

PJM Governance: Can Reforms Improve Outcomes?

Presentation to PJM Members Committee Stakeholder Process Forum

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About Us

Kleinman Center for Energy Policy: Alumni-funded center at the University of Pennsylvania that works to advance research and education on energy policy issues.

Focus on advancing student education and opportunities, supporting faculty research, and conducting applied research.

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Methods

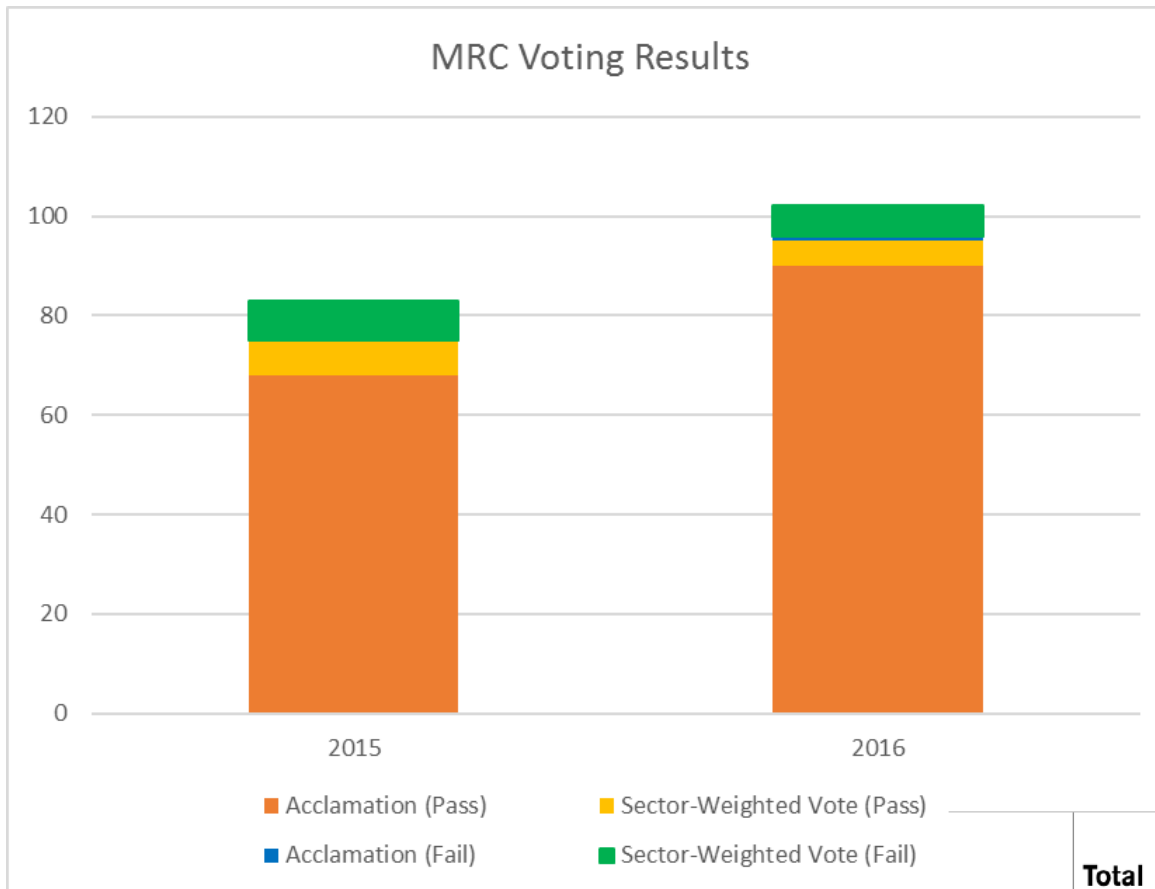
- Semi-structured stakeholder interviews
 - at least two members from each of the five sectors.
 - PJM staff, Market Monitor, public interest group, others.
- Review of available data
- Literature reviews
- Non-stakeholder academic and expert reviewers

Some Key Questions

1. How is the stakeholder process working?
2. Has the stakeholder process evolved along with the markets?
3. Does the stakeholder system inhibit or promote competition?
4. Would reforms improve outcomes?

IS THE STAKEHOLDER PROCESS WORKING?

Stakeholder Process Remarkably Effective When Issues Less Contentious

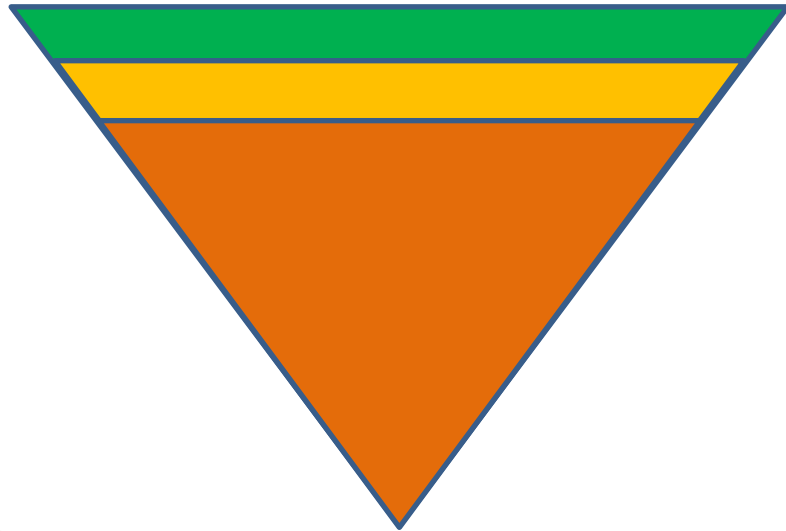


Acclamation vote - less contentious

Sector-weighted vote – more contentious

	Total Votes	Acclamation (Pass)	Acclamation (Fail)	Sector-Weighted Vote (Pass)	Sector-Weighted Vote (Fail)
2015	83	68	0	7	8
2016	102	90	1	5	6

Less Effective on Smaller Volume of High Contention Issues



CONTENTION

What Drives Contention?



Allocation of Costs and Benefits



Fairness/Power Balance



High Financial Stakes

...But, Issues are Becoming More Contentious

Market disruption from:

- low priced natural gas and high efficiency gas technology
- mandates for renewable energy (up to 13% of total PJM supply by 2029)
- flat load growth
- growth of financial products

And there are examples of the stakeholder process under stress...

In the past few years, big shifts have occurred in the markets.

HAS THE STAKEHOLDER PROCESS EVOLVED ALONG WITH THE MARKETS?

Not Really

Major Governance Actions

- FERC Order 719 in 2008
- FERC Technical Conference in 2010
- PJM's GAST process 2009 – 2011
- Minor actions
 - PJM's bi-annual stakeholder satisfaction surveys
 - PJM's regular stakeholder forums

During the same time span:

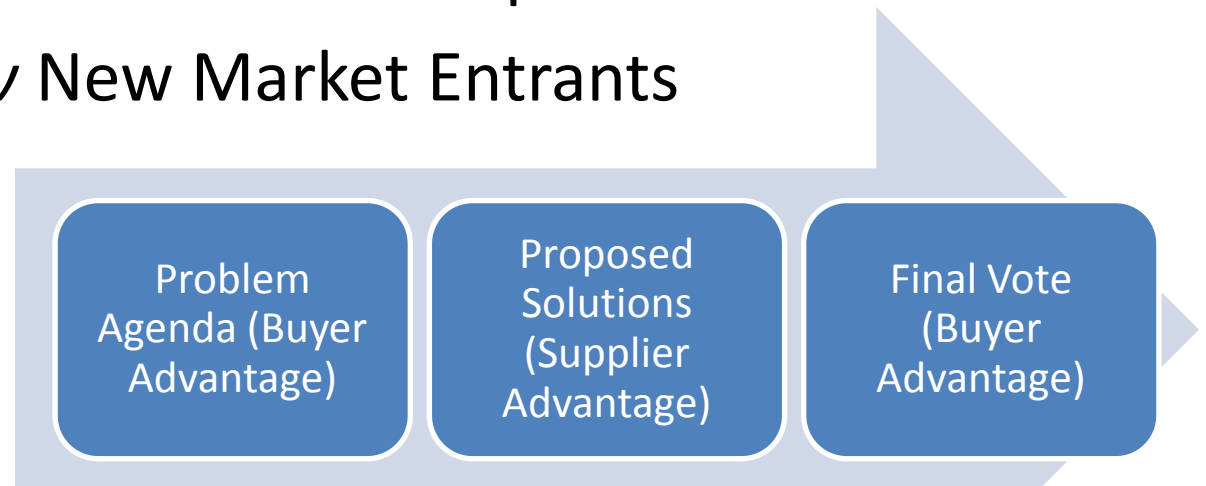
- Two presidential admins with very different views
- Change in PJM leadership
- Market disruptions (gas/renewables/zero load growth/financial products)
- Technology advancements
- Membership increases
- Almost a decade of operational experience
- Maturing of market, increased complexity of market design

Stakeholder Tensions and Legacy Deals

Stakeholder lines of tension:

- Sellers v Buyers
- Asset Owners v Non-Asset Owners
- Large companies v Small Companies
- Incumbents v New Market Entrants

Old issue, new threat: State power outside stakeholder process and stakeholder influence over states.



“Legacy Deals” split structural advantage in decision making process. This enabled agreement on process, but did it compromise long-term viability of process outcomes?

Some Observed Issues

- Buy-side vote blocking power
 - Blumsack, Yoo, Johnson
- Sector self-selection for members
- Lack of information transparency and consistency on lower level votes
- Membership growth and sector misalignment

Many of these and other issues identified in 2009-2011 GAST, but stakeholder agreement on a solution could not be reached.

Do Sectors Still Represent Participants?

September 1, 2009						
	Generation Owner	Transmission Owner	Electric Distributor	End Use Customer	Other Supplier	Totals
Affiliate	55	42	7	3	67	174
Voting Member	62	15	35	24	228	364
Total	117	57	42	27	295	538
April 25, 2016						
Affiliate	181	38	6	3	186	414
Voting Member	89	13	43	36	360	541
Total	270	51	49	39	546	955
Total Growth (2009 - 2016)						
Affiliate	126	-4	-1	0	119	240
Voting Member	27	-2	8	12	132	177
Total	153	-6	7	12	251	417
Percent Growth (2009 - 2016)						
Affiliate	229%	-10%	-14%	0%	178%	138%
Voting Member	44%	-13%	23%	50%	58%	49%
Total	131%	-11%	17%	44%	85%	78%
Lower Level Voting Power Balance Changes						
2009	22%	11%	8%	5%	55%	
2016	28%	5%	5%	4%	57%	
Change	7%	-5%	-3%	-1%	2%	

New Market Entrants in growth sectors:

- Renewable Energy (G.O.)
- EE (E.D./T.O./O.S.)
- DR (O.S.)
- Marketers/Traders (O.S.)

Concerns:

- Lack of unique voice
- Discourages participation of disadvantaged
- Larger sectors reduce individual firm impact

Also - Supplier Advantage @ Lower Level Voting

Are there issues of fairness, bias, or incumbent advantage?

DOES THE STAKEHOLDER SYSTEM INHIBIT OR PROMOTE COMPETITION?

Quasi-Governmental Organizations

Has legal characteristics of both government and private sectors

Benefits

- Avoids expanding federal bureaucracy
- Develops new revenue sources to fund operations
- Exempt from federal central management laws (e.g. compensation limits)
- Economic-focused values (e.g. use of markets)
- Entity-specific laws and regulations for flexibility

Drawbacks

- Accountability?
 - More difficult to control, less responsive to preferences of political superiors (compared to traditional government agencies)
 - To whom are these orgs accountable?
- How is the public interest being protected over private interests?

Quasi-Government: Accountability and Public Interest

- Political Accountability – Compared to traditional government agency
 - Unlike FERC leadership, RTO/ISO leadership is not politically appointed.
 - FERC cannot appoint board members to RTO/ISOs.
- Stakeholder Accountability
 - Strong Accountability over RTO/ISOs
 - FERC – legal (not political)
 - Transmission Owners – participation in RTO/ISO is voluntary, but needed.
 - States – can implement legally acceptable policies that impact RTO/ISO markets
 - Weak Accountability over RTO/ISOs
 - All other stakeholders, unless they are a T.O. affiliate
- Reduced political accountability enables pursuit of organizational interest, which may or may not be consistent with public interest.

Potential for RTO/ISO Bias

- Organizational Bias - Self-interested behavior not associated with profit motivation
- Cultural Bias – Impact of workforce beliefs
- Principal-Agent Problem – Agent advantage
- Moral Hazard – e.g. party managing financial risk does not bear financial risk

Incumbent Advantage

- Setting agenda of proposed solutions via lower level affiliate voting.
 - Lack of transparency compounds this problem.
- Concentration of resource ownership
 - In 2015, over 77% of generation capacity needed to meet PJM's peak were controlled by just 10 companies. (Excludes reserve margin and renewables.)
- Resource burden to participate
 - Time & money to participate. Can be addressed through agent.
 - Technical expertise is hardest to level.

Reforms can't fix all the challenges facing RTO/ISOs, but there is at least the potential to improve outcomes.

CAN REFORMS IMPROVE OUTCOMES? (...MAYBE)

Recommendations

- FERC should require PJM (other RTO/ISOs) to review and evaluate governance process, implement beneficial changes. Should require future evaluations at regular intervals.
- Structural Concerns
 - Address Quasi-Governmental Organization Pitfalls
 - Greater State Participation

Recommendations

- Fairness Issues
 - Balance of Power
 - e.g. examine the “deals”
 - Incumbent Advantage
 - e.g. affiliate voting, technical disadvantage for small firms
 - Ensure RTO/ISO neutrality
 - Put procedures in place to acknowledge, evaluate, monitor, and correct for behaviors that create preferences or prejudices.
- Process Issues
 - Sector realignment to reflect market participants
 - Increase transparency of lower level voting
 - Improve sector self selection process

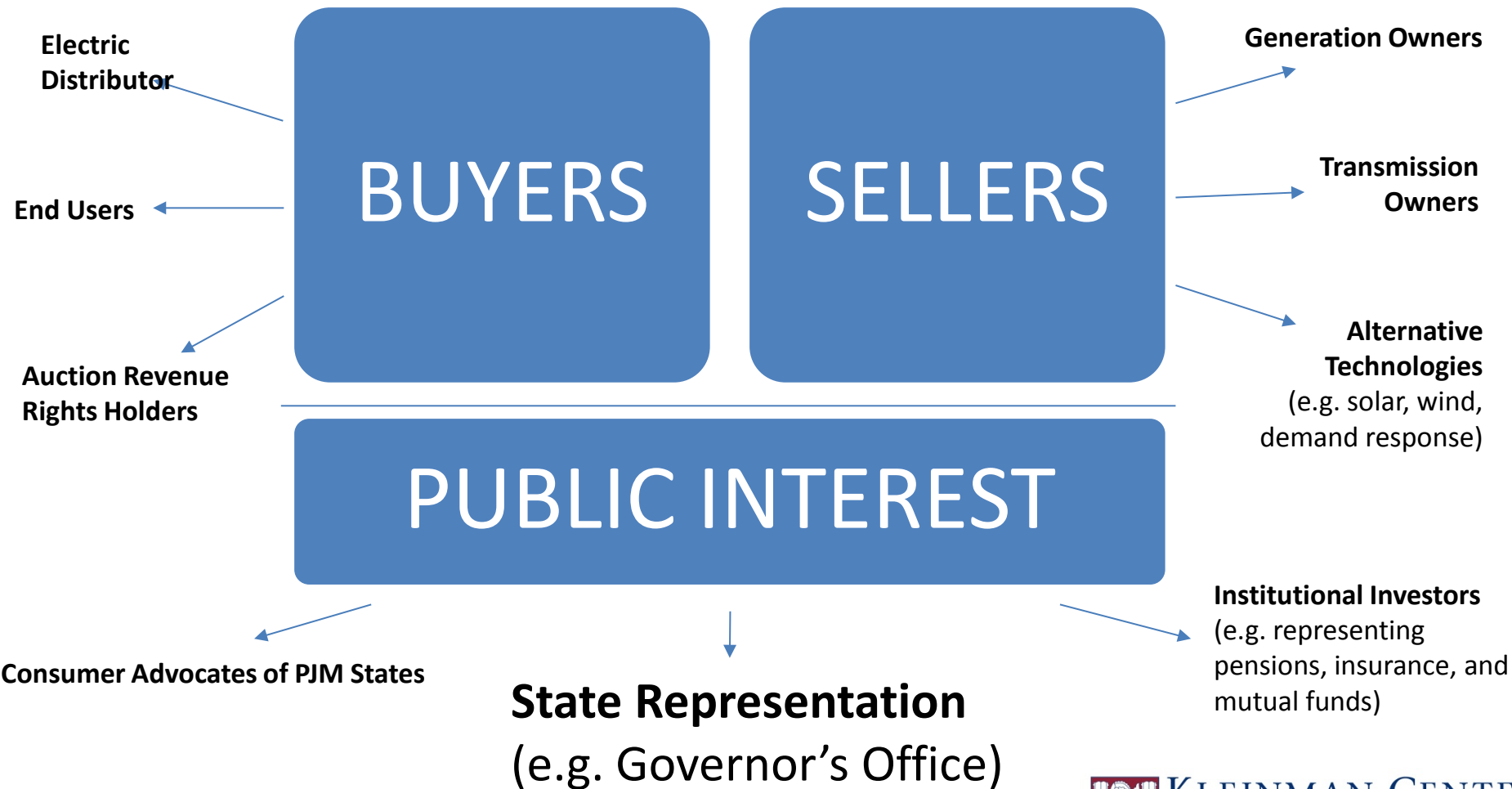
Greater Participation of States

- Specifically, on high-controversy issues
 - Including some method of voting where non-conflicted, elected representative of state (e.g. governor's office) participates.
- States help define and represent public interest
 - Dynamic – different over time, location.
 - Lowest cost? Price stability? Reliability? Environmental? Jobs?
 - Elections and political accountability.
- Theory – will greater involvement increase state understanding of issues, reduce distortionary policy/improve policy design?

The questions isn't "whether" increased state involvement is needed, rather what is the best "method" to enhance state involvement?

Exploring an Enhanced Stakeholder Construct

Realigned Sectors and Enhanced Public Interest and Accountability Mechanisms



Additional Thoughts Not in Paper

- Many proposals can be “just and reasonable”
 - If buy and sell side can’t reach agreement on single proposal at lower level, the preferred solution from each side should be advanced. Important for the record.
 - Idea: State’s vote could serve as tie-breaker.
- Technical Ombudsman Office
 - Perhaps housed in MMU
 - Provides technical assistance for new market entrants
- Role of Public Comment?
 - Esp. on high controversy issues

Almost Final Thought

- Imagine a world where the electricity system is undergoing major transformation, prompting significant market design and rule changes (i.e. high contention).

Is the existing stakeholder process likely to be helpful in guiding these changes?

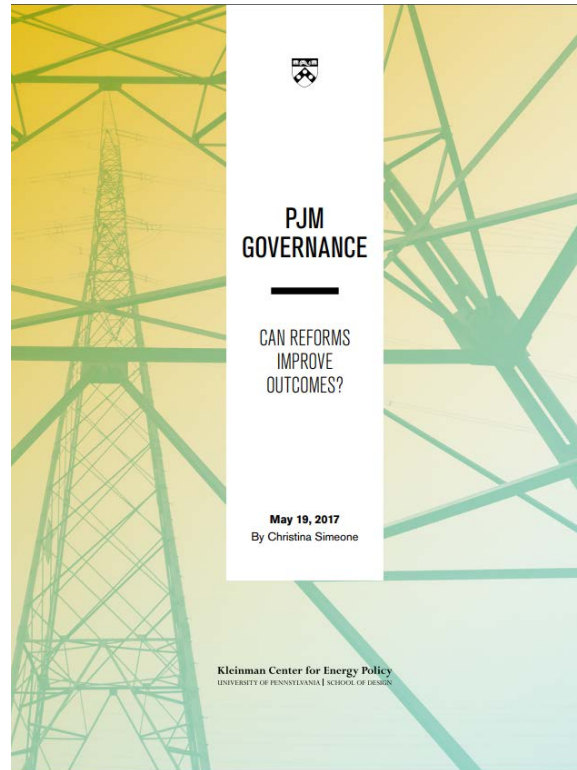
Final Thought

Eventually, FERC's light will shine on the stakeholder process again.

What would you prefer?

- *Being told what to do, or*
- *Getting a head start on making changes while you still have flexibility.*

<http://kleinmanenergy.upenn.edu/paper/pjm-governance>



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