Open Energy Market Design & Policy: Commercial and Residential

Wholesale Market Structure

- Determine the Day 1 wholesale market structure:
 - Possible considerations:
 - Existing Structure Bilateral market w/ open access transmission service
 - Nevada Power Exchange facilitated bilateral market w/ open access transmission service
 - Contract with CAISO or SPP as operator of a Nevada-governed, Nevada-based ISO that continues to use the CAISO EIM (interim or permanent solution)
 - Work with CAISO to expand EIM to include day-ahead operations for Nevada
 - Nevada centralized market combined with transmission services
- Determine which of the following Attributes and Services for Evolving/End State wholesale market that best support Nevada's retail market goals
 - Energy Imbalance Market (real time, day ahead,)
 - Price settlement (zonal, nodal, facilitated bilateral)
 - Ancillary Service market (generation services for transmission operations and reliability
 - How to address sudden, unexpected demands for more power on short notice?
 - How to ensure that generation adjusts with demand to maintain optimal grid operation?
 - Capacity Market (for Resource Adequacy)
 - Determine policies to ensure adequate resources are on the grid to meet demand at all times
 - Determine if there are existing must-run generation untis that should be retained/ continue operation locally for voltage and frequency support of the grid
 - Regional or State NV only, California (if it becomes regional w/ acceptable governance for NV), SPP, Mountain West Group, or build a new regional market with non-California parities, etc.
- Considerations when selecting above Attributes and Services
 - Governance structure and Nevada's representation
 - Implementation Schedule
 - Cost to implement (and benefits received from the cost)
 - Ongoing operational cost
- Rules/Mechanisms to encourage development of small (PURPA) resources.
 - What to do with the utility's PURPA entitlements
- <u>https://www.ferc.gov/industries/electric/gen-info/qual-fac/what-is.asp</u>
- Develop plan to address any seams issue between POLR/Default provider and wholesale market operator, and Determine standards/oversight for how POLR

procurs energy for these services (auction, wholesale market, and provider owned generation)

Retail Market Structure

- Consideration of existing market structures:
 - No Utility Provided Default Service (TX)
 - Market Pass-Through (NY)
 - Auction or RFP (PJM & NE)
 - Hybrid (OH, CA, MI)
- Identify competitive vs. regulated services (billing, metering, energy efficiency offerings, demand response, net metering)
- Determine if state should establish market power criteria for retail market and/or impose limits on generation ownership within the state to facilitate diverse competition
- Determine how to implement retail electric market in territories of coops, munis, and PUDs, while preserving unique mission and governance of these entities
- Determine Licensing Qualification and requirements for retail providers
 - Will retailers be subject to any limits such as pricing caps or number or types of choices they must offer?
 - Eligibility criteria: e.g., financial viability, in-state offices, bonded, website, scheduling operation?
- Consumer Education platform and program
 - How will it be funded?
 - Who will be in charge of content?
 - What is it scope? To educate on how to switch? Who is offering? Rights? To motivate people to switch?
- Customer enrollment and switching management
- Data management
- Collection of local franchise taxes
- Collection of mill tax

Default and Provider of Last Resort Services

- Determine qualifications for entities to provide service Day 1 and beyond
- Will there be a transition period service and for how long?
- Determine which entities provide service for customers who do not choose or whose retail provider defaults (state agencies, assigned to retail providers, bid on by retail providers)
- Determine process for setting POLR rates and define oversight roles for POLR (e.g. PUCN)

Consumer Protections: Protections from Undue Rate Increases & Fraudulent Practices

Identify requirements, processes, enforcement agencies, cost and funding sources for the following:

- Licensing, market behavior, transactional rules and related enforcement regimes
- Routine monitoring and oversight of market participants (e.g., administering and managing any reporting requirements)
- Customer education on the marketplace and their rights
- Customer complaint and dispute resolution
- Oversight of and rules for entity managing customer enrollments and supplier switching
- Oversight of and rules for managing data privacy and data exchange
- Transmission and distribution system rate design and recovery
- Market participant compliance with market behavior rules and any obligations that extend to them (e.g., energy supply requirements, emerging technologies, net metering, energy efficiency, demand response requirements)
 - Who will enforce? AG? PUCN? Both?
 - Create penalty authority for noncompliance.
- Low-income customer assistance
- Retailer Providers what types of payment options and credit arrangements should be offered
- Oversight of Energy Providers extended to territories of cooperatives, municipalities, and public utility districts where needed or desirable

Innovation, Technology, and Renewable Industry Development

Identify requirements, entities responsible for implementing/complying, agencies responsible for administration and oversight agencies, cost and funding sources for the following:

- Renewable portfolio standards
- Electric Vehicles
- Energy Storage
- Metering (net, time of use)
 - Include an assessment of AMI metering deployment in Nevada, and policies associated with data accuracy and security
- Demand-side management programs
- Energy efficiency programs
- Aggregation programs
 - Community Solar
 - o Commercial/ private sector
- Blockchain Retail/ Wholesale/ Consumer Policies
- Incentive programs for other technologies of interest

• How do incentives in nearby markets work and how can they be incorporated into this new market?

Generation, Transmission, & Delivery: Securing Energy Imports & Exports

- Infrastructure and other needs to support imports, exports, and renewable energy development.
- Resource Adequacy and System Planning
 - Should generation and transmission planning be an administrative or market-based solution?
- Policies that will transition NV to become a net energy exporter
- Economic opportunities for Nevada
- Federal and State land issues associated with Transmission and Generation Development
- Advise Open Market Committee on transmission planning and cost allocation cost to accomplish Nevada's goals
- Develop roles/relationships for State Agency and Policy makers and ISO/RTO governance to ensure that ISO/RTO processes are responsive to State energy goals and policies.

Energy Consumer & Investor Economic Impacts: Divesting Assets & Investments

- Transitional regime and rate structure to recover costs of transition and stranded costs
- Determine extent and timing of divestiture of supply assets
- Determine the process for divesting the utilities of supply assets (generation, power purchase agreements, and associated assets and contracts)
 - Include an assessment of PURPA impacts for PPAs
 - Include an assessment of federal hydropower contracts
- Determine the process for divesting the utilities of other assets, contracts, and obligations associated with restructuring requirements (as determined in categories above)
- Determine appropriate processes for calculating and recovering Stranded costs or benefits
- Determine new investments and expense required to transition to the restructured market (as determined in the categories above)
- Determine the mechanisms for recovering Transition costs and schedule for recovery
- Determine plans to mitigate any potential employment impacts of restructuring
- Determine the entities responsible and funding for management of job loss and retraining

- Develop mechanisms and standards to minimize cost of all of the committee decisions?
- What costs will be funded through non-bypassable charges and who will collect those charges?
- Determine potential impacts to Sierra Pacific Power Gas customers