



Legal & Regulatory Conference

IN PARTNERSHIP WITH

GRIDLIANCE

A background image showing a group of people in a professional setting, likely a conference. The image is semi-transparent and overlaid with a light blue tint. It depicts several individuals, including a man in a suit on the left and a woman with blonde hair in the center, engaged in conversation.

Examine Together

Regional Market Developments

APPA Legal and Regulatory Conference

Charleston, 2018



Braun Blaising
Smith Wynne

Overview

- ▶ Driving Forces for Regional Market Evolution
- ▶ Overview of Developments
- ▶ Legal Questions that Arise for Public Power Participation
- ▶ What is on the Horizon

Driving Forces of Change

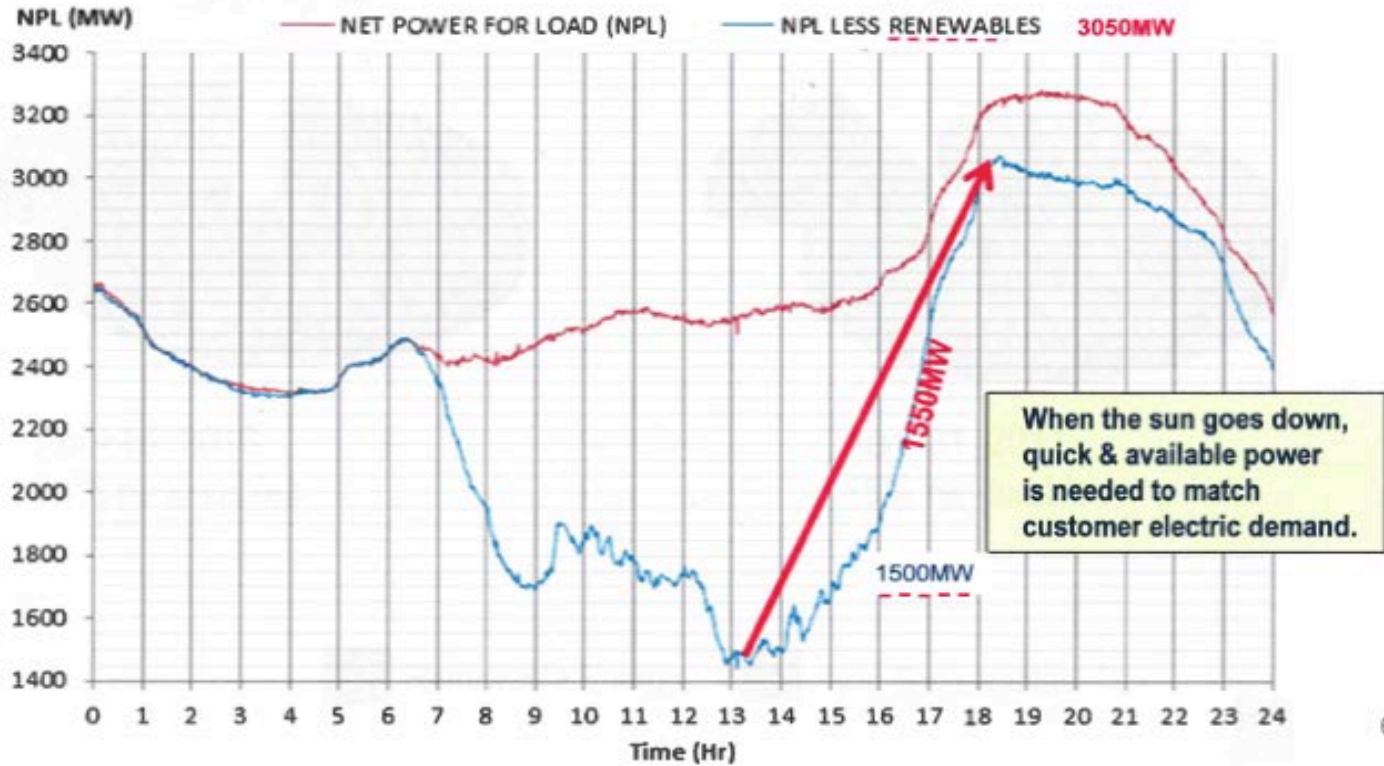
- ▶ The Current and Future Changes to the Generation Fleet
 - ▶ State Policies
 - ▶ Economics of Renewable Energy
 - ▶ Rooftop Solar and Customer Preference
 - ▶ Retirement of Existing Coal
- ▶ Transmission Opportunities for Merchants and IOUs
 - ▶ Significant Opportunities for New Transmission in the West
 - ▶ Regional Markets May Increase Opportunities for Project Approval and Spread Costs More Broadly
 - ▶ Perceived Opportunities for Higher Rates of Return

Not Everyone Has the Same Policies But the Trends are There

- ▶ In vertically integrated states, the utilities have every incentive to replace retiring generation with utility-owned wind and solar
- ▶ Some states have significant penetration of non-utility wind and solar driven by PURPA obligations
 - ▶ In Idaho it is roughly 1/3 of the fleet
- ▶ Arizona has high amounts of rooftop solar and increasing utility solar and a ballot initiative for 50% renewable by 2030
- ▶ Oregon has adopted an 50% by 2040 RPS
- ▶ Oregon and Washington seem poised to implement new carbon policies

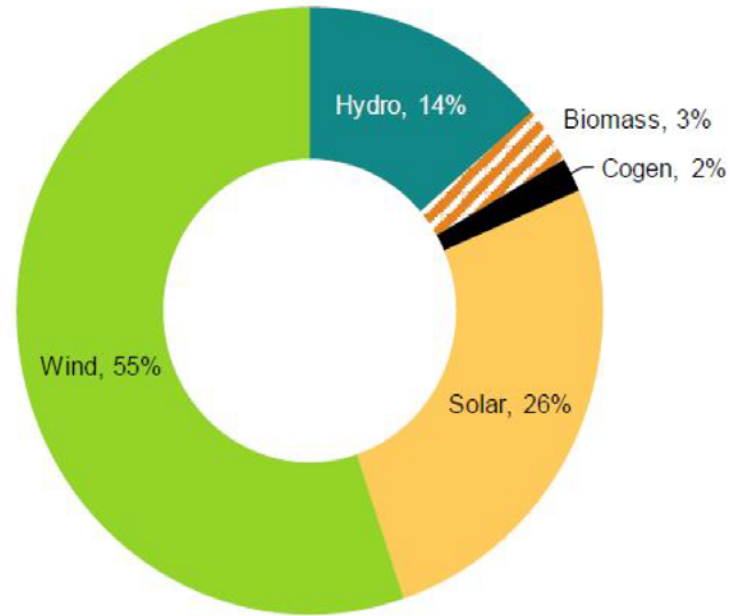
Reliability Challenge: The Duck Curve

Net Power for Load (NPL) for 02/26/2017



PURPA Generation

- April 2017 – 128 online PURPA contracts
- Approximately 1,115MW nameplate capacity



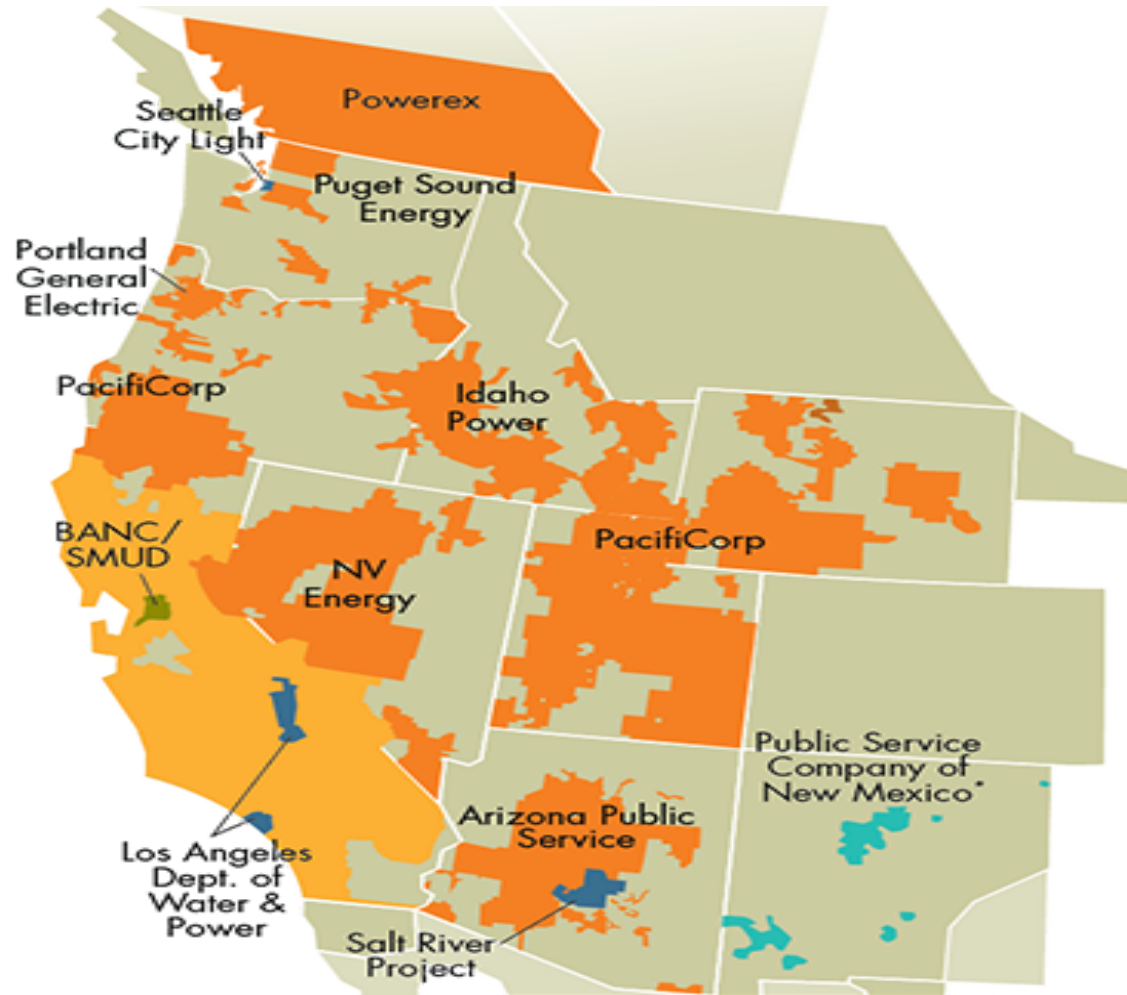
PURPA contracts by resource type

Manifestations of Change

- ▶ EIM Establishment and Expansion
- ▶ Legislative Proposals to Change CAISO Governance
- ▶ Further Proposals to Enhance Regional Markets
- ▶ Mountain West Transmission Group and Southwest Power Pool
- ▶ Splintering of Reliability Coordinator Services along Market Boundaries

EIM Expansion

- ▶ 2014 - 2017 Sees Historic Changes to How the West Trades Power
- ▶ 13 Entities Operating or Slated to Operate in the EIM
- ▶ Public Power Foray into EIM
 - ▶ BANC/SMUD 2019
 - ▶ LADWP, SCL, SRP 2020
- ▶ Likely More To Follow



Market Operator	
	California ISO
EIM entity	
	Active participant
	Planned EIM entry 2019
	Planned EIM entry 2020
	Planned EIM entry 2021

*Pending state commission approval

Developments in the Mountain West Transmission Group

- ▶ Public, Cooperative, and Investor Owned Utilities
- ▶ Explored Market Options
- ▶ Seemed Poised to Move Forward with Full Southwest Power Pool “Day Two” Market
 - ▶ Day Ahead
 - ▶ Joint Transmission Planning
 - ▶ Common Resource Adequacy Rules
- ▶ Public Service of Colorado Pulled Out
- ▶ Future Uncertain

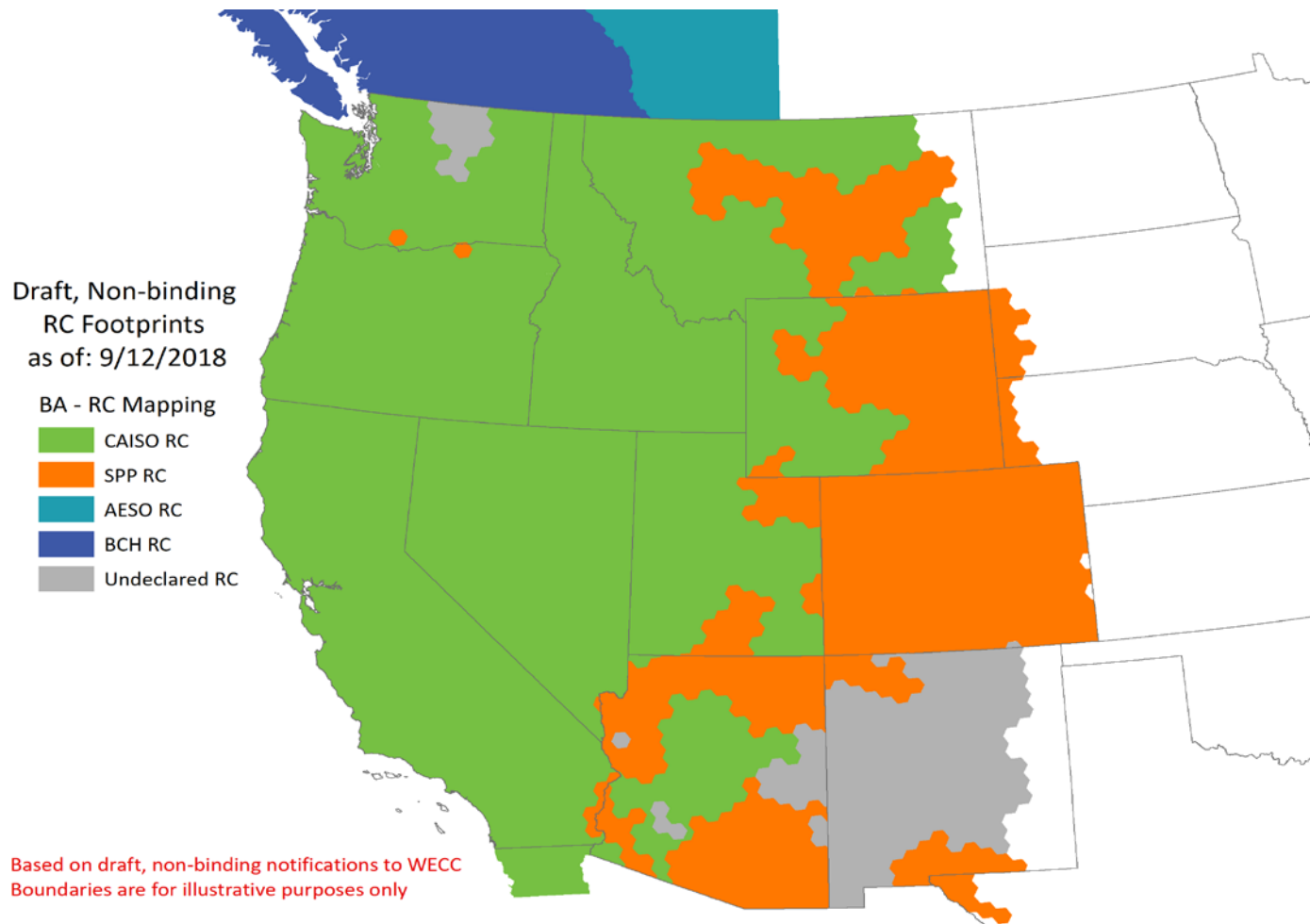
Changes to Reliability Coordination Services

- ▶ MWTG Was Anticipated to Exit Peak RC as Services Duplicate Those Provided by SPP
 - ▶ Ironically, MWTG/SPP efforts have not moved forward
- ▶ Peak Announces Partnership with PJM to Offer Market Services in the West
 - ▶ This was poorly received in many quarters
- ▶ Peak Announcement Triggers CAISO Notice of Withdrawal
 - ▶ Approximately 35% of Funding
- ▶ Most Every Funding Party Provided a Notice of Withdrawal
- ▶ Peak Has Commenced “Wind Down” Process

Multiple RC in the West in 2019

- ▶ California ISO
- ▶ Southwest Power Pool
- ▶ BC Hydro
- ▶ Alberta

The RC Map



EIM Augmentation

- ▶ CAISO Planning Changes to Its Own Day Ahead Market
 - ▶ Responding to Renewable Integration Challenges
- ▶ CAISO Proposing to Consider Then Expanding Day Ahead Participation to EIM Entities
 - ▶ Greatly Expand Trading within the Single Optimization
 - ▶ Affects on Liquidity of Other Markets
 - ▶ Raises Issues: Governance, Transmission, Resource Adequacy, GHG, Others
 - ▶ 2021-22 Implementation

California Legislation 2018 - AB 813; Déjà vu All Over Again, But Different

- ▶ Proposals to Condition California Entity Participation in MultiState Regional Transmission Operator
 - ▶ Public Openness and Transparency
 - ▶ Reasonable Cost Allocation
 - ▶ GHG Attribution
 - ▶ Others
- ▶ Failed: Politics of 2018 No Different that 2016, 2017
- ▶ Do We Need Governance Changes?
- ▶ Future Uncertain

Considerations of EIM Participation for Public Power

- ▶ Economic
 - ▶ Market Opportunities
 - ▶ Cost of Implementation
- ▶ Strategic
 - ▶ Alignment of Market Options
 - ▶ Impact on Policy Goal Achievement
- ▶ Legal
 - ▶ FERC Tariff Engagement
 - ▶ Public Power Considerations

Basic Structure of EIM

- ▶ It is Voluntary
 - ▶ Unit Participation in the Market is Voluntary
 - ▶ Commitment of Excess Transmission is Voluntary
- ▶ There are No Charges for Use of Transmission
 - ▶ Reciprocity
 - ▶ Contribution of Transmission in Return for Optimization of Market over Transmission Systems of Other Participants
 - ▶ Avoid *Vernon* Type Analysis of Public Power Transmission Revenue Requirement and FERC Review

Balancing Authority and TSP Obligations Remain

- ▶ Balancing Authority
 - ▶ Still Responsible for Reliability Obligations of the BA
 - ▶ EIM Includes a “Resource Sufficiency” Test to Ensure the BA could be specified adequacy obligations on a stand alone basis prior to entering the market period
- ▶ Transmission Service Provider
 - ▶ This Has Not Been a Matter of Focus for BANC
 - ▶ IOUs Have Effectuated Changes to Imbalance Service Through OATT filings
 - ▶ Parallel Efforts are Expected for Public Power entities with OATTs and transmission customers

It is a FERC Regulated Market

- ▶ Service is Provided Under the Terms and Conditions of the CAISO Tariff
 - ▶ Prices Regulated by FERC
 - ▶ Bids Subject to Market Power Mitigation
 - ▶ Department of Market Monitoring Reviews Activity
 - ▶ Default Energy Bids are Negotiated for the Purposes of Mitigation

Other Practical Conditions of Service

- ▶ Scheduling Coordinator Service
- ▶ Required Risk Management Policies
- ▶ Required Credit Assurances
 - ▶ Public Power Net Assets Exemption from Credit Posting Requirements
- ▶ Required Metering Practices and Standards
 - ▶ Although there is some flexibility

Legal Roadmap - Execution of Agreements

- ▶ Implementation Agreement - Includes Obligation to Pay Incremental Costs to Onboard EIM Entity
- ▶ Entity Agreement
 - ▶ BANC is the Only Public Power Version Filed to Date at FERC
 - ▶ Publics Successful in Getting Changes from *Pro Forma* Entity Agreement
 - ▶ Reliance on Agreement Not Tariff in Case of Inconsistencies of Interpretation. This was to effectuate unique implementation details specific to BANC
 - ▶ Express Intent Language on 201(f) status
 - ▶ More Reciprocal Liability Provisions
 - ▶ Processes to Examine Possible Conflicts with State and Local Laws - Particularly Important for Non-California Entities

Roadmap Continued

- ▶ EIM Scheduling Coordinator Agreement
- ▶ EIM Meter Service Agreement
- ▶ Participating Resource Agreement
- ▶ Parallel Discussions on These *Pro Forma* Agreements
 - ▶ Recognition of 201(f) Status
 - ▶ Liability
 - ▶ Conflicts with State or Local Laws

Be Aware of Regulatory Burden Ramp Up

- ▶ Market Performance is Constantly Reviewed
- ▶ Market Rule Changes are Continuous
 - ▶ Associated Stakeholder Initiatives
 - ▶ Resulting FERC Filings
 - ▶ The Need for Relationships
 - ▶ With the CAISO
 - ▶ With other Participants
 - ▶ With FERC

Takeaways on Legal Structure and Public Power Implications

- ▶ Since EIM Scope is Relatively Limited and Participation is Voluntary, Many Thornier Issues of Full RTO Participation are Avoided
- ▶ Bottom Line - The Market is the Market
 - ▶ Most Rules are Uniform for All Market Participants
 - ▶ CAISO Has Shown Flexibility on Certain Matters, but this should not be confused with a wholly different set of rules for public power
 - ▶ Most Protections Come from Easy Exit

Conclusions

- ▶ Generation Choices Have Changed
 - ▶ Economics
 - ▶ Policy
 - ▶ Consumer Demands
- ▶ Markets Are Evolving Without Legislative Fiat
- ▶ It is a Matter of How and What and When