RPPTF Meeting

February 14, 2013

RPPTF – *Preliminary* Polling Summary

February 14, 2013

Poll Information

- 16 respondents representing 85 entities
  - 71 entities are voting members
  - 14 are affiliates

Poll Information

- PJM CBIR - Polling is not “Voting”
- Poll results shape Task Force direction of effort
  - Identify items worthy of further pursuit and refinement
  - Identify items to be tabled or discarded
- Stakeholder responses are ***non-binding***
- Data is presented in raw form or as percentages

Market Efficiency Benefit/Cost Test Methods

Production Cost	Net Load Payment	Hybrid: Production Cost/Net Load Payments
Represents a Societal Metric and measures benefits to all consumers and all producers regardless of who pays for upgrade	Represents a Participant/Rate Payer Metric and measures benefit to consumers. Inclusion of all zones represents benefit to all consumers and inclusion of only zones that benefit represent benefit only to consumers that benefit from upgrade.	Represents combination of Societal and Participant/Rate Payer Metric.
Calculated using actual generator costs and not LMP	Calculated using LMP Prices	Represents current method approved by FERC in 2007 as a compromise between stakeholders
Includes Fuel, Variable O&M, and Emission costs	Includes Load Payments reduced by congestion credits	
Measured on system level and not zonal	Measured on Zonal level	Measured partially on system and zonal level

Packages

	Design Element	Current	Package 1 - Status Quo	Package 4	Package 6 - Benefit determination use Production/Capacity costs only (MISO method)	Package 8 - Benefit determination using only Load Payments(Lower Voltage use only zones with decreased in net load/capacity payments)	Package 9 - Benefit determination use only Load Payments (only zones with decrease in net load/capacity payments)	Package 10 - NEW -- Matches cost allocation if assume Load Ratio Share socialization comparable to Production Costs socialization
1	Benefit Determination: Regional Project	Total Benefit= Energy + Capacity Benefit						
		Energy Benefit: 70% change in production costs + 30% change in net load payments all zones		Energy Benefit: 50% change in production costs + 50% change in net load payments all zones	Energy Benefit: 100% change in production costs	Energy Benefit: 100% change in net load payments all zones	Energy Benefit: 100% change in net load payments (only zones with decrease in net load payments)	Energy Benefit: 50% change in production costs + 50% change in net load payments (only zones with decrease in net load payments)
		Capacity Benefit: 70% change in capacity costs + 30% change in net capacity payments all zones		Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payments all zones	Capacity Benefit: 100% change in capacity costs	Capacity Benefit: 100% change in net capacity payments all zones	Capacity Benefit: 100% change in net capacity payments (only zones with decrease in net capacity payments)	Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payments (only zones with decrease in net capacity payments)
2	Benefit Determination: Lower Voltage Project	Total Benefit= Energy + Capacity Benefit						
		Energy Benefit: 70% change in production costs + 30% change in net load payments(only zones with decrease in net load payments)		Energy Benefit: 50% change in production costs + 50% change in net load payments(only zones with decrease in	Energy Benefit: 100% change in production costs	Energy Benefit: 100% change in net load payments (only zones with decrease in net load payments)		
		Capacity Benefit: 70% change in capacity costs + 30% change in net capacity payments (only zones with decrease in net capacity payments)		Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payments (only zones with decrease in net capacity payments)	Capacity Benefit: 100% change in capacity costs	Capacity Benefit: 100% change in net capacity payments (only zones with decrease in net capacity payments)		
3	Cost Allocation - Regional Project	Load Ratio Share	50% Load Ratio Share and 50% to zones with decreased net load payments					
4	Cost Allocation - Lower Voltage Project	100% to zones with decreased net load payments						

Benefit Determination

PJM recommends either of the below packages based on poll results and member feedback

- Package 1 (Status Quo):
  - Initial poll results show no package with overwhelming support
  - Represents previous stakeholder compromise already approved
- Package 10 (New Package):
  - New package proposed by PJM which could be considered to match cost allocation most appropriately if assume Load Ratio Share socialization is comparable to production costs socialization
  - Regional Projects:
    - Cost allocation= 50% Load Ratio Share + 50% to zones with decreased net load payments
    - Benefit determination= 50% Production costs + 50% to zones with decreased net load payments
  - Lower Voltage Projects:
    - Cost allocation=100% to zones with decreased net load payments
    - Benefit determination= 100% to zones with decreased net load payments

Package 1(Status Quo):

- Regional Energy Benefit: 70% change in production costs + 30% change in net load payments all zones
- Regional Capacity Benefit: 70% change in capacity costs + 30% change in net capacity payments all zones
- Lower Voltage Energy Benefit: 70% change in production costs + 30% change in net load payments for zones with decrease in net load payments
- Lower Voltage Capacity Benefit: 70% change in capacity costs + 30% change in net capacity payment for zones with decrease in net capacity payments

Package 4:

- Regional Energy Benefit: 50% change in production costs + 50% change in net load payments all zones
- Regional Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payments all zones
- Lower Voltage Energy Benefit: 50% change in production costs + 50% change in net load payments for zones with decrease in net load payments
- Lower Voltage Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payment for zones with decrease in net capacity payments

Package 6:

- Regional Energy Benefit: 100% change in production costs
- Regional Capacity Benefit: 100% change in capacity costs
- Lower Voltage Energy Benefit: 100% change in production costs
- Lower Voltage Capacity Benefit: 100% change in capacity costs

Package 8:

- Regional Energy Benefit: 100% change in net load payments for all zones
- Regional Capacity Benefit: 100% change in net capacity payment for all zones
- Lower Voltage Energy Benefit: 100% change in net load payments for zones with decrease in net load payments
- Lower Voltage Capacity Benefit: 100% change in net capacity payment for zones with decrease in net capacity payments

Package 9:

- Regional Energy Benefit: 100% change in net load payments for zones with decrease in net load payments
- Regional Capacity Benefit: 100% change in net capacity payment for zones with decrease in net capacity payments
- Lower Voltage Energy Benefit: 100% change in net load payments for zones with decrease in net load payments
- Lower Voltage Capacity Benefit: 100% change in net capacity payment for zones with decrease in net capacity payments

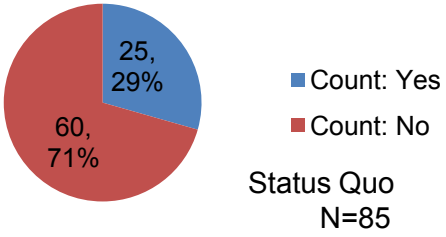
Package 10:

New package proposed by PJM which could be considered to match cost allocation most appropriately if assume Load Ratio Share socialization is comparable to production costs socialization.

- Regional Energy Benefit: 50% change in production costs + 50% change in net load payments (only zones with decrease in net load payments)
- Regional Capacity Benefit: 50% change in capacity costs + 50% change in net capacity payments (only zones with decrease in net capacity payments)
- Lower Voltage Energy Benefit: 100% change in net load payments (only zones with decrease in net load payments)
- Lower Voltage Capacity Benefit: 100% change in net capacity payments (only zones with decrease in net capacity payments)

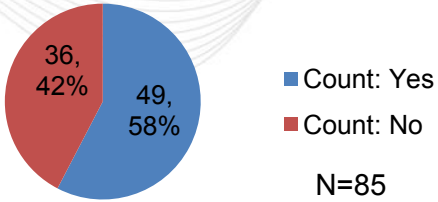
To determine the benefit for Market Efficiency Projects, I could support…

Package 1



Status Quo
N=85

Package 4



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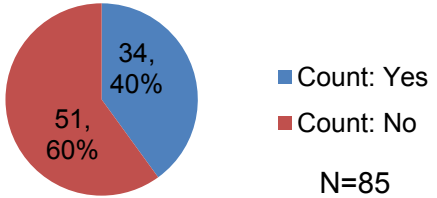
Package 6



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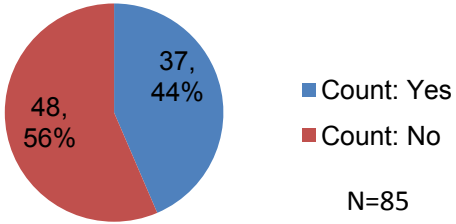
Package 8



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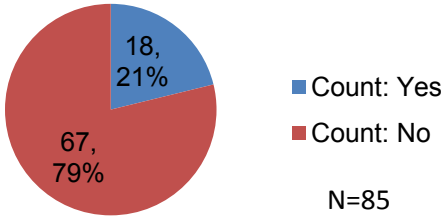
Package 9



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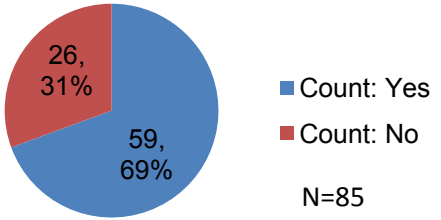
Package 10



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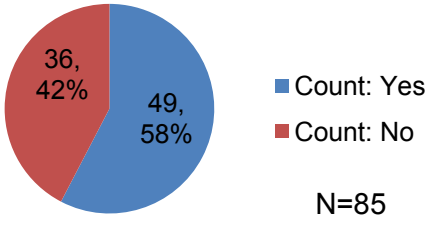
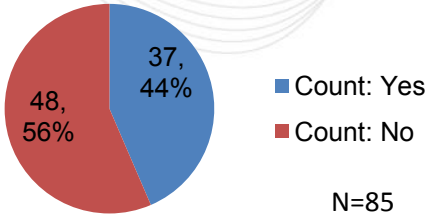
Workable Options?

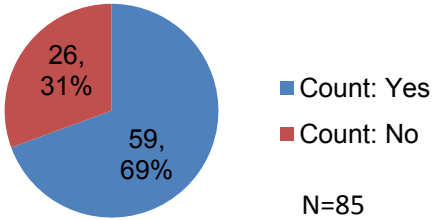
Package 4



Package 8



Package 10



Package 4
Sector Weight In Favor
4.33

Package 8
Sector Weight In Favor
3.94

Package 10
Sector Weight In Favor
2.61

Notes –

- Package 4 is similar to package 10, however, 10 is only zones with decrease in net load payments.
- Sector weights are informational only. Parent stakeholder group results may vary.

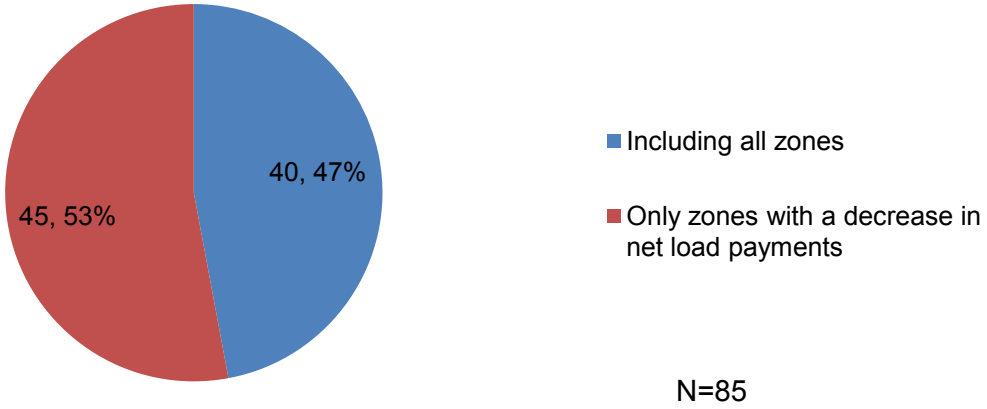
New Poll Questions: Benefit Determination

- For Regional projects
  - If benefit is determined using net load payments, do you support including all zones or only zones with a decrease in net load payments?

- For Lower voltage Projects
  - If benefit is determined using net load payments, do you support including all zones or only zones with a decrease in net load payments?

Regional Projects - Net Load Payments

For regional projects, if benefit is determined using net load payments, which do you support?



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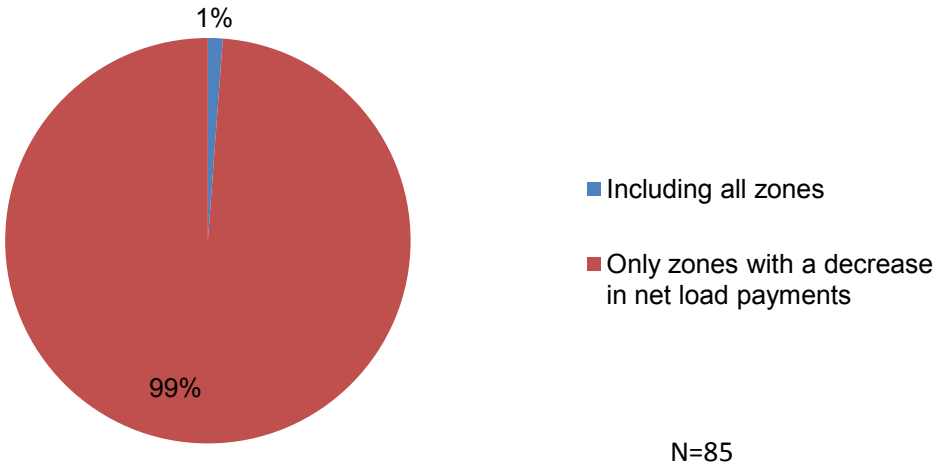
Lower Voltage Projects Net Load Payments

For lower voltage projects, if benefit is determined using net load payments, which do you support?



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Generation Expansion

Generation Expansion

	A: Status Quo	B	C	D	E	F	G
Generation Expansion	Include all ISA. Scale existing units based on location and technology to meet Reserve Requirement	Include all ISA and FSA. Scale existing units based on location and technology to meet Reserve Requirement	Include all ISA and FSA. Add units on HV system based on location and technology to meet Reserve Requirement.	Include actual transmission upgrades for congestion that arises from scaling assumptions.	Place holder. Add Demand Response (Need proposal from Atlantic Ewind)	Include all ISA, FSA and units with Impact Study Agreements to meet Reserve Requirement. Include known network upgrades that are associated with all of these units. If necessary, scale existing units based on location and technology of remaining queued requests to meet Reserve Requirement. (Note: It is not anticipated that this option would require scaling because of the quantity of Impact Study agreements.)	Include all ISA. Add units on HV system based on location and technology to meet Reserve Requirement.

Generation Expansion

- PJM recommends inclusion of FSA units in future generation determination
  - Transmission topology used already includes transmission upgrades associated with FSA units
  - Consistent with Reliability analysis
  - Slight reduction in scaling (Could move years necessary to scale further out)

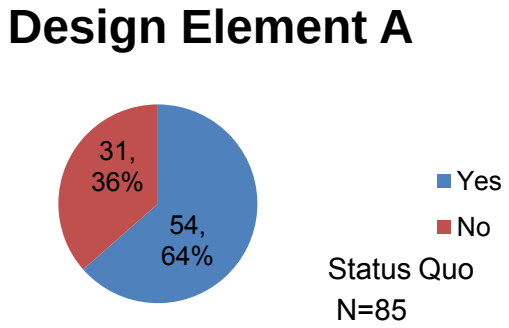
- Design Element G added
  - Include all ISA. Add units on HV system based on location and technology to meet Reserve Requirement.
  - Same as design element C but does not include FSA units.

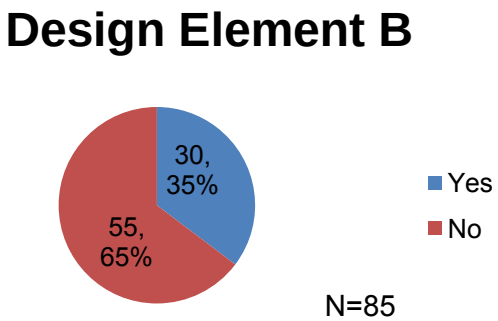
New Poll Questions: Generation Expansion

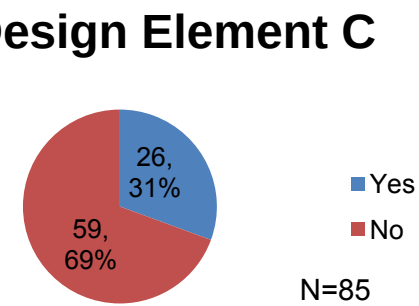
- Please indicate if you can support each design element(s). (Yes or No)
  - Design Elements: A (Status Quo), B, C, F, G, A+D, B+D, D+F, D+G
- Do you support modeling any level of demand response in future scaling? (Yes or No)

Please indicate if you can support each design element(s). (Yes or No)

Design Elements:



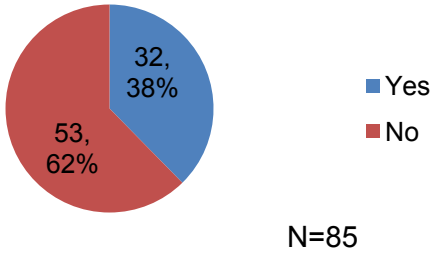




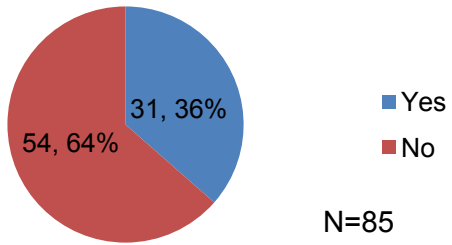
Please indicate if you can support each design element(s). (Yes or No)

Design Elements:

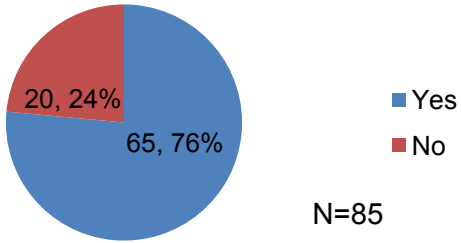
Design Element F



Design Element G



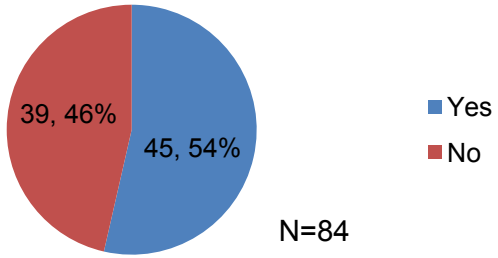
Design Element A+D



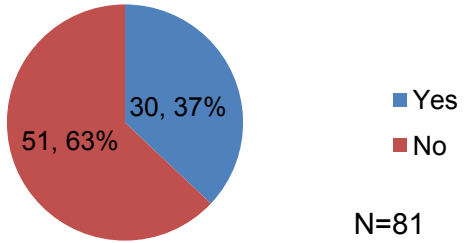
Please indicate if you can support each design element(s). (Yes or No)

Design Elements:

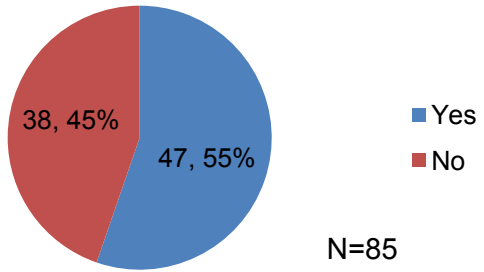
Design Element B+D



Design Element D+F

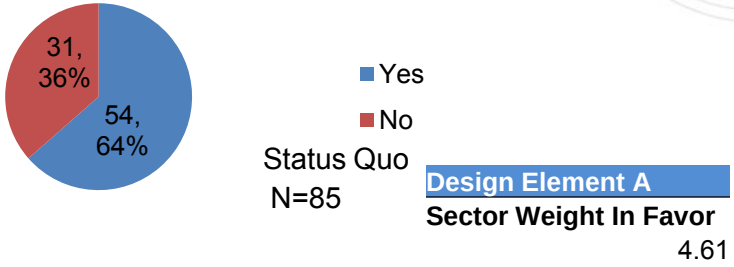


Design Element D+G

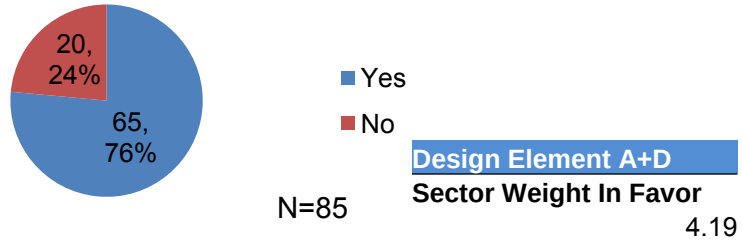


Please indicate if you can support each design element(s). (Yes or No)

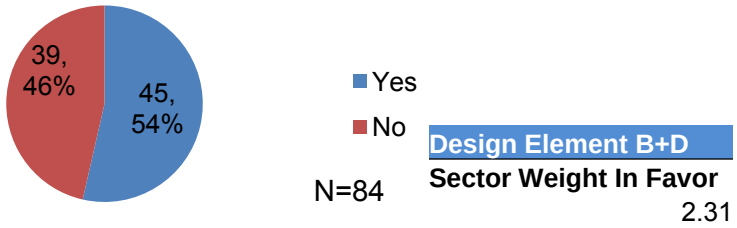
Design Element A



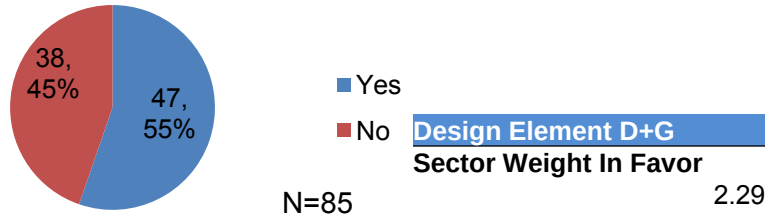
Design Element A+D



Design Element B+D

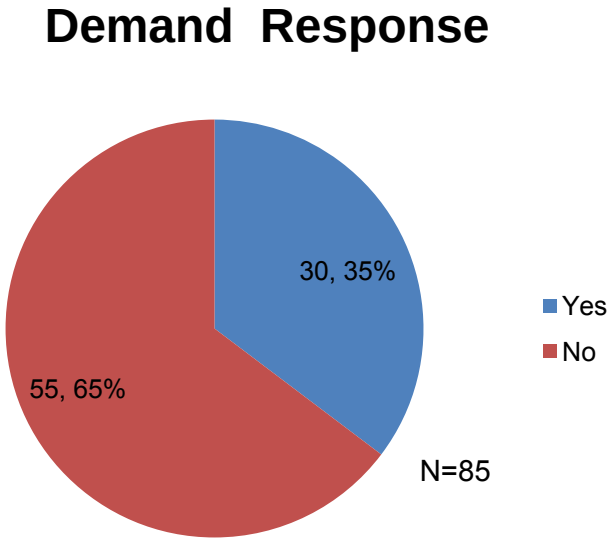


Design Element D+G



Demand Response Modeling

Do you support modeling any level of demand response in future scaling?

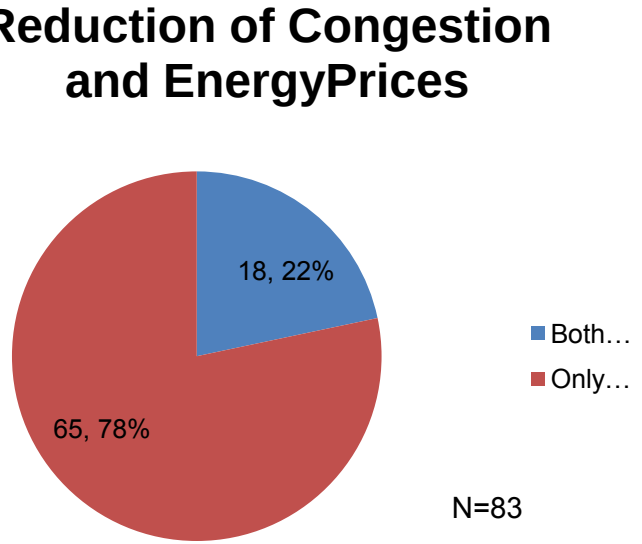


Reduction of Congestion and Energy Prices

If you support both transmission and generation in Public Policy projects, then please answer the following: Reduction of Congestion and Energy Prices?

Both the line and generation can lower prices separate from reductions in congestion

Only the line without generation can lower prices by reducing congestion.



Questions?