

Thursday, August 7, 2014

ISO-NE pay-for-performance reforms meet pushback

ISO-NE's capacity market reforms won FERC approval this spring, but its compliance efforts were met with another barrage of protests this week. The ISO's pay-for-performance reforms were designed to incentivize generator performance by paying those that are there when they are most needed and penalizing those that fail to show up.

ISO-NE had issues with natural gas generators going back several years due to its position at the far end of the gas pipeline and heavy reliance on the fuel. The issues with generators failing to get gas spread westward this winter and now PJM is considering some similar reforms of its own, with ISO-NE's changes being mentioned a potential model.

The RTO is especially worried with its reliance on gas set to grow when older coal plants retire to comply with EPA's Mercury and Air Toxics Standard ahead of the winter of 2015/2016.

Before FERC ruled on the ISO-NE proposal, most of its stakeholders opposed it on the grounds that it would be too costly for consumers and too risky for generators. Many asked the commission for rehearing, but the protests this week went after more specific aspects of the ISO's compliance proposal.

EPSA and the New England Power Generators Assn (NEPGA) argued the ISO failed to follow FERC's directive to exempt generators on the export side of a transmission constraint from the penalties and performance payments of the rule. FERC reasoned that when such a binding intra-zonal constraint crops up, the price signal on the export side should be lower than that on the import side.

ISO-NE did not exempt such constrained resources, arguing that generators would get a windfall in being able to keep capacity-market revenue (that is higher in constrained zones) when they cannot respond to a problem – and that resources that contribute less to reliability will get paid more than those that contribute more.

The generators argued that ISO-NE's reasoning fell apart because, while their members might get paid more for being located in a constrained zone during the initial capacity

auction, that would not mean intra-zonal constraints were something that could be controlled by capacity sellers.

Penalizing resources for such intra-zonal constraints could actually lead to the opposite of the reaction ISO-NE wants, EPSA and NEPGA argued. Generators could eliminate such constraints by turning down their output – thus avoiding penalties, but the ISO's rules are designed to maximize performance during times of stress.

A group of power cooperatives that buy power for publicly owned power systems in Connecticut, Massachusetts, New Hampshire and Vermont also protested the ISO's compliance filing. Those public systems took issue with the ISO's proposed constraint rules as well, saying the grid operator proposal would have resources treated as non-performing, even when they actually reach their capacity obligations.

The ISO's attempt to classify performing resources as non-performing “lays bare the fallacies at the heart of” the performance incentive change, said the protest.

FERC hybrid at fault?

A group of state agencies from Connecticut and Rhode Island protested the ISO's compliance proposal, noting it was based on “the commission's misguided” order that combined the grid operator's capacity market reforms with stakeholders' scarcity pricing proposal to push shortage prices to “unprecedented levels.”

The two states argued that the order, which was compounded by the ISO's compliance filing, would produce excessive, inefficient pricing. They quoted the ISO's external market monitor as saying the changes translated into scarcity pricing of \$7,995/MWH, or maybe higher.

The Connecticut Public Utilities Regulatory Authority – part of the Connecticut and Rhode Island group – hired NERA Economic Consulting VP Jonathan Falk to look at how those high prices clashed with economic principles.

How RCPFs figure in

The stakeholders' initial proposal would push up the reserve constraint penalty factors (RCPFs), which

already factored into the ISO's calculations for its capacity performance incentive proposal, Falk said. FERC asked the ISO if that would force a tweak to its capacity market changes, but in the compliance filing it effectively said "no."

The higher RCPFs allow reserve and, through co-optimization, energy prices to move higher during scarcity conditions, Falk said in testimony the two states filed. They create incentives for plants to be available that Falk expects would lead to investments making that possible more often.

The figure of \$7,995/MWH is well above what the ISO's proposal would have resulted in by itself, which Falk argued was already too high. The ISO intimated it could revisit the performance rate calculations in the future, but Falk argued that should have to happen before the rates went into place.

Falk votes for VOLL

Shortage pricing should be based on the expected value of lost load (VOLL), which is based on the price a disconnected customer would be willing to pay to get their lights back times the chance they would lose power in a shortage event. Falk pegged the VOLL at \$12,000/MWH, though other higher estimates exist, and he noted

that the likelihood of outages is low given the one-in-10-year standard ISO-NE plans around.

With a VOLL of \$30,000/MWH and an outage probability of 0.01%, the implicit value of reserves is \$3,000/MWH, which is well below the pricing impact of ISO-NE's compliance proposal. Under the compliance proposal, generators would be paid between \$3,000-6,455/MWH to take action in situations with very low chances of load shedding, Falk said.

Multiples too high

Those are multiples higher than they should be because FERC based the performance payments on the cost of new entry (CONE) rather than VOLL, he added. It got worse when the higher RCPFs were added to drive the foundation of the costs above even the CONE.

Scarcity pricing should be based on expected VOLL, not CONE, Falk said. That does not impair capacity procurement because the ISO already controls the level of its needs through its installed capacity requirement that is the target for every capacity auction, said Falk.

"This is why the ISO-NE approach to an operational problem through a capacity construct is so misguided: it confuses capacity and operational considerations in a way that is difficult to disentangle," he added.