Holistic Approach to Congestion Irresolvable in SCED

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Direct Energy Comments Regarding Holistic Approach to Congestion Irresolvable in SCED

Direct Energy appreciates the opportunity to provide comments regarding the data presented by STEC at the September TAC meeting. The data presented by STEC is a flawed attempt to present the TAC recommendation as a decision designed to increase cost to consumers. Moreover, the data fails to recognize that efficient price signals create value for consumers. Direct Energy believes the TAC recommendation strikes an appropriate balance between ensuring efficient pricing outcomes during a scarcity condition, observing the applicable system-wide offer cap levels, ensuring reliable system operations, and preventing inefficient dispatch.[1] Direct Energy highlights in these comments why Direct Energy believes the TAC recommendation supports and strikes a balance between each of these principles. However, Direct Energy first describes why the STEC data is flawed.

<u>STEC Data Is Based Upon Flawed Assumptions</u>:

The STEC calculations are misleading. The calculation is based upon key assumptions that facts refute.

1. The STEC calculation assumes that all consumers are purchasing energy in the real-time market. History shows this assumption is incorrect. Data actually supports the opposite conclusion – most consumers are purchasing energy in the bilateral and/or day-ahead market to hedge real-time electricity price exposure. In fact, hedged energy has exceeded the day ahead load forecast during some months in 2011.[2] Therefore, STEC's cost calculation is not based upon an accurate assumption regarding consumer exposure to real-time energy prices.
2. STEC also assumes the Valley Import Constraint will violate for approximately 50 hours per year. It is true that the Valley Import Constraint has violated for approximately 50

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[1] See the principles for setting an appropriate shadow price cap discussed during stakeholder deliberations regarding the initial shadow price cap levels for the nodal market at http://www.ercot.com/content/meetings/tac/keydocs/2008/1106/11._CMWG_20080827_Penalty_Factors_Comment.doc.

[2] See for example the Wholesale Market Operations Update presented at the ERCOT Board of Directors Meeting on March 22, 2011 on page 2 at http://www.ercot.com/content/meetings/board/keydocs/2011/0322/Item_05c_-_Wholesale_Market_Operations_Report.pdf.

hours to date in 2011. However, approximately 40 of those hours occurred during the extreme weather event in February. Direct Energy believes it is not reasonable to assume extreme weather conditions will exist every year in the STEC analysis. Based upon data available to Direct Energy, Direct Energy understands the Valley Import Constraint in 2009 and 2010 violated for significantly less than 50 hours.

If the purpose of STEC's data is to prove that the higher the shadow price cap is the stronger the price signal for the market, then Direct Energy agrees with that conclusion. STEC's attempt to calculate a hypothetical cost to consumers that is based upon flawed assumptions is an incomplete analysis. Direct Energy believes the complete exercise regarding price signal is to determine whether or not the price signal represents an efficient price signal.

TAC Recommendation Strikes the Right Balance and Supports ERCOT Market Design:

The TAC recommendation strikes an appropriate balance between ensuring efficient pricing outcomes during a scarcity condition, observing the applicable system-wide offer cap levels, ensuring reliable system operations, and preventing inefficient dispatch. The recommendation also properly balances the interests of the market as reflected by the 24 – 3 vote in favor of the recommendation with two abstentions.

TAC recommendation provides efficient pricing outcomes:

When a constraint is irresolvable that means there is a shortage of generation available to relieve the constraint. Direct Energy believes the shadow price cap value when congestion is irresolvable in SCED should by consistent with the marginal cost pricing concepts in PUC Subst. R. 501. The marginal cost of reliably serving load in the Valley when all generation resources are exhausted is to curtail load. Direct Energy's support for the $2000 minimum shadow price cap for irresolvable constraints was partially based upon a belief the shadow price cap should be set at a value that reflects value of lost load. Direct Energy believes a reasonable, conservative assumption for value of lost load is a proxy value for demand response. In making this determination, Direct Energy researched the value of demand response programs offered statewide by TDSPs. The average value in $ per MWh paid by TDSPs for the right to curtail load in 2010 was approximately $2000 per MWh.[3] This is a conservative assumption because it assumes the TDSPs maximized the curtailment hours permitted in the program.

An efficient price signal for a shortage/scarcity condition should provide existing generation an incentive to perform when needed and provide generation developers an adequate incentive to build. The TAC recommendation addresses the need for an appropriate price signal for generation performance and development with the inclusion of the $95,000 per MW/year net margin threshold. This threshold was selected because it represents the annualized fixed cost recovery needed for peaking units.[4] The net margin threshold also protects consumers from excessive wealth transfer to generation by dropping the shadow price cap to a lower value after the price signal has provided an adequate annualized opportunity for generation development.[5]

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[3] Direct Energy will make this analysis available at the TAC meeting on October 4, 2011.

[4] See the 2010 ERCOT State of the Market Report, page 49 at http://www.puc.state.tx.us/industry/electric/reports/ERCOT_annual_reports/2010annualreport.pdf.

[5] It also is informative to consider that under the current $350 per MWh interim shadow price cap in the Valley that the Valley Import Constraint would need to violate for over 270 hours in a year to exceed the $95,000 per MW/year net margin threshold. This compares to the approximate 50 hours the Valley Import Constraint has violated to date this year.

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TAC recommendation is consistent with system-wide offer cap levels:

The TAC recommendation adopts $2000 per MWh as the initial minimum shadow price cap level for constraints deemed irresolvable. The current system-wide offer cap level pursuant to PUC Subst. R. 25.505 is $3000 per MWh. Therefore, $2000 per MWh is consistent with PUC Subst. R. 25.505 and is significantly less than the $3000 per MWh shortage price signal that occurs today when the power balance penalty curve sets the price during system-wide scarcity intervals. In the case of the Valley Import Constraint, a shadow price cap value of $2000 per MWh also represents a 60% reduction from the initial shadow price cap value of $5000 per MWh. Moreover, if the net margin threshold of $95,000 per MW/year is exceeded, then consumers are further protected through the reduction of the shadow price cap level to the currently effective LCAP pursuant to PUC Subst. R. 25.505.

TAC recommendation ensures reliable system operations and prevents inefficient dispatch:

One of the principles adopted by the WMS regarding the development of a holistic solution was the proposal should complement rather than interfere with the operation of the market. Direct Energy believes the TAC recommendation ensures that ERCOT will continue to dispatch efficiently available generation to relieve the irresolvable constraint. The TAC recommendation achieves this result by continuing the shadow price cap at the level that is necessary to dispatch existing generation to relieve the constraint. The shadow price cap necessary to dispatch generation is determined by dividing the Mitigated Offer Cap of the unit with the lowest shift factor impact on the constraint by the shift factor of the unit with the lowest shift factor that relieves the constraint. Direct Energy believes the TAC recommendation also prevents inefficient dispatch by applying a shift factor cutoff of 2% (0.02) for constraints that have been deemed irresolvable by ERCOT.

Direct Energy supports the TAC recommendation regarding the holistic approach to congestion irresolvable in SCED and looks forward to discussing this issue further at the TAC meeting on October 6, 2011.