

Integrated Resource Planning Process New Orleans vs. Georgia

**Utility, Cable, Telecommunications and
Technology Committee Meeting**

July 26th, 2017

Background

- The Stipulation in the Georgia Public Service Commission's ("GA PSC") 2016 Final Integrated Resource Planning ("IRP") Order has Been Recommended by Some New Orleans Stakeholders as:
 - Applicable to the Council's Proposed IRP Rules in Council Docket UD-17-01 for a Renewable Resource Request for Proposals ("RFP") Process

- Advisors Reviewed Georgia's IRP Act, GA PSC's IRP Rules, and Final IRP Orders as Implemented by Georgia Power (a Wholly Owned Subsidiary of Southern Company) to Determine:
 - The Context of the Renewable RFP Provision Within Georgia's IRP Process

Retail Rate Comparison

Entergy New Orleans ("ENO") vs Georgia Power

2015 Retail Electricity Rates ¹	Entergy New Orleans New Orleans, LA	Georgia Power Atlanta, GA	Georgia Power Rates as a Percent of ENO Rates
Residential	\$0.0951/kWh	\$0.1215/kWh	128%
Commercial	\$0.0805/kWh	\$0.0956/kWh	119%
Industrial	\$0.0652/kWh	\$0.0548/kWh	84%

¹ Data From Forms EIA-861 – Schedules 4A & 4D and EIA-861S, 2015 Utility Bundled Retail Sales

Energy Mix Comparison

ENO vs Georgia Power

Generation by Fuel Type	ENO (2015) ¹	Georgia Power (2015) ²
Nuclear	57%	9%
Hydro	---	5%
Other	---	2%
Coal	4%	29%
Gas ³ /Oil	39%	55%
Total	100%	100%

¹ ENO 2015 Integrated Resource Plan, February 1, 2016.

² <https://www.georgiapower.com/about-energy/energy-sources/home.cshtml>

³ ENO's Energy Mix Includes Gas Purchases From MISO at the Margin

Emissions Comparison

Entergy vs Southern Co.

2014 Generation (MWh) ¹	Entergy (Including ENO)	Southern Co. (Including Georgia Power)	Southern Co. Percent Greater
Total Generation	130,325,124	190,901,034	+ 46%
Generation by Fossil Fuel	53,519,177	154,156,924	+ 288%
Generation by Coal	14,804,105	78,406,024	+ 530%
2014 Emission Rates (lb/MWh)			
SO ₂	0.7	2.6	+ 371%
NO _x	0.6	0.8	+ 33%
CO ₂	581	1,232	+ 212%

¹ M. J. Bradley & Associates. (2016). *Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States.*

Comparison of Fossil Fuel Generation Georgia Power vs ENO

- **84%** of Georgia Power's Electricity is Generated From Fossil Fuels
- **43%** of ENO's Electricity is Generated From Fossil Fuels
- Georgia Power a Greater Need to Replace its Fossil Fuel Generation With Renewables Than Does ENO

Comparison of Renewable Acquisitions

Georgia Power vs ENO

- GA PSC 2016 Stipulation Approves 1,200 MW in Renewable Resources for Acquisition via the RFP Process Subject to Cost-Effectiveness Screening
- ENO has Committed to 100 MW of Additional Renewable Resources
- ENO on par With Georgia Power When Additional Renewables are Considered as a Percent of Total Load
 - ENO: 100 MW of Renewables is **8.8% of Total Load** (1,142 MW)
 - Georgia Power: 1,200 MW of Renewables is **7.4% of Total Load** (16,244 MW)

Observations

- GA PSC Policy With Respect to Adding **Both** Renewables and DSM is Established in Final IRP Orders and Constrained by:
 - A Strong Preference to **Minimize Upward Pressure on Rates as Directed in the GA PSC IRP Rules and Reaffirmed in Final IRP Orders**
 - GA PSC Does not Have a Renewable Portfolio Standard or an Energy Efficiency Standard but Rather **Adds These Resources Subject to Cost-Effectiveness**
- The IRP Rules Currently Under Consideration by the Council Require ENO to Determine the Optimal Integration of Supply- and Demand-Side Resources and Show Impact on Revenue Requirements (Rates)
- Georgia Power's Residential Retail Rates are **28%** Higher Than ENO's Residential Retail Rates