PUBLIC UTILITY COMMISSION OF TEXAS

Filing Receipt

Received - 2022-03-14 02:23:02 PM
Control Number - 53169
ItemNumber - 12

PUC PROJECT NO. 53169

REVIEW OF TRANSMISSION RATES FOR EXPORTS FROM ERCOT	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

GRID UNITED'S REPLY COMMENTS ON STAFF'S DISCUSSION DRAFT PROPOSING CHANGES TO § 25.192(e)

Grid United LLC (Grid United) is pleased to submit these reply comments, following Grid United's initial filing on March 3, 2022 to the request for comments by the Staff of the Public Utility Commission of Texas (Commission Staff) regarding proposed changes to 16 Tex. Admin. Code (TAC) § 25.192. Grid United appreciates the opportunity to provide reply comments on the Commission's review of transmission rates for exports from ERCOT and is pleased to submit these additional comments to the Commission.

I. INTRODUCTION

Grid United is a Houston-based company that develops large-scale transmission projects to provide points of connection to the three separate electric grids in the United States. Specifically, Grid united is developing long-distance high-voltage direct current (DC) tie lines to enable these grid-to-grid connections. Grid United believes these projects are critically important to accommodating an increasingly diverse generation mix while maintaining grid stability, reliability and affordability. Grid United supports the Commission's proposed changes to reduce the ERCOT on-peak export tariff as well as a broader evaluation of the appropriate framework to encourage the development of additional DC ties between ERCOT and the adjacent grids. The existing DC ties in Texas are owned and operated by rate-regulated investor-owned utilities. As a result, the cost for operating such facilities is paid for ERCOT-wide through utility rates. The proposed Southern Cross project and projects to be proposed by Grid United, will likely operate as merchant facilities, with private investment capital recovered through charges to wheel energy across the

DC tie facilities. As such, the Southern Cross project received market-based rate authority from the Federal Energy Regulatory Commission (FERC), and it would be anticipated that projects proposed by Grid United interconnecting to ERCOT would pursue similar market-based rate authority. Thus, costs to export energy to and over a merchant DC tie facility negatively impact the financial incentives to construct such facilities.

In their initial comments, Texas Industrial Energy Consumers (TIEC) raised concerns about the impact of DC ties on ERCOT's ability to serve native load, particularly during the months of June, July, August, and September. Grid United appreciates TIEC's concerns, and the important role of ERCOT in having sufficient transmission capacity to serve native load during times of resource scarcity. These reply comments seek to respond to and, hopefully, alleviate those concerns. As will be discussed below, rather than hurting ERCOT's ability to serve native load, incentivizing the development and operation of additional DC tie connections in ERCOT will significantly increase ERCOT's operational flexibility during times of resource scarcity and incentivize the development of new generation resources.

II. EXPORT TARIFF IMPACTS ON DC TIE LINES

To appropriately incentivize grid-to-grid connections, it is important to remove obstacles for transmission developers who rely on market forces to earn revenue to pay for their projects. As described below, merchant transmission developers interconnecting with ERCOT will rely on arbitrage revenue from connecting ERCOT with surrounding markets. Export charges, especially in off-peak periods, impact the economic incentives to develop DC tie projects. Thus, by further reducing or eliminating export charges for DC ties in off-peak months, when the grid has surplus capacity for export, the Commission can incentivize grid-to-grid connections, which will in turn be available to provide the critical ability to import during times of scarcity in ERCOT. Further, exports during off-peak months (when demand is lower) will lead to a more efficient market by providing power producers with an outlet for excess resource capacity.

Table 1: Indicative % loss in revenues from export tariffs to grid-to-grid connection projects[1]

Grid-to-grid tie	Status Quo	Proposed	Proposed; no off-peak
ERCOT-WECC (west)	-24%	-17%	-6%
ERCOT-MISO (east)	-25%	-22%	-5%
ERCOT-SPP (north)	-13%	-11%	-3%

It is important to look at the financial impacts of export charges on grid-to-grid connections. As the Commission deliberates on this critical topic, Grid United thought it would be instructive to present the impact of export charges on three hypothetical examples connecting ERCOT to markets to the west, north, and east using historical price data. As the chart above indicates, under the current export tariff regime ("Status Quo"), these hypothetical merchant DC tie projects face a ~13% to ~25% hit to their revenue as a result of export charges. Under the Commission's current proposal, the impact to revenues is still significant, but reduced by lowering off- peak export charges. Finally, the chart shows that the economics of grid-to-grid connections can be still further incentivized by eliminating the export charges during off-peak months entirely, and thus minimizing losses in project revenue to between ~3% and ~6%. Export charges materially affect the economics of a proposed DC tie project, possibly hindering its construction and preventing electricity consumers from seeing the benefits it brings both during day-to-day grid operations and extreme events.

A logical question is: why would the Commission care about creating such incentives for the development of merchant DC tie facilities? We need only look back a year, and a decade before that, and each summer during times of resource scarcity in ERCOT, to see the potential benefit of

[1] Annual revenue is calculated for each project using historic hourly power price differentials over the last five years between ERCOT and WECC, MISO and SPP, excluding data from 2/21 (Winter Storm Uri).

significant additional import capacity through DC tie facilities. A properly incentivized merchant DC tie facility provides ERCOT with potentially thousands of megawatts of additional resource capacity for grid stability and reliability, which is fully controllable by the grid operator. Properly incentivizing merchant DC tie developers allows beneficial reliability to be paid for primarily by market-driven investors, rather than ratepayers. Thus, the further reduction or elimination of export charges during off-peak periods will not limit ERCOT's ability to serve native load customers (because there is sufficient capacity) and will incentivize construction of merchant DC tie facilities that will provide import capacity for ERCOT to better serve native load customers during times of scarcity.

III. CONCLUSION

In the absence of regulatory regimes to support the build-out of inter-grid connections, merchant DC tie developers must rely on market arbitrage – exporting lower cost power to the market with higher power prices or importing when prices are lower in other markets – to justify and finance projects. Thus, export charges directly impact the financial incentive for potential DC tie developers to provide ERCOT with projects with the potential to significantly improve the reliability of the ERCOT grid. History has shown that private capital flows into markets as barriers to trade are reduced. By allowing DC tie developers to benefit from additional revenue in off-peak months, when the grid has surplus transmission capacity and excess power for export, the Commission can incentivize DC tie lines that can provide the critical ability to import when power is needed most. As the hypothetical examples show, the economics of DC tie projects improve dramatically as off-peak charges are reduced.

Grid United appreciates the opportunity to respond to Commission's Staff request for comments in this matter and is available to discuss or provide additional information deemed to be helpful during the course of this proceeding.

Respectfully submitted,

/s/ Michael P. Skelly

Michael P. Skelly
Manager, Grid United LLC
1717 West Loop South, Suite 1800
Houston, Texas 77027
GRID UNITED LLC

EXECUTIVE SUMMARY

Grid United appreciates the opportunity to provide reply comments on the Commission's review of transmission rates for exports from ERCOT and looks forward to working with the Commission to address this important issue. Commission Staff's request for comments includes a request for commenters to include a bulleted executive summary to assist Commission Staff in reviewing the filed comments in a timely fashion. Accordingly, Grid United provides the following:

- ERCOT export charges significantly impact the economic basis by which potential merchant DC tie operators will choose to develop additional DC tie interconnections between ERCOT and adjacent grids.

- Development of additional DC tie facilities between ERCOT and adjacent grids will potentially provide thousands of megawatts of new transmission import capacity that will allow ERCOT to better serve native load during times of scarcity.