

FERC market reform effort draws support, warnings

Long list of stakeholders weigh in on first 2 changes

Shortage-pricing change draws supporters, concerns

Comments poured into FERC this week on its recent NOPR marking the first two proposed changes in the commission's efforts to reform energy markets (UMT, [Sept-18](#)). The NOPR proposed to align settlement and dispatch intervals and to make it so shortage-pricing rules are triggered when reserves fall short.

Some of the ISO/RTOs already comply with the proposals while others will have to make significant changes, the ISO/RTO Council (IRC) told FERC in comments. Many of IRC's members have already either implemented or have at least worked on aligning settlement and dispatch intervals.

The change will require significant settlement system upgrades on those ISO/RTOs that have yet to make them, so the IRC asked for flexibility in implementation timelines.

The IRC did not come together on the shortage-pricing question and instead noted its members have quite different markets and urged FERC to respect those differences in instituting changes that could be major for some.

NYISO used the same settlement and dispatch intervals since its markets started, but the ISO asked FERC to let it keep settling station power (used by power plants to meet their own onsite energy needs) and limited storage resources that take part in reserves markets on an hourly basis.

NYISO also uses demand curves to price shortages, which raise prices as they get worse, and that would comply with FERC's proposal. The ISO supports the rule because it has worked well already.

MISO is working on a new software system to let it be more flexible in its dispatch and settlement intervals, but it will not

be ready until February 2017, it said. The ISO asked FERC for another eight months after that to implement the rule change.

The operating reserves demand curve (ORDC) that MISO uses already effectively implements the proposal on shortage pricing, it told FERC. The recent implementation of extended LMP also provides more accurate shortage pricing by pricing fast-start resources before they have fully started up.

If FERC finds MISO needs to do more to comply with the shortage-pricing proposal, it could need more time for implementation.

Cal-ISO said it already complied with the settlement and dispatch intervals internally but asked that FERC not extend that to intertie transactions. The 15-minute pricing it uses at its interties already provides dynamic pricing signals to reflect grid conditions, it added.

The ISO asked FERC to avoid expanding the settlement to non-dispatchable demand, which it settles hourly. Load is not dispatchable so it lacks a relevant settlement interval against which it can be dispatched. Requiring sub-hourly demand prices would be too costly, Cal-ISO said.

PJM does not comply with FERC's settlement and dispatch alignment proposal. Instead it pays generators hourly based on average LMPs. Complying with that proposal would take significant software and rule changes, PJM told FERC.

If the RTO can make some changes to its existing systems, that could cost \$3 million and take about 15 months to implement. If more radical changes were needed, PJM estimated it could cost \$3.8 million and take over three years to implement.

PJM is looking into the first option now, but it will not know until April whether those cheaper upgrades are possible. PJM's members would have to invest in better metering, too, it added.

What if reliability is OK?

The RTO and the Southwest Power Pool (SPP) filed joint comments on the shortage-pricing proposal, arguing the NOPR

FERC market reform effort draws support, warnings

Continued from preceding page

could lead to the higher prices kicking in when reliability is not threatened. If the grid is not actually stressed and generators cannot even respond in time to the shortage pricing signals, they should not be priced.

“Requiring shortage pricing under these transitory circumstances misaligns price changes with the associated changes in resource operation and therefore may not achieve the commission’s well-intentioned goal to align prices with signals for investment to facilitate reliability,” the two said. They may result in market pricing and operations that are contrary to the commission’s goal, they added.

FERC should leave the specifics of shortage pricing up to the regional markets themselves to ensure the mechanism is applied appropriately, the two RTOs said.

PJM’s Independent Market Monitor Joseph Bowring argued in comments that the alignment of settlement and dispatch intervals should be adopted. That might cost some money, but FERC required other such costs sometimes at the request of PJM when it felt the benefits outweighed them and that is the case here, he added.

In theory, the shortage pricing change makes sense but PJM cannot accurately measure its level of reserves every five minutes so it cannot tell if quick shortage conditions are actually real. PJM should be directed to figure out ways to better measure its reserves on a minute-by-minute basis, but it should not be required to implement the shortage-pricing proposal until it can, the monitor said.

EPSA: All ISO/RTOs need it

EPSA argued that reforming an array of flawed ISO/RTO energy and operating reserve price formation policies in the day-ahead and real-time markets is critical to get price signals that reflect actual conditions and supports needed investments. The two practices identified in the NOPR and many others need to be implemented in every ISO/RTO quickly, EPSA said.

The NOPR creates the needed urgency for ISO/RTOs to change their rules on settlement intervals and when shortage pricing kicks in, EPSA said. Aligning settlement and dispatch intervals in real-time markets is a fundamental change that every ISO/RTO should implement.

It will help to ensure that clearing prices are as consistent as possible with the actual operation of the transmission system. Dispatch-based pricing requires LMPs to match quantities called for dispatch under actual conditions, which occurs in five-minute increments.

The dispatch-settlement changes will also make it easier to implement the shortage pricing reform thus giving resources the incentive to respond in real-time to system constraints.

EPSA hired FTI Consulting Managing Director Susan Pope to draft an affidavit for the NOPR case and she also strongly supported the proposed rules. She has consistently argued for the settlement policy, which was used in NYISO since its markets launched in 1999.

Expanding the policy can cut uplift as suppliers will be paid at the LMP during the same interval in which they are dispatched – rather than getting an average hourly LMP. Sub-hourly settlement intervals will also help implement other needed rule changes such as the pricing of fast-start, block-loaded resources; the modeling of operating reserve zones; shortage pricing trigger intervals; pricing for ramping constraints, and others, Pope said.

EI supports changes

EI supports the changes as important first steps toward providing more efficient price formation in competitive energy markets. The group did ask for more flexibility on implementing them since especially the settlement rule change will require some investments to enact.

The two firms with nuclear plants that have issues with low wholesale prices in recent years – Entergy and Exelon – both support the commission’s proposal.

Entergy Nuclear Power Marketing has actually retired, or announced the retirements of several nuclear power plants in the Northeast and it told FERC in comments it fully supports the proposed action – and appreciates the effort to collect data from ISO/RTOs on other issues. The firm does not want any changes made before the rule is finalized and urged FERC to act fast to get information from the RTOs.

Sub-hourly settlement intervals and improved shortage pricing triggers will improve price formations for resources operating in real-time, but they will not improve the outlook for resources fully committed in the day-ahead markets, Entergy said. In ISO-NE’s higher shortage pricing will actually lead to lower capacity revenues due to offset provisions in its rules, the firm noted.

Making sure the actual marginal unit sets the price should be a

FERC market reform effort draws support, warnings

Continued from preceding page

top goal and that could be helped through one of the issues the reports are looking into – pricing fast-start units, Entergy said.

Exelon wants cap raised

Exelon was lauded FERC's NOPR, though it did want a tweak and also asked for added rule changes. The firm wants FERC to require ISO/RTOs to raise the energy market offer cap consistently across all markets in time for the winter of 2016-2017.

FERC should also let cost-based offers above whatever new offer cap it comes up with set the wholesale price in every ISO/RTO, the firm said.

The one change Exelon wants on the NOPR at issue is more time to implement the changes on settlement data. In markets with hourly settlements, generators have metering that can get that data to ISO/RTOs, but will need new meters to get five-minute data.

Exelon would need 18 months instead of 12 to implement the change across its 152 units in PJM, it said, as sometimes the equipment upgrade will require an outage.

What about other ISO/RTOs?

While suppliers welcomed the NOPR's prescriptions, other parties argued that FERC should at least let the ISO/RTOs that do not have those market design elements a chance to study them to ensure they will actually produce benefits.

Direct Energy Business asked FERC to make the RTOs look into whether resources actually have the capability to effectively respond to five-minute price signals. If generators cannot, then the price signals will be ineffective, it added.

“In particular, the volatility of five-minute price signals may create problems for existing generation technologies that are not able to respond effectively on a five-minute basis,” Direct said. “This mismatch could lead five-minute generation settlements to be less effective than anticipated, or potentially create additional inefficiencies in RTO/ISO markets.”

Most existing generator technologies take longer to ramp up and have longer minimum run times than are ideal for five-minute price signals, it added. Some can respond effectively but

Direct worries they do not represent a large share of the overall resource portfolio.

The mismatch between settlement intervals and generator capabilities could lead to too many resources trying to respond to a shortage situation, thus fast turning it into an oversupply situation. That will push prices down, making many of the resources that responded to the original price spike uneconomic, Direct said.

Any uneconomic resources that responded in such a case would get uplift payments. It was unclear as to whether the five-minute settlements should be applied to load, but if FERC wants to go that way, then it should wait until load actually can respond to such quick signals, Direct said.

Direct also argued against the shortage-pricing proposal because applying the pricing method to transient conditions where the lack of reserves is temporary does not make sense. Shortage should only happen in ISO/RTOs when the grid operator has used all physical capacity to meet energy and reserve requirements, at which point reserves have to be used to start meeting demand, Direct said.

ELCON: Long overdue

ELCON supported the settlement time change, calling it a “long-overdue correction,” though it said less urgency exists to deal with the shortage pricing issue. The big power users' group would oppose the rule if its intent was to preserve and expand the use of shortage pricing.

FERC should only adopt the shortage pricing change if FERC uses it to promote the development of technology-neutral, fast-ramp products that are paid to provide the specific shortage service and for which compensation would not inflate real-time LMPs, the industrial customer group said.

Some ISO/RTOs delay shortage pricing for quick events, seeing them as a “mathematical artifact” of system modeling that will be gone before generators can respond. That is not always a clean process and sometimes it leads to uplift, ELCON said.

“But uplift costs are generally very small and probably a fair price to pay to avoid an overly complicated market design,” it added. “The solution to compensate all generators operating at the time with shortage prices amounts to a very substantial increase in revenue that has to be recovered from end-use consumers.”

APPA, NRECA share warning

APPA and NRECA asked FERC to make sure that whatever changes it makes to price formation that it focus on ensuring

FERC market reform effort draws support, warnings

Continued from preceding page

they promote efficiency gains for consumers and guard against market power abuse. The two lobbies also want the commission to respect ISO/RTO market differences and refrain from universal rulemakings.

The groups appreciate the argument on better aligning settlement and dispatch intervals, but they want any change to have to make it through ISO/RTO stakeholder processes. The grid operators themselves should also assess the costs and

benefits before changing their rules, they said.

On the shortage pricing proposal, APPA and NRECA noted it could lead to higher energy prices and that will have to be balanced against a demonstration of improvements in the energy market that benefit customers.

The minimum period of a shortage event should be the amount of time it takes to procure resources needed to solve it, APPA and NRECA argued. The NOPR never talks about whether a five-minute event would actually be resolved with any actions.

“The NOPR’s shortage pricing proposal runs the risk of rewarding generators that are already online just because another generator has not fully ramped up yet,” APPA and NRECA said.