only posted or available prior to the FS Deadline for a duration of more than one year (whether from the transmission service provider or through a secondary market) on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Future Firm ATC Expected exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. The Participant must also demonstrate that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.3 Transmission Outages and Derates. Participant demonstrates that an applicable segment of its existing transmission service rights from its source to sink path for its Qualifying Resource is expected to be derated or out-of-service and the ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not otherwise available, and that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.4 Counterflow of a Qualifying Resource. Participant demonstrates that either: (i) Participant's use of firm transmission service in connection with the delivery of capacity from Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to Participant's load (or other qualifying delivery point permitted by the WRAP) or (ii) a second Participant's use of firm transmission service in connection with the delivery of capacity from the second Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the second Participant's load (or other qualifying delivery point permitted by the WRAP) provides a direct and proportional counterflow transmission that supports the first Participant's delivery of capacity from the first Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the first Participant's load (or other qualifying delivery point permitted by the WRAP) Qualifying Resource to their load. If the exception is requested under subpart (ii) of this subsection, the Participant requesting the exception shall include a written

acknowledgement from the second Participant that it is aware of such exception request.

As more fully set forth in the Business Practice Manuals, such exceptions may be subject to overall WRAP limits, and shall be supported by a Senior Official Attestation. WPP will consider the exception category terms, conditions and limitations set forth above, and may consider the completeness of the exception request, information from transmission service providers, OASIS data, and data readily available to WPP from other reliable and validated sources concerning the duration, timing, firmness and quantity of available transmission service or equivalent options (including transmission construction)~~and other relevant data and information~~, in determining whether to grant or deny a transmission exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such transmission exception request. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

A Participant granted a transmission exception under either Section 16.3.2.1 or Section 16.3.2.2 must complete a monthly transmission exception check report demonstrating that either (i) the circumstances necessitating the exception have not changed; (ii) transmission has become available and the Participant has acquired it; or (iii) the Participant has acquired a different resource, and associated transmission service rights, and no longer requires the exception. Failure to timely submit a required monthly report will result in assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance.

- 16.3.3 To the extent a Participant does not demonstrate satisfaction of its FS Transmission Requirement by the FS Deadline, the Participant may correct any such deficiency on or before the end of the cure period prescribed by Section 14.5 of this Tariff to avoid a Deficiency Charge.
- 16.3.4. Any deficiency of transmission service rights ultimately determined by WPP will be treated, for purposes of Deficiency Charge determinations, as in conjunction with, and not additive to, any deficiencies of QCC determined pursuant to Section 16.2.

Attachment A

5. Independent Evaluator

- 5.1 WPP shall engage an Independent Evaluator to provide an independent assessment of the performance of the WRAP and any potential beneficial design modifications. The Independent Evaluator shall report directly to the Board of Directors.
- 5.2 The Independent Evaluator shall conduct an annual review of the WRAP, including but not limited to analyzing prior year program performance, accounting and settlement, and program design.
- 5.3 The Independent Evaluator shall prepare an annual report of its findings, and any recommended modifications to WRAP design, and present its findings to the WRAP committees and the Board of Directors, subject to any necessary confidentiality considerations. Any data included in the Independent Evaluator's report shall be reported on an aggregated basis as applicable to preserve confidentiality. The Independent Evaluator's annual reports shall be available to the public, except to the extent they contain information designated as confidential under this Tariff, or information designated as confidential by the Independent Evaluator.
- 5.4 The Independent Evaluator shall not:
 - 5.4.1 Evaluate individual Participants.
 - 5.4.2 Possess any decision-making authority regarding the WRAP or design modifications.
 - 5.4.3 Evaluate WPP's day-to-day operations of the WRAP (except as part of review of prior year program performance).

16. Components of the Forward Showing

16.1 FS Capacity Requirement. The FS Capacity Requirement shall be determined for each Participant on a monthly basis by applying the applicable Monthly FSPRM for a Month to such Participant's peak load forecast for that Month. The Participant's peak load forecast for a given Month of a Binding Season will be the P50 Peak Load Forecast for the Binding Season multiplied by a shaping factor based on the historic relationship, for such Participant, of the seasonal peak for the Winter Season or Summer Season, as applicable, and the monthly peaks for the Months in such season, as more fully described in the Business Practice Manuals.

16.1.1 P50 Peak Load Forecast. The P50 Peak Load Forecast is a peak load forecast prepared on a basis, such that the actual peak load is statistically expected to be as likely to be above the forecast as it is to be below the forecast. The Business Practice Manuals shall specify an approved load forecasting methodology for use by all Participants for their WRAP-required load forecasts which shall include (i) a base monthly peak derived from a recent historic period that recognizes additions and removals of load during the historic period, (ii) adjustments for known additions and removals of load during the forecast window; and (iii) a specified load growth factor.

16.1.2 FS Planning Reserve Margin

16.1.2.1 The FSPRM is an increment of resource adequacy supply needed to meet conditions of high demand in excess of the applicable peak load forecast and other conditions such as higher resource outages, expressed as a percentage of the applicable peak load forecast. The FSPRM shall be determined based on probabilistic analysis, taking account of uncertainties in generation and load, as the margin above peak load that provides an expectation of no more than a single event-day of loss of load in ten years (sometimes referred to herein as the "1-in-10 LOLE" or 0.1 annual LOLE). The FSPRM shall be determined in a manner that accounts for the governing principles of QCC value determinations set forth in Section 16.2.5 of this Tariff and shall employ the applicable peak load for the applicable Binding Season and Months. Additional details, assumptions, methodologies, and procedures for determination of the FSPRM shall be as set forth in the Business Practice Manuals.

16.1.2.2 WPP shall calculate in the Advance Assessment process the recommended Monthly FSPRM for each Month of each Binding Season, for approval by the Board of Directors as set forth in this Part II.

16.1.2.3 The FSPRM shall employ (i) a simulated resource stack using capacity accreditation principles consistent with those used for WRAP QCC determinations; (ii) an adjustment in the total WRAP-required QCC value as needed to meet a 1-in-10 LOLE, and (iii) while maintaining the 1-in-10 LOLE in (ii), include a monthly reduction of capacity to ensure that each Month has at least 0.01 annual LOLE. The FSPRM for a Month shall be the simulated QCC as adjusted to meet the 1-in-10 LOLE minus the P50 Peak Load Forecast for the Month, divided by the P50 Peak Load Forecast for the Month.

16.1.2.4 The FSPRM shall include an approximation of Contingency Reserves as set forth in the Business Practice Manuals.

16.1.3 Contingency Reserves Adjustment. A Participant's FS Capacity Requirement will be adjusted as set forth in the Business Practice Manuals to account for changes in Contingency Reserve requirements resulting from energy contract purchases and contract sales.

16.1.4 A Participant responsible for loads located in a Subregion for which an FSPRM value has been determined that is higher than the FSPRM value determined for a different Subregion may, in lieu of demonstrating a MW increment of Portfolio QCC otherwise required to satisfy such Participant's FS Capacity Requirement for a given Month, demonstrate in its Forward Showing Submittal, in accordance with the procedures and requirements set forth in the Business Practice Manuals, transmission service rights, which such Participant will make available during all hours of such Month for purposes of regional diversity sharing under the WRAP, of the type required by the FS Transmission Requirement, in a quantity, in addition to that required by the FS Transmission Requirement, that is no greater than the difference in the two FSPRM values multiplied by the Participant's P50 Peak Load Forecast, with the point of delivery in the Subregion with the higher FSPRM value and the point of receipt in the Subregion with the lower FSPRM value. The MW quantity of the additional transmission so demonstrated shall reduce for such Month, by the same MW quantity, the Portfolio QCC the Participant would otherwise be required to demonstrate to satisfy its FS Capacity Requirement for such Month. Each such offer shall identify the MW quantity, Month of service, point of receipt, and point of delivery of such transmission service rights, and such other information as specified in the Business Practice Manuals, and shall verify that the offered rights are NERC Priority 6 or NERC Priority 7 firm point-to-point transmission service. No Participant is obligated to offer any such transmission service rights, but any offer so made and not withdrawn before the deadline specified in the Business Practice Manuals shall be considered a binding offer of the identified

transmission service rights which may not be withdrawn before the end of the last Day of the Month for which such transmission service is offered.

16.2 Qualified Capacity Contribution

- 16.2.1 For each Participant and each Binding Season, the Forward Showing shall show and support the Portfolio QCC, which shall be the sum of the QCC of the Participant's Qualifying Resources ("Resource QCC"), the QCC of its contracted capacity ("Net Contract QCC"), and any transfers of capacity already accredited by another Participant ("Total RA Transfer," which could be positive or negative). The Portfolio QCC effective for a Binding Season shall be the value determined by WPP.
- 16.2.2 A resource will not be assigned a Resource QCC or counted toward Portfolio QCC unless it is a Qualifying Resource. Qualifying Resources are those that, before they are included in a Forward Showing Submittal, are first registered with WPP. A Participant seeking registration of a resource must submit a request for registration providing the resource information described in the Business Practice Manuals.
- 16.2.3 The minimum resource size for registration of a resource is 1 MW, provided, however, that Participants with responsibility for individual resources of less than 1 MW may aggregate them to meet the 1 MW minimum requirement, under the conditions and limitations specified in the Business Practice Manuals.
- 16.2.4 A Participant may include in its Forward Showing Submittal a request for an exception from its FS Capacity Requirement for an insufficiency of its Portfolio QCC solely due to (i) a catastrophic failure of one or more Qualifying Resources due to an event of Force Majeure as defined by Section 8.1 of this Tariff that (ii) the Participant is unable to replace on commercially reasonable terms prior to the FS Deadline as a result of the timing and magnitude of such catastrophic failure and its consequences. As more fully set forth in the Business Practice Manuals, such exception request shall be supported by a Senior Official Attestation. The exception request must include complete information on the nature, causes and consequences of the catastrophic failure, and must describe the Participant's specific, concrete efforts prior to the FS Deadline to secure replacement Qualifying Resources for the applicable Binding Season. WPP will consider the exception criteria established by this section, the information provided in the exception request, the completeness of the exception request, and other relevant data and information, in determining whether to grant or deny an FS Capacity Requirement exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such FS Capacity Requirement exception request. A Participant granted an exception hereunder must complete a monthly exception check report

demonstrating that either the circumstances necessitating the exception have not changed; or that Qualifying Resources have become available, and the Participant has acquired them and no longer requires the exception. Failure to timely submit a required monthly report will result in assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

16.2.5 QCC: WPP shall determine QCC values for the resource types specified below in accordance with the governing principles specified below for each resource type, and consistent with further details specified for each resource type in the Business Practice Manuals.

16.2.5.1 For resources that use conventional thermal fuels, including but not limited to, coal, natural gas, nuclear, and biofuel, WPP will determine QCC based on an Unforced Capacity methodology that employs resource-specific capability testing and capability requirements to determine an Installed Capacity value, and a forced outage calculation methodology based on historic performance during Capacity Critical Hours over a specified multi-year period (excluding outages properly reported as “outside management control”), or based on class-average forced outage data, as specified in the Business Practice Manuals, if there is insufficient data on historic performance.

16.2.5.2 For resources that are Variable Energy Resources, including, but not limited to, wind and solar resources, WPP will determine QCC based on an ELCC methodology, that accounts for synergistic portfolio effects within and among VER types at different resource penetration levels that influence the extent to which the WRAP Region can rely on those VER categories to meet overall capacity needs.

16.2.5.2.1 For such purpose, a separate ELCC value will be calculated in the aggregate for all VER resources of a given type in an identified VER Zone, to be delineated in the Business Practice Manuals based on factors such as geography, performance, meteorological considerations, and penetration.

16.2.5.2.2 As more fully described in the Business Practice Manuals, the zonal aggregate VER-resource-type value will be calculated by (i) conducting a benchmark LOLE study that includes all resource types except the VER resource type being studied, employing a model and assumptions consistent with those used to calculate FSPRM, and adding, or subtracting, the same MW quantity of Pure Capacity to every hour of the applicable Binding Season until, respectively, an initial LOLE value above 0.1 day per year becomes 0.1 day per year, or an initial LOLE value below 0.1 day per year becomes 0.1 day per year; (ii) conducting an LOLE study that includes all resource types including the VER resource type being studied, employing a model and assumptions consistent with those used to calculate FSPRM, and adding, or subtracting, the same MW quantity of Pure Capacity to every hour of the applicable Binding Season until, respectively, an initial LOLE value above 0.1 day per year becomes 0.1 day per year, or an initial LOLE value below 0.1 day per year becomes 0.1 day per year; and (iii) subtracting the Pure Capacity value determined under subpart (ii) from the Pure Capacity value determined under subpart (i) (for which calculation a Pure Capacity value subtracted from each hour in either subpart (i) or subpart (ii) will be assigned a negative value; (iv) repeating steps (i) through (iii) for each year of the study period employing historic, or as necessary, synthesized, data; and (v) basing the aggregate value of the studied VER resource type for the studied VER Zone on the results of the calculation in step (iii) for the years studied, which may include differential weighting of the years studied as appropriate to improve the quality and predictive capacity of the final result.

16.2.5.2.3 The aggregate capacity calculated for each VER resource type in each VER Zone will then be allocated to VERs of that type in that VER Zone based on each such resource's average historical performance if at least three years of historical performance or three years of synthesized forecast data during the WRAP Region's CCH is available at the time of such allocation. If three years historical performance or synthesized forecast data

is not then available, the average ELCC from the VER Zone will be assigned.

- 16.2.5.3 For resources that are Energy Storage Resources, WPP will determine QCC based on an ELCC methodology comparable to that used for VERs. The ELCC methodology will model Energy Storage Resources at the level of their usable capacity that can be sustained for a minimum duration of four hours. An Energy Storage Resource need not have a nameplate rating that assumes a minimum of four hours in order to receive a QCC determination, but the QCC in that case will be scaled to reflect the capability that can be sustained for four hours, as more fully described in the Business Practice Manuals.
- 16.2.5.4 For Demand Response capacity resources, WPP will determine QCC by multiplying the load reduction in MWs by the number of hours the resource can demonstrate load reduction capability divided by five. To be a Qualifying Resource, a Demand Response capacity resource also must satisfy certain testing requirements; must be controllable and dispatchable by the Participant or by the host utility; and must not already be used as a load modifier in the Participant's load forecast, as further specified in the Business Practice Manuals.
- 16.2.5.5 For Storage Hydro Qualifying Resources, the Participant will calculate a QCC based on a methodology detailed in the Business Practice Manuals that: (i) considers each resource's actual generation output, residual generating capability, water in storage, reservoir levels, and flow or project constraints over the previous ten-year historical period; (ii) determines the project's QCC by assessing the historical generation during CCHs on any given day and ability to increase generation during CCHs on the same day, subject to useable water in storage, inflows/outflows, and expected project operating parameters/constraints and limitations; (iii) incorporates forced outage rates; and (iv) determines QCC as average contribution to the CCH for each Winter Season and Summer Season over the previous ten years. If ten years of historic data is not available for the Storage Hydro Qualifying Resource, the Participant may alternatively employ data on the same metrics from a demonstrably comparable facility or apply another method that provides reasonable confidence in the reliability of the predicted values, as more fully set forth in the Business Practice Manuals. The Participant's QCC calculation shall be subject to review and validation by WPP. In connection with such review, the Participant shall provide WPP with the following information necessary to calculate a QCC for

Storage Hydro Qualifying Resources: (i.a) historic reservoir elevation levels; (ii.a) historic plant generation; (iii.a) elevation versus capacity curves; (iv.a) any minimum or maximum reservoir level constraints; (v.a) forced outage rates; (vi.a) volume of water versus reservoir elevation storage tables; and (vii.a) turbine discharge versus generation efficiency curve.

16.2.5.6 For Run of River Qualifying Resources, WPP will determine QCC based on the monthly average performance of such resource during Capacity Critical Hours, as further specified in the Business Practice Manuals

16.2.5.7 For resources that (i) are not within the meaning of any of Sections 16.2.5.1 through 16.2.5.5, and that (ii) either (a) are not dispatchable; or (b) require the purchaser of energy from the resource to take energy as available from such resource, including but not limited to a qualifying facility as defined under the Public Utility Regulatory Policies Act of 1978, WPP will determine QCC based on the monthly average performance of such resource during Capacity Critical Hours, as further specified in the Business Practice Manuals.

16.2.6 Net Contract QCC: WPP shall determine Net Contract QCC for the agreement types specified below in accordance with the governing principles specified below for each agreement type, and consistent with further details specified for each agreement type in the Business Practice Manuals. Net Contract QCC may be either positive or negative, to take account of, for example, a Participant's agreements for the sale of capacity to any other party.

16.2.6.1 Absent one of the exceptions described and limited below, capacity supply agreements qualifying for a Net Contract QCC in the WRAP must be resource specific, and therefore must include, among other requirements, an identified source, an assurance that the capacity is not used for another entity's resource adequacy requirements, an assurance that the seller will not fail to deliver in order to meet other supply obligations, and affirmation of NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource to the point of delivery/load. The specific resources identified in a capacity supply agreement qualifying for Net Contract QCC shall meet the same Resource QCC accreditation requirements for the given resource type, as specified in Section 16.2.5.

16.2.6.2 A system sales contract can qualify for a Net Contract QCC value, provided that if the seller is not a Participant, the system

capacity that is the subject of the agreement must be deemed surplus to the seller's estimated needs, there must be an assurance that the seller will not fail to deliver in order to meet other commercial obligations, and there must be NERC priority 6 or 7 firm point-to-point transmission service rights or network integration transmission service rights from the identified resource) to the point of delivery/load. Surplus status may be demonstrated by a Senior Official Attestation with pertinent supporting details for such surplus status, including written assent of the non-Participant Seller, secured by the purchasing Participant. Such attestation is not required if the seller is a Participant, because the information needed to verify surplus status is already available.

16.2.6.3 A supply agreement entered into prior to October 1, 2021 ("Legacy Agreement") can qualify for a Net Contract QCC value; provided that where a legacy agreement does not identify the source, it must be possible for WPP to presume a source or sources for the contract, including with the written assent of the supplier under such Legacy Agreement, conveyed in the form and manner set forth in the Business Practice Manuals. A Legacy Agreement for which such resource determination cannot be reasonably made will not be counted as adding to the Portfolio QCC.

16.2.7 Total RA Transfer: A Participant may agree with another Participant on a transfer of a portion of their FS Capacity Requirement ("RA Transfer"), provided that the details and duration of such transfer are reported to WPP for validation in accordance with procedures and information requirements specified in the Business Practice Manuals. Where such transfers have been duly reported and validated, an RA Transfer will be added to the purchasing Participant's Portfolio QCC and subtracted from the selling Participant's Portfolio QCC.

16.2.8 Planned Outages: Participants shall include in their Forward Showing Submittal for a Binding Season information on all Qualifying Resources that are currently out of service with a scheduled return date that falls during the Binding Season. Capacity associated with such resources must be deducted from Participants' Portfolio QCC as specified in the Business Practice Manuals to ensure no credit is granted for such resources during the planned outage. The aggregate of any additional outages that are planned to occur during the Binding Season but have not yet begun at the time of submission must be within the Participant's remaining surplus (or replaced with other supply). Participants may provide information on all Qualifying Resources that are planned to be out of service but if such data cannot be supplied with reasonable specificity, a Participant may provide a Senior Official Attestation at the time of the submission of its FS

Submittal that it expects the sum of planned outages to be equal to or less than the surplus stated in its FS Submittal throughout the Binding Season.

16.2.8.1 If a Qualifying Resource is planned to return to service within the first five days of a Binding Season, WPP may approve a qualified acceptance of the FS Submittal, provided the deficiency is less than 500 MW.

16.2.8.2 A planned outage shall not justify a waiver of or exception to a Participant's holdback or energy delivery obligations under Part III of this Tariff. Participants will be expected to procure the necessary capacity or energy to meet the Operations Program requirements, regardless of planned outage schedules or FS Submittal acceptance.

16.3 FS Transmission Requirement

16.3.1 As part of its Forward Showing Submittal for a Binding Season, each Participant must demonstrate, as specified in the Business Practice Manuals, that it has secured firm transmission service rights, including under supply arrangements with a third party that holds or has committed transmission service rights, sufficient to deliver a MW quantity equal to at least 75% of the MW quantity of its FS Capacity Requirement. To the extent a Participant holds transmission service rights with a point of receipt at a Qualifying Resource, or in connection with an RA Transfer to such Participant, any such rights from such point in a MW quantity, respectively, in excess of the QCC of such Qualifying Resource, or in excess of the value of such RA Transfer, shall not contribute toward satisfaction of such Participant's FS Transmission Requirement. The FS Transmission Requirement must be met with NERC Priority 6 or NERC Priority 7 firm point-to-point transmission service or network integration transmission service, from such Participant's Qualifying Resource(s) or from the delivery points for the resources identified for its Net Contract QCC or for its RA Transfer to such Participant's load. Notwithstanding the foregoing, authorized use of Capacity Benefit Margin will satisfy the FS Transmission Requirement. Demonstration of the FS Transmission Requirement shall not, in and of itself, relieve any Participant of responsibility for a Delivery Failure Charge as determined under Section 20.7 if such Participant's failure to obtain or maintain firm transmission service of the type and quantity expected by the Operations Program, as described in Section 20.6 of this Tariff, caused or contributed to an Energy Delivery Failure.

16.3.2 A Participant may include in its Forward Showing Submittal a request for an exception from a limited part of its FS Transmission Requirement, provided the exception request meets the terms, conditions, and limitations of one or more of the following four exception categories:

16.3.2.1 Enduring Constraints. Participant is unable to demonstrate sufficient NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights on any single segment of a source to sink path for a Qualifying Resource; and Participant demonstrates that no ATC for such transmission service rights is available (either from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less; and Participant submits a Senior Official Attestation that Participant has taken commercially reasonable efforts to procure firm transmission service rights, and that Participant has posted Firm Transmission Requirements on a relevant bulletin board prior to the FS Deadline. In the event such transmission service rights are only available for a duration of more than one year (whether from the transmission service provider or through a secondary market) at the FS Deadline on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Enduring Constraints exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. In addition to the foregoing, Participant must further demonstrate that there was remaining available transmission transfer capability (i.e., non-firm ATC after the fact) for all CCHs in the same season of the most recent year for which CCHs have been calculated; or, if the path was constrained in at least one CCH of the CCHs in the same season of the most recent year for which CCHs have been calculated, Participant in that case must demonstrate either that it is constructing or contracting for a new local resource for at least the amount of the exception requested, or that it is pursuing long-term firm transmission service rights by entering the long-term queue and taking all appropriate steps to obtain at least the amount of the exception requested.

16.3.2.2 Future Firm ATC Expected. Participant demonstrates that ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not posted or available prior to the FS Deadline (for a duration of one year or less) at the applicable Open Access Transmission Tariff rate or less, and that the transmission service provider has, after the FS Deadline, released additional ATC for such transmission service

rights in every one of the CCHs of the most recent year for which CCHs have been calculated on the applicable path. In the event ATC for such transmission service rights is only posted or available prior to the FS Deadline for a duration of more than one year (whether from the transmission service provider or through a secondary market) on the applicable segment for the Month(s) needed at the applicable Open Access Transmission Tariff rate or less, a Participant is not required to obtain such service in order to qualify for the Future Firm ATC Expected exception hereunder. Notwithstanding the foregoing, if such Participant declines to obtain such available service and is granted the exception hereunder, such Participant shall not qualify for an exception hereunder for the same path (or across the same constraint) for the same season of the subsequent year if the Participant again declines to obtain such transmission service rights that are available for a duration of more than one year. The Participant must also demonstrate that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.3 Transmission Outages and Derates. Participant demonstrates that an applicable segment of its existing transmission service rights from its source to sink path for its Qualifying Resource is expected to be derated or out-of-service and the ATC for NERC Priority 6 or NERC Priority 7 firm point-to-point or network integration transmission service rights is not otherwise available, and that the exception request meets volume and duration limitations specified in the Business Practice Manuals.

16.3.2.4 Counterflow of a Qualifying Resource. Participant demonstrates that either: (i) Participant's use of firm transmission service in connection with the delivery of capacity from Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to Participant's load (or other qualifying delivery point permitted by the WRAP) or (ii) a second Participant's use of firm transmission service in connection with the delivery of capacity from the second Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the second Participant's load (or other qualifying delivery point permitted by the WRAP) provides a direct and proportional counterflow transmission that supports the first Participant's delivery of capacity from the first Participant's Qualifying Resource (or from the resource associated with its Net Contract QCC) to the first Participant's load (or other qualifying delivery point permitted by the WRAP) Qualifying Resource to their load. If the exception is requested under subpart (ii) of this subsection, the Participant requesting the exception shall include a written

acknowledgement from the second Participant that it is aware of such exception request.

As more fully set forth in the Business Practice Manuals, such exceptions may be subject to overall WRAP limits, and shall be supported by a Senior Official Attestation. WPP will consider the exception category terms, conditions and limitations set forth above, and may consider the completeness of the exception request, information from transmission service providers, OASIS data, and data readily available to WPP from other reliable and validated sources concerning the duration, timing, firmness and quantity of available transmission service or equivalent options (including transmission construction), in determining whether to grant or deny a transmission exception request. WPP shall provide such determination no later than sixty days after submission of such Participant's FS Submittal containing such transmission exception request. A Participant denied an exception request hereunder may appeal such denial to the Board of Directors in accordance with the procedures and deadlines set forth in the Business Practice Manuals. In such event, the requested exception shall be denied or permitted as, when and to the extent permitted by the Board, in accordance with the procedures and timing set forth in the Business Practice Manuals. WPP shall give notice of any exception granted hereunder in the time and manner provided by the Business Practice Manuals.

A Participant granted a transmission exception under either Section 16.3.2.1 or Section 16.3.2.2 must complete a monthly transmission exception check report demonstrating that either (i) the circumstances necessitating the exception have not changed; (ii) transmission has become available and the Participant has acquired it; or (iii) the Participant has acquired a different resource, and associated transmission service rights, and no longer requires the exception. Failure to timely submit a required monthly report will result in assessment of a Deficiency Charge, unless the deficiency is cured within seven days of notice of non-compliance.

- 16.3.3 To the extent a Participant does not demonstrate satisfaction of its FS Transmission Requirement by the FS Deadline, the Participant may correct any such deficiency on or before the end of the cure period prescribed by Section 14.5 of this Tariff to avoid a Deficiency Charge.
- 16.3.4. Any deficiency of transmission service rights ultimately determined by WPP will be treated, for purposes of Deficiency Charge determinations, as in conjunction with, and not additive to, any deficiencies of QCC determined pursuant to Section 16.2.