# **Subject: Stepped Constraint Parameters**

Submitted by	Company	Date Submitted
Nuo Tang	San Diego Gas & Electric Co.	May 26, 2016
858-654-1818		

SDG&E generally supports several of the suggestions to reduce real time offset uplift costs and create more efficient solutions in the issue paper. SDG&E requests more analyses to be presented in the ISO's straw proposal.

## Transmission constraint relaxation parameter

The ISO proposes to lower the transmission constraints based upon the magnitude of the violation as well as the voltage level. SDG&E agrees that lowering the pricing parameter would help lower the real-time congestion offset uplift costs. In the ISO's March 8, 2013 tariff amendment submission to FERC, it noted that lowering the parameter to \$1,500 from \$5,000 would produce up to 36 percent savings with minimal reduction in effectiveness of resources bid into the market. SDG&E requests the ISO to perform similar analysis on the potential savings to lowering the parameter to as low as \$500. Also in the same submission, the ISO "concluded that further lowering the real-time transmission constraint parameter to \$1,000 would be counterproductive because it could prevent the dispatch of economic bids at the \$1,000 bid cap and would interfere with the ISO's ability to establish schedule priorities." What events have occurred to allow the ISO to propose a \$750 price?

SDG&E notes that ISO's proposal to separate the voltages at 230kV and 115kV leaves out existing voltages at 138kV and 220kV. SDG&E recommends incorporating all voltages for the parameter.

The current parameter is \$1,500 per megawatt hour. The ISO lists lowering the range to \$1,000 per megawatt. SDG&E wishes the ISO to confirm the unit price that it is proposing.

## Shift factor effectiveness threshold

The ISO proposes to lower the effectiveness threshold to solve the market optimization more efficiently within the market timelines. SDG&E's main concern with the proposal is the increased time to find a feasible solution with the additional bids. SDG&E requests ISO to provide more data on the time of calculation for dates other than Dec 1, 2014. It would be useful to see if there are differences of calculation time based on seasonality and if there might be more instances where the optimization did not solve within the market timelines.

Does the ISO have an estimate of the optimization time needed if PAC was to join the ISO and the shift factor is set at 0.1%? Would the ISO study the necessary optimization time for the expanded area and potentially roll back the shift factor?

SDG&E requests the ISO to explain how a lower threshold would impact the potential savings based on the proposed stepped constraint. In the 2013 FERC submission, the ISO notes that "the cost of relieving congestion depends on the relative effectiveness or shift factor, of the resources the ISO must redispatch up or down in order to relieve a constraint. If the relative effectiveness is zero, increasing the output of one resource and decreasing the output of the other resource will result in no relief." How much does lowering the shift factor to 0.1% relieve congestion costs compared to a 2% shift factor. What is the interplay of the shift factor and the transmission constraint relaxation parameter in the optimization? How much additional congestion might be lowered when both parameters are implemented as proposed? SDG&E would like the ISO to provide detailed analysis in its next proposal.

## **Power Balance Constraint**

SDG&E supports the concept of a power balance constraint when there is a violation. SDG&E recommends the ISO to also consider the method that was implemented by MISO based on percentage of the violation rather than a predetermined megawatt level.

## EIM transfer limit for resource sufficiency evaluation

SDG&E does not support the proposed penalty structure for resource sufficiency. SDG&E is unconvinced that a penalty price, regardless of the magnitude, would adequately address "leaning". SDG&E also believes the allocation of penalty revenue to other BAAs would not be an accurate reflection of true costs. SDG&E believes the ISO should resolve this issue using other means which would not allow "leaning".

## **Lowering Bid Floor**

SDG&E supports a lower bid floor for both day-ahead and real-time markets in order to provide better market signals for resources. SDG&E does not believe symmetry should drive the decision to have a lower bid floor however.