Commissions Know Economics, But Do We Know Economic Development?

Session for the Committee on Energy Resources and the Environment

Sunday, February 9, 2020 – NARUC Winter Policy Summit Meeting
Commissions Know Economics, But Do We Know Economic Development?

Moderator:

Tom Stanton, Principal Researcher, Energy and Environment, National Regulatory Research Institute,

Panelists:

Hon. Abigail Anthony, Rhode Island
Hon. Tim Echols, Georgia
Hon. David Ober, Indiana
Hon. Mary Throne, Wyoming
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If your commission is expanding decision making criteria to incorporate economic effects or explicitly to achieve certain economic development goals, you are not alone. More states are asking or telling Commissions to consider the economic impacts of resource plan decisions, policies that promote specific emerging markets, and the potential roles of utilities in helping to achieve diverse labor and community impact objectives. This hour features a Commissioner roundtable discussion about these ideas and what different states are directing their regulators to do, to incorporate economic development criteria in utility regulatory decisions.
Frequently thought to be the same as economic growth, with the implication that at least some important observers believe there is a context of consensus about agreed upon values and goals and constraints.

Cambridge Dictionary: “The process in which an economy grows or changes and becomes more advanced, especially when both economic and social conditions are improved.”

John A. “Skip” Laitner: “The programs and policies designed to sustain economic activity — given changes in population, expectations, technologies, and resource constraints.”

How does your state define economic development for your commission?
ECONOMIC IMPACT

It Matters in Georgia
“AVOIDED COST BAR” IN IRP

- Additional 2000 MW of Utility Scale solar at market prices below avoided cost
- 210 MW of DG at solar avoided cost
- 80 MW of Utility Batteries owned by Utility
- 2\textsuperscript{nd} Life EV Pilot project capped at $250K
- Closed 5 coal units that became uneconomic
BATTERY STORAGE INSTALLED COSTS SHOULD BE RIPE FOR NEXT IRP IN 2022

Cost declines of 8-10% year-on-year expected through mid 2020s

Bulk-scale 4-hour lithium-ion battery installed cost ($/kW)
THE NUCLEAR UTILITY SECTOR IS UNDER INTENSE ECONOMIC PRESSURE DUE TO LOW GAS PRICES AND COMPETITIVE MARKET STRUCTURES.
WHAT ABOUT THE ECONOMIC IMPACT OF PLANT VOGLTE?
GA PSC Commissioners with Secretary Rick Perry at Plant Vogtle
OTHER VOGTLE SOFT ECONOMIC FACTORS

• Too big to fail
• 8000 workforce significant economic impact
• Hedge against aggressive CO2 policy
• Legislature, Governor, Chamber, co-owners—all vested in the project.

• Two units will power 500,000 homes
• PSC certified $10.5 B all-in for GP’s portion
• 10.4% rate impact with 5.5% already in rates
US Commercial Nuclear Power Reactors: Years of Operation by End of 2013

Longevity impacts value.

Carbon and fracking policy will impact value.

92% capacity factor
• Charging at home, at night, provides better grid utilization and puts downward pressure on rates
• Uses in-state fuel
• Vehicles weigh less and have less impact on highways
• Every one percent of petroleum-based miles travelled in GA that is displaced by electric vehicles, approximately $201 million dollars will remain in the state of Georgia annually.
Overnight charging on Cobb EMC system is $0
GPC PEV Rate - Customer Load Study
• 94% customers are saving on this rate
• 15% increase in energy usage (3,023 kWh)
• PEV customers shifted an additional 10% usage to super off-peak

• If electricity costs $0.2 per kWh and the vehicle consumes 34 kWh to travel 100 miles, the cost per mile is about $0.01.
• If electricity costs $0.02 per kilowatt-hour, charging an all-electric vehicle with a 210-mile range (assuming a fully depleted 72 kWh battery) will cost about $2 to reach a full charge.
Adding Net Metering against the Power Company’s objections—with limits.
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