

# PGP's Interest in Price Formation Enhancements (PFE)

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- **The Public Generating Pool is a subset NW publics who own and operate their own generation (primarily Hydro) and purchase a large portion of BPA's tier 1 power.**
  - Load serving entities in Bonneville Power Administration's Balancing Authority (BPA's BA)
  - Energy Imbalance Market (EIM) Entities
  - Non-Participating Balancing Authorities (BAs)
- **The regional backdrop is evolving>> tools for managing emergency conditions need to evolve too**
  - Extreme weather, climate change = increased risk for extreme conditions
  - Large Loads, electrification = evolving loads and demand management opportunities
  - Challenges with resource and transmission development = need to maximize operational efficiency
  - New/evolving markets and seams = new external impacts
- **Historical discussion on price formation during tight conditions also highlighted issues around the interaction of CAISO as Market Operator vs BA>> time for solutions that apply to all participating BAs**
  - Market Power Mitigation (MPM) also important and needs to evolve, changes should not be delayed

# PFE Scarcity Progress To Date

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- **Articulation of most urgent concerns for scarce conditions**
  - **Price formation during emergency actions** (Not just CAISO actions- level playing field)
  - **Better/broader definition of “scarce” conditions under unique western construct**, and warning signals
  - **Properly incentivize supply and demand-side performance** when critical for reliability
  - **Improve transparency** around expected market behavior during these conditions
  
- **Some concepts were explored thoroughly and point us in a direction**
  - New Ancillary Service product for the CAISO: Too complex to implement now, may not align with regionalization goals, may not solve most urgent concerns >> **need something easy to implement, applied broadly**
  - Value Of Lost Load (VOLL) use in market prices: Challenging to establish, unclear if appropriate >> **need clear and consistent signals that improve on existing frameworks**
  - Scarcity limitations: price duration/impact should send correct incentives but not cause harm when all tools are used up >> **Correct known issues with the signal for short duration events first, improving tools and performance incentives**

# Recommended Path

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- **Accept that we explored “standard design” and determined it won’t work in the unique Extended Day Ahead and Western Energy Imbalance markets**
  - It’s poor timing to implement a complex change but **there is urgency here!**
- **Refine and *implement* the straw proposal, which will lock in progress and support future comprehensive design.**
  - Process will begin to answer questions to define BA supply margin, and improve MPM
- **Expand the conditions considered in the straw proposal based on past discussion and experience:**
  - How to define supply and demand-side BA emergency actions across the footprint
  - How to trigger and communicate conditions, especially if post-market pricing is required
  - How to provide warning of pending event, make prices last through event, when to call it over
  - Consideration of what would be needed to live with post market settlement in the interim
  - Clarify relationship to Energy Assistance/Resource Sufficiency Evaluation
- **Western approach has always been a continuous improvement model, let’s use it!**