

BRIEF

PJM CEO pans coal bailout but says plant payments needed in mid-2020s

By Gavin Bade

Published Nov. 1, 2018

Dive Brief:

- The CEO of the PJM Interconnection said Thursday that a federal bailout for coal and nuclear plants is unnecessary, but higher payments to generators that store fuel onsite may be needed in the mid-2020s.
- The PJM grid is secure today, CEO Andy Ott said at a Washington event, but a new report on power plant fuel dependency shows risks to the system could arise in five to six years if more power plants retire than anticipated and multiple stressors hit the grid at once.
- PJM will engage its members and federal regulators to design market-based payments to power plants that can store multiple weeks of fuel onsite or provide similar grid services, Ott said. Critics are concerned the report raises unrealistic scenarios and that solutions will be biased toward fossil fuel and nuclear plants at the expense of renewables, demand management and energy storage.

Dive Insight:

The debate over power plant compensation in PJM illustrates how the transition from large coal and nuclear plants to natural gas and renewables is stressing power markets.

Coal and nuclear plant owners argue that the retirement of their

resources could put the power system at risk by making it over-reliant on gas, which is diverted for home heating in the winter.

Their concerns are shared by the Trump administration, which this spring ordered the Department of Energy to devise a plan to save the money-losing plants.

That plan is now reportedly on hold at the White House, but Ott, who runs the power market where most of the retiring plants are located, has said since its proposal that such action is not needed.

"Government intervention is unnecessary," he reiterated Thursday. "It would be inefficient and more costly."

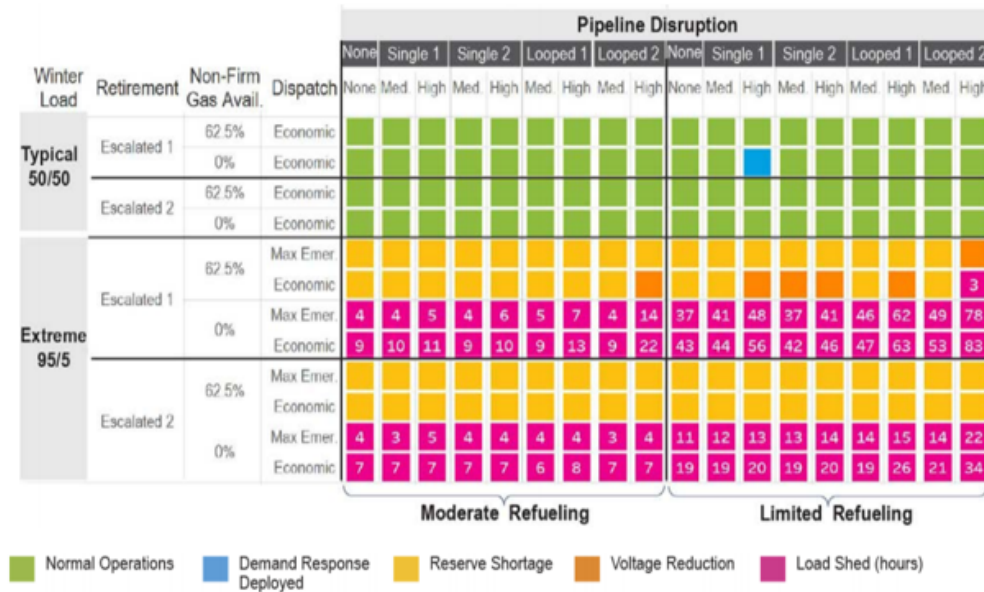
Instead, the PJM CEO has said the grid operator needs to study when the retirement of coal and nuclear plants could present a risk to the grid.

The answer, according to a fuel security report released Thursday, is in five to six years.

"Based on the results of this analysis, in extreme but plausible scenarios we do see a risk that we could get into situations where we couldn't meet all demand under certain circumstances," Ott told reporters.

Those risks would only be present in the most severe scenarios PJM modeled, when more generators retire than anticipated, power demand is at or near seasonal records and fuel deliveries to plants either by truck or pipeline are disrupted.

Figure 3: Results: Escalated Retirements, Typical and Extreme Winter Load



PJM only anticipates forced outages ("load shed" above) in situations of extreme winter demand with escalated plant retirements and disruption to pipelines or other fuel deliveries. Credit: [PJM](#)

Solutions debated

The report, a summary of a full analysis to be released next month, does not make concrete policy recommendations for how to deal with the risk. Ott said the grid operator will discuss that with its market participants and the Federal Energy Regulatory Commission, but he anticipates some action will have to be taken.

"I myself think there are actions we will need to take relating to valuing fuel secure resources," he said. "We can value them in both the energy and capacity market."

That action could come through a number of avenues, Ott said, such as compensating plants for refueling their gas or oil supplies. PJM's capacity performance rules already require generators to keep a few days of fuel onsite, but Ott said that is not long enough for extended outage risks assessed in the report.

"We actually see this in New England already, where the replenishment of liquid fuel backup, that really isn't paid for," Ott said. "We just assume it will happen through the incentives in our market, so we can address that issue by saying the cost of that fuel replenishment needs to be reflected back into reserves and capacity markets."

Though that payment would benefit fossil fuel plants, Ott stressed that any solution from PJM would be "fuel-neutral," and not target certain types of generators.

"We're going to say any resource that can provide fuel security [would qualify], and fuel security is defined as making sure the fuel will be available, so the cost of that will be reflected in the market," he said. "Even other types of resources, like demand response or renewables with some sort of firming technology, could qualify."

Some critics worry that PJM's approach is not actually fuel-neutral. Rob Gramlich, a former wind energy lobbyist and staffer for ex-FERC Chairman Pat Wood III, said the grid operator should widen its focus from fuel supplies.

"What they're saying to me is they want winter peak energy during extreme cold scenarios. That's a technology-neutral product," Gramlich said. "A fuel secure resource is not a technology neutral product and the difference is things like wind, which is usually screaming hard during these situations, is providing winter peak energy."

In addition to compensating fuel deliveries, Ott said PJM could move to enhance fuel security in the energy market. During times of grid stress, PJM could potentially pay resources without secure fuel supplies to generate power so other plants could conserve their onsite supplies.

"In heavy winter operation ... we may change our dispatch to conserve oil in the oil tanks and run other resources so we don't burn up the oil," he said. "So [if] we've taken action to conserve

fuel in the fuel tank, we could actually define a reserve product in the energy market and ... any resource that provides that capability ... would get paid."

Gramlich said that approach would be more appropriate than actions in the capacity market, which would tend to advantage large generators.

"Every megawatt-hour out of a wind turbine is saving gas and oil that could be burned later so it's providing that exact product," he said. "The point is, a megawatt-hour on day four of a [winter] event from one source is the same as a getting a megawatt-hour from another source and they need to be paid the same."

Timeline questioned

The former FERC staffer also raised concerns about the timing of PJM's proposed fixes. Since any problems are at least five years away and the grid operator only forecasts grid issues if more plants retire than expected, Gramlich said the need to enhance compensation for fuel secure resources is not clear.

"If we're only finding problems in a significantly enhanced retirement scenario, to me that's not a problem," Gramlich said. "In a five year timeframe any of those potentially retiring generators can change their decision and stay on and any of those generators in the queue, almost all of which could be built in five years, could respond and be there too."

Ott said he hopes the early focus on fuel security today will prevent PJM from getting into a situation like ISO-New England, where the grid operator says one major pipeline fault during severe weather this winter could push its grid into emergency conditions.

"If we start to have that conversation now and put rules in place to assure that as we transition we don't have a severe issue," he said. "If you think about where things are in New England ... we don't want to be there, and I think it will be less costly to do it in

a reasoned way.

A number of clean energy advocates, including FERC Commissioner Richard Glick, are concerned that fuel security debates could have the same result as the White House bailout — preserving uneconomic plants with little benefit for the grid.

Ott, however, insisted PJM's latest report is only to "start a dialogue" and that PJM would eventually have to deal with its findings one way or another.

"Should stakeholders come back in a year and say we don't see this risk and we don't see the accelerated retirements, that's a good data point," he said. "What I'm saying as the system operator is eventually this is going to come to pass."