August 31, 2018

By Hand Delivery
Ms. Lora W. Johnson, CMC, LMMC
Clerk of Council
Council of the City of New Orleans
Room 1E09, City Hall
1300 Perdido Street
New Orleans, LA 70112

Re: In Re: 2018 Triennial Integrated Resource Plan of Entergy New Orleans, LLC
Docket No. UD-17-03

Dear Ms. Johnson:

Entergy New Orleans, LLC ("ENO" or the "Company") respectfully submits the Public Version of its September 14, 2018 Technical Meeting Materials in the above referenced Docket. Please file an original and two copies into the record in the above referenced matter, and return a date-stamped copy to our courier.

The confidential information provided on CD included with the Technical Meeting Materials are considered Highly Sensitive Protected Materials ("HSPM") and will be provided to the appropriate reviewing representatives pursuant to the provisions of the Official Protective Order adopted in Council Resolution R-07-432 relative to the disclosure of HSPM. As such, these confidential materials are being sent to the appropriate parties via UPS overnight delivery.

Should you have any questions regarding the above, I may be reached at (504) 576-2984. Thank you for your assistance with this matter.

Sincerely,

Harry M. Barton

HMB/bkd
Enclosures
cc: Official Service List (via email)
ENO 2018 IRP
Technical Meeting #2

September 14, 2018
Technical Meeting #1—Follow Ups

• Proposed Planning Scenarios
  – Add narrative descriptions
  – Consider impact of 50/50 renewables-to-gas buildout on LMPs
  – Consider CO₂ pricing adjustments to create better range of macro market futures

• Proposed Planning Strategies
  – Propose ideas for Strategy 3 for group discussion

• IRP Modeling
  – Further discussion of portfolio development process

• Inputs Workbook
  – Produce workbook with relevant IRP modeling inputs
  – Transition from BP18U to BP19
Goals and Agenda of Technical Meeting #2

Goals
• As described in the Initiating Resolution (R-17-430), the main purpose of this meeting is for ENO, the Advisors, and Intervenors to attempt to reach consensus on the Scenarios and Strategies that were initially discussed in Technical Meeting #1 (and which have been refined as described in this presentation), or
• To discuss the Planning Scenario and/or Strategies that have been prepared by the Intervenors and provided to the parties in advance of this Technical Meeting

Agenda
1. Analytical Framework and Portfolio Development
2. ENO Capacity Need and Supply Alternatives
3. IRP Inputs and Assumptions
4. Timeline and Next Steps
Section 1
Analytical Framework and Portfolio Development
Analytic Process to Create and Value Portfolios

Development of Planning Scenarios and Strategies

Market Modeling

- Development of assumptions and inputs for Scenarios and Strategies
- Projection of MISO market outside of ENO for each Scenario

Portfolio Development

- Construction of resource portfolios for each Scenario/Strategy combination

Total Relevant Supply Cost

- Production costs and fixed costs are determined for each portfolio under each Scenario/Strategy combination

Action Plan

- Identify action plan that balances reliability, cost, and risk

Production costs and fixed costs are determined for each portfolio under each Scenario/Strategy combination.
Development of ENO Proposed Planning Scenarios – Update
*MISO Market Outside of New Orleans*

- Aurora market model testing has shown negative Locational Marginal Prices (LMPs), over an extended period of time as a result of the 50/50 renewables-to-gas market additions originally proposed for the MISO market
  - These negative LMPs could result in the suppression of renewable resource additions in portfolios designed for ENO
  - Because it is not realistic to expect the MISO market to experience negative LMPs over an extended period of time, it was necessary to reconsider this assumption

- Based on this testing, two of the three Scenarios proposed at Technical Meeting #1 were modified as shown on following slide:
  - To mitigate the impact that negative LMPs would have on the results and to encourage a range of market prices, ENO:
    - Adjusted the second Scenario to reflect a 25%/75% renewables-to-gas mix for MISO Market additions, and adjusted the CO₂ pricing assumption
    - Adjusted the third Scenario to incorporate battery deployment to address the possibility of negative LMPs due to the 50/50 renewables-to-gas addition assumption
  - This helps ensure that the market model doesn’t preclude any resource type because of negative LMPs
# ENO Proposed Planning Scenarios – Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Scenario 1 (Moderate Change)</th>
<th>Scenario 2 (Customer Driven)</th>
<th>Scenario 3 (Policy Driven)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Load &amp; Energy Growth</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Natural Gas Prices</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Market Coal &amp; Legacy Gas Deactivations</td>
<td>60 years</td>
<td>55 years (Modified from 50 years)</td>
<td>50 years (Modified from 55 years)</td>
</tr>
<tr>
<td>Magnitude of Coal &amp; Legacy Gas Deactivations²</td>
<td>12% by 2028 54% by 2038</td>
<td>31% by 2028 88% by 2038</td>
<td>54% by 2028 91% by 2038</td>
</tr>
<tr>
<td>MISO Market Additions Renewables / Gas Mix</td>
<td>34% / 66%</td>
<td>25% / 75% (Modified from 50%/50%)</td>
<td>50% / 50%</td>
</tr>
<tr>
<td>CO₂ Price Forecast</td>
<td>Medium</td>
<td>Low (Modified from High)</td>
<td>High (Modified from Medium)</td>
</tr>
</tbody>
</table>

1. Highlighted cells indicate a change since Technical Meeting #1
2. "Magnitude of Coal & Legacy Gas Deactivation" driven by "Market Coal and Legacy Gas deactivation" assumptions (e.g. 55 Years; 31%/88%) and were likewise swapped between Scenarios 2 and 3. Percentages based on BP18U; to be adjusted for BP19
Proposed Scenario Purpose and Drivers

IRP analytics rely on macro market Scenarios designed to allow for the assessment of the total production cost and risk of resource portfolios across a reasonable range of possible future outcomes. The three proposed Scenarios for the ENO 2018 IRP are:

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Key Drivers</th>
</tr>
</thead>
</table>
| Scenario 1 (Moderate Change Over Time) | • Flat/declining usage per customer (UPC) in residential and commercial sectors due to increases in energy efficiency and other customer adopted measures  
  • UPC declines partially offset by industrial growth and growth in residential and commercial customer counts  
  • Renewables and gas replace retiring capacity to promote fuel diversity in long-term resource planning                                                                 |
| Scenario 2 (Customer Driven Change) | • Low peak load growth and natural gas prices tied to slumping demand  
  • Growth rate of residential and commercial demand and energy usage decreased due to strong customer preferences for EE and DERs  
  • Capacity additions in the MISO market are weighted towards gas-fired generation due to low gas and CO₂ prices                                                                                      |
| Scenario 3 (Policy Driven Change) | • Growth rate of residential and commercial customer demand and energy usage increased through economic development and moderated energy efficiency gains  
  • Political and economic pressure on coal and legacy gas plants accelerates retirements  
  • High CO₂ pricing along with economic factors drive the replacement of retiring capacity with portfolio of equal amounts of renewables complemented with battery storage and gas-fired technology to replace retiring capacity |
ENO Proposed Planning Strategies– Update

Proposed Strategy 3: Solar, Storage, and DSM Alternative

• Policy-driven strategy under which capacity needs are met through a diverse array of solar, battery storage, and DSM
  – **Solar**: Added to meet energy needs throughout planning horizon
  – **Energy storage**: Will be explored to help meet peak load requirements
  – **Demand Response and Energy Efficiency Assumption**: To be discussed
## ENO Proposed Planning Strategies--Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Strategy 1</th>
<th>Strategy 2</th>
<th>Strategy 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Least Cost Planning</td>
<td>0.2/2% DSM Goal</td>
<td>Solar, Storage &amp; DSM Alternatives</td>
</tr>
<tr>
<td>Capacity Portfolio Criteria and Constraints</td>
<td>Meet 12% Long-term Planning Reserve Margin (PRM) target using least-cost resource portfolio</td>
<td>Include a portfolio of DSM programs that meet the Council’s stated 2% goal</td>
<td>Meet peak load need + 12% PRM target using DSM, solar, and battery resources</td>
</tr>
<tr>
<td>Description</td>
<td>Assess demand- and supply-side alternatives to meet projected capacity needs with a focus on total relevant supply costs</td>
<td>Assess portfolio of DSM programs that meet Council’s stated 0.2/2% goal along with consideration of additional supply-side alternatives</td>
<td>Assess demand- and supply-side alternatives to meet projected capacity needs with a focus on adding solar and batteries</td>
</tr>
<tr>
<td>DSM Input Case</td>
<td>Navigant Base</td>
<td>Navigant 2%</td>
<td>To be discussed</td>
</tr>
</tbody>
</table>
Optimized Portfolio Design

- Two ways to develop portfolios within the constraints of the strategies:

  (1) Aurora Capacity Expansion Algorithm Portfolios
      - Used to identify least cost portfolios across a range of scenarios to meet the goal of a least cost planning strategy. A portfolio could be developed for each, or a subset of, the Scenarios.

  (2) Customized Portfolios
      - Used to create policy-driven portfolios where desired outcomes (i.e., selection of particular renewable resources, adoption of aggressive DSM programs) consistent with policy requirements and planning principles would be ensured.

- Production Cost Modeling
  - All portfolios are later tested against all Scenarios in the Aurora Production Cost model in order to calculate the variable supply costs for each portfolio/scenario combination.
## Assessment of Each Portfolio Design Approach

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity Expansion Approach</strong></td>
<td></td>
</tr>
<tr>
<td>• Capable of finding least cost portfolios given inputs and constraints</td>
<td>• Dependent on and sensitive to changes to inputs in ways that can be unpredictable</td>
</tr>
<tr>
<td>• 3rd party model-based portfolio development</td>
<td>• May not account for qualitative benefits and considerations</td>
</tr>
<tr>
<td>• Considers multiple market and cost inputs</td>
<td>• May not account for all stakeholder preferences</td>
</tr>
<tr>
<td>• Simultaneously considers multiple competing constraints</td>
<td>• Application of constraints without judgment can result in less appropriate resource selection</td>
</tr>
<tr>
<td>• Captures intermittent resource attributes</td>
<td>• Lack of transparency for validation and explanation of results</td>
</tr>
<tr>
<td>• Consistent application of algorithm</td>
<td></td>
</tr>
<tr>
<td><strong>Customized Portfolio Development</strong></td>
<td></td>
</tr>
<tr>
<td>• Ensures stakeholder preferences are met</td>
<td>• Dependent on input from stakeholders and agreement on assumptions</td>
</tr>
<tr>
<td>• Enables greater focus on other aspects of the IRP (e.g. sensitivities, stakeholder engagement and feedback)</td>
<td>• Unlimited possible combinations</td>
</tr>
<tr>
<td>• Allows evaluation of alternatives and portfolios</td>
<td>• May not meet all objectives (e.g. traditional “least-cost” portfolio)</td>
</tr>
<tr>
<td>• Transparency</td>
<td></td>
</tr>
<tr>
<td>• Can utilize non-Aurora software</td>
<td></td>
</tr>
</tbody>
</table>
Optimized Portfolio Design

What type of Strategy?

- Least Cost?
  - Aurora Capacity Expansion Software
    - For each Scenario, Aurora Capacity Expansion creates the least cost portfolio of demand- and supply-side resources to meet the identified need (peak load + 12% PRM)
  - Using Aurora’s Production Cost Modeling, all portfolios are analyzed in all scenarios
    - Total supply costs (fixed + variable production costs) calculated for all portfolios/scenario combinations for comparison and analysis
      - Least cost portfolios subjected to sensitivity analysis to examine effects of differing fuel prices, CO2 costs, etc.

- Policy-driven?
  - Aurora Capacity Expansion Software
    - A portfolio is created that incorporates the policy constraints and meets the identified need (peak load + 12% PRM)
  - or
    - Customized Capacity Expansion

Strategy Driver
Design Process
Total Fixed Costs
Total Variable Production Costs
Total Supply Costs
Sensitivity Analysis
Optimized Portfolio Design

Capacity Expansion Approach

Scenario 1

Portfolio 1

Scenario 2

Portfolio 2

Strategy 1 (Least Cost)

Scenario 3

Portfolio 3

Scenario 4 (Stakeholder)

Portfolio 4

Customized Portfolio Approach

Policy & Planning Principles

Strategy 2 (2% DSM)

Portfolio

Strategy 3 (Solar, Storage, DSM)

Portfolio

Strategy 4 (Stakeholder)

Portfolio

NOTE: All 7 of these portfolios would be tested across the 4 Scenarios in the Production Cost Model, generating 28 Total Relevant Supply Cost Results
Section 2
ENO Capacity Need and Supply Alternatives
ENO’s Long-Term Capacity Need

ENO’s existing and planned capacity portfolio over the 20 year planning period

Assumptions:
- Requirements based on non-coincident peak and a 12% reserve margin
- ENO Solar additions modeled with 50% effective capacity (100 MW nameplate)
DSM and Supply Side Resources

• DSM programs will be evaluated based on the characteristics and attributes provided in the potential studies.
  – Demand Response programs described by an average annual load reduction and annual program costs will be evaluated through spreadsheet models outside of the Aurora model based on capacity value net of fixed program costs.
  – Energy Efficiency programs described by an hourly load reduction profile and annual program costs.
• Programs determined to be economic (i.e. positive net benefits) will be selected in the first year.
  – ENO’s capacity position (surplus/deficit) will be adjusted to reflect the capacity contribution of selected Demand Response programs.
• Programs not considered economic in year one will be evaluated by AURORA alongside supply side resources in future years (future program inputs to be provided following initial run).
  – DSM programs with hourly load reduction profiles will be evaluated alongside supply side resources in the portfolio design in order to identify the most economic combination of DSM programs and supply side resources.
Supply-Side Technology Resources

- The supply-side technology assessment analyzes potential supply-side generation solutions that could help ENO serve customers’ needs reliably and at the most reasonable cost, including renewables, energy storage, and natural gas technologies.

- ENO’s technology assessment for the 2018 IRP explores in detail the challenges, opportunities, and costs of generation alternatives to be considered when designing resource portfolios to meet the capacity needs of customers.
  - Renewable energy resources, especially solar, have emerged as viable economic alternatives.
  - Trend to smaller, more modular resources (such as battery storage) provides opportunity to reduce risk and manage peak demand.
  - Deployment of intermittent generation has increased the need for flexible, diverse supply alternatives. New smaller scale supply alternatives will better address locational, site specific reliability requirements while continuing to support overall grid reliability.
Renewable Resource Assumptions (Solar PV & Wind)

### Levelized Real Cost of Electricity (2019$/MWh-AC)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2026</th>
<th>2029</th>
<th>2032</th>
<th>2035</th>
<th>2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Tracking ²</td>
<td>$53.39</td>
<td>$49.64</td>
<td>$46.71</td>
<td>$44.35</td>
<td>$43.86</td>
<td>$43.79</td>
<td>$42.28</td>
<td>$40.51</td>
<td>$39.10</td>
<td>$37.82</td>
</tr>
<tr>
<td>Onshore Wind ³</td>
<td>$44.82</td>
<td>$46.12</td>
<td>$48.65</td>
<td>$48.19</td>
<td>$48.14</td>
<td>$47.32</td>
<td>$44.35</td>
<td>$42.21</td>
<td>$41.47</td>
<td>$41.46</td>
</tr>
</tbody>
</table>

### Other Modeling Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Solar</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed O&amp;M (2017$/kW-yr-AC)</td>
<td>$16</td>
<td>$36.01</td>
</tr>
<tr>
<td>Useful Life (yr)</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>MACRS Depreciation (yr)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Capacity Factor</td>
<td>26%</td>
<td>36%</td>
</tr>
<tr>
<td>DC:AC</td>
<td>1.35</td>
<td>N/A</td>
</tr>
<tr>
<td>Hourly Profile Modeling Software</td>
<td>PlantPredict</td>
<td>NREL SAM</td>
</tr>
</tbody>
</table>

1. Year 1 levelized real cost for a project beginning in the given year
2. ITC normalized over useful life and steps down to 10% by 2023
3. PTC steps down to 40% by 2020 and expires thereafter

Source: The capital cost assumptions for Wind and Solar are based on a confidential IHS Markit forecast.
Grid-Scale Battery Storage Alternatives

As battery storage technology continues to improve it is important to assess the costs and benefits associated with its deployment to meet long-term needs in the proper context.

Battery storage includes a range of unique attributes that should be considered, such as:

• The ability to store energy for later commitment and dispatch (energy and capacity value)
• Ability to discharge in milliseconds and fast ramping capability (ancillary services)
• Potential deferral of transmission and distribution upgrades
• Rapid construction (on the order of months)
• Modular deployment provides potential scalability
• Portability and capability to be redeployed in different areas
• Small footprint (typically less than an acre), allowing for flexible siting
• Low round-trip losses compared to other storage technologies (such as compressed air)

These attributes should be considered in the appropriate context, not all of which is well understood at this time, including but not limited to:

• Batteries are not a source of electric generation
• Useful life can be much shorter than other grid-scale investments (replacement cost)
• Market rules not yet established to govern participation in wholesale markets
• Discharge less electricity than required to charge due to losses
• Cost of environmentally sound disposal
Battery Storage Assumptions

Levelized Real Fixed Cost (2019$/kW-yr) ¹

<table>
<thead>
<tr>
<th>Year</th>
<th>Battery Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$177</td>
</tr>
<tr>
<td>2020</td>
<td>$163</td>
</tr>
<tr>
<td>2021</td>
<td>$155</td>
</tr>
<tr>
<td>2022</td>
<td>$146</td>
</tr>
<tr>
<td>2023</td>
<td>$143</td>
</tr>
<tr>
<td>2026</td>
<td>$132</td>
</tr>
<tr>
<td>2029</td>
<td>$122</td>
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<tr>
<td>2032</td>
<td>$113</td>
</tr>
<tr>
<td>2035</td>
<td>$105</td>
</tr>
<tr>
<td>2038</td>
<td>$96</td>
</tr>
</tbody>
</table>

Other Modeling Assumptions

- Energy Capacity : Power ²: 4:1
- Fixed O&M (2017$/kW-yr): $9.00
- Useful Life (yr) ³: 10
- MACRS Depreciation (yr): 7
- AC-AC efficiency: 90%
- Hourly Profile Modeling Software: Aurora

1. Year 1 levelized real cost for a project beginning in the given year
2. Current MISO Tariff requirement for capacity credit
3. Assumes daily cycling, no module replacement cost, full depth of discharge

Source: The capital cost assumptions for Battery Storage is based on a confidential IHS Markit forecast.
## Gas resource assumptions

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Cycle Gas Turbine (CCGT)</td>
<td>1x1 501JAC</td>
<td>605</td>
<td>$1,244</td>
<td>$16.70</td>
<td>$3.14</td>
<td>6,300</td>
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<tr>
<td>Simple Cycle Combustion Turbine (CT)</td>
<td>501JAC</td>
<td>346</td>
<td>$809</td>
<td>$2.37</td>
<td>$13.35</td>
<td>9,400</td>
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<tr>
<td>Aeroderivative Combustion Turbine (Aero CT)</td>
<td>LMS100PA</td>
<td>102</td>
<td>$1,543</td>
<td>$5.86</td>
<td>$2.90</td>
<td>9,400</td>
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<tr>
<td>Reciprocating Internal Combustion Engine (RICE)</td>
<td>7x Wartsila 18V50SG</td>
<td>128</td>
<td>$1,545</td>
<td>$31.94</td>
<td>$7.30</td>
<td>8,400</td>
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*Heat Rate based on full load without duct firing
Section 3
Inputs and Assumptions
## 2018 IRP Inputs and Assumptions

<table>
<thead>
<tr>
<th>Input/Assumption</th>
<th>MISO Market Modeling</th>
<th>Portfolio Development</th>
<th>Total Relevant Supply Costs</th>
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<tbody>
<tr>
<td>Scenarios &amp; Strategies</td>
<td>✓</td>
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<tr>
<td>Gas Price Forecast*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>CO$_2$ Price Forecast*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Capacity Value*</td>
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<tr>
<td>Supply-Side Resource Alternative Costs*</td>
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<tr>
<td>Load Forecast*</td>
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<tr>
<td>ENO’s Long-Term Capacity Need*</td>
<td></td>
<td>✓</td>
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<tr>
<td>DSM Potential Study Results</td>
<td>✓</td>
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</table>

*Updated to Business Plan 19 Inputs since Technical Meeting #1
**Gas Price Forecast**

**Nominal $/MMBtu**

<table>
<thead>
<tr>
<th>Case</th>
<th>2019</th>
<th>2026</th>
<th>2031</th>
<th>2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>$2.52</td>
<td>$2.86</td>
<td>$3.32</td>
<td>$3.83</td>
</tr>
<tr>
<td>Reference</td>
<td>$2.79</td>
<td>$4.15</td>
<td>$5.09</td>
<td>$6.41</td>
</tr>
<tr>
<td>High</td>
<td>$3.09</td>
<td>$5.64</td>
<td>$6.89</td>
<td>$8.80</td>
</tr>
</tbody>
</table>
Coal Price Forecast

Nominal $/MMBtu

Independence

White Bluff
CO₂ Price Forecast

Nominal $/Short Ton

- Low
- Ref
- High

Years: 2019 to 2038

Prices:
- $0 in 2019
- $3 in 2020
- $18 in 2027
- $35 in 2038

WE POWER LIFE℠
Capacity Value Forecast

Levelized Cost of a New-Build CT

$/kW-Yr

$78 $87 $96 $104 $114

2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038

WE POWER LIFE™
3 demand forecasts were created for the ENO IRP: a low, reference, and high

### Energy

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Ref</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>5,400</td>
<td>5,600</td>
<td>5,800</td>
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<tr>
<td>2022</td>
<td>5,520</td>
<td>5,720</td>
<td>5,930</td>
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<tr>
<td>2025</td>
<td>5,640</td>
<td>5,840</td>
<td>6,060</td>
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<tr>
<td>2028</td>
<td>5,760</td>
<td>5,960</td>
<td>6,190</td>
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<td>2031</td>
<td>5,880</td>
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<td>2037</td>
<td>6,120</td>
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### Peak Load

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<th>Ref</th>
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<td>2019</td>
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<td>1,130</td>
<td>1,114</td>
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<tr>
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<td>1,169</td>
<td>1,143</td>
<td>1,127</td>
</tr>
<tr>
<td>2025</td>
<td>1,180</td>
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### 10 Year CAGR (%)

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<th>2029 – 2038</th>
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<td>Low</td>
<td>-0.28%</td>
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<td>Reference</td>
<td>0.08%</td>
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<tr>
<td>High</td>
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<td>0.42%</td>
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Section 4
Timeline and Next Steps
## Current Timeline

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<th>Description</th>
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<td>Public Meeting #1 - Process Overview</td>
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<td>Technical Meeting #1 Material Due</td>
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<td>January 2018</td>
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<tr>
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<td>Technical Meeting #2</td>
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<td>IRP Inputs Finalized</td>
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<td>File IRP Report</td>
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<td>Public Meeting #2 - Present IRP Results</td>
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<td>Technical Meeting #5</td>
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<td>Intervenors and Advisors Questions &amp; Comments Due</td>
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<td>ENO Response to Questions and Comments Due</td>
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<td>Advisors File Report</td>
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Appendix
# Technical Meeting Purpose

<table>
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<tr>
<th>Technical Meeting</th>
<th>Purpose</th>
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<tr>
<td>Technical Meeting 1 (January 22(^{nd}))</td>
<td>The purpose of this meeting will be to discuss Planning Scenarios and Strategies. ENO should be prepared to present its Reference (and two alternative) Planning Scenarios, the Least Cost Planning Strategy, and the Utility’s proposed Reference Planning Strategy.</td>
</tr>
<tr>
<td>Technical Meeting 2 (September 14(^{th}))</td>
<td>The purpose of this meeting is to either confirm the consensus Scenario and Strategy or to confirm that ENO is prepared to include the Stakeholder Scenario and Strategy pursuant to the discussions of Technical Meeting 1.</td>
</tr>
<tr>
<td>Technical Meeting 3 (November 19(^{th}) – November 30(^{th}))</td>
<td>Purpose is to finalize the Planning Scenarios and Strategies by all parties and lock down of all IRP inputs. The results of the DSM Potential Studies will be provided in the input format required for modeling in the IRP. This meeting will also contain the initial discussion of scorecard metrics.</td>
</tr>
<tr>
<td>Technical Meeting 4 (April 22(^{nd}) – May 3(^{rd}))</td>
<td>The purpose of this meeting is to review the Optimized Resource Portfolios, finalize the Scorecard Metrics, and conduct an initial discussion regarding Energy Smart Program budgets and savings goals. For this meeting, ENO should prepare initial proposed Energy Smart Program budgets, and savings goals for discussion.</td>
</tr>
<tr>
<td>Technical Meeting 5 (August 28(^{th}) – September 11(^{th}))</td>
<td>The purpose of this meeting is to discuss Energy Smart implementation for Program Years 10-12.</td>
</tr>
</tbody>
</table>
CERTIFICATE OF SERVICE
Docket No. UD-17-03

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

Lora W. Johnson, CMC, LMMC
Clerk of Council
Council of the City of New Orleans
City Hall, Room 1E09
1300 Perdido Street
New Orleans, LA 70112

Erin Spears, Chief of Staff
Bobbie Mason
Connolly Reed
Council Utilities Regulatory Office
City of New Orleans
City Hall, Room 6E07
1300 Perdido Street
New Orleans, LA 70112

David Gavlinski
Council Chief of Staff
New Orleans City Council
City Hall, Room 1E06
1300 Perdido Street
New Orleans, LA 70112

Suni LeBeouf
City Attorney Office
City Hall, Room 5th Floor
1300 Perdido Street
New Orleans, LA 70112

Norman White
Department of Finance
City Hall, Room 3E06
1300 Perdido Street
New Orleans, LA 70112

Hon. Jeffery S. Gulin
3203 Bridle Ridge Lane
Lutherville, GA 21093

Clinton A. Vince, Esq.
Presley R. Reed, Jr., Esq.
Emma F. Hand, Esq.
Herminia Gomez
Dentons US LLP
1900 K Street, NW
Washington, DC 20006

Basile J. Uddo, Esq.
J.A. “Jay” Beatmann, Jr.
c/o Dentons US LLP
The Poydras Center
650 Poydras Street, Suite 2850
New Orleans, LA 70130-6132

Walter J. Wilkerson, Esq.
Kelley Bazile
Wilkerson and Associates, PLC
The Poydras Center, Suite 1913
650 Poydras Street
New Orleans, LA 70130

Philip J. Movish
Victor M. Prep
Joseph W. Rogers
Cortney Crouch
Legend Consulting Group
8055 East Tufts Avenue
Suite 1250
Denver, CO 80237-2835
Errol Smith, CPA
Bruno and Tervalon
4298 Elysian Fields Avenue
New Orleans, LA 70122

Gary E. Huntley
Entergy New Orleans, LLC
Mail Unit L-MAG-505B
1600 Perdido Street
New Orleans, LA 70112

Timothy S. Cragin, Esq
Harry M. Barton, Esq.
Brian L. Guillot, Esq.
Alyssa Maurice-Anderson, Esq.
Karen Freese, Esq.
Entergy Services, Inc.
Mail Unit L-ENT-26E
639 Loyola Avenue
New Orleans, LA 70113

Polly S. Rosemond
Seth Cureington
Derek Mills
Keith Wood
Entergy New Orleans, LLC
Mail Unit L-MAG-505B
1600 Perdido Street
New Orleans, LA 70112

Joseph J. Romano, III
Suzanne Fontan
Therese Perrault
Entergy Services, Inc.
Mail Unit L-ENT-4C
639 Loyola Avenue
New Orleans, LA 70113

Renate Heurich
350 Louisiana
1407 Napoleon Avenue,
Suite #C
New Orleans, LA 70115

Andy Kowalczyk
1115 Congress St.
New Orleans, LA 70117

Benjamin Quimby
1621 S. Rampart St.
New Orleans, LA 70113

Logan Atkinson Burke
Forest Bradley-Wright
Sophie Zaken
Alliance for Affordable Energy
4505 S. Claiborne Avenue
New Orleans, LA 70115

Ernest L. Edwards Jr.
Air Products and Chemicals, Inc.
300 Lake Marina Ave.
Unit 5BE
New Orleans, LA 70124

Mark Zimmerman
Air Products and Chemicals, Inc.
720 I Hamilton Boulevard
Allentown, PA 18195

Maurice Brubaker
Air Products and Chemicals, Inc.
16690 Swingly Ridge Road
Suite 140
Chesterfield, MO 63017
Marcel Wisznia  
Daniel Weiner  
Wisznia Company Inc.  
800 Common Street  
Suite 200  
New Orleans, LA 70112

Amber Beezley  
Monica Gonzalez  
Casius Pealer  
U.S. Green Building Council, LA Chapter  
P.O. Box 82572  
Baton Rouge, LA 70884

Luke F. Piontek,  
Judith Sulzer  
J. Kenton Parsons  
Christian J. Rgodes  
Shelly Ann McGlathery  
Roedel, Parsons, Koch, Blache, Balhoff & McCollister  
8440 Jefferson Highway,  
Suite 301  
Baton Rouge, LA 70809

Corey G. Dowden  
Lower Nine House of Music  
1025 Charbonnet St.  
New Orleans, LA 70117

Andreas Hoffman  
Green Light New Orleans  
8203 Jeannette Street  
New Orleans, LA 70118

Nathan Lott  
Brady Skaggs  
Miriam Belblidia  
The Water Collaborative of Greater New Orleans  
4906 Canal Street  
New Orleans, LA 70119

Jason Richards  
Angela Morton  
Joel Pominville  
American Institute of Architects  
1000 St. Charles Avenue  
New Orleans, LA 70130

Jeffery D. Cantin  
Gulf States Renewable Energy Industries Association  
400 Poydras St.  
Suite 900  
New Orleans, LA 70130

Monique Harden  
Deep South Center for Environmental Justice  
3157 Gentilly Boulevard  
Suite 145  
New Orleans, LA 70122

Andreaneia Morris  
Trayshawn Webb  
Greater New Orleans Housing Alliance  
4640 S. Carrollton Avenue  
Suite 160  
New Orleans, LA 70119
Elizabeth Galante  
Ben Norwood  
PosiGen  
819 Central Avenue  
Suite 201  
Jefferson, LA 70121

Katherine Hamilton  
Advanced Energy Management Alliance  
1200 18th St. NW  
Suite 700  
Washington DC 20036

Cliff McDonald  
Jeff Loiter  
Optimal Energy  
10600 Route 116  
Suite 3  
Hinesburg, VT 05461

New Orleans, Louisiana, this 31st day of August, 2018.

[Signature]

Harry M. Barton