

We have the **energy**

to make things better ... for you, for our investors and for our

PJMs "Going Forward Principles" - Presented at July 18, 2017 Special PC

Principles	TO Position	Comments
Cost cap proposals are voluntary.	AGREE	
Cost cap is one factor in overall project review	AGREE	
The principle evaluation criteria continues to be a technical analysis that selects the project which best addresses the problem statement/long term needs of the system. Other factors besides cost cap include: constructability; developer's design; construction/permitting experience; O&M capabilities.	AGREE	
Exclusions - Cost caps and cost commitments must be clearly articulated at the time of submittal with specific details regarding the components that are covered by the cost caps and cost commitments and any exclusions.	AGREE	Exclusions must be clear and supported so PJM can consider the risks associated with each exclusion proposed and the potential cost impact.
Exclusions – Proposal submittals must include the proposed contractual language on covered and excluded items. Cost cap/cost containment language shall ultimately be included in the DEA as a non-standard term and filed with FERC.	AGREE	
Exclusions – must be supported with detailed information such as past experiences relevant to construction of such projects, past experience with the events giving rise to the exclusion and discussion of why exclusion of a particular risk has been identified.	AGREE	
Exclusions – PJM will consider the risk of excluded event and the potential cost impact of exclusions.	AGREE	
Challenges to the Cost Cap - Comments and any Protests submitted to FERC prior to finalizing DEA.	AGREE	Stakeholders must retain the right, without limitation, to challenge cost recovery for any overage, exclusions or rate change, over and above the cost cap.

Principles	TO Position	Comments
ReportingErr on the side of transparency in reporting	NEUTRAL	 Recognizing the complexities involved with incorporating cost caps into transmission ratemaking, if PJM selects a cost capped project, it should be required to monitor and provide periodic updates on the status of the developer's efforts to meet the cost cap obligation. Transparency vs Innovation – PJM should consider how it will encourage innovation if it continues to publicly reveal developer ideas. Focus should be on after-the-fact transparency rather than divulging ideas during the process. PJM should publish the full details of the cost cap on selected Order 1000 projects, including exclusions. PJM should require quarterly updates on the progress of the project, including: General status of the engineering, siting and construction; percentage of project complete; timely completion of milestones, including projected in service date, and updates on project costs and any additional project information to provide transparency in reporting.
Enforcement: Done exclusively through FERC ratemaking process; PJM Board reserves the right to reconsider projects that are not timely progressing.	NEUTRAL	The broader the cost cap and the farther removed from project construction that it is, the harder it will be for stakeholders to stay on top of each and every project and enforce rate provisions, perhaps a decade or two or three after-the-fact.

Broad Cost Cap Lingering Questions that Must Be Answered

Is PJM capable of deciding the best cost cap?

- Can ROEs set through this process ever be challenged or is an ROE Cap in place for the entire life of the asset?
- The analysis and selection of a cost cap can inform the rate setting process, but can it be a substitute for it?
- What happens if the cost cap is exceeded and the DE abandons?
- Who decides how to handle the rising cost of the incumbent upgrades needed to accommodate the new project?
- Who enforces the cost cap on the designated entity throughout the 40+ year life of the asset?
 - Most transmission formula rates are a blend of multiple projects. Cost caps would
 presumably require single-issue entities for ratemaking purposes.
 - Must be able to track complex cost caps through the potentially 40+ year asset life of multiple assets, multiple entities and, quite possibly, multiple successors in interest.

Challenges with Broad Cost Cap Provisions

- Evaluation Mechanism: No clear cost cap evaluation mechanism
- RTO Models are Different: Sponsorship Model vs. Procurement Model
 - PJM may need to look at further refinement of the entire competitive construct to facilitate
 - RTEP Timeframe: PJM's planning windows are much shorter than in other regions.
 - RPM Auction Timeframe Concerns: Has to work, meet NERC planning criteria, meet RPM Auction timeframes.
 - The required additional analysis will push out other deadlines.
- Resources Lack of legal and ratemaking personnel/resources to administer and enforce
 - PJM's expertise lies in planning

- PJM Staff are not regulators, general contractors, environmental permitting experts or judges; nor do they have a field staff to police project development.
- Calling "balls and strikes" on risk allocation associated with rates has never been an RTO function.
- In the Broad Cost Cap World, PJM is an information source.
- Actual enforcement of the cost cap is up to load primarily, with limited involvement of other TOs affected by the Order 1000 project and the Developer itself
- Jurisdiction Issue: Unclear PJM has the authority to take on rate responsibility functions in addition to the planning function

Options for Consideration

- 1. Cost Containment
- 2. Limiting Cost Caps to Construction Costs
- Explore Cost Caps for Market Efficiency Projects And Cost Containment for Reliability Projects

Cost Containment vs Cost Caps

- The term cost containment should not immediately be defined as cost caps.
- There are a number of measures and mechanisms to contain costs associated with the development of transmission infrastructure.
 - Such measures include but are not limited to a bidder's ability to finance the project, track record in delivering projects on schedule and under budget, experience with relevant permitting issues and control over rights of way.
- A utility's obligation to serve requires responsibility to design, build, own, operate and maintain transmission assets prudently and subject to state and federal ratemaking oversight. This has stood as a built-in cost containment mechanism for decades.
- The proof of its success is evident in the reliability and long asset lives of the entire PJM transmission grid.
- Cost caps, with all the challenges identified, are intertwined with the allocation of risk between project investors and ratepayers

Cost Containment Measures

- 1. A review of the bidders' ability to finance the project;
- 2. Proposed schedule and demonstrated experience to meet schedule;
- 3. Experience and expertise in environmental permitting and engineering to minimize permitting costs and impacts on schedule;
- 4. Estimating experience (including detailed information on how estimated cost was reached and by whom);
- 5. Experience and track record of budgeting for similar projects and demonstrated ability to meet that budget;
- 6. Proposed organizational chart and contract administration expertise;
- 7. Identification of anticipated risks and plans to address these risks; and
- 8. Other verifiable cost containment advantages (i.e. ownership of rights of way and easements).

These measures can be evaluated by the RTOs and if applied to all of the potential bidders, will allow a fair assessment of each bidder's cost containment potential.

Explore Cost Caps for Market Efficiency Projects And Cost Containment for Reliability Projects

- The attempt under Order No. 1000 to apply competition processes simultaneously to multiple aspects of transmission development has been problematical.
- The path followed by the United Kingdom regarding how they introduced competition into transmission development is instructive.
 - Explore in a narrow scope of simple projects, how to create a competitive framework in connection with the provision of transmission services.
- Market efficiency projects are selected for inclusion in the regional transmission plan based on the economics of the project as demonstrated by a minimum benefit to cost ratio.
- Cost caps could perhaps be a better fit in that context given that the benefit/cost ratio is the ultimate cap.
 - Limiting to construction costs would further address

- Broad-based cost caps in market efficiency context would still be complex
- TO Concerns: Still does not resolve resources, evaluation, enforceability and jurisdictional rate-setting issues

Sponsorship Model vs Procurement Model

"[T]he sponsorship model certainly allows [] more creativity and a broader range of proposals but perhaps a tougher selection process and harder to easily integrate some of these cost guarantees and so forth."

> - FERC Commissioner LaFleur - *Competitive Transmission Development Technical Conference*, June 27, 2016 (1:00 P.M.) Transcript, Docket No. AD16-18-000 (Jun. 27, 2016)

- Benefits and drawbacks to each approach
 - Sponsorship model opens the door for submittal of innovative ideas that solve the potential reliability violations, economic constraints, system conditions and public policy requirements identified by PJM through its RTEP analysis. Complex due to the multiple number of ideas that have to be sifted through upfront.
 - Procurement model is less innovative, but might be simpler to implement. Simpler is not always better, particularly for reliability. Could ultimately lead to cheaper projects being built, but cheapest project may not always be the best project – Penny wise. Pound Foolish concerns.
 - CAISO, PJM and others have recognized untenable to adopt common metrics for all planning regions because what works with one model may not be possible in another
- > PJM has a history with sponsorship model.
 - Do we change up the paradigm to facilitate broad-based cost caps or conduct smaller-scale exploration first?

	<u>Option 1</u> Cost Containment	Option 2 Limiting Cost Caps to Construction Costs	Option 3 Mkt Efficiency (Cost Caps) Broad-based or Limited to Construction Cost	<u>Broad-Based Cost Caps</u>
Tracking	Easy/Moderate.	Moderate.	Complex.	Complex.
Enforceability	Fully enforceable @ FERC	Moderate.	Complex.	Complex. Unknown. Untested.
Ratemaking Complexity	No issues. FERC is rate regulator.	Moderate.	Complex.	Complex.
RTO vs FERC Jurisdiction	Clear.	Clear.	Unclear.	Unclear.

	<u>Option 1</u> Cost Containment	Option 2 Limiting Cost Caps to Construction Costs	Option 3 Mkt Efficiency (Cost Caps) Broad-based or Limited to Construction Cost	<u>Broad-Based Cost Caps</u>
RTEP	No impact.	No Impact. Could potentially be done within existing planning process	Minimal Impact.	Major Impact
RPM	No impact.	No Impact. Would not interfere with RPM timeframes	Unknown.	Unknown.
TO Concerns	None. Sound transmission planning requires consideration of many factors besides initial construction costs.	Any cost-capping raises concerns around interpretation of cost cap language and exclusions, enforceability of cost caps and a a narrow focus on short-term construction cost savings. Project with greatest overall value may be more expensive in the short term but may anticipate, and thus avoid, longer- term problems Project with somewhat more expensive upfront costs may have ancillary benefits, (e.g. reducing energy congestion; replacing aging infrastructure) that lowest cost solution does not	Broad-based still does not resolve resources, evaluation, enforceability and jurisdictional rate- setting issues	SIGNIFICANT CONCERNS
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Conclusion

- Decision-making depends on PJM guidance
 - Timing implications to RTEP
 - Timing implications to RPM
 - RPM and RTEP timing must remain certain for both reliability and market integrity
 - Realistic assessment of ability to perform functions asked
- Stakeholder Recognition of Enforcement Responsibilities
 - PJM is not a rate regulator, general contractor, contract attorney firm environmental permitting expert or judge, nor does it have a field staff to police project development.
 - PJM, MISO and CAISO have all been clear that RTOs have neither the resources nor the mandate to act as rate approval or enforcement agencies.
- Modifications to the planning process should not compromise market processes
 - Reliability remains paramount