PJM Productions Presents:

The successor to “Who Does What” the 2017 Smash Hit…

“FERC Regulator for a Day”

…an exciting new game show for policy wonks!!!

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Congratulations…

President Trump Has Just Announced:

You are FERC Regulator for a Day!!!!

The Rules:

- Scenarios based on FERC Docket EL16-49
- 30 seconds to decide the right answer
- Your fellow Judges:

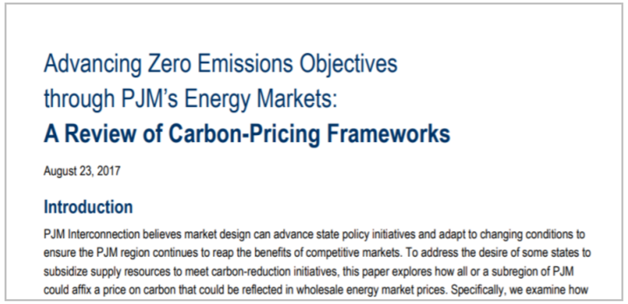
Note to Contestants: There are no easy answers, just tough choices!

Certain States in the PJM Footprint want to value carbon free resources. They come to you as a FERC Commissioner and seek your thoughts on the most effective way to do that

You have thirty seconds to answer…

Your Answer to: What's the Best Way to Value Carbon Free Attributes for States in an RTO?

1. "Work with PJM's Proposed Model for a Carbon Market within a subset of states in the PJM Region"
2. "Forget about the PJM carbon proposal and instead support an RPS mandating that your state buy in-state renewable resources"
3. "Forget about the PJM carbon proposal and instead provide a ratepayer guarantee for individual units"
4. "Pursue a "Resource Carve Out" Under PJM's Filing"
5. "Hold a State-Wide Beauty Contest to Choose the Most Attractive Resource"


Advancing Zero Emissions Objectives
through PJM's Energy Markets:
A Review of Carbon-Pricing Frameworks

August 23, 2017

Introduction

PJM Interconnection believes market design can advance state policy initiatives and adapt to changing conditions to ensure the PJM region continues to reap the benefits of competitive markets. To address the desire of some states to subsidize supply resources to meet carbon-reduction initiatives, this paper explores how all or a subregion of PJM could affix a price on carbon that could be reflected in wholesale energy market prices. Specifically, we examine how

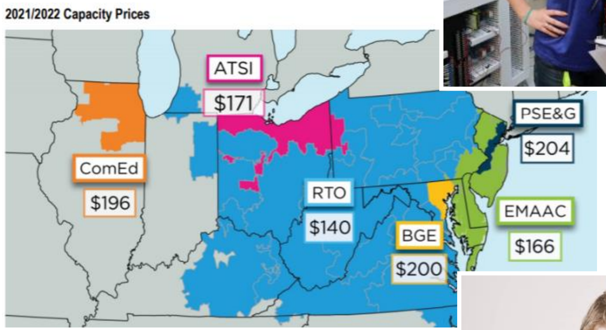
Question Two

Your trusty advisor outlines the following dilemma:

- One state provides a subsidy for specific carbon free resources.

- Another PJM State in retaliation passes a subsidy for in-state coal units.

- A third state passes a subsidy for any generating plant that employs a large number of workers.



- Units in all of these states compete in the RPM auction.
- A fourth state files a complaint at FERC saying the results of the auction are not just and reasonable as it does not want to pay for any of these subsidies.

What do you do?

1. Option A: ***"Clean MOPR"*** — In order to assure just and reasonable rates, put all of the plants on the same basis going into the auction by applying a MOPR to each of the plants
2. Option B: ***"Incorporate Externalities"*** — As a FERC Commissioner, decide yourself which of these state actions are 'good' subsidies and allow those to be recognized in the auction but not the others
3. Option C: ***"Resource Carve Out"*** — Require each state that wants to choose a particular plant to pay the full cost of that plant outside of the auction
4. Option D: ***"Fuggetabout it"*** — Don't worry…be happy!

Which Solution Do You Adopt?

Your Third Question:

Merchant generators in the market point out that pulling out load and subsidized units suppresses prices and as a result “squeezes out” merchant projects in neighboring states that depend on capacity and energy market revenues…

What Do You Do In Response?

1. Keep the subsidized unit in the market — Let the subsidized unit clear in the auction and collect what it can from the market with the rest paid for by an in-state charge on consumers;
2. Take the subsidized unit out of the market — Keep the subsidized unit out of the market and force it to 'buy out' another plant that cleared in the market;
3. Use PJM's "Extended-RCO" mechanism to ensure that prices are consistent with what they would have been absent state A's subsidy action;
4. Ignore the 'price suppression issue' since the new price is the 'right price' for the smaller market?
5. Leave it to Sumo Wrestlers representing each state to fight it out

Your Fourth Question:

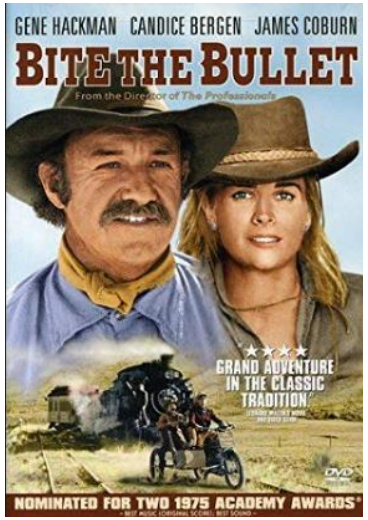
You agree with PJM that its not reasonable that otherwise competitive units should get 'squeezed out' by subsidized units that can bid in a lower price. You are then asked who should pay to remedy this problem for the 'squeezed out' units?

Who pays?

1. Don’t pay the squeezed out units anything—Even if they prematurely retire, its their problem;
2. Have the customers in the state that passed the subsidies pay the squeezed out unit’s lost opportunity cost;
3. Have the owners of the subsidized unit pay as they made the choice to bid into the market and ‘squeeze out’ other units;
4. Socialize the cost across the entire PJM footprint as price suppression impacts everyone in the long run; or…
5. Ask unit owners to seek help through a “Go Fund Me” campaign…

Your one day term is about to end…What do you do?

- Stall for more time by sending PJM a deficiency notice?
- Bite the bullet and make a tough call given your obligation to determine just and reasonable wholesale rates
- Go get a job with the National Association of Water Companies



Congratulations!

You win the door prize – third year in a row!!!

Let’s Talk

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