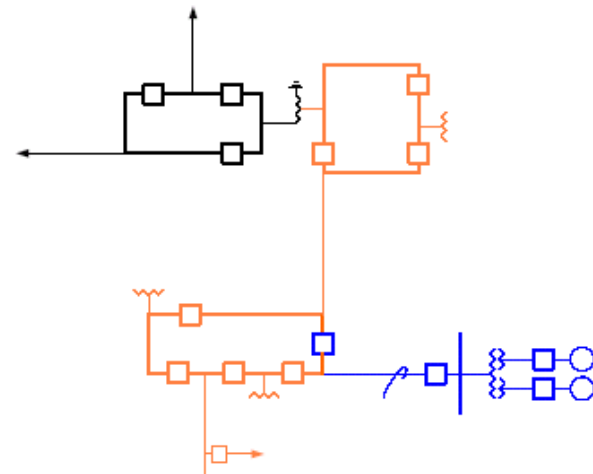


Qualifying Transmission Upgrade (QTU) Credit Requirement

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Background

- ◆ H-P Energy Resources LLC, a developer of Qualifying Transmission Upgrade (QTU) projects, seeks to address the anomalous situation of the credit requirement for a QTU being a multiple of QTU total project cost.
- ◆ The anomaly is compounded by the uniquely low performance risk of a QTU relative to other RPM resources (existing generation, planned generation and demand response).

Uniquely Low Performance Risk

- ◆ The performance risk of a QTU is uniquely low relative to other RPM resources:
 - PJM determines the QTU will be in service for the Delivery Year as a condition of certifying the QTU for participation in a Base Residual Auction (BRA).
 - The Transmission Owner, not the QTU developer, is responsible for all aspects of QTU construction.
 - QTUs are typically simple upgrades.

And a Unique PJM Backstop

- ◆ Unlike other RPM resources, PJM can order transmission upgrades.
- ◆ Currently PJM can order a transmission upgrade if a developer defaults on an Upgrade Construction Service Agreement.
- ◆ No reason such authority couldn't extend to a QTU that clears (commits) in a BRA. In both cases PJM would have total project cost in hand if the BRA credit requirement were set at total project cost.

Why This Matters

- ◆ An excessive credit requirement discourages entry and thereby artificially raises RPM prices in constrained Locational Deliverability Areas (LDAs).
- ◆ Restricted entry imbalances regulatory goals (Order No. 741, 133 FERC ¶ 61,060, P 2):
“The management of risk and credit necessarily involves balance. If access to credit is too restrictive, competition suffers because fewer entities are eligible to participate, which can potentially reduce competition.”

Real World Example

- ◆ H-P had a QTU project (now withdrawn due to changed topology) showing the problem.
- ◆ PJM Queue Y3-030 was a reconductoring upgrade of the High Ridge-Sandy Spring 230 kV circuit to be built by the Transmission Owner (Baltimore Gas and Electric).
- ◆ H-P's analysis indicated that this project would increase the Capacity Emergency Transfer Limit (CETL) into the MAAC LDA by 900 MW.

Real World Example (cont.)

- ◆ The PJM facilities study indicated total project cost of \$7.0 million.
- ◆ However, under the credit requirement based on the last BRA, pre-auction bid credit would be 0.3 Net CONE or \$32.57 million.
- ◆ This credit requirement would be more than 400% of total project cost, and would be an unnecessary barrier to H-P's ability to offer the project as a QTU in a BRA.

Real World Example (cont. 2)

- ◆ Please note contrast with a new plant of 900 MW that could have a total project cost in the neighborhood of \$1 billion.
- ◆ A credit requirement of \$32.57 million to secure generating plant costing \$1 billion (credit at 3.3% of project cost) would not appear excessive.
- ◆ In contrast, a credit requirement more than 400% of total QTU project cost is *prima facie* excessive.

Order No. 1000 Credit Requirement

- ◆ Also relevant is the credit requirement for major transmission projects selected in competitive process under Order No. 1000.
- ◆ PJM has proposed 3% of total project cost.
- ◆ It is not rational for a major RTEP transmission project to have a credit requirement of 3% of total project cost, while a relatively minor QTU upgrade could have a credit requirement of more than 400% of total project cost.

What Is the Relevant Risk?

- ◆ The question has been raised as to whether the credit requirement should be based on the risk of non-payment of the deficiency penalty rather than the risk of non-performance itself.
- ◆ RPM credit policy in OATT Attachment Q is framed in terms of the “risk of non-performance” of the resource, *not* the risk of non-payment of the deficiency penalty.

What Is the Relevant Risk (cont.)?

- ◆ RPM credit policy appropriately focuses on the risk of non-performance itself.
- ◆ The deficiency penalty is not an end in itself – instead it is intended to reasonably assure performance.
- ◆ Imposing a credit requirement that is a multiple of the amount that reasonably assures performance serves no legitimate purpose and is a barrier to entry.

What Is the Relevant Risk (cont. 2)?

- ◆ Further, if the determining factor were risk of non-payment of the deficiency penalty, rather than risk of non-performance, then there would be no basis for excluding existing generation from a credit requirement.
- ◆ Cleared existing generation that does not show up in the Delivery Year is subject to a deficiency penalty like any other resource yet posts no security.

What Is the Relevant Risk (cont. 3)?

- ◆ There are tens of thousands of MWs of existing generation that clear in a BRA, and then are “replaced” and do not show up in the Delivery Year
- ◆ Monitoring Analytics table that follows shows 26,000 MW in this category (Table 3 of the Monitoring Analytics report posted here, http://www.monitoringanalytics.com/reports/Reports/2013/IMM_Report_on_Capacity_Replacement_Activity_2_20130913.pdf.)

What Is the Relevant Risk (cont. 4)?

Table 3 RPM commitments for internal Generation Resources in service: June 1, 2007 to June 1, 2013

	UCAP (MW)				
	RPM Cleared	Net Replacements	RPM Commitments	RPM Commitment Shortage	RPM Commitments Less Commitment Shortage
01-Jun-07	127,614.0	0.0	127,614.0	(8.1)	127,605.9
01-Jun-08	128,334.1	(707.2)	127,626.9	(182.8)	127,444.1
01-Jun-09	130,930.7	(2,030.3)	128,900.4	(0.4)	128,900.0
01-Jun-10	130,251.4	(3,403.1)	126,848.3	(1.1)	126,847.2
01-Jun-11	127,784.0	(4,983.1)	122,800.9	(2.2)	122,798.7
01-Jun-12	127,362.4	(7,057.2)	120,305.2	(13.2)	120,292.0
01-Jun-13	141,717.7	(8,086.4)	133,631.3	(21.4)	133,609.9

What Is the Relevant Risk (cont. 5)?

- ◆ This 26,000 MWs of existing generation (not even including recent BRAs) that ultimately did not show up in the Delivery Year presents, at the time of the BRA, a risk of non-payment of a deficiency penalty for not showing up in that BRA's Delivery Year.
- ◆ Therefore, if the credit requirement must be applied to all resources for which there is risk of non-payment of a deficiency penalty, then existing generation should be subject to it.

Role of Uniformity

- ◆ It also has been suggested that the credit requirement should be uniform.
- ◆ This suggestion disregards the fact that the largest category of resources in RPM, existing generation, has no credit requirement.
- ◆ This exemption has been provided on a view that all other resources have a “materially increased risk of non-performance” (OATT Attachment Q).

Role of Uniformity (cont. 2)

- ◆ However, QTUs have *less* risk of non-performance than existing generation because:
 - PJM determines that a QTU will be in service for the Delivery Year in the course of certifying the QTU for participation in the BRA.
 - All performance is in the hands of regulated Transmission Owners with very high performance records.

Role of Uniformity (cont. 3)

- ◆ Further, unlike other RPM resources, PJM can order transmission upgrades in the event of a QTU developer default putting system integrity or reliability at risk.
- ◆ In contrast, existing generation has a non-negligible risk of non-performance as shown by the tens of thousands of MWs that clear in a given BRA and do not show up in the Delivery Year and PJM cannot order generation.

Role of Uniformity (cont. 4)

- ◆ Thus, if uniformity were the overarching consideration QTUs should have a similar credit requirement as existing generation (relative to which it is even less risky).
- ◆ In any event uniformity is not an end in itself. As PJM commented in Docket No. ER13-2108-000, filed December 3, 2013 (page 10):
“... comparability does not require identical rules; comparable rules that appropriately address inherent differences between resource types are acceptable.”

Appropriate QTU Credit Requirement

- ◆ QTU credit requirement should be the same as existing generation: A QTU that clears at its offering price has virtually no chance of non-performance.
- ◆ If there is a non-zero credit requirement it should not exceed total QTU project cost.
- ◆ That credit amount could be deemed forfeited if the QTU clears in the BRA and the QTU developer does not proceed with the project.
- ◆ Performance is thus assured no matter what.