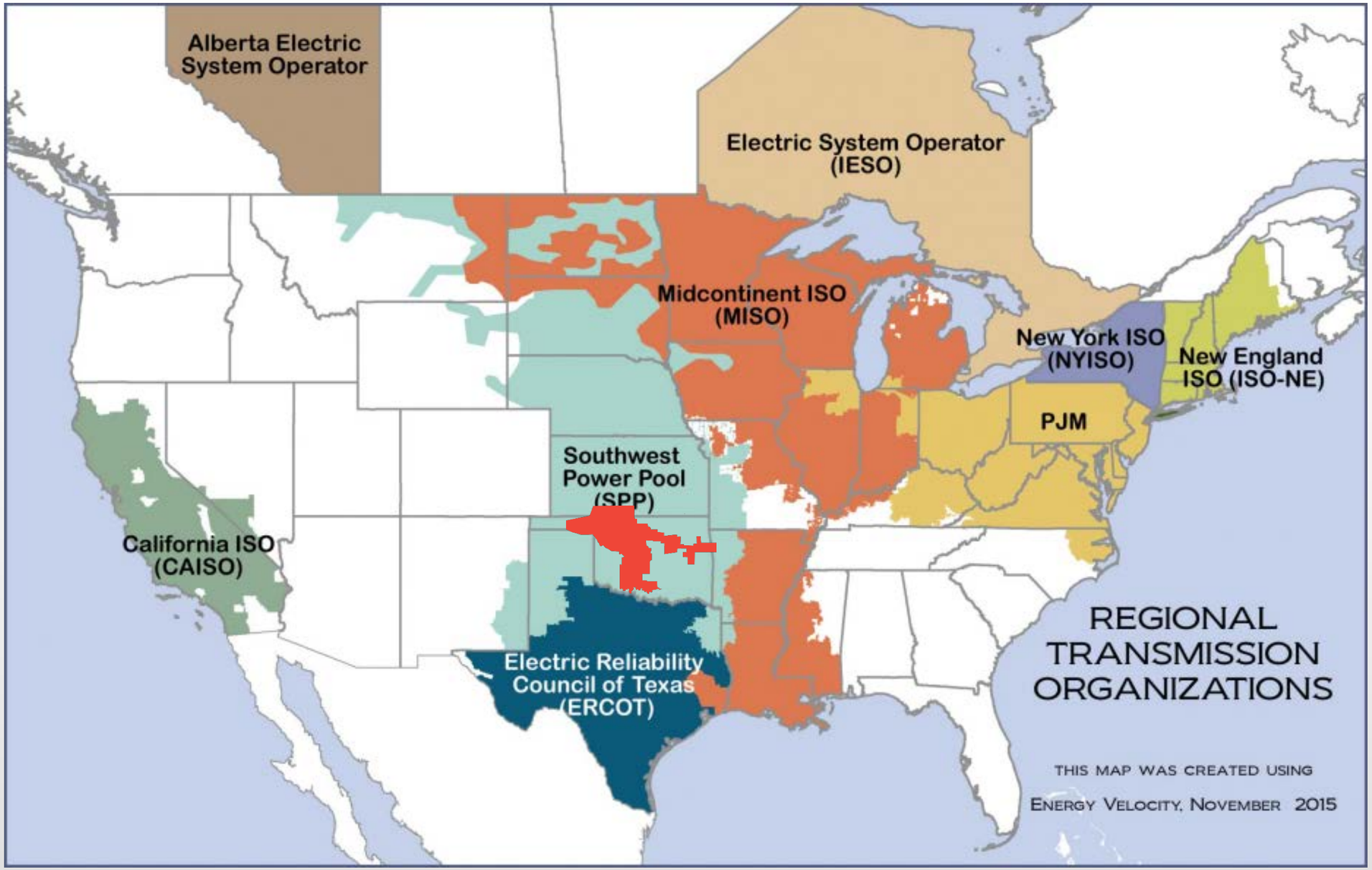
Southwest Power Pool Update

April 9, 2019

Greg McAuley, Director RTO Policy & Development
and
Darrell Wilson, Director Fuels and Market Operations

RTOs/ISOs



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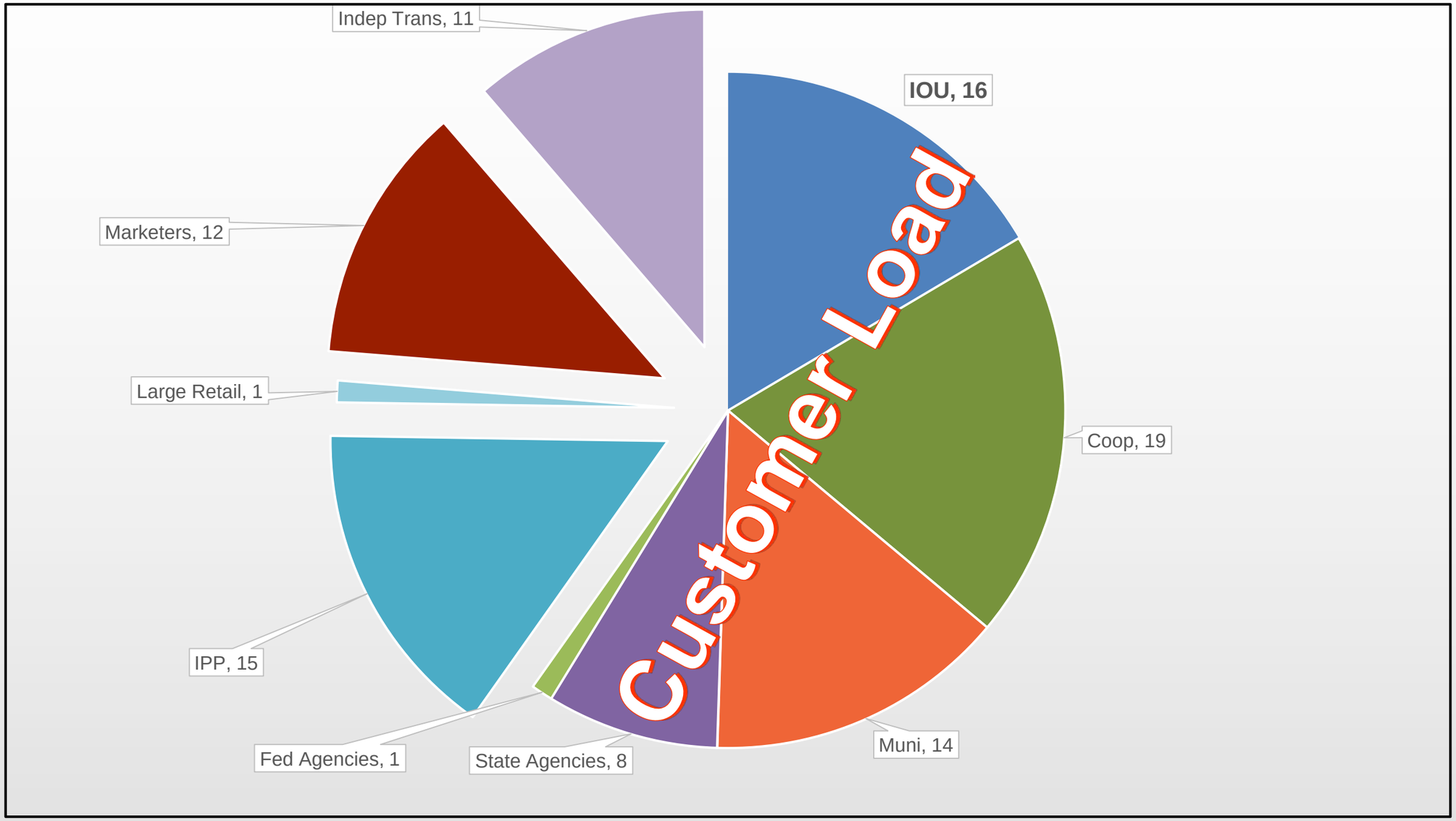
SPP Membership



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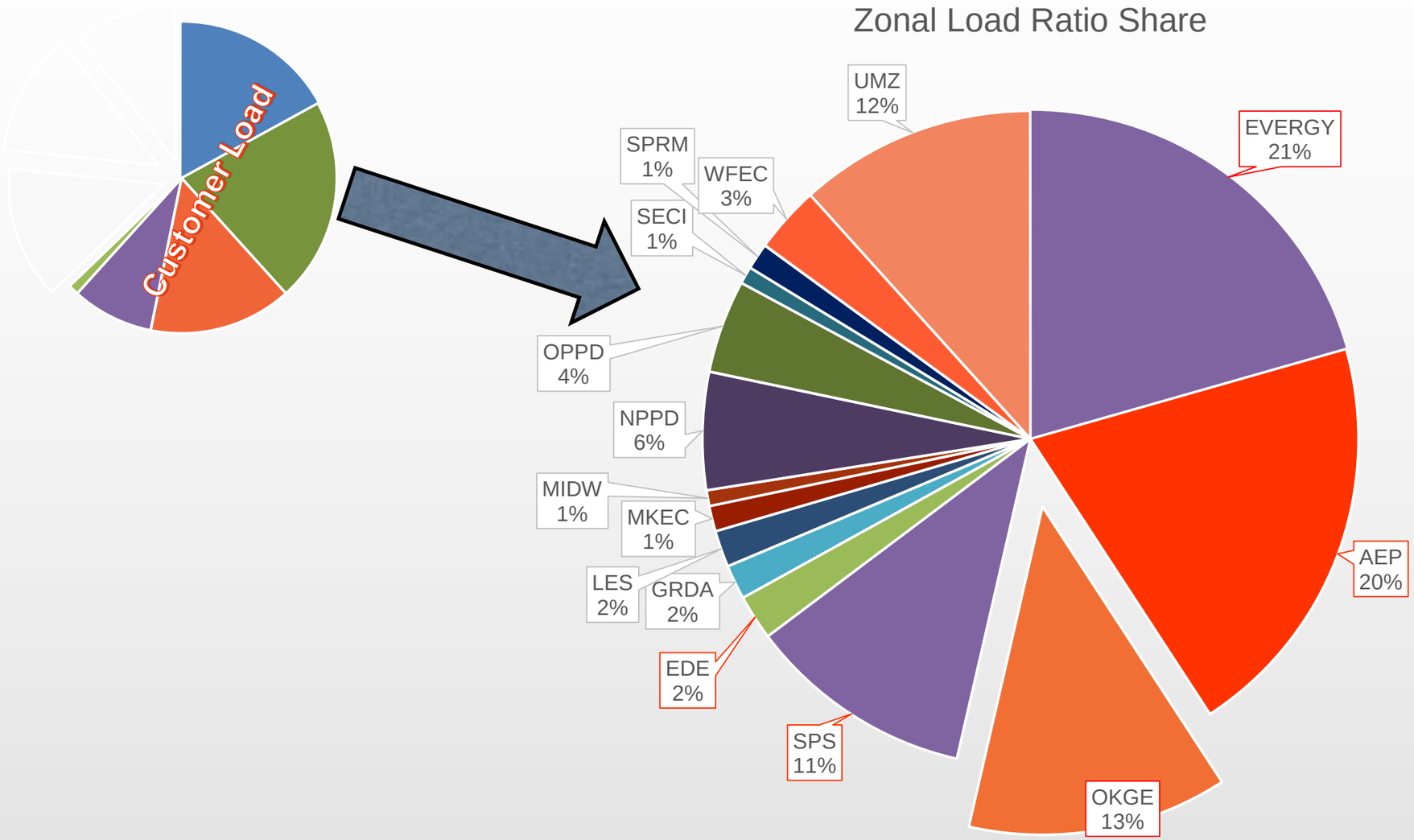

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Current Trends - Policy

- Holistic Integrated Tariff Team (HITT)
  - Resource Adequacy
  - Generation Interconnection Issues
  - Cost Allocation in Wind Rich Zones
    - (in parallel with Cost Allocation Working Group)
  - Congestion Hedging
  - Zonal Consolidation
- Value and Affordability Task Force (VATF)
- Western Energy Imbalance Market

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Current Trends - Renewables

- Wind
  - Total Wind Generation Connected: Over 21GW
  - Wind Penetration Record: 63.9% (4/30/2018)
  - Wind Output Peak: 16.4GW (12/20/2018)
  - Additional Wind in GI Queue: 55GW
- Solar
  - Total Solar Generation Connected: .2GW (215MW)
  - Solar in GI Queue: 25GW
- SPP Peak Load: 50.6GW (7/21/2016)

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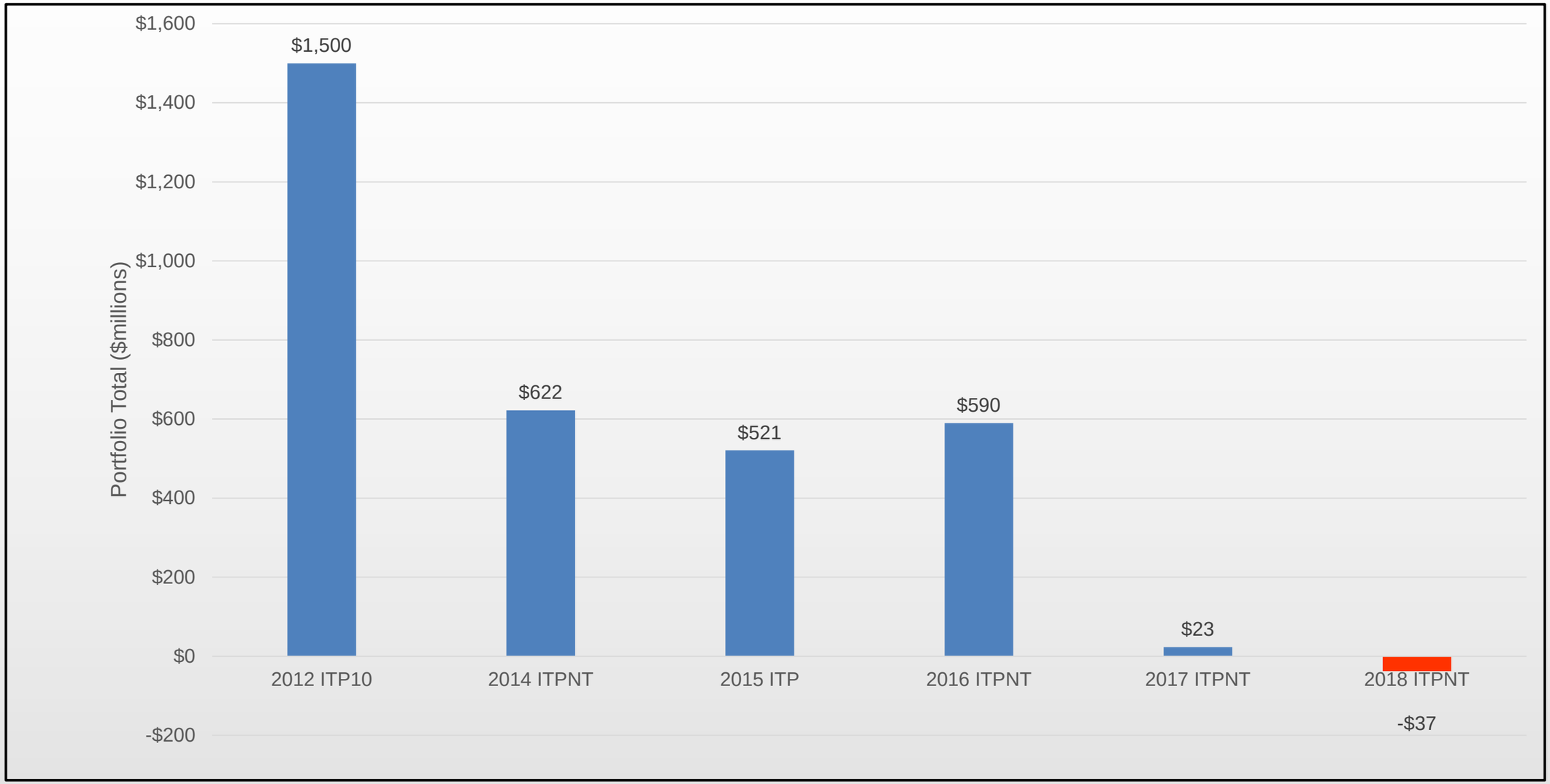
Current Trends – Transmission Planning



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Recent Projects

- Phase-Shifting Transformer – Woodward
- Second Windspeed Line – Woodward to Oklahoma City

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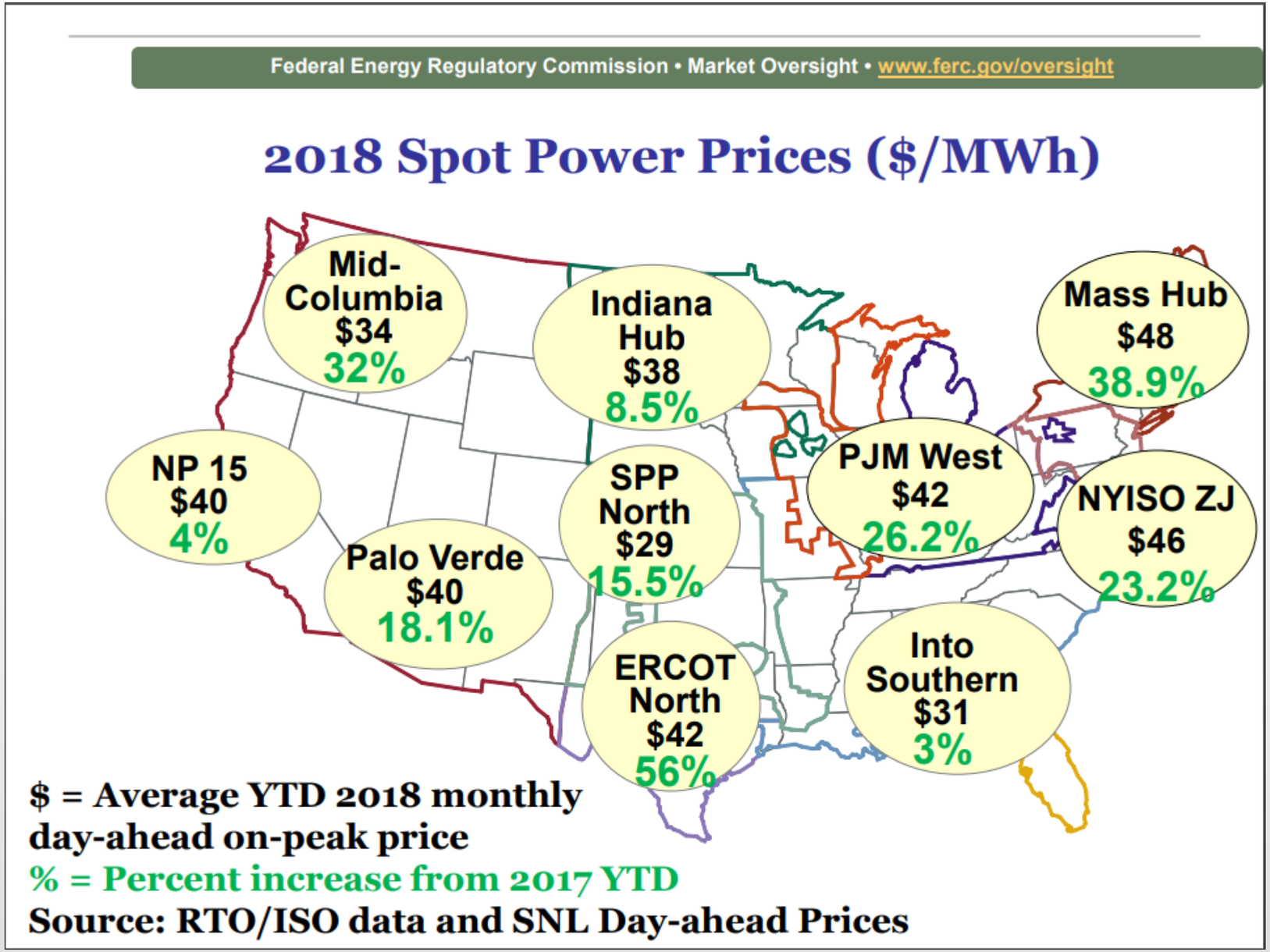
Current Trends - Prices



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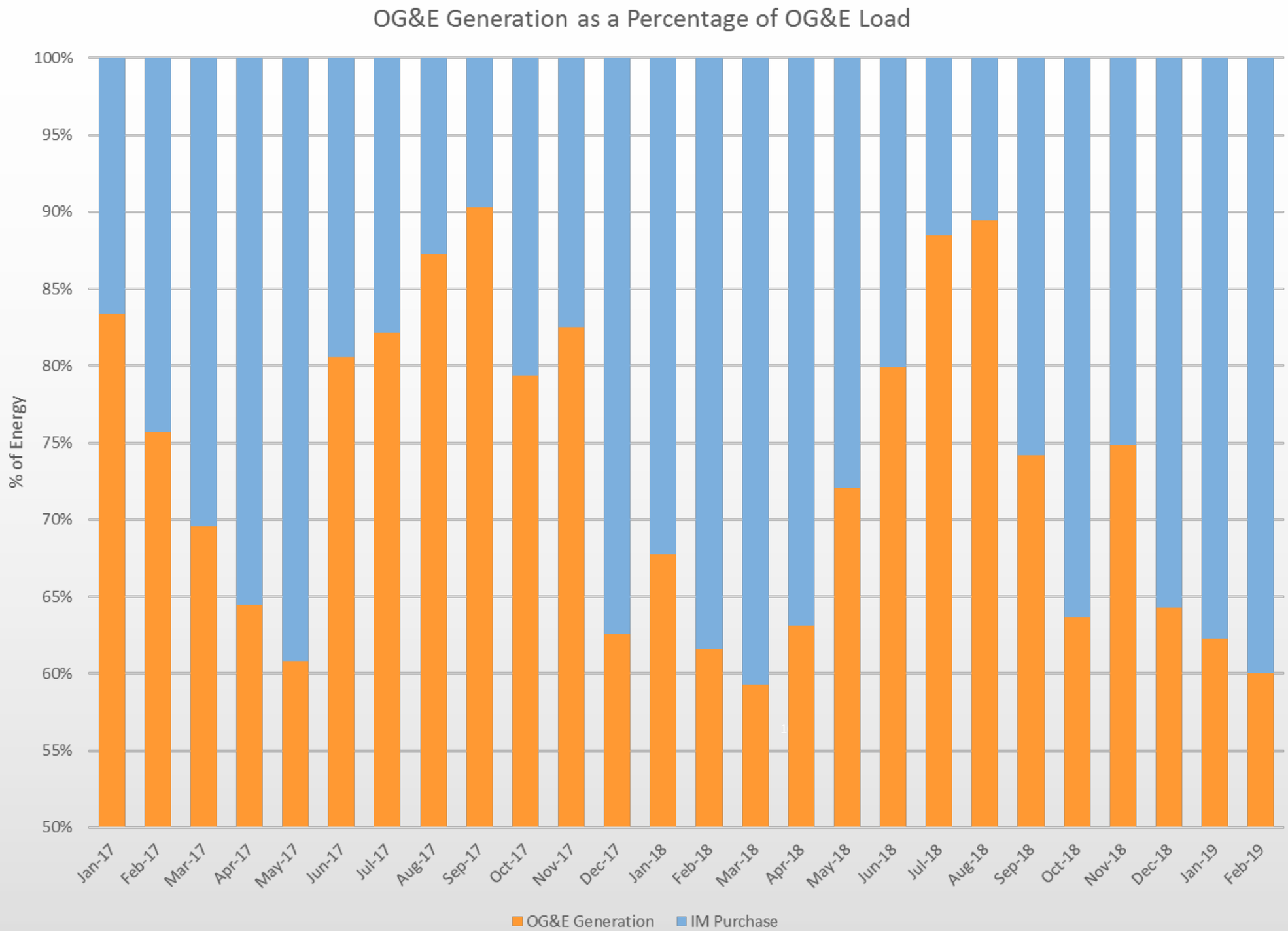

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2018 Integrated Marketplace Generation Totals

	Energy (MWh)	Gross Margin ($000)	Generation Margin ($/MWh)
Coal	8,303,992	72,107	8.68
Combined Cycle	5,489,571	69,674	12.69
Gas Steam	2,136,900	14,207	6.65
Mustang CTs	962,780	13,438	13.96
Fossil PPAs	1,997,456	17,127	8.57
Wind	2,616,601	(10,702)	(4.09)
Total Generation	21,507,300	175,851	8.18

Gross Margin calculated by subtracting variable cost from market settlements

- Positive Margin offsets load costs
- Wind includes both owned and PPA wind
  - Contractual price is considered variable costs for PPA wind where owned wind has minimal variable cost

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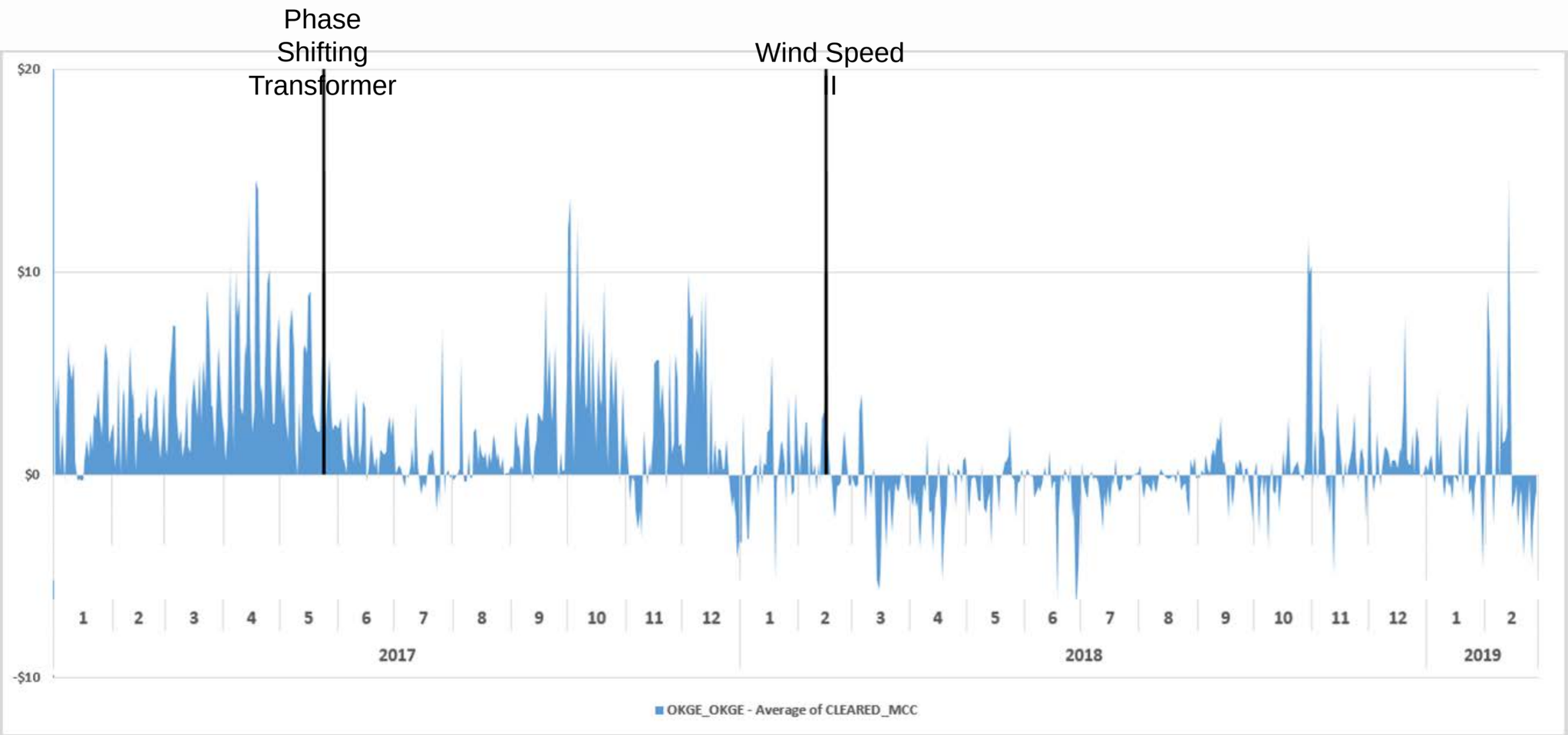

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