



**CAISO's Stepped Constraint Parameters Issue Paper**  
**Public Generating Pool Comments**  
**May 26, 2016**

The Public Generating Pool (PGP) represents ten consumer-owned utilities in Oregon and Washington, three of which own and operate Balancing Authority Areas (BAA)s. PGP appreciates the opportunity to comment on the California ISO Stepped Constraint Parameters Issue Paper (issue paper) dated May 5<sup>th</sup>, 2016. PGP's comments focus on the ISO's proposals to relax the power balance constraint for small infeasibilities and replace the freezing of EIM transfers as a resource sufficiency enforcement mechanism with a penalty mechanism.

**Power Balance Constraint Relaxation**

In its issue paper, the ISO proposes to implement a tier relaxation approach applied to both upward and downward power balance constraint violations to address small infeasibilities of the power balance constraint. PGP agrees that there are more appropriate methods of addressing small infeasibilities than triggering extreme jumps in market clearing prices, such as the \$1,000 MWh penalty price in the case of the CAISO markets.

PGP is supportive of the ISO exploring efficient shortage pricing measures in the CAISO markets. However, PGP is not supportive of market rules that simply suppress real-time price volatility by dipping into operating reserves. Market prices should accurately signal shortages and scarcity and should encourage resources to be available when they are needed most. PGP recommends the ISO further explore shortage pricing measures that are graduated in nature, for circumstances when supply from available resources becomes exhausted and potentially becomes insufficient to meet demand. Shortage pricing parameters should be applied to both upward and downward power balance constraint violations, and the penalty price should graduate stepwise in proportion to the size of the shortage.

**Resource Sufficiency Enforcement**

Resource sufficiency and its enforcement are important components of the voluntary nature of the CAISO Energy Imbalance Market (EIM). Proper design and enforcement ensure the market reaches equitable solutions, functions properly and does not adversely impact reliability. As an energy-only market, the EIM does not serve as a source of capacity. In order for the EIM to be equitable and to function properly, without adversely impacting reliability, EIM Entities should not be allowed to lean on the EIM to meet deficits in energy or capacity needs. It is critical that each EIM Entity demonstrate sufficient generating capacity to meet its obligations *before* the



operating hour, through the ISO's resource sufficiency framework, and that market rules send proper signals that reflect when the resource sufficiency framework is not functioning properly.

### **PGP Proposed Principles for Resource Sufficiency Enforcement**

The ISO proposes in its issue paper that a penalty approach may be more appropriate for the BAA that failed the resource sufficiency evaluation, rather than freezing the EIM transfers into and out of the BAA. The ISO proposes the penalty structure be similar to the under- and over-scheduling penalties. The ISO also proposes that the penalties collected be allocated to the other BAAs in the EIM area that passed the resource sufficiency evaluation, in order to compensate them for leaning on the EIM – whether from having been in an insufficient condition, or having had an excess of supply.

PGP opposes the ISO's proposed changes to its Resource Sufficiency enforcement structure since the current structure it has not been demonstrated that the current structure has had negative consequences. At the same time, we are concerned that the proposed penalty structure may incent unwanted behavior on the part of the EIM Entity and result in negative unintended consequences. Given the importance of compliance with the resource sufficiency test, enforcement of resource sufficiency should be grounded on the following foundational principles:

- Resource Sufficiency compliance should not be a discretionary economic alternative.
- The resource sufficiency enforcement framework should prevent leaning on neighboring systems or intra-hour markets for flexibility or capacity needs.
- Enforcement measures should provide prompt identification of resource sufficiency failure, and impose consequences that escalate with the frequency and/or severity of non-performance.

### **PGP Concerns with Proposed Penalty Enforcement Mechanism**

The ISO's proposed penalty structure for enforcement of resource sufficiency is problematic and concerning for several reasons:

1. ***Proposed changes makes resource sufficiency an economic choice.*** By changing the enforcement of resource sufficiency from exclusion from the EIM to issuance of a penalty, resource sufficiency becomes an economic choice rather than a mandatory requirement for participation in the EIM. An EIM Entity may decide it is more economic to lean on the EIM during hours of peak conditions rather than to procure sufficient capacity and energy on a forward basis to meet those peak conditions. **The possibility**



**of exclusion from the EIM for failing the resource sufficiency evaluation sends the proper signal to procure energy and capacity *before* the operating hour.**

2. **Loss of visibility and transparency around insufficiencies.** A penalty enforcement structure reduces the transparency and visibility of the underlying insufficiency. As the ISO mentioned in its issue paper, exclusion from the EIM upon failing the resource sufficiency evaluation results in impacts to LMPs inside the EIM area. This makes it visible to all parties that there is a problem that needs to be addressed. As occurred with the price spikes in PacifiCorp's BAAs upon PacifiCorp joining the EIM, the underlying root causes for the price spikes were promptly identified and addressed because the problems were reflected in the LMPs. **PGP is concerned about the loss of visibility and transparency that results from a penalty enforcement structure.** This is particularly important when resource insufficiencies are of greater magnitude or frequency and occur during periods of critical operations or stressed system conditions.
3. **Penalty enforcement structure does not properly address large insufficiencies.** The ISO proposes to implement a penalty structure similar to the load under- and over-scheduling penalties. The ISO assesses under- and over-scheduling charges in two levels, according to the deviations from the EIM base schedule: if metered demand deviates from the schedule 1) by between five to ten percent (level 1); and 2) by more than ten percent (level 2). The level 1 charge is 25% of the hourly real-time load aggregation point price for the entire deviation; the level 2 charge is 100% of the hourly real-time load aggregation point for under-scheduling and 50% of the hourly real-time load aggregation point for over-scheduling. This graduated threshold approach recognizes that greater resource insufficiencies impose a larger burden on other EIM Entities and the ISO. However, a penalty enforcement structure alone will not adequately incent the EIM Entity to ensure adequate resources are committed before the hour, which could potentially lead to reliability concerns. In the event the ISO decides to pursue a penalty enforcement approach, **PGP encourages the ISO to consider that the consequence for resource insufficiencies should result in exclusion from the EIM if the magnitude of the insufficiency exceeds a certain threshold.**
4. **Penalty enforcement structure doesn't address frequency of insufficiencies.** While the ISO proposed a threshold approach to address the magnitude of the resource insufficiency under a penalty framework, the ISO does not propose a similar threshold approach for the *frequency* of resource insufficiency evaluations. This allows an EIM Entity to lean on other EIM Entities and the ISO for small amounts of energy on a re-occurring basis, largely without consequence. Should the ISO pursue a penalty enforcement approach, PGP encourages the ISO to also consider a threshold for the number of times an EIM Entity fails the resource sufficiency test, and beyond a certain



frequency threshold, the EIM Entity is excluded entirely from the EIM for a set period of time.

5. ***Penalty enforcement does not prevent leaning on neighboring systems.*** In Docket No. ER14-1386-000, dated April 15, 2014, the ISO stated that the resource sufficiency test protects EIM Entity BAAs from real-time leaning on other BAAs, including the ISO BAA, by isolating any EIM Entity BAA that fails to meet these requirements, from accessing the resources available in other BAAs in the EIM area. Exclusion from the EIM *prevents* an EIM Entity from leaning on its neighboring BAAs, whereas a penalty enforcement *allows* leaning, but at a price. **The ISO has not substantiated why it is now willing to allow an EIM Entity failing to satisfy the resource sufficiency requirements, to lean on other EIM BAAs or the ISO BAA. The ISO has also not explained how changing to a penalty enforcement framework is necessary or more beneficial.**

#### **PGP Request for more information on ISO reasons for proposed change**

The ISO provided two reasons for the proposed change:

1. Freezing transfers into and out of anr EIM BAA that failed the resource sufficiency evaluation has an impact on the LMPs within that BAA. There may be market participants in a BAA that have load or generation imbalances settled at the LMP, but have sufficient resources to individually meet their imbalance needs.
2. EIM benefits are the result of maximizing the use of available transfer capability between BAAs and the freezing of transfers reduces the use of transmission made available to support EIM transfers.

The current enforcement framework has been successful in ensuring that EIM Entities are resource sufficient for a high percentage of hours. This means that the instances of high LMPs due to resource sufficiency enforcement are rare, and the cost to market participants in the insufficient EIM Entity BAA who were individually sufficient, has likely been limited. Likewise, due to the small percentage of hours EIM Entities are resource insufficient and excluded from the EIM, the limitation of EIM benefits resulting from the freezing of transfers is also rare. **The ISO needs to provide more information than provided in the original proposal about the number of incidences and financial impact associated with the current approach to enforcement.**

#### **PGP Recommendations**

- **MAINTAIN CURRENT ENFORCEMENT STRUCTURE:** PGP recommends the ISO keep the current exclusion enforcement mechanism in place as the proposed penalty structure is much less effective at preventing resource insufficiencies and poses the potential unintended consequences mentioned above.



- **IF A FINANCIAL PENALTY STRUCTURE IS PURSUED, MAKE IT GRADUATED IN NATURE WITH EXCLUSION AS AN ULTIMATE CONSEQUENCE:** To the extent the ISO moves forward with a penalty enforcement structure, PGP urges the ISO to ensure the penalty is graduated in nature, increases in severity with the magnitude and/or frequency of resource insufficiency, and includes exclusion from the EIM when the EIM Entity exceeds a particular MW threshold and/or a number of insufficiency events.