

NWPP RESOURCE ADEQUACY STAKEHOLDER ADVISORY COMMITTEE MEETING

JUNE 18, 2020 1:00-4:30 P.M.

FRANK AFRANJI, NWPP



OBJECTIVES

- Provide an update on recent NWPP RA program work and accomplishments
- Provide a detailed overview of the phased program implementation approach and interim solutions being explored
- Engage in a deeper discussion of the two binding seasons proposal; review CAISO and SPP approaches and address SAC member concerns/questions
- Share and solicit feedback on resource eligibility proposal
- Walk through approaches under consideration to address import/export assumptions
- Provide an open forum for discussion/questions from SAC members on any program-related topics

AGENDA

1:00-1:30 **Introduction, Phased Approach to Program**
Frank Afranji, NWPP and Joel Cook, BPA

1:30-2:15 **Two Binding Seasons Deep Dive**
Gregg Carrington, Chelan PUD

2:15-2:30 **Break**

2:30-3:00 **Resource Eligibility Proposal**
Cathy Kim, Portland General Electric

3:00-3:45 **Import/Export Assumptions**
Mark Holman, Powerex

3:45-4:30 **Open Q&A Session on Any Topic**

STATUS REPORT

- 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
- Two advisory committee meetings and two public webinars

OVERVIEW OF PROJECT TIMELINE



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

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

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

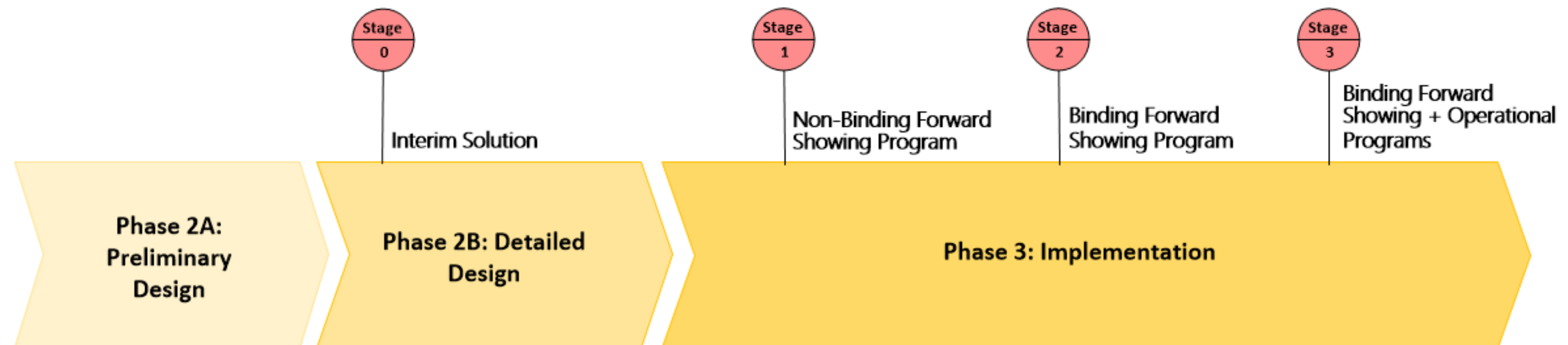
**Phase 3:
Begin Work to
Implement
Program (2021)**

PHASED APPROACH TO PROGRAM IMPLEMENTATION

PRESENTER: JOEL COOK, BPA



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

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: DEEP DIVE

GREGG CARRINGTON, CHELAN PUD



RECAP: 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

RECAP: TWO BINDING SEASONS PROPOSAL

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

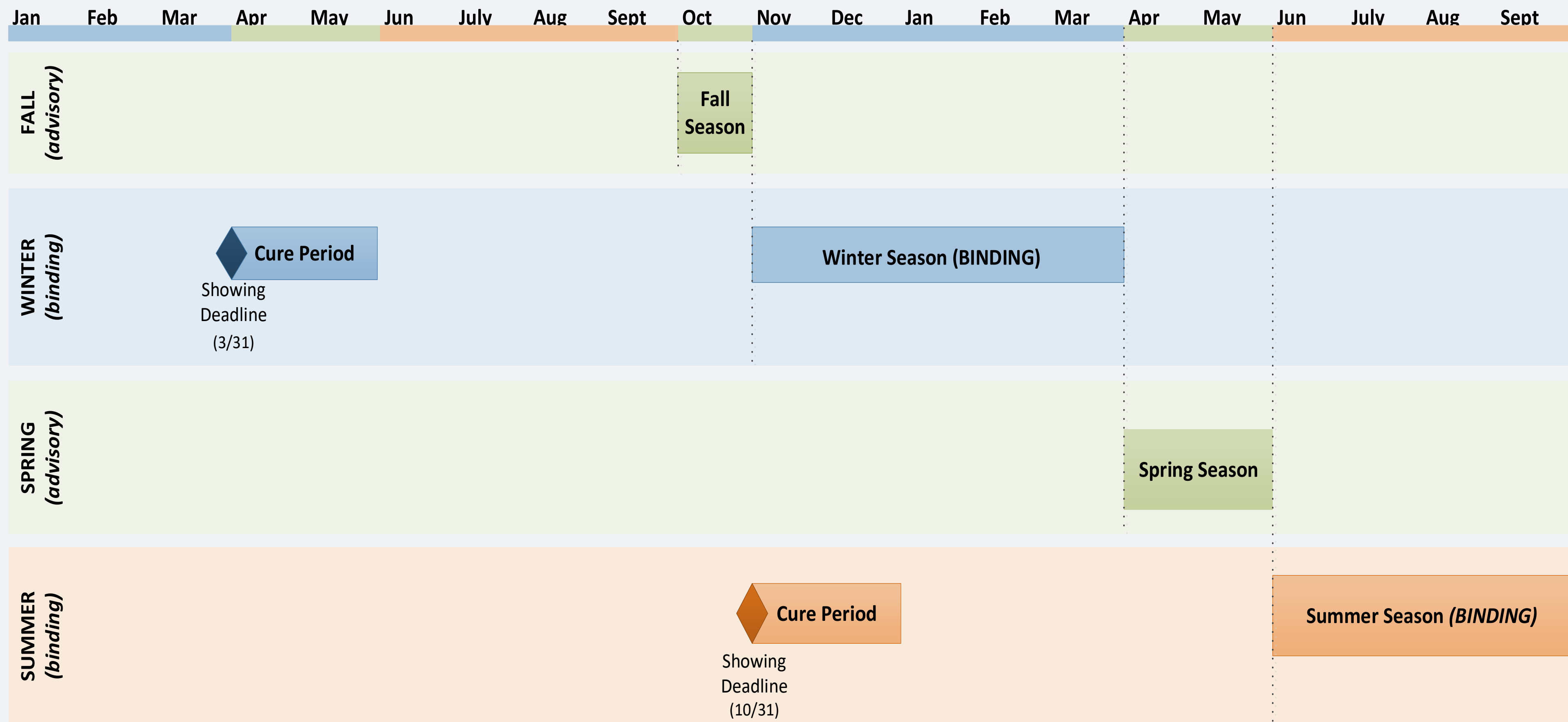
Entities must demonstrate to Program Administrator that they have sufficient resources to meet required metrics
- › **Cure period** *for 2 months following compliance showing date*

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



CAISO RA TYPES

- **System:** used to meet system peak demand
 - Requirement to meet load forecast plus a planning reserve margin (15%-17%)
 - Must self-schedule or economically bid into the CAISO market 24/7 and be available during peak hours
- **Local:** used in specific local areas to reliably operate grid
 - Local requirement in each area in which LSE serves load is determined annually
 - Must self-schedule or economically bid into CAISO markets 24/7 and be available during peak hours
- **Flexible:** used to manage variations in load and variable energy resource output
 - ISO determines system need and allocates out to each LSE annually
 - Flexible MW value of resource is defined by amount resource can ramp up in three hours
 - Must economically bid up to 17 hours a day, depending on category
 - Flexible RA and System RA must be provided together; they are a bundled product

CAISO COMPLIANCE APPROACH

– Annual

- *LSE must procure 90% of System RA (for 5 summer months: May-Sept)*
- *90% of flexible RA (all 12 months)*
- *100% of Local RA (all 12 months)*

– Monthly

- *LSE must demonstrate it has procured 100% of System (all 12 months)*
- *100 % Flexible RA (all 12 months)*
- *100% Local (May-Dec)*

CAISO ANNUAL SHOWING

RA Type	Total Obligation	Season	Binding or Advisory	Duration	Compliance Showing Date	Cure Period
System	90%	Summer	Binding	5 summer months (May-Sept)	October	Within 30 days of the beginning of the RA Compliance Year
Local	100%	Annual	Binding	12 months	October	Within 30 days of the beginning of the RA Compliance Year
Flexible	90%	Annual	Binding	12 months	October	Within 30 days of the beginning of the RA Compliance Year

CAISO MONTHLY SHOWING

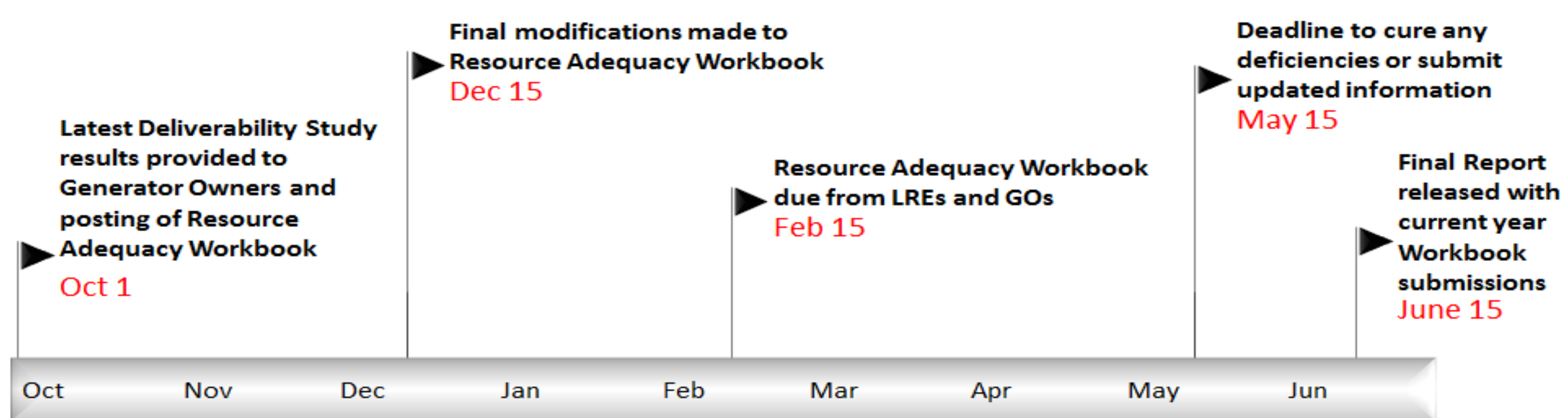
RA Type	Total Obligation	Season	Binding or Advisory	Duration	Compliance Showing Date	Cure Period
System	100% of monthly system RA obligation	Every month	Binding	1 month	Filed 45 days prior to compliance month	5 days after issuance of notice of deficiency
Local	100%	May – December: LSE must demonstrate procurement of their revised (due to load migration) Local RA obligation	Binding	1 month	Filed 45 days prior to compliance month	5 days after issuance of notice of deficiency
Flexible	100% of flexible monthly RA obligation	Every month	Binding	1 month	Filed 45 days prior to compliance month	5 days after issuance of notice of deficiency

SPP RA TYPES

- **Deliverable Capacity:** capacity confirmed with annual deliverability study
- **Firm Capacity:** capacity with firm transmission adjusted for sales or purchases
- **Firm Power:** power purchases with firm transmission that include capacity, energy and planning reserves

SPP COMPLIANCE APPROACH

- Summer Season: (BINDING) June 1-September 30 (Summer Season Net Peak Demand + Summer Season Net Peak demand*PRM)
- Winter Season: (NON-BINDING) Dec 1-March 31st (Winter Season Net Peak Demand + Winter Season Net Peak Demand *PRM)



SPP ANNUAL SHOWING

Total Obligation:

Deliverable Capacity + Firm Capacity + Firm Power = 100% Net peak load (25% can come from short-term contracts)

Season	Binding or Advisory	Duration	Compliance Showing Date	Cure period
Summer	Binding	Seasonal	6 months prior to Season	1 month prior to season

CONCERNS AND QUESTIONS ON TWO BINDING SEASONS

- Are more frequent showing periods than seasonal warranted given the inter-season variability within the hydro system?

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.

ADVISORY COMMITTEE

QUESTIONS ON RESOURCE

ELIGIBILITY

- How are you considering resources from third-party providers?
- How are demand side resources qualified under the program?

IMPORT/EXPORT ASSUMPTIONS

MARK HOLMAN



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 advisory committee meeting scheduled for September
- Proposed conceptual design document may be available for SAC review prior to September