# NWPP Resource Adequacy

# Public Webinar

***Frank Afranji, NWPP***
***July 1, 2020; 1:00-2:30 p.m.***

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# Agenda

- Update on recent NWPP RA program work and accomplishments
  - Phased program implementation approach and interim solutions under consideration
  - Two Binding Seasons
  - Resource Eligibility
  - Approaches under consideration to address import/export assumptions

# Overview of Project Timeline

**Phase 1: Information Gathering (concluded Oct. 2019)**

**Phase 2A: Preliminary Design Phase (Early 2020)**

**Phase 2B: Detailed Design (Late 2020)**

**Phase 3: Begin Work to Implement Program (2021)**

# Status update

- Developing conceptual design document with proposals on program design elements
- Decision to hire for a program developer to help navigate detailed design phase and stand up program
- RA modeling for the region with the help of E3 well underway
- Evaluating regulatory pathways with legal assistance
- Three advisory committee meetings and two public webinars

# Stakeholder Advisory Committee

- Request for more information about the stakeholder review process of the conceptual design document
- Discussion on the importance of the NWPP RA program demonstrating benefits to the entire region
- Program design should not create disincentives for any class of participants
- Desire for more information about the NWPP RA program will interact with other RA programs and with CAISO's existing EIM and future EDAM

# Phased Approach to Program Implementation

*Joel Cook, BPA*

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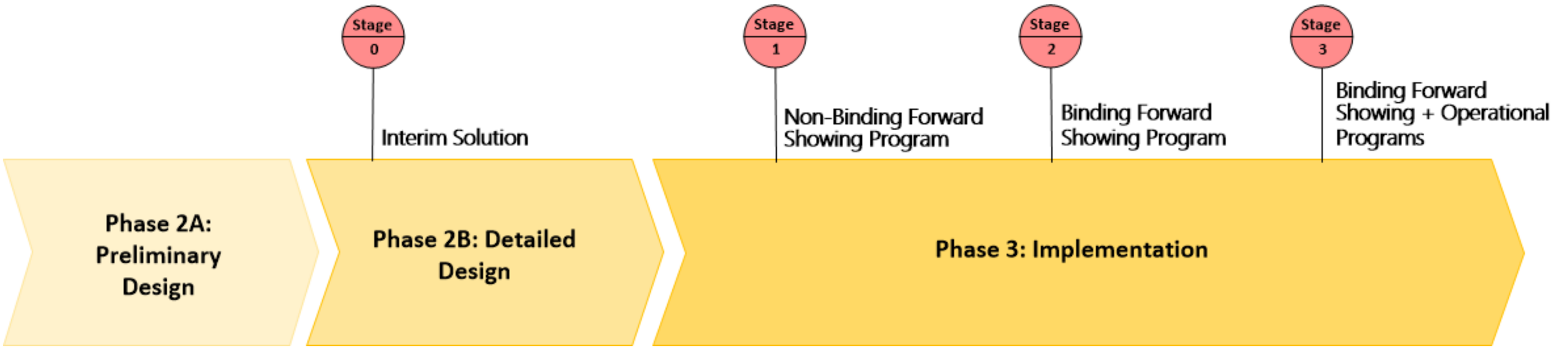
# Phased Approach Timeline



# Stage 0: Interim Solution

- Stop-gap in the event of a loss of load event before RA program is fully functional
- Participants would be eligible to give/receive RA assistance on a voluntary basis during the high grid stress periods of Winter (November through March) and Summer (June through September)

STAGE 1

# Non-Binding Forward Showing Program

- **Two Non-Binding Showings (one summer, one winter season)**
- **Program Administrator (PA)**
  - Inform participants of RA requirements
  - Participating entities submit information to the PA on the established timelines, PA to certify whether they have met obligations
- **No penalties for non-compliance**
- **Implemented through multi-lateral agreement**
- **Anticipated to be non-FERC jurisdictional**

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STAGE 2

# Binding Forward Showing Program

- Two Binding Showings (one summer, one winter season)
- **Program Administrator**
  - Same role as in non-binding EXCEPT: penalties for non-compliance implemented
- **Anticipated to trigger FERC jurisdiction over the binding elements of this stage**

STAGE 3

# Binding Forward Showing and Operational Programs

» A full operational program will be added, enabling participating entities to access pooled regional resources in a **structured program**

  – Anticipated to trigger FERC jurisdiction over certain elements of this stage (i.e., accessing pooled resources, use of transmission)

» **Stage 3 functionality anticipated for 2024 timeframe**

# Two Binding Seasons

## *Gregg Carrington, Chelan PUD*

# Two Binding Seasons Proposal

- **Winter** (BINDING): Nov-March
- **Summer** (BINDING): June-Sept
- Spring (advisory): April -May
- Fall (advisory): October

*Administrator may provide additional out-year data or metrics for planning purposes – to be further discussed in Phase 2B*

# Two Binding Seasons Proposal

- ***Compliance showing deadline*** *7 months in advance of binding seasons*

  Entities must demonstrate to Program Administrator that they have sufficient resources to meet required metrics

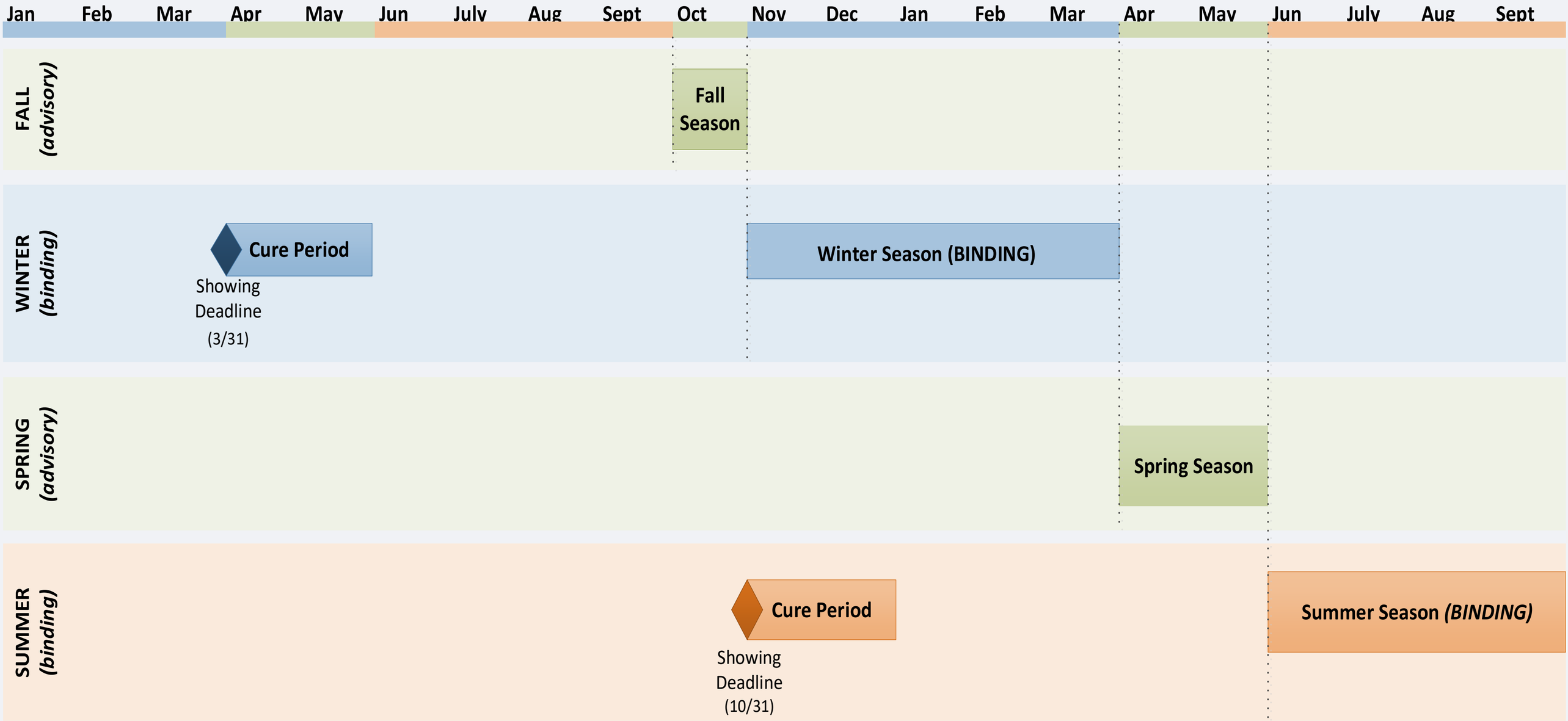
- ***Cure period*** *for 2 months following compliance showing date*

  Complete contracts or acquire resources to true up any discrepancies between required metrics and portfolio shown

# Two Binding Seasons Proposal

Proposed Compliance Seasons

| Season | Binding/ Advisory | Duration | Compliance Showing Date | Cure Period |
|---|---|---|---|---|
| **Winter** | Binding | November-March | March 31 | April 1 – May 31 |
| **Summer** | Binding | June-September | October 31 (of prior year) | November 1 – December 31 (of prior year) |
| Spring | Advisory | April-May | N/A | N/A |
| Fall | Advisory | October | N/A | N/A |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FALL (advisory)
Fall Season
WINTER (binding)
Cure Period
Showing Deadline (3/31)
Winter Season (BINDING)
SPRING (advisory)
Spring Season
SUMMER (binding)
Cure Period
Showing Deadline (10/31)
Summer Season (BINDING)

# Resource Eligibility Proposal

## *Cathy Kim, PGE*

# Resource Eligibility Proposal

- Resource eligibility will require a registration and certification process for all resources
  - Historical performance of resource would meet the operational test requirements for existing resources
  - The definition of a system and the process/ability to aggregate will be considered during Phase2B: Detailed Program Design

# Eligibility of Resource Types

- Program is designed to be technology agnostic; all resources will be considered
- The Program Administrator will be responsible for determining the capacity contributions as new resources are added
- The Steering Committee has considered some resource types, but additional resources will be considered during Phase 2B: Detailed Design

# Import/Export Assumptions

## *Mark Holman, Powerex*

# Import/Export Assumptions

- Modeling assumption of future hourly imports to footprint (in each season) will have significant impact on:
  - *Identification of critical hours → calculation of regional PRM applied to participating entities*
  - *Calculation of capacity contribution of resource types (intraday shape of assumed imports can change critical hours of need)*
- Modeling assumption of future hourly exports from footprint (in each season) is considered to be an individual obligation

# Determining Import/Export Assumptions

- CAISO has performed a historical data analysis of NWPP-CAISO RA contracts and transfers –publicly posted
- Modeling exercise with E3 included a sensitivity analysis, with an assumed hourly shape of imports in each of summer and winter seasons (and assumed exports)

# Import/Export Approach

- For purposes of initial modeling:
  - *Provide regional load credit for hours of the day with expected (reliable) import level.*
  - *Expected exports have no impact to load or PRM, as assumed to be from individual entities' "surplus" (surplus potentially exported is unavailable to footprint)*
- When a program is implemented, we expect to have more robust data about forward contracted imports and exports – assumptions will be reevaluated as program evolves

# Questions and Next Steps

- Questions?
- Next public webinar will be in late September
- Send follow-up questions to inquiries@nwpp.org

# Appendix

# SPP and CAISO RA Types and compliance Approach

| | SPP | CAISO |
|---|---|---|
| RA Types | **Deliverable Capacity:** capacity confirmed with annual deliverability study<br><br>**Firm Capacity**: capacity with firm transmission adjusted for sales or purchases<br><br>**Firm Power**: power purchases with firm transmission that include capacity, energy and planning reserves | **System:** used to meet system peak demand<br><br>**Local:** used in specific local areas to reliably operate grid<br><br>**Flexible:** used to manage variations in load and variable energy |
| Compliance Approach | **Summer Season**: (BINDING) June 1-September 30 (Summer Season Net Peak Demand + Summer Season Net Peak demand*PRM)<br><br>**Winter Season:** (NON-BINDING) Dec 1-March 31st (Winter Season Net Peak Demand +Winter Season Net Peak Demand *PRM) | **Annual** LSE must procure 90% of System RA (for 5 summer months: May-Sept)<br><br>**Monthly**: LSE must demonstrate it has procured 100% of System (all 12 months) |