Gainesville Regional Utilities Authority AGENDA



Wednesday, February 7, 2024, 5:30 p.m. GRU Administration Building 301 SE 4th Avenue Gainesville, FL 32601

> <u>Authority Members</u> Craig Carter - Chair James Coats, IV - Vice-Chair Robert Karow - Member Eric Lawson - Member Vacant

If you have a disability and need accommodation in order to participate in this meeting, please call (352) 334-5051 at least two business days in advance. TTY (Text Telephone Telecommunication Device) users please call 711 (Florida Relay Service). For Speech to Speech (STS) relay, please call 1-877-955-5334. For STS Spanish relay, please call 1-877-955-8773. For STS French Creole relay, please call 1-877-955-8707.

### A. CALL TO ORDER

Agenda Statement: The Gainesville Regional Utilities Authority encourages civil public speech. The Gainesville Regional Utilities Authority expects each person entering this chamber to treat others with respect and courtesy. Speakers are expected to focus on agenda items under discussion. Signs, props, posters, food, and drinks should be left outside the auditorium.

- B. ROLL CALL
- C. INVOCATION Pastor Chipper Flaniken, City Church
- D. PLEDGE OF ALLEGIANCE
- E. CHAIR COMMENTS
- F. GENERAL PUBLIC COMMENT (for items not on the agenda, not to exceed 30 minutes total)
- G. ADOPTION OF THE AGENDA Includes Consent and Regular Agenda Items
- H. APPROVAL OF MINUTES
  - 1. Approval of Minutes from the January 17 2024 Meeting
- I. CONSENT AGENDA
  - 1. 2024-116 Lift Station 1 Improvements (B) Department: GRU Water Wastewater / Procurement.

**Description:** This item is seeking approval to proceed with a construction contract for Lift Station No. 1 Improvements.

**Fiscal Note:** The funds for this project are included in the FY24-FY26 Water/Wastewater budget and are partially funded by the Resilient Florida Grant Program. The vendor being selected, SGS Contracting Services, Inc., will cost \$4,722,700 to complete this project per the procurement bidding process.

**Recommendation:** The GRU Authority authorize the CEO/General Manager, or his designee, to negotiate and execute a contract with SGS Contracting Services for Lift Station No. 1 Improvements for the price of \$4,722,700, subject to legal review and approval.

- J. CEO/GM COMMENTS
- K. ATTORNEY COMMENTS

### L. BUSINESS DISCUSSION ITEMS

### 1. 2024-114 IRP Introduction and Preliminary Results (B) Department: GRU/Sustainability

**Description:** Staff will present an overview of the current electric system and an introduction to the current Integrated Resource Plan (IRP) process

Fiscal Note: None

**Recommendation:** Hear staff presentations on the Integrated Resource Plan process and preliminary results and market overview presentation from TEA.

2. 2024-115 Agreements and Associations (B) Department: CEO/GM Office

**Description:** GRU maintains several formal and informal agreements and associations with General Government (GG). The utility continues to evaluate which can be modified or eliminated to adhere to HB-1645 and evaluating cost-effectiveness.

**Fiscal Note:** The presentation identifies a number of areas where GRU can potentially reduce expenses and raise revenue by changing its current agreements or associations. In some cases, the potential exists to lose revenue and increase expenses. The overall goal is to ensure services are properly being billed and paid

**Recommendation: 1.)** Implement Phase 2 plan to modify relationships: IT, network connectivity, Connect Free, streetlights and FY24 service reductions. **2.)** Evaluate Phase 3, which includes obtaining the most cost-effective services with the highest value and determining whether the best source is internal, external or GG.

### 3. 2024-137 Escrow for Government Services Contribution (GSC) (NB) Department: GRU Authority Board, Vice Chair Coats

**Description:** The Vice Chair of the GRU Authority Board is recommending that the Gainesville Regional Utilities (GRU) Authority Board discuss the possibility of escrowing scheduled payments for the Government Services Contribution (GSC).

Fiscal Note: None at this time

Recommendation: GRU Authority members discuss and recommend next steps.

#### M. MEMBER COMMENT

N. ADJOURNMENT



**Gainesville Regional Utilities Authority** 

MINUTES

### January 17, 2024, 5:30 p.m. GRU Administration Building 301 SE 4th Avenue Gainesville, FL 32601

Members Present:

Chair Craig Carter, Vice-Chair James Coats, IV, Robert Karow, Eric Lawson

### A. CALL TO ORDER

Chair Craig Carter called the meeting to order at 5:30pm

Chair Craig Carter joined the meeting at 5:30 pm.

Vice-Chair James Coats, IV joined the meeting at 5:30 pm.

Robert Karow joined the meeting at 5:30 pm.

Eric Lawson joined the meeting at 5:30 pm.

### B. ROLL CALL

C. INVOCATION

Chair Craig Carter provided the invocation

### D. PLEDGE OF ALLEGIANCE

### E. GENERAL PUBLIC COMMENT

Prior to General Public Comment the Chair provided comments.

Public Comment:

Jim Konish, Anthony Johnson, Debbie Martinez, Tanna Silva, Bob Chewning, Jo Beatty, Nancy Deren, Ernesto Martinez, Tom Cunilio, Kimpope Joy, Angela Casteel, Rachel Ryan, Bobby Mermer, Lee Scott

### F. ADOPTION OF THE AGENDA

**Public Comment** 

Debbie Martinez, Jim Konish, Jo Beatty, Bobby Mermer, Kolee Blunt (name was inaudible), Donald Shepherd, Ernesto Martinez

Moved by Robert Karow Seconded by Vice-Chair Coats

**Motion**: Move the Power District Overview Item (#2024-67) to the end of the agenda.

Aye (4): Chair Carter, Vice-Chair Coats, Robert Karow, and Eric Lawson

Approved (4 to 0)

### G. APPROVAL OF MINUTES

No Public Comment was given.

The board did not provide comments.

Moved by Eric Lawson Seconded by Robert Karow

Motion: Approval of the Minutes

Aye (4): Chair Carter, Vice-Chair Coats, Robert Karow, and Eric Lawson

Approved (4 to 0)

#### H. CEO/GM COMMENTS

The CEO/GM, Tony Cunningham, addressed a question from a citizen and provided additional comments.

### I. ATTORNEY COMMENTS

The attorney, Scott Walker, provided some comments.

Chair Craig Carter left the meeting at 10:07 pm.

Vice-Chair James Coats, IV left the meeting at 10:07 pm.

Robert Karow left the meeting at 10:07 pm.

Eric Lawson left the meeting at 10:07 pm.

### J. BUSINESS DISCUSSION ITEMS

### 1. 2024-73 GRU CEO/GM Search (NB)

Member Lawson introduced the item.

The board discussed the item.

The item was brought back to the board for discussion.

Public Comment:

Jim Konish, Chuck Ross, Austin Key, Nancy Deren, Anthony Johnson, Kimpope Joy

Chair Carter spoke to the item.

Moved by Robert Karow Seconded by Vice-Chair Coats

**Recommendation:** Board to discuss and provide continued plan of action.

**Motion 1:** Move the CEO/GM Search Item (#2024-73) to the 4th item, following the GSC.

Aye (4): Chair Carter, Vice-Chair Coats, Robert Karow, and Eric Lawson

Approved (4 to 0)

Moved by Robert Karow Seconded by Vice-Chair Coats

**Motion 2:** To continue the CEO/GM search with the vendor Mycoff-Fry up toward \$100,000 (\$90,000 for the search and \$10,000 for travel of the candidates), and a total of \$480,000 if you include severance, PTO, etc.

Aye (3): Chair Carter, Vice-Chair Coats, and Robert Karow

Nay (1): Eric Lawson

Approved (3 to 1)

#### 2. 2024-67 Power District Overview (B)

Moved by Vice-Chair Coats Seconded by Robert Karow

**Recommendation:** 1.) Authorize staff to issue a Request for Proposal (RFP) for a real estate brokerage firm to a) provide guidance for identifying the most advantageous method of liquidating the unused property; and b) upon approval of the methodology, provide services necessary to market and sell the property. 2.) Authorize staff to issue an RFP for the development of a space-needs assessment for operations currently housed in the Administration Building.

Motion: Move the Power District Item to 3/6 GRUA meeting.

### Withdrawn

### 3. 2024-70 City Services Reduction (B)

The CEO/GM, Tony Cunningham, introduced the item.

The board discussed the item.

Public Comment (1st Motion):

Jo Beatty, Angela Casteel, Jim Konish, Cynthia Curry, Donald Shepherd, Mike Cook, Coulder Halloway, Ernesto Martinez, Anthony Johnson, Nancy Deren, Kimpope Joy, Debbie Martinez, Bobby Mermer

Public Comment (2nd Motion):

Jim Konish, Windy Wood, Donald Shepherd, Debbie Martinez, Bobbie Mermer, Chuck Ross, Jane Kupfer, Steve Varvel, Tyler Forrest

Moved by Vice-Chair Coats Seconded by Eric Lawson

**Motion 1:** Permission for Chair Carter and CEO/GM Tony Cunningham to discuss the item (#2024-70) with the Charter Officers

Aye (4): Chair Carter, Vice-Chair Coats, Robert Karow, and Eric Lawson

Approved (4 to 0)

Moved by Robert Karow Seconded by Vice-Chair Coats

**Motion 2:** Reduce the FCAP by \$180,906 per month starting February 2024 Continue to evaluate all services and make recommendations for FY25 budget

Aye (3): Chair Carter, Vice-Chair Coats, and Robert Karow

Nay (1): Eric Lawson

Approved (3 to 1)

### 4. 2024-69 Impact of GSC Alternatives on Rates and Debt Reduction (B)

GRU's External Legal Counsel, Scott Walker, introduced the item.

The CEO/GM, Tony Cunningham, introduced the item.

The Director of Accounting and Finance for Utilities, Mark Benton, spoke to the item.

The CEO/GM, Tony Cunningham, added some additional content on the item.

The Board discussed the item and the motion made by Member Karow.

The Attorney spoke to the board's discussion.

Public Comment:

Coulder Halloway, Alex Hood, Jenn Powell, Angela Casteel, Chuck Roth, Austin Key, Marilyn Eisenberg, Bobby Mermer, Windy Wood, Jane Kupfer, Natalie Nandelstadt, Nancy Deren, Jim Konish, Anthony Johnson, Kolee Blunt (Name was inaudible), Tyler Forrest

Chair Carter addressed the item.

Moved by Robert Karow

Motion 1: Reduce the GSC by 100%

Died for lack of second

Moved by Vice-Chair Coats Seconded by Eric Lawson

**Recommendation**: The GRU Authority receive a presentation on alternate GSC scenarios, discuss and take any action deemed appropriate.

**Motion 2**: Have a joint City of Gainesville/GRU Authority meeting within the next 45 days.

Aye (3): Chair Carter, Vice-Chair Coats, and Eric Lawson

Nay (1): Robert Karow

Approved (3 to 1)

### 5. 2024-68 Integrated Resource Plan (B)

The Board discussed the item at hand.

Public Comment:

Jim Konish

Moved by Vice-Chair Coats Seconded by Robert Karow

**Recommendation:** Hear staff presentation on the Integrated Resource Plan process and market overview presentation from TEA.

**Motion:** Move the IRP item to the 2/7 GRUA meeting and the Power District Item to 3/6 GRUA meeting.

#### <u>Withdrawn</u>

### K. MEMBER COMMENT

Member Lawson provided a comment regarding the format of the meetings and agenda reviews.

Member Karow provided a comment.

### L. ADJOURNMENT

Adjourned at 10:07pm.

Christine Kunkel, GRU Authority Clerk



#### File Number: 2024-116

Agenda Date: February 7, 2024

**Department:** Gainesville Regional Utilities

Title: 2024-116 Lift Station 1 Improvements (B)

Department: GRU Water Wastewater / Procurement.

**Description:** This item is seeking approval to proceed with a construction contract for Lift Station No. 1 Improvements.

**Fiscal Note:** The funds for this project are included in the FY24-FY26 Water/Wastewater budget and are partially funded by the Resilient Florida Grant Program. The vendor being selected, SGS Contracting Services, Inc., will cost \$4,722,700 to complete this project per the procurement bidding process.

### Explanation:

Gainesville Regional Utilities (GRU) owns and operates Lift Station No. 1 (LS No. 1), which collects raw wastewater and conveys it to the Kanapaha Water Reclamation Facility (KWRF). Lift Station No. 1 is located at 3311 SW 2nd Avenue, Gainesville, FL 32601 and serves most of the gravity collection area north of the University of Florida Campus between 34<sup>th</sup> St and 13<sup>th</sup> St. In order to accommodate current peak and future flows, LS No. 1 will be upgraded from 75 HP pumps to 140 HP pumps. In conjunction with the larger pumps, a new electrical building, electrical equipment, control system, piping, and site work will also be included in this project. This project is funded in part by the Resilient Florida Grant Program.

GRU Procurement issued an Invitation To Bid (ITB) for the improvements to prospective firms and posted the ITB to OpenGov. Three responses were received and are shown on the attached bid tabulation. The contract award will be made to the lowest, responsive, responsible Respondent.

**Recommendation:** The GRU Authority authorize the CEO/General Manager, or his designee, to negotiate and execute a contract with SGS Contracting Services for Lift Station No. 1 Improvements for the price of \$4,722,700, subject to legal review and approval.



BID TABULATION

ADMINISTRATIVE SERVICES

#### Lift Station# 1 Improvements

ITB No. 2024-017

#### TOTAL BID

| Oelrich Construction, Inc.      | \$ 5,998,928.00 |
|---------------------------------|-----------------|
| Sawcross, Inc.                  | \$ 5,187,000.00 |
| SGS Contracting Services, Inc.* | \$ 4,722,700.00 |

\*Recommended Award

A copy of each bid is on file in Utilities Purchasing and is available for inspection.

Prepared by:

Annie Velez Procurement Specialist III



#### File Number: 2024-114

Agenda Date: February 7, 2024

**Department:** Gainesville Regional Utilities

Title: 2024-114 IRP Introduction and Preliminary Results (B)

**Department:** GRU/Sustainability

**Description:** Staff will present an overview of the current electric system and an introduction to the current Integrated Resource Plan (IRP) process

#### Fiscal Note: None

**Explanation:** The IRP is a strategic planning tool used by utilities to study different options to meet the future generation needs of its system. GRU has completed its preliminary economic modeling in the current IRP process. These presentations will give an introduction and overview of the current electric system dynamics and the current IRP process and provide a summary of the preliminary economic modeling results. GRU staff will be working with the Board over the next several months to develop a strategy and plan to meet future power needs for our customers. In addition, a representative from The Energy Authority (TEA) will provide a power generation market overview for discussion.

**Recommendation:** Hear staff presentations on the Integrated Resource Plan process and preliminary results and market overview presentation from TEA.



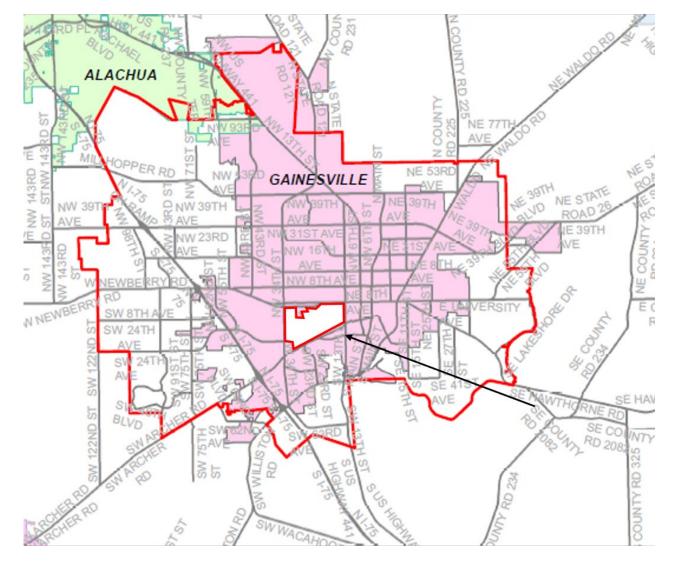
# GRU Electric Integrated Resource Plan (IRP) – Part 1 Executive Summary

Page 13 of 191

# **IRP Process Overview**

| 1. IRP Goals   | 2. Inputs &<br>Assumptions   | 3. Resource<br>Needs  | 4. Evaluate<br>Alternatives   | 5. Develop<br>Preferred Plan  | 6. Implement<br>Preferred Plan<br>(Action Steps)   |
|--|--|---|---|---|--|
| <ul> <li>-Set primary goals<br/>for IRP</li> <li>-What do you want<br/>to accomplish?</li> <li>-Develop an<br/>actionable, cost-<br/>effective plan to<br/>meet future electric<br/>needs</li> </ul> | -Build model to<br>accurately reflect<br>current GRU system:<br>•Plant capacities<br>•Unit Performance<br>•Costs (Fixed and Variable<br>O&M)<br>•Input Forecasts:<br>•System Load<br>•Fuel Prices<br>•Financial (interest,<br>inflation, etc.)<br>•Describe New<br>Resource Options:<br>•Capital Costs<br>•Operating Costs<br>•Performance Details | <ul> <li>PLEXOS Model:</li> <li>Input allowances and constraints that account for real world</li> <li>Evaluates gaps in required generation capacity</li> <li>Fills gaps by providing resource portfolio with the lowest life-cycle costs</li> <li>Chronological listing of resource additions</li> <li>This resource mix becomes the baseline against which all others are compared</li> </ul> | <ul> <li>-Multiple scenarios<br/>and sensitivities are<br/>run through the<br/>model</li> <li>-Outputs are<br/>compared against<br/>the baseline for<br/>resource mix<br/>changes and cost<br/>changes</li> <li>-Evaluation and<br/>comparison of<br/>differing outputs<br/>yields valuable<br/>insights</li> </ul> | After PLEXOS model<br>is complete:<br>• GRU team weighs the<br>performance of a given<br>model output against a<br>variety of futures<br>• Many factors are<br>reviewed including:<br>• Cost<br>• Organization Financial<br>Constraints<br>• Reliability<br>• Technology advantages<br>• Timing<br>• GRU teams builds a<br>preferred resource plan<br>that is technically and<br>economically feasible for<br>the organization<br>• Preferred Plan is brought<br>to board for input and<br>approval | <ul> <li>-Develop and<br/>execute steps to<br/>implement Preferred<br/>Plan</li> <li>-Action Steps could<br/>include (among<br/>others):</li> <li>•Developing technical<br/>equipment specifications</li> <li>•Engineering and<br/>Equipment Vendor RFPs</li> <li>•Construction</li> <li>•Executing Purchase<br/>Power Agreements</li> </ul> |
|  |  |   |   |   |  |

## GRU's Electric Service Territory

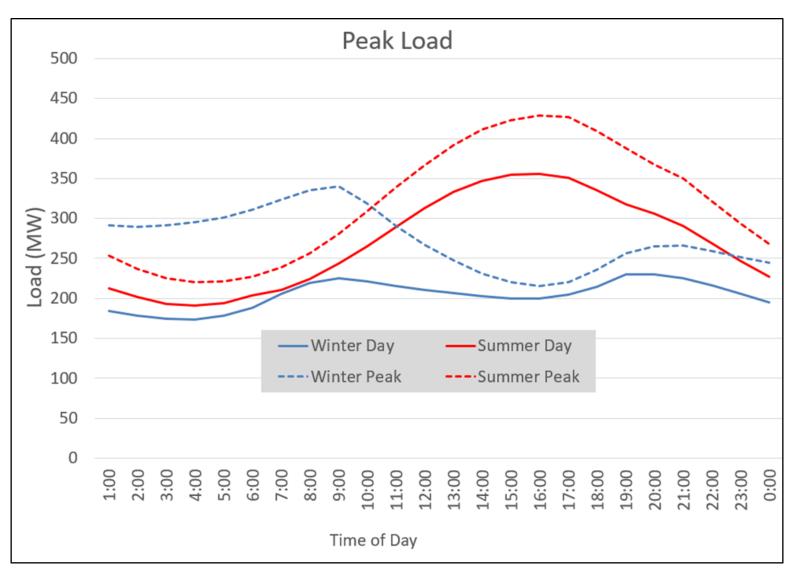








### **Peak Load Variation**







### **How GRU Manages Its Energy Portfolio**

Balanced, diverse, economic portfolio ensures power needs met reliably and cost effectively

- Baseload and Intermediate Units
  - Relatively higher efficiency
  - Slow start-up and shut-down times
- Firming (Peaking) Units
  - Lower efficiency
  - Fast start
- Intermittent (solar)
  - Take power when it is generated
- Power Trading









# **Overview of GRU Energy Supply**

| Plant                | Unit Number | Fuel Types           | Expected Retirement | Contribution to<br>Summer Peak<br>Demand (MW) |
|----------------------|-------------|----------------------|---------------------|---|
| John R. Kelly        | CC1         | Natural Gas          | 12/2051             | 112   |
| Deerhaven            | DH1         | Natural Gas / #6 oil | *12/2027            | 76  |
| Deerhaven            | DH2         | Natural Gas / coal   | 12/2031             | 232   |
| Deerhaven            | CT1         | Natural Gas / diesel | *12/2026            | 17.5  |
| Deerhaven            | CT2         | Natural Gas / diesel | *12/2026            | 17.5  |
| Deerhaven            | CT3         | Natural Gas          | 12/2046             | 71  |
| South Energy Center  | SEC1        | Natural Gas          | 12/2039             | 3.8   |
| South Energy Center  | SEC2        | Natural Gas          | 12/2047             | 7.4   |
| Deerhaven Renewables | DHR         | Biomass              | 12/2043             | 102.5   |
| Sand Bluff Solar     | -           | -                    | 12/2044             | 27  |

\*Unit expected to retire in next 5 years





- GRU is a "Balancing Authority"
  - 60 balancing authorities in US
  - Monitor power load and supply to ensure continuous balance
  - Start, stop, "ramp up", or "ramp down" generating units
  - Import or export power from grid Power Trading
- The owner of the load is responsible for balancing
  - Load = Customers
  - Load Balancing
    - Can be done by the owner
    - Can be outsourced to another vendor at the cost of the owner





E Load Balancing

# **Buying & Selling Power (continued)**

### Example: 50 MW (Peak) Dispatchable PPA in 2028

| Size (MW)                              |         | 50         |
|--|---------|------------|
| Capacity Factor                        |         | 50%        |
| Annual Energy (MWh)                    |         | 219,000    |
| Capacity (\$/kW-month)                 | \$      | 7.28       |
| Variable O&M (\$/MWh)                  | \$      | 1.68       |
| Heat Rate (Btu/kWh)                    |         | 7,000      |
| Delivered Natural Gas Cost (\$/MMBtu)  | \$      | 4.87       |
| Gas Capacity Reservation Charge (\$/MM | Btu) \$ | 0.62       |
| Total Natural Gas Cost (\$/MMBtu)      | \$      | 5.49       |
| Wheeling Cost (\$/kW-month)*           | \$      | 2.99       |
|  |         |            |
| Annual Capacity Cost (\$)              | \$      | 4,369,611  |
| Annual Variable O&M Cost (\$)          | \$      | 368,056    |
| Annual Fuel Cost (\$)                  | \$      | 8,416,170  |
| Annual Wheeling Cost (\$)              | \$      | 1,794,000  |
| Total Cost                             | \$      | 14,947,837 |
|  |         |            |
| Total Cost per MWh                     | \$      | 68.25      |

\*Wheeling charges for the IRP were based upon FPL's tariffed transmission rate in 2023 of \$2.67/kW-month. FPL increased this rate to \$3.77/kW-month on 1/1/24. Escalated at 2.3% per year through 2028 for this example, this charge would be \$4.13/kW-month, or an annual cost increase of \$684,000.







- Assessment of future energy needs
- Evaluation of energy supply portfolios for meeting those needs
  - Reliable and compliant with all applicable regulations
  - Cost-Effective
  - Mitigate risks
- Plan satisfies energy needs over 25+ year horizon
- Road map for decision making
  - Drives actionable decisions over next ~5 years
- Industry Best Practice
  - Typically conducted every ~3-5 years
  - Reflect changes in technology, costs, industry trends, etc.

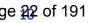






- Assumed GRU will be the power provider
  - Generated
  - Purchased
- Baseline is best estimate of future conditions
  - Minimal constraints
  - Not based on net-zero resolution
- Only 1 sensitivity has net-zero resolution
- All sensitivities and scenarios look at the lowest cost









- Several Deerhaven units nearing end-of-life
  - Additional resources needed to meet demands and comply with NERC standards
- Energy resource portfolio must be reliable, operable, and meet all regulatory standards
  - Meet peak demand with largest unit out of service "N-1" (NERC-TPL-001-4)
- Rate and debt concerns
- Lower fuel and O&M costs with newer units and technologies
- Evolving technologies
  - Plan must be based on commercially available technologies but allow flexibility for future technology shifts







### **PLEXOS Model**

### **Energy Demand**

- Peak demand
- Energy
- Hourly demand over year

### **Resource Alternatives**

- Capital costs
- Fixed & Variable O&M costs

12

- Heat rates
- Dispatchability

### Energy Costs

- Fuel prices
- PPA costs
- Transmissio
   n costs
- Financial

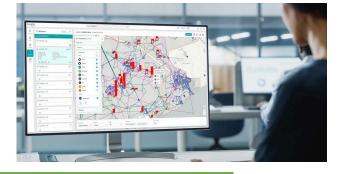
  Inflation

  - rate
- Bond rate
- Discount rate

### Constraints

- Reliability
- Plant retirements
- Transmission capacity
- Operability
- Other scenario/sensitivityspecific





### Outputs

- Lowest lifecycle cost portfolio
- Timeline for resource additions
- Emissions



Page 24 of 191





- NPV used to compare lifecycle costs
- Industry standard metric evaluating cash flows over the lifetime of an investment
- Captures costs of serving energy requirements over the IRP study period (through 2050)
- Accounts for time value of money by applying a "discount rate" to future investments
- Allows comparison of alternatives with different cash flows





# **Thank you!**



Page 26 of 191

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# **Appendix**



Page 27 of 191

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### **Part I: Background Information**

- Electricity Basics
- Bulk Electric System (BES) Overview
- How Power is Produced
- Overview of GRU Energy Supply (Generating Units)
- Overview of GRU Energy Delivery (Transmission Assets)
- Load Balancing
- Buying and Selling Power
- IRP Process
- GRU Stakeholder and Community Engagement Approach

### **Part: II: Preliminary IRP Results**







Outline

# **Electricity Basics**

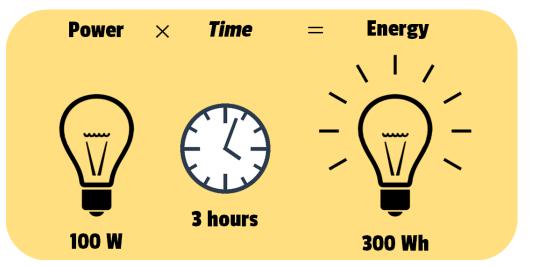
### Demand (Power)

- Watt = unit of power
- 1 Kilowatt (kW) = 1,000 Watts
- 1 Megawatt (MW) = 1 Million Watts
- GRU peak demand (2023) = 409 MW

### Energy (Power Consumed)

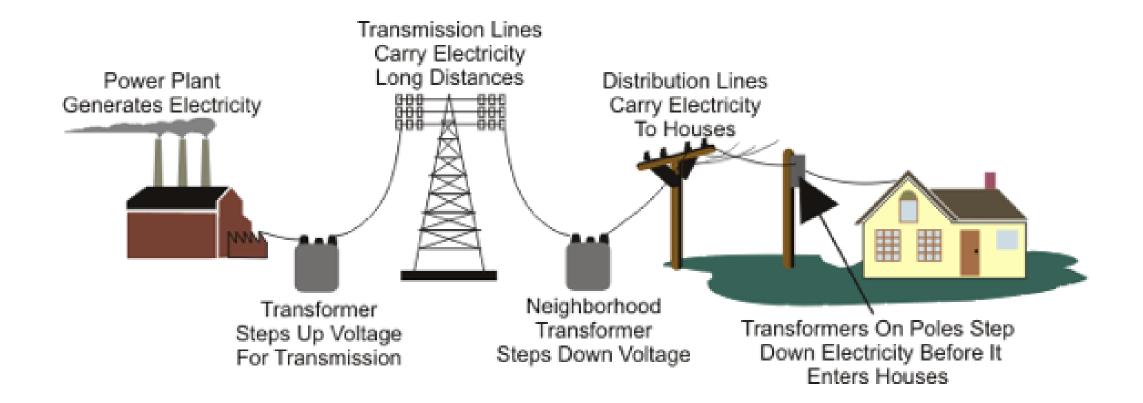
- Kilowatt hour (kWh) = kW x hours
- Average residential customer uses ~850 kWh/month
- GRU supplies total of 2 Million MWh of electricity/year







### Bulk Electric System (BES) Overview







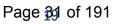


## How Power is Produced

- Fuel Types
  - Natural Gas
  - Liquid Fuels (diesel, #6 fuel oil, etc.)
  - Coal
  - Biomass
  - Other (nuclear, hydrogen, etc.)
- Generation Types
  - Conventional steam turbine
  - Combustion turbine (CT)
  - Reciprocating Internal Combustion Engine (RICE)
  - Combined-Cycle (combustion turbine w/ steam turbine)
  - Utility-scale Solar
  - Other (wind, hydro, nuclear, geothermal)









# **Overview of GRU Energy Supply**

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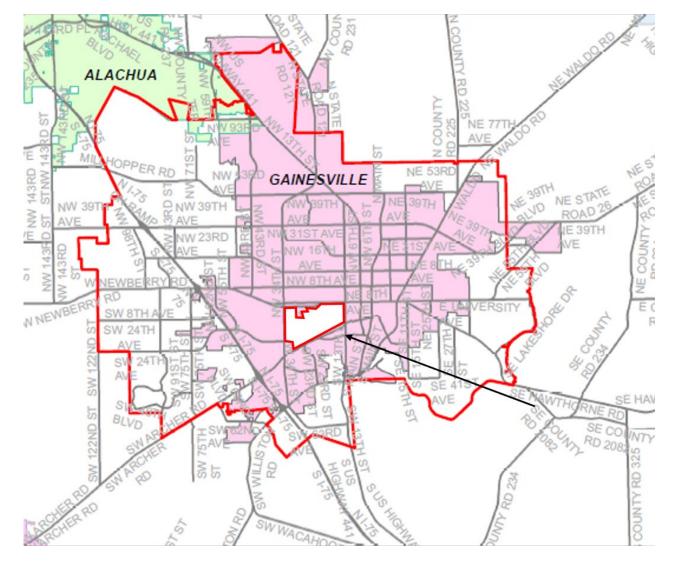
## Generation Types Modeled in IRP

|       | Supply-Side Resource                      | Description                                   | Finance<br>Period<br>Years | Max.<br>Capacity<br>Summer Net<br>MW | Net Full Load<br>Heat Rate<br>Summer<br>Btu/kWh | Capital Costs<br>2023 \$, Millions | Capital Costs<br>2023 \$ per kW,<br>Summer |
|-------|---|---|----------------------------|--------------------------------------|---|------------------------------------|--|
|       |   | NGCC - Siemens SGT-800 1x1                    | 30                         | 74.7                                 | 7,172   | \$162.3                            | \$2,173                                    |
|       | Combined Cycle                            | NGCC - Siemens SGT-800 2x1                    | 30                         | 143.5                                | 7,172   | \$320.9                            | \$2,236                                    |
|       | Combustion Turbine                        | NGCC - Siemens SGT-800 3x1                    | 30                         | 224.0                                | 7,172   | \$471.7                            | \$2,106                                    |
|       | Simple Cycle Combustion<br>Turbine        | Kelly Inlet Air Chilling                      | 20                         | 10.0                                 | N/A   | \$10.5                             | \$1,051                                    |
|       |   | Siemens SGT-800                               | 30                         | 52.4                                 | 9,818   | \$83.9                             | \$1,601                                    |
|       |   | 3 x Solar Titan 250                           | 30                         | 52.6                                 | 10,851  | \$97.2                             | \$1,849                                    |
|       |   | 1 x Solar Titan 250                           | 30                         | 17.5                                 | 10,851  | \$32.4                             | \$1,849                                    |
| ed    |   | 1 x Solar Titan 350                           | 30                         | 29.5                                 | 10,619  | \$41.3                             | \$1,401                                    |
| U Own |   | 2 x General Electric<br>LM2500+G4             | 30                         | 55.9                                 | 10,358  | \$123.7                            | \$2,213                                    |
| GR    | Reciprocating Internal                    | RICE - MAN 3x20 MW                            | 30                         | 59.0                                 | 8,680   | \$94.7                             | \$1,605                                    |
|       | Combustion Engine                         | RICE - MAN 1x20 MW                            | 30                         | 19.7                                 | 8,680   | \$31.6                             | \$1,605                                    |
|       | Nuclear[(Small Modular<br>Reactors (SMR)] | Participant in 600 MW<br>SMR project          | 40                         | 100.0                                | 10,447  | \$865.3                            | \$8,653                                    |
|       | Biomass                                   | Steam Turbine Fueled with<br>Urban Waste Wood | 30                         | 30.0                                 | 13,500  | \$155.4                            | \$5,180                                    |





## GRU's Electric Service Territory



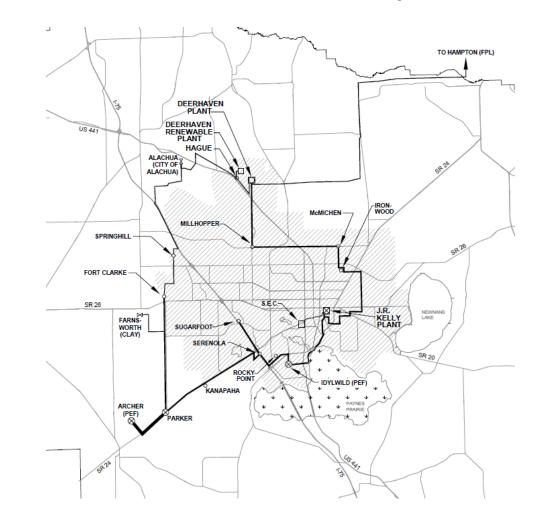






Overview of GRU Energy Delivery (Transmission Assets)

- 230 kV radial and a 138 kV loop connecting the following:
  - 3 primary generating stations
  - 11 distribution substations
  - 1x 230 kV and 1x 69 kV tie with Duke Energy Florida (DEF)
  - 138 kV intertie with Florida Power and Light Company (FPL)
  - Interconnection with Clay at Farnsworth Substation
  - Interconnection with the City of Alachua at Alachua No. 1 Substation







### How GRU Manages Its Energy Portfolio

Balanced, diverse, economic portfolio ensures power needs met reliably and cost effectively

- Baseload and Intermediate Units
  - Relatively higher efficiency
  - Slow start-up and shut-down times
- Firming (Peaking) Units
  - Lower efficiency
  - Fast start
- Intermittent (solar)
  - Take power when it is generated
- Power Trading











- Natural gas curtailment periods
- Variable weather conditions
- Planned and unplanned outages

**Regulatory Requirements** 

- North American Energy Reliability Corporation (NERC)
- Florida Energy Regulatory Commission (FERC)
- Florida Reliability Coordinating Council, Inc. (FRCC)

NERC

- Strict standards governing reliability & security (including cybersecurity)
- Reporting and audits to verify compliance





E Load Balancing

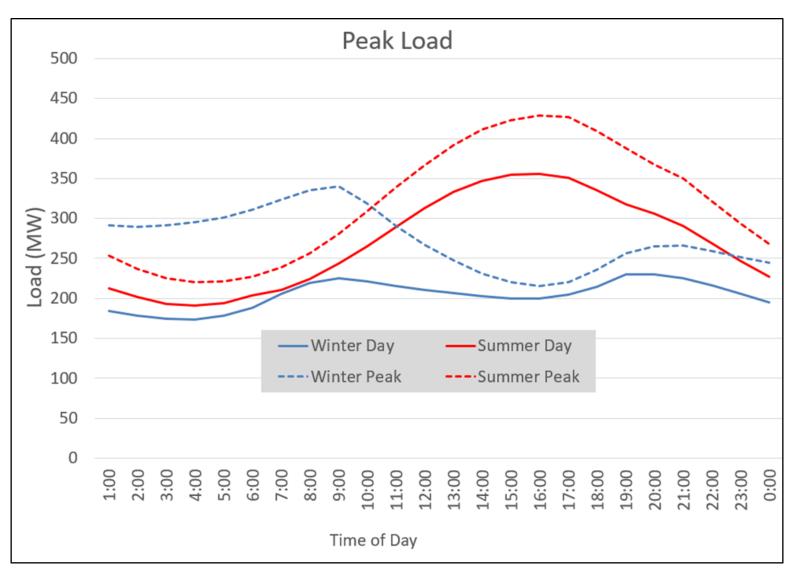
- GRU is a "Balancing Authority"
  - 60 balancing authorities in US
  - Monitor power load and supply to ensure continuous balance
  - Start, stop, "ramp up", or "ramp down" generating units
  - Import or export power from grid Power Trading
- The owner of the load is responsible for balancing
  - Load = Customers
  - Load Balancing
    - Can be done by the owner
    - Can be outsourced to another vendor at the cost of the owner





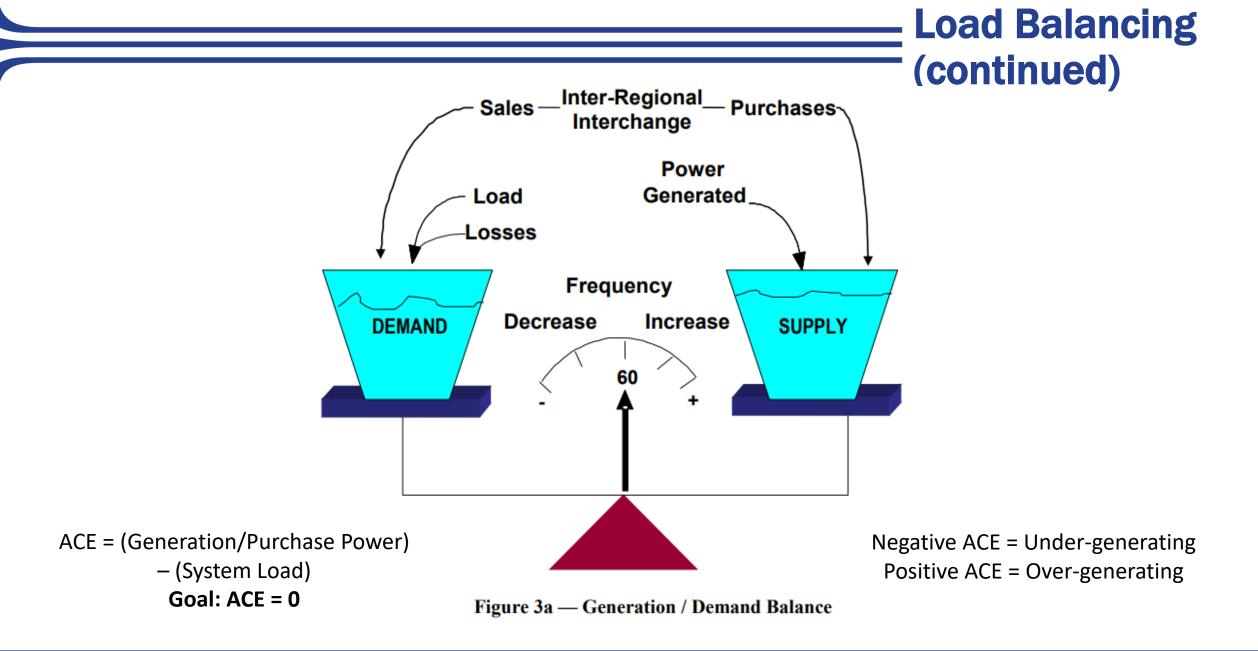
E Load Balancing

## **Peak Load Variation**













- Buying & Selling Power
  - GRU has transmission ties with FPL & Duke
  - GRU purchases and sells power over these ties
    - GRU purchases and sells power from utilities across the southeast
  - GRU participates in multiple power markets
    - Southeast Energy Exchange Market (SEEM): 15-minute intervals
    - Hourly market
    - Day-ahead market
    - Special short-term (a week or more) deals (outages, economic opportunities, etc.)
    - Long-term contracts (PPAs) (Winter Park, Alachua, Seminole, etc.)







- Transmission lines have limits over how much they can move
  - Transmission availability can vary hour-to-hour
  - Transmission can be reserved for long-term deals (if available)
- Transmission rates or "wheeling charges"
  - Charges associated with transferring purchased power over someone else's transmission lines
  - Rates are governed by the PSC and are nonnegotiable



**Buying & Selling** 

**Power (continued)** 





Buying & Selling Power (continued)

Long-term Power Purchases (PPAs)

- Typically consist of capacity, non-fuel variable O&M, and fuel charges
  - Capacity and O&M charges can be fixed or escalating
  - Fuel charges are pegged to a heat rate (generating unit efficiency) and the delivered cost of natural gas each month
- Wheeling costs are additional and cumulative for the transmission systems the power flows across





## **Buying & Selling Power (continued)**

#### Example: 50 MW (Peak) Dispatchable PPA in 2028

| Size (MW)                                  | 50               |
|--|------------------|
| Capacity Factor                            | 50%              |
| Annual Energy (MWh)                        | 219,000          |
| Capacity (\$/kW-month)                     | \$<br>7.28       |
| Variable O&M (\$/MWh)                      | \$<br>1.68       |
| Heat Rate (Btu/kWh)                        | 7,000            |
| Delivered Natural Gas Cost (\$/MMBtu)      | \$<br>4.87       |
| Gas Capacity Reservation Charge (\$/MMBtu) | \$<br>0.62       |
| Total Natural Gas Cost (\$/MMBtu)          | \$<br>5.49       |
| Wheeling Cost (\$/kW-month)*               | \$<br>2.99       |
|  |                  |
| Annual Capacity Cost (\$)                  | \$<br>4,369,611  |
| Annual Variable O&M Cost (\$)              | \$<br>368,056    |
| Annual Fuel Cost (\$)                      | \$<br>8,416,170  |
| Annual Wheeling Cost (\$)                  | \$<br>1,794,000  |
| Total Cost                                 | \$<br>14,947,837 |
|  |                  |
| Total Cost per MWh                         | \$<br>68.25      |

\*Wheeling charges for the IRP were based upon FPL's tariffed transmission rate in 2023 of \$2.67/kW-month. FPL increased this rate to \$3.77/kW-month on 1/1/24. Escalated at 2.3% per year through 2028 for this example, this charge would be \$4.13/kW-month, or an annual cost increase of \$684,000.



Page 34 of 191





- Assessment of future energy needs
- Evaluation of energy supply portfolios for meeting those needs
  - Reliable and compliant with all applicable regulations
  - Cost-Effective
  - Mitigate risks
- Plan satisfies energy needs over 25+ year horizon
- Road map for decision making
  - Drives actionable decisions over next ~5 years
- Industry Best Practice
  - Typically conducted every ~3-5 years
  - Reflect changes in technology, costs, industry trends, etc.

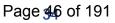






- Assumed GRU will be the power provider
  - Generated
  - Purchased
- Baseline is best estimate of future conditions
  - Minimal constraints
  - Not based on net-zero resolution
- Only 1 sensitivity has net-zero resolution
- All sensitivities and scenarios look at the lowest cost









- Several Deerhaven units nearing end-of-life
  - Additional resources needed to meet demands and comply with NERC standards
- Energy resource portfolio must be reliable, operable, and meet all regulatory standards
  - Meet peak demand with largest unit out of service "N-1" (NERC-TPL-001-4)
- Rate and debt concerns
- Lower fuel and O&M costs with newer units and technologies
- Evolving technologies
  - Plan must be based on commercially available technologies but allow flexibility for future technology shifts





## **IRP Technical Team**

- The Energy Authority (TEA) performing technical analysis
  - Input from GRU technical staff and 3rd party consultant, nFront Consulting
- TEA is a non-profit corporation that works on behalf of public power and other community owned organizations in the power and natural gas markets
  - Over 50 public power clients
  - GRU is 1 of 7 TEA owners, joining in 1999
  - GRU's CEO/GM is a Board member of TEA









- **IRP** Technical Team (continued)
- GRU utilizes many of TEA's services, including:
  - Bilateral energy trading
  - Natural gas trading
  - Portfolio management
  - Risk management
  - Advisory services
- TEA has completed over 20 IRPs for other municipal utilities
  - TEA worked with GRU to complete its 2016 and 2019 IRPs
- NFront Consulting
  - Electric Power industry planning services
  - Numerous IRPs for various sized municipal electric utilities
  - Assisting in stakeholder engagement







## **PLEXOS Model**

### **Energy Demand**

- Peak demand
- Energy
- Hourly demand over year

### **Resource Alternatives**

- Capital costs
- Fixed & Variable O&M costs

38

- Heat rates
- Dispatchability

### Energy Costs

- Fuel prices
- PPA costs

•

- Transmissio
   n costs
- Financial

  Inflation
  - Inflation
  - rate
- Bond rate
- Discount rate

### Constraints

- Reliability
- Plant retirements
- Transmission capacity
- Operability
- Other scenario/sensitivityspecific





### Outputs

- Lowest lifecycle cost portfolio
- Timeline for resource additions
- Emissions



Page 50 of 191



## Information Sources for Inputs to IRP

| <ul> <li>Energy Demand</li> <li>Peak demand</li> <li>Energy</li> <li>Hourly</li> </ul> | <ul> <li>Resource Alternatives</li> <li>Capital costs</li> <li>Fixed &amp; Variable O&amp;M costs</li> </ul> | <ul> <li>Energy Costs</li> <li>Fuel prices</li> <li>PPA costs</li> <li>Transmissio</li> </ul> | Financial <ul> <li>Inflation</li> <li>rate</li> <li>Bond rate</li> </ul> |
|--|--|---|--|
| demand over<br>year  | <ul> <li>Heat rates</li> <li>Dispatchability</li> </ul>  | n costs   | <ul> <li>Discount<br/>rate</li> </ul>                                    |

**UF** Bureau of Economic and Business Research UNIVERSITY of FLORIDA



## Sargent & Lundy





### **S&P Global** Commodity Insights



Page 51 of 191

39



Building Customer Trust Infrastructure Reliability

# IRP Process (continued)

### PLEXOS

- Specialized software used for IRP analysis
- Applies mixed integer programming to perform multi-operational decision optimization
- Replicates actual electric system operation with all technical constraints modeled and obeyed
- Solves for the lowest life-cycle cost resource portfolio that meets demand and energy needs on an hourly basis
- NERC regulations for reliability and reserve margin must be met
- Considers all costs for each resource portfolio option
  - Capital Outlays
  - Fixed and variable O&M
  - Fuel costs
  - PPA costs
  - Firming power required for utility scale solar





## **IRP Process** (continued)

- "Baseline"
  - Model inputs based on most likely anticipated future based on industry forecasts
  - PLEXOS solves for lowest lifecycle cost portfolio that meets energy needs
- Multiple "Scenarios" and "Sensitivities" also evaluated to account for other possible futures
  - 19 scenarios and sensitivities modeled
  - Achieving 2045 net-zero carbon emission per 2018 City Commission Resolution was only one of 15 sensitivities modeled (not part of the baseline)
- IRP provides a robust preferred resource plan that will mitigate risks across multiple futures and fit within debt defeasance plan









- NPV used to compare lifecycle costs
- Industry standard metric evaluating cash flows over the lifetime of an investment
- Captures costs of serving energy requirements over the IRP study period (through 2050)
- Accounts for time value of money by applying a "discount rate" to future investments
- Allows comparison of alternatives with different cash flows





### GRU Stakeholder and Community Engagement Approach

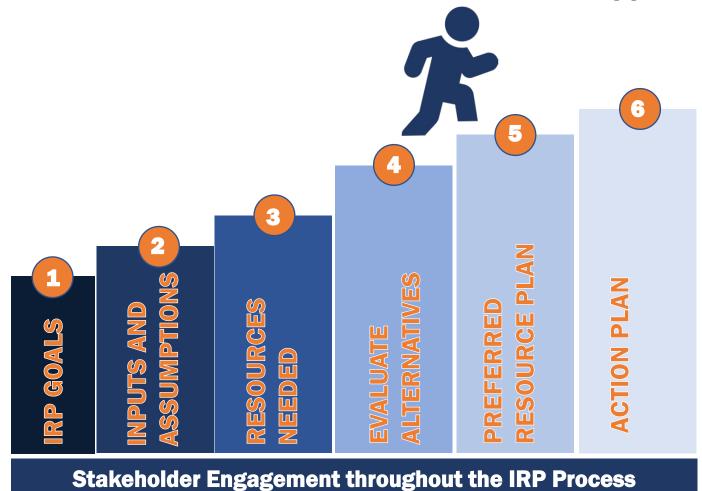
- Purpose
  - Educate and get input from broad cross-section of stakeholders with various interests
    - Business
    - Low Income customers
    - Environmental & civic
- Industry Best Practice
  - Facilitate buy-in of final plan
- Stakeholder Engagement/Public Outreach Team
  - Acuity Design Group (ADG)
  - nFront Consulting
  - TEA
  - GRU Staff
- Stakeholder Advisory Group
  - Initiated March 2023
  - Diverse group representing cross-section of interests and perspectives
  - 6 stakeholder technical meetings
- Community Engagement Meetings
  - 6 Meetings







GRU Stakeholder and Community Engagement Approach











- Development of Preferred Resource Plan
  - Develop Internally
  - January March
- Proposed Preferred Resource Plan to GRUA April 17
- Final Stakeholder Advisory Group and Community Meetings – May







**ENext Steps** 

Item#2024-114

# GRU Electric Integrated Resource Plan (IRP) PART 2 Executive Summary

Page 58 of 191



### Part I: Background

## **Part: II: Preliminary IRP Results**

- Summary of Scenarios and Sensitivities
- Transmission, Solar, and Battery Considerations
- Baseline Scenario Results
- Comparison of Results for Scenarios and Sensitivities
- Summary of Results
- Additional Sensitivities and Stress Tests
- Summary of Recent IRP Results from Other Utilities
- Next Steps







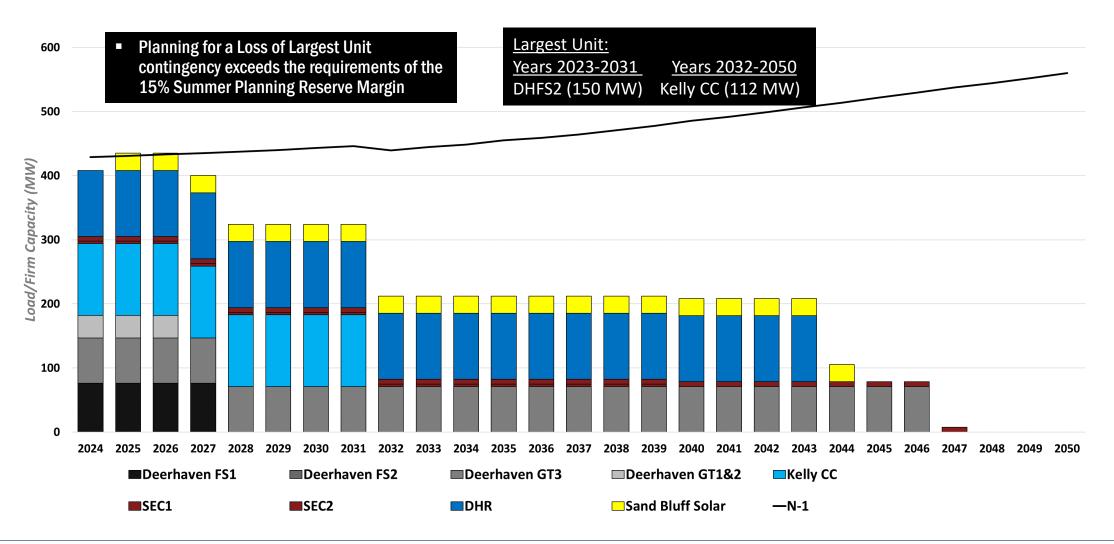
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- 7 scenarios and sensitivities evaluate effects of variations in economic conditions, load growth, fuel pricing
- 2 sensitivities evaluate potential benefit of extending life of Deerhaven Steam Turbine 2 (DHFS2)
- 9 additional sensitivities and stress tests







Peak Load and Capacity (N-1 Requirement) – No Resource Additions

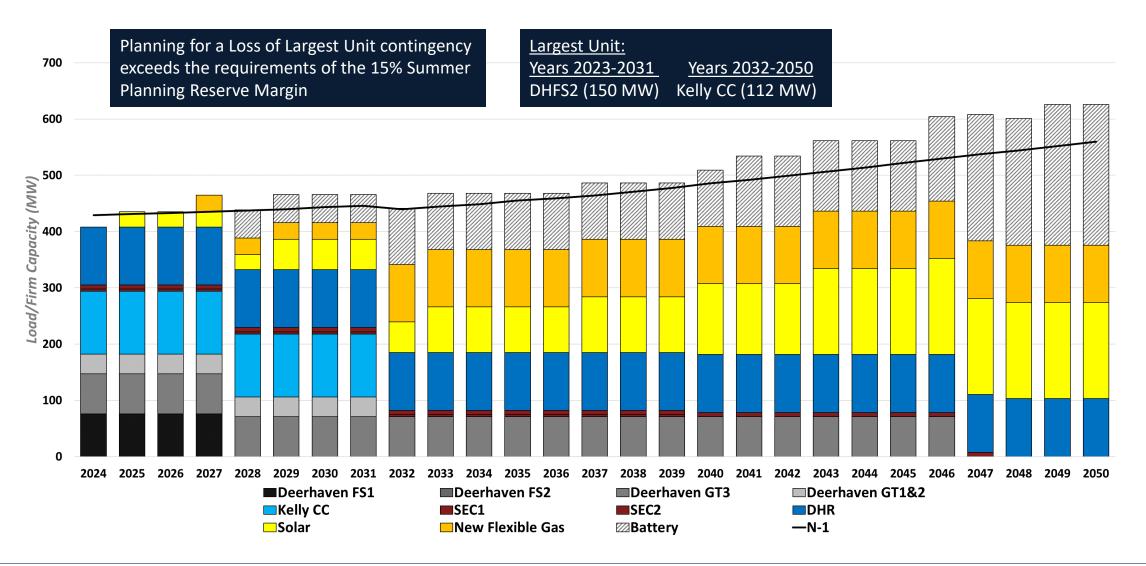




Page @1 of 191



Peak Load and Capacity (N-1 Requirement) - Baseline Scenario





Page 62 of 191

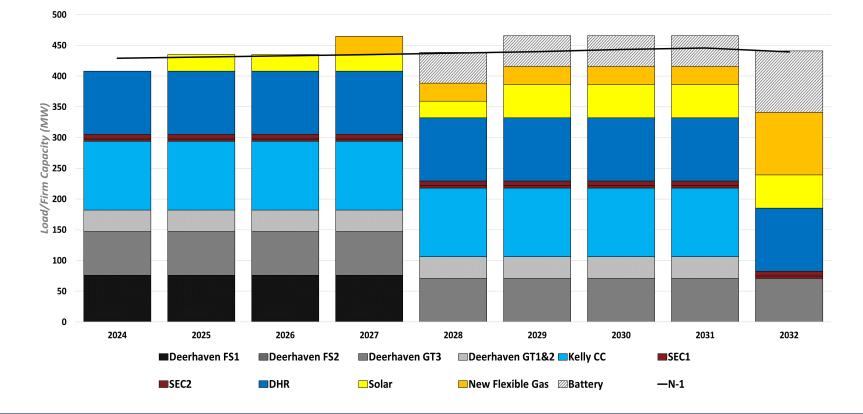


Building Customer Trust

**Peak Load and Capacity** (N-1) - Baseline Scenario 2024 - 2032

Planning for a Loss of Largest Unit contingency exceeds the requirements of the 15% Summer Planning Reserve Margin

Largest Unit: Years 2023-2031 Year 2032 DHFS2 (150 MW) Kelly CC (112 MW)





2025: Sandbluff Solar PPA (+27 MW)

**2027:** New Flexible Gas (+29.5 MW)

**2032:** New Flexible Gas (+72.4 MW)

**Battery (+50 MW)** 

**DHFS1 Retirement (-76 MW)** 

**DHFS2 Retirement (-232 MW)** 

DHGT1&2 Retirement (-35 MW)

**2028:** Battery (+50 MW)

**2029: Solar PPA (+27 MW)** 





**Building Customer Trust** 

- Additional Sensitivities and Stress Tests
  - **1.** Does utility-scale solar reduce overall cost?
    - No solar
    - High solar price (3 sensitivities)
  - 2. Would it be cheaper to rely on market power purchases and not build new GRU units?
    - Market reliance no new GRU generating units
    - Reduced capacity pricing for power purchase agreement (PPA)
  - 3. What would be the impacts of imposing environmental constraints?
    - 2018 resolution net-zero carbon emissions by 2045
    - Carbon tax (based on stakeholder request)
    - Reduced discount rate (based on stakeholder request)





## **Comparison of Preliminary Results**

|                                    | Resource Plan Cost                    |  |  | Capacity Added as of 2050 (MW) |       |             |                          |               |                 |
|------------------------------------|---------------------------------------|--|--|--------------------------------|-------|-------------|--------------------------|---------------|-----------------|
| Scenario / Sensitivity             | Net Present<br>Value (Millions<br>\$) | Difference from<br>Baseline<br>(Millions \$) | Difference from<br>Baseline<br>(percent) | Total (MW)                     | Solar | Natural Gas | Small Modular<br>Reactor | Firm Capacity | Battery Storage |
| Baseline                           | \$2,080                               | \$0  | 0.0%                                     | 827                            | 475   | 102         | 0                        | 0             | 250             |
| High Utility-Scale Renewables      | \$2,115                               | \$35   | 1.7%                                     | 811                            | 475   | 236         | 0                        | 0             | 100             |
| Rapid Electrification              | \$2,288                               | \$208  | 10.0%                                    | 888                            | 475   | 163         | 0                        | 0             | 250             |
| High Inflation                     | \$1,860                               | -\$220                                       | -10.6%                                   | 704                            | 475   | 79          | 0                        | 0             | 150             |
| Demand-Side Management             | \$2,014                               | -\$65  | -3.1%                                    | 806                            | 475   | 106         | 0                        | 0             | 225             |
| No Load Growth                     | \$1,800                               | -\$280                                       | -13.5%                                   | 704                            | 475   | 79          | 0                        | 0             | 150             |
| Carbon Tax                         | \$2,329                               | \$250  | 12.0%                                    | 827                            | 475   | 102         | 0                        | 0             | 250             |
| 2018 Renewable Resolution          | \$2,207                               | \$127  | 6.1%                                     | 906                            | 550   | 106         | 100                      | 0             | 150             |
| Market Reliance - No New GRU Gen.  | \$2,460                               | \$380  | 18.3%                                    | 390                            | 0     | 10          | 0                        | 380           | 0               |
| High Natural Gas Price             | \$2,138                               | \$58   | 2.8%                                     | 897                            | 550   | 102         | 0                        | 70            | 175             |
| Low Natural Gas Price              | \$1,909                               | -\$170                                       | -8.2%                                    | 804                            | 475   | 104         | 0                        | 0             | 225             |
| No Solar                           | \$2,400                               | \$321  | 15.4%                                    | 461                            | 0     | 261         | 0                        | 0             | 200             |
| Deerhaven DHFS2 - 5 Year Extension | \$2,066                               | -\$13  | -0.6%                                    | 822                            | 475   | 47          | 0                        | 0             | 300             |
| Deerhaven DHFS2 - 9 Year Extension | \$2,058                               | -\$22  | -1.1%                                    | 822                            | 475   | 47          | 0                        | 0             | 300             |
| High Solar \$51.65+esc.            | \$2,270                               | \$191  | 9.2%                                     | 629                            | 300   | 104         | 0                        | 0             | 225             |
| High Solar \$62.50+esc.            | \$2,319                               | \$239  | 11.5%                                    | 659                            | 275   | 134         | 0                        | 0             | 250             |
| High Solar \$75.63+esc.            | \$2,348                               | \$268  | 12.9%                                    | 459                            | 0     | 284         | 0                        | 0             | 175             |
| Low Firm Capacity Price            | \$2,080                               | \$0  | 0.0%                                     | 827                            | 475   | 102         | 0                        | 0             | 250             |
| Reduced Discount Rate (2%)         | \$2,955                               | \$875  | 42.1%                                    | 806                            | 475   | 106         | 0                        | 0             | 225             |





## Summary of Recent IRP Results from other Utilities

- Electric utilities of varying sizes have resource plans with some combination of the following:
  - Retirement of existing thermal resources
  - Addition of new flexible and efficient natural gas-fired resources
    - Combined/simple cycle combustion turbines
    - Reciprocating internal combustion engines
  - Addition of solar PV and battery energy storage

| Approximate Planned Resource Changes by 2030 |             |                             |                                    |                               |                 |
|--|-------------|-----------------------------|------------------------------------|-------------------------------|-----------------|
| Utility                                      | Peak Demand | Thermal Retirements<br>(MW) | New Efficient Flexible<br>Gas (MW) | Total Solar<br>(Nameplate MW) | Solar % of Peak |
| Santee Cooper                                | 5,500       | 1,150                       | 1,200                              | 1,500                         | 27%             |
| <b>City Utilities</b>                        | 735         | 184                         | 0                                  | 150                           | 20%             |
| JEA  | 2,850       | 520                         | 570                                | 1,500                         | 53%             |
| Lakeland                                     | 740         | 19*                         | 120                                | 89                            | 12%             |
| FPL  | 28,160      | 715                         | 0                                  | 19,107                        | 68%             |
| GRU Baseline (Prelim.)                       | 410         | 111                         | 30                                 | 150                           | 37%             |

\*Operating Standby







- All scenarios and sensitivities call for mix of solar, batteries, and flexible natural gas-fired resources – unless intentionally excluded
  - No solar and Market Reliance sensitivities do not allow PLEXOS to pick solar
- Delayed retirements may reduce lifecycle cost and defer capital expenditures
  - Deerhaven CT1 and CT2
  - Deerhaven 2 (DHFS2) requires further engineering evaluation
- Market Reliance on import power results in higher cost
- Additional capacity needed within 3-4 years
- Demand-side management (DSM) may be a cost-effective resource option to flatten peak demands - needs further study







- Develop of Preferred Resource Plan and Action Plan
  - Develop Internally
  - January March
- IRP Draft Plan Update to GRUA April 3
- Proposed Preferred Resource Plan to GRUA April 17
- Final Stakeholder Advisory Group and Community Meetings May







# **Thank you!**



Page 69 of 191

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## **Appendix**



Page 70 of 191

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**Part I: Background Information** 

## **Part: II: Preliminary IRP Results**

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Outline



- Baseline Scenario Model inputs based on most likely anticipated future based on industry forecasts
- 7 scenarios and sensitivities evaluate effects of variations in economic conditions, load growth, fuel pricing
- 2 sensitivities evaluate potential benefit of extending life of Deerhaven Steam Turbine 2 (DHFS2)
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- Current firm import capability
  - 75 MW Summer
  - Up to 200 MW beginning 2028
- Can be utilized to import solar energy or other purchased power
- Additional import capability requires transmission upgrade
  - +200 MW additional capacity (400 MW total)
  - Estimated cost of \$131M NPV (2023 dollars)
  - Modeled as an option in all scenarios and sensitivities



- Solar Integration Considerations
- Firm capacity required in conjunction with solar
  - 1:2 ratio of Firm capacity to Solar PV
  - Firm capacity options include thermal generation and batteries
- Contribution of Solar PV rated capacity available to meet peak demand
  - 36% Summer; 0% Winter
- Solar PV additions limited to 75MW
- Must be at least 4 years apart for Tier 1 (Local)
  - 1 year to familiarize use of increasing inverter-based resources (i.e. Solar PV and Battery Storage)
  - 3 years for ACE study/RFP process/permitting/construction
- Must be at least 3 years apart for Tier 2 (Imported)



### Solar Integration Timeline Capability

| Resource<br>Location | Incremental<br>Cost  | Year Ranges<br>Solar Can be Added | Maximum<br>Incremental<br>Nameplate<br>Capacity<br>Added (MW) | Maximum Cumulative<br>Nameplate Capacity<br>(MW) |
|----------------------|--|-----------------------------------|---|--|
|                      | PPA Cost   | 2025-2028 (Sand Bluff)            | 75  | 75   |
| Local (Tier 1)       |  | 2029-2032                         | 75  | 150  |
|                      |  | 2033-2036                         | 75  | 225  |
|                      |  | 2037+                             | 50  | 275  |
|                      | PPA Cost + Wheeling Cost   | 2040-2042                         | 75  | 350  |
| External (Tier 2)    |  | 2043-2045                         | 75  | 425  |
|                      |  | 2046+                             | 50  | 475  |
| External (Tier 3)    | PPA Cost + Wheeling Cost +<br>Transmission Upgrade<br>Cost<br>(\$131M in 2023\$) | 2049+                             | 75  | 550  |



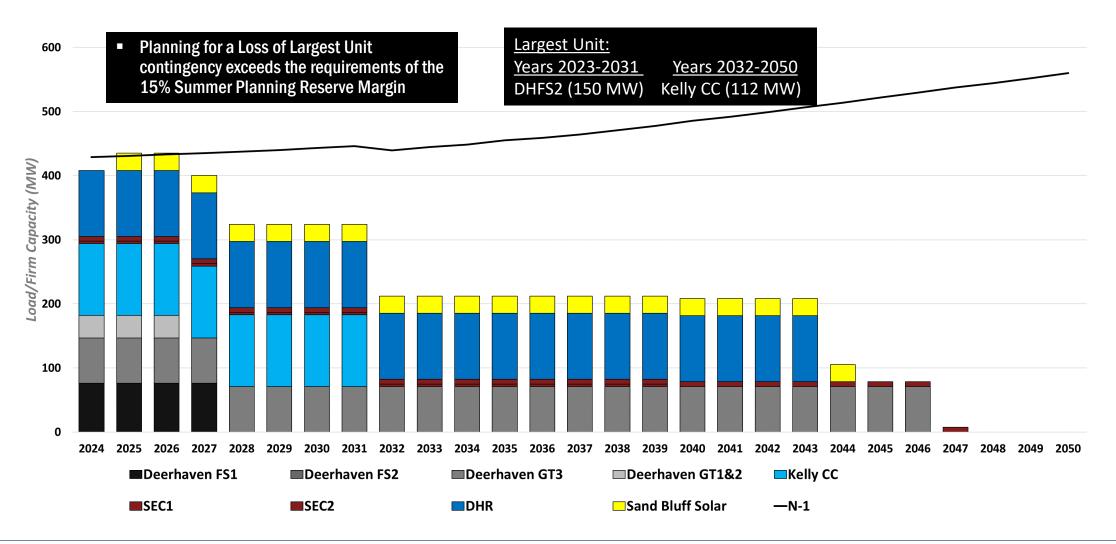


- Battery storage additions limited to 50 MW every 3 years until 2033
  - Integration of inverter-based resource
  - Battery technology expected to advance in 10-year horizon

| <b>Resource</b><br>Location | Incremental<br>Cost | Year<br>Ranges | Maximum<br>Incremental<br>Nameplate Capacity<br>Added (MW) | Maximum<br>Cumulative<br>Nameplate<br>Capacity (MW) |
|-----------------------------|---------------------|----------------|--|---|
| Local                       | PPA Cost            | 2027-2029      | 50   | 50  |
| Local                       | PPA Cost            | 2030-2032      | 50   | 100   |
| Local                       | PPA Cost            | 2033+          | No Limit   | No Limit  |



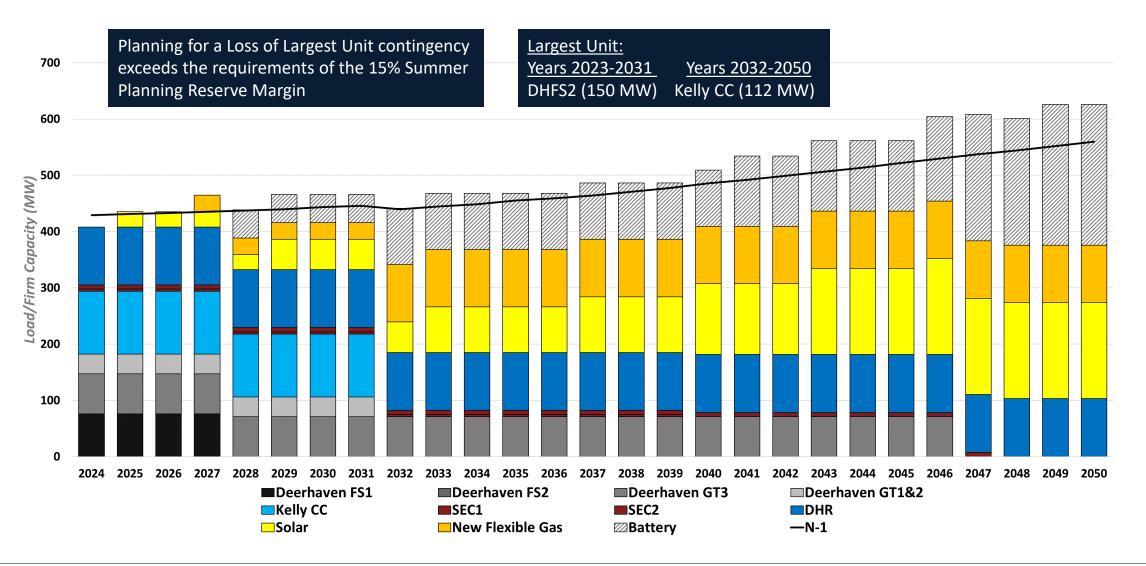
Peak Load and Capacity (N-1 Requirement) – No Resource Additions





Page 77 of 191

Peak Load and Capacity (N-1 Requirement) - Baseline Scenario





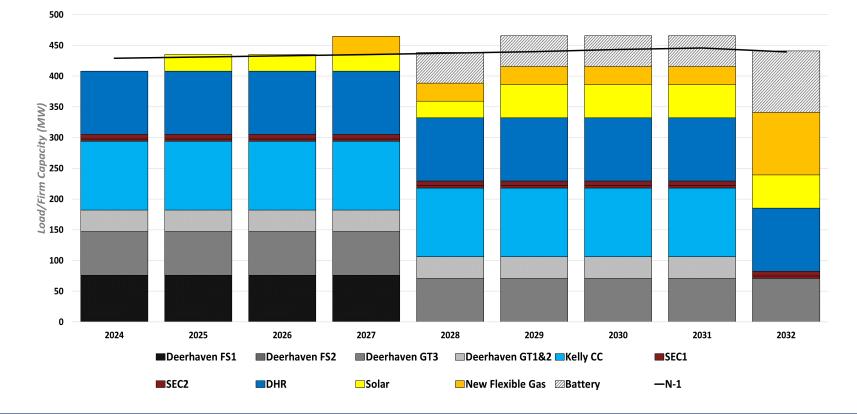
Page 78 of 191

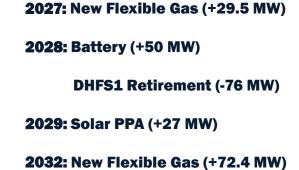
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 Largest Unit:

 Years 2023-2031
 Year 2032

 DHFS2 (150 MW)
 Kelly CC (112 MW)





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DHFS2 Retirement (-232 MW)

**Battery (+50 MW)** 

DHGT1&2 Retirement (-35 MW)



Page 79 of 191



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Additional Sensitivities and Stress Tests

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- Additional Sensitivities and Stress Tests
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  - 3. What would be the impacts of imposing environmental constraints?
    - 2018 resolution net-zero carbon emissions by 2045
    - Carbon tax (based on stakeholder request)
    - Reduced discount rate (based on stakeholder request)



# Does utility-scale solar reduce overall cost?

### No Solar Sensitivity

- Objective: Determine impacts of eliminating all utility-scale solar on lifecycle NPV cost
- Model constrained to not allow any solar addition
- Includes removing Sand Bluff solar farm
- Result
  - No Solar increases NPV by \$320M



# Does utility-scale solar reduce overall cost?

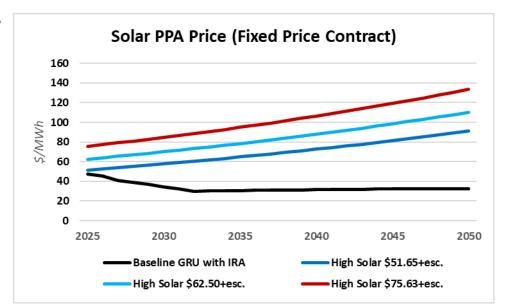
### **High Solar Price Sensitivity**

- Objective: Determine the impact if future solar prices are higher than expected
- 3 sensitivities evaluated in addition to baseline

|          | Modeled    | PLEXOS Result |        |  |  |
|----------|------------|---------------|--------|--|--|
| Scenario | 2025 Price | Tier 1        | Tier 2 |  |  |
|          | \$/MWh     | MW            | MW     |  |  |
| Baseline | \$47.35    | 275           | 200    |  |  |
| A        | \$51.65    | 275           | 25     |  |  |
| В        | \$62.50    | 275           | 0      |  |  |
| С        | \$75.63    | 0             | 0      |  |  |

- Sand Bluff cost \$40.56/MWh
- Result: Utility scale solar price would have to increase substantially before model chooses different resources





Is Market Reliance (No New GRU Generation) Cheaper?

### Market Reliance Sensitivity

- Objective: Evaluate cost impact of Market Reliance
- Retirements of existing generating units over same timeline as Baseline
- No new GRU generating units
- No new GRU solar PPA projects
- Resource needs met by firm capacity PPAs (5 yr term)
- Transmission upgrade required \$131M (2023 \$)





### **Reduced Capacity Pricing PPA Sensitivity**

- Objective: Determine if reducing the capacity PPA price would make Capacity PPA a preferred resource
- Capacity PPA Option Selected in Only 2 Sensitivities:
  - High Natural Gas Price
  - Market Reliance No New GRU Generation
- For Reduced Capacity Pricing Sensitivity the Capacity PPA price was reduced from \$6.50/kW-mo (Baseline) to \$2.50/kW-mo (well below current market)
- Result: No change to the lowest cost resource portfolio from the Baseline Scenario



# Is Market Reliance (No New GRU Generation) Cheaper?

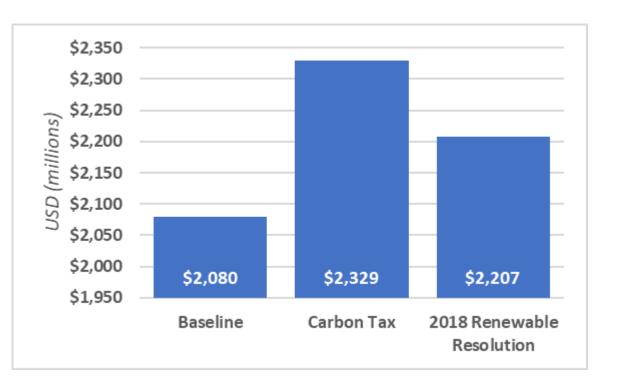
### **Market Reliance Sensitivity (continued)**

- Firm Capacity PPA pricing based on:
  - -\$6.50/kW-month capacity charge (2023 \$)
  - Natural gas-fired combined cycle unit with 7 MMBtu/MWh heat rate and \$1.50 variable 0&M (2023 \$)
  - Delivered natural gas price (FGTZ3+usage+fuel) + \$0.55 adder (2023 \$)
  - -\$2.67/kW-month wheeling rate
- Result
  - Market Reliance increases NPV by \$380M



### Impacts of Imposing Environmental Constraints

- Carbon Tax Sensitivity increases NPV \$249M but does not change the resource plan from Baseline
- Most scenarios/sensitivities reduce CO<sub>2</sub> emissions from 2005 levels by more than 75% (Baseline reduction is 85%)
- Reduction of CO<sub>2</sub> emissions to "net zero" by 2045 increases NPV by \$127M





### **Comparison of Preliminary Results**

|                                    | Resource Plan Cost                    |  |  | Capacity Added as of 2050 (MW) |       |             |                          |               |                 |
|------------------------------------|---------------------------------------|--|--|--------------------------------|-------|-------------|--------------------------|---------------|-----------------|
| Scenario / Sensitivity             | Net Present<br>Value (Millions<br>\$) | Difference from<br>Baseline<br>(Millions \$) | Difference from<br>Baseline<br>(percent) | Total (MW)                     | Solar | Natural Gas | Small Modular<br>Reactor | Firm Capacity | Battery Storage |
| Baseline                           | \$2,080                               | \$0  | 0.0%                                     | 827                            | 475   | 102         | 0                        | 0             | 250             |
| High Utility-Scale Renewables      | \$2,115                               | \$35   | 1.7%                                     | 811                            | 475   | 236         | 0                        | 0             | 100             |
| Rapid Electrification              | \$2,288                               | \$208  | 10.0%                                    | 888                            | 475   | 163         | 0                        | 0             | 250             |
| High Inflation                     | \$1,860                               | -\$220                                       | -10.6%                                   | 704                            | 475   | 79          | 0                        | 0             | 150             |
| Demand-Side Management             | \$2,014                               | -\$65  | -3.1%                                    | 806                            | 475   | 106         | 0                        | 0             | 225             |
| No Load Growth                     | \$1,800                               | -\$280                                       | -13.5%                                   | 704                            | 475   | 79          | 0                        | 0             | 150             |
| Carbon Tax                         | \$2,329                               | \$250  | 12.0%                                    | 827                            | 475   | 102         | 0                        | 0             | 250             |
| 2018 Renewable Resolution          | \$2,207                               | \$127  | 6.1%                                     | 906                            | 550   | 106         | 100                      | 0             | 150             |
| Market Reliance - No New GRU Gen.  | \$2,460                               | \$380  | 18.3%                                    | 390                            | 0     | 10          | 0                        | 380           | 0               |
| High Natural Gas Price             | \$2,138                               | \$58   | 2.8%                                     | 897                            | 550   | 102         | 0                        | 70            | 175             |
| Low Natural Gas Price              | \$1,909                               | -\$170                                       | -8.2%                                    | 804                            | 475   | 104         | 0                        | 0             | 225             |
| No Solar                           | \$2,400                               | \$321  | 15.4%                                    | 461                            | 0     | 261         | 0                        | 0             | 200             |
| Deerhaven DHFS2 - 5 Year Extension | \$2,066                               | -\$13  | -0.6%                                    | 822                            | 475   | 47          | 0                        | 0             | 300             |
| Deerhaven DHFS2 - 9 Year Extension | \$2,058                               | -\$22  | -1.1%                                    | 822                            | 475   | 47          | 0                        | 0             | 300             |
| High Solar \$51.65+esc.            | \$2,270                               | \$191  | 9.2%                                     | 629                            | 300   | 104         | 0                        | 0             | 225             |
| High Solar \$62.50+esc.            | \$2,319                               | \$239  | 11.5%                                    | 659                            | 275   | 134         | 0                        | 0             | 250             |
| High Solar \$75.63+esc.            | \$2,348                               | \$268  | 12.9%                                    | 459                            | 0     | 284         | 0                        | 0             | 175             |
| Low Firm Capacity Price            | \$2,080                               | \$0  | 0.0%                                     | 827                            | 475   | 102         | 0                        | 0             | 250             |
| Reduced Discount Rate (2%)         | \$2,955                               | \$875  | 42.1%                                    | 806                            | 475   | 106         | 0                        | 0             | 225             |



### Summary of Recent IRP Results from other Utilities

- Electric utilities of varying sizes have resource plans with some combination of the following:
  - Retirement of existing thermal resources
  - Addition of new flexible and efficient natural gas-fired resources
    - Combined/simple cycle combustion turbines
    - Reciprocating internal combustion engines
  - Addition of solar PV and battery energy storage

|                        | Approxin    | nate Planned Res            | source Changes                     | by 2030                       |                 |  |
|------------------------|-------------|-----------------------------|------------------------------------|-------------------------------|-----------------|--|
| Utility                | Peak Demand | Thermal Retirements<br>(MW) | New Efficient Flexible<br>Gas (MW) | Total Solar<br>(Nameplate MW) | Solar % of Peak |  |
| Santee Cooper          | 5,500       | 1,150                       | 1,200                              | 1,500                         | 27%             |  |
| City Utilities         | 735         | 184                         | 0                                  | 150                           | 20%             |  |
| JEA                    | 2,850       | 520                         | 570                                | 1,500                         | 53%             |  |
| Lakeland               | 740         | 19*                         | 120                                | 89                            | 12%             |  |
| FPL                    | 28,160      | 715                         | 0                                  | 19,107                        | 68%             |  |
| GRU Baseline (Prelim.) | 410         | 111                         | 30                                 | 150                           | 37%             |  |





- Develop preferred resource plan that will mitigate risks across multiple futures and fit within debt defeasance plan

   Addition of mix of efficient natural gas, solar and batteries
- Long Term: Evaluate remaining life of Deerhaven Unit 2 (DHFS2) - DHFS2 set to retire in 2032
  - -May defer resource additions that are after 2032





- Develop of Preferred Resource Plan and Action Plan
  - Develop Internally
  - January March
- IRP Draft Plan Update to GRUA April 3
- Proposed Preferred Resource Plan to GRUA April 17
- Final Stakeholder Advisory Group and Community Meetings May





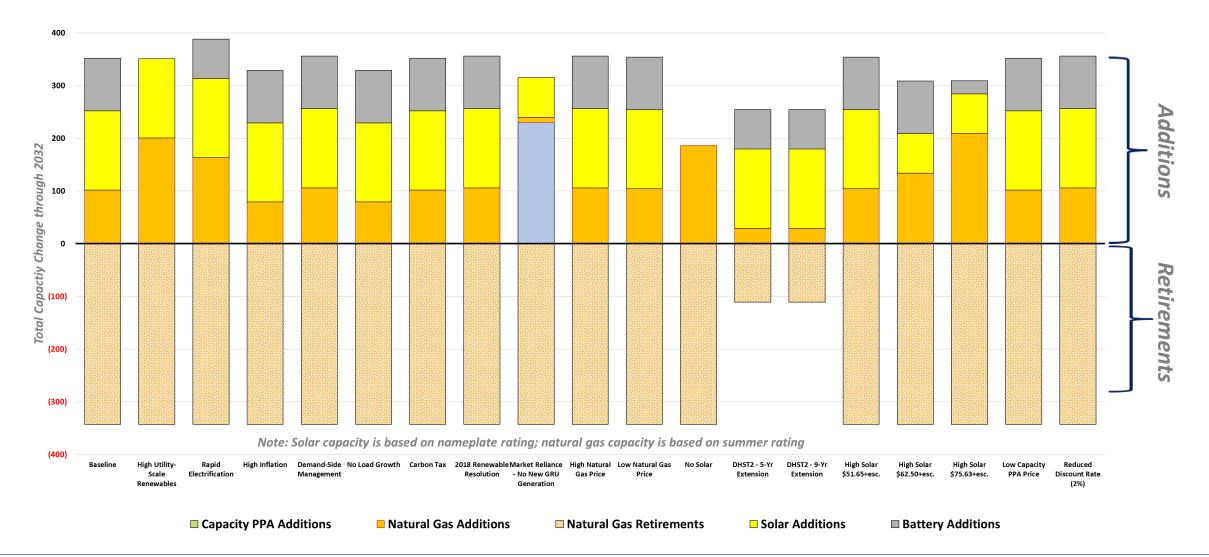
### For more detailed information please visit:

# www.gru.com/IRP



Page 38 of 191

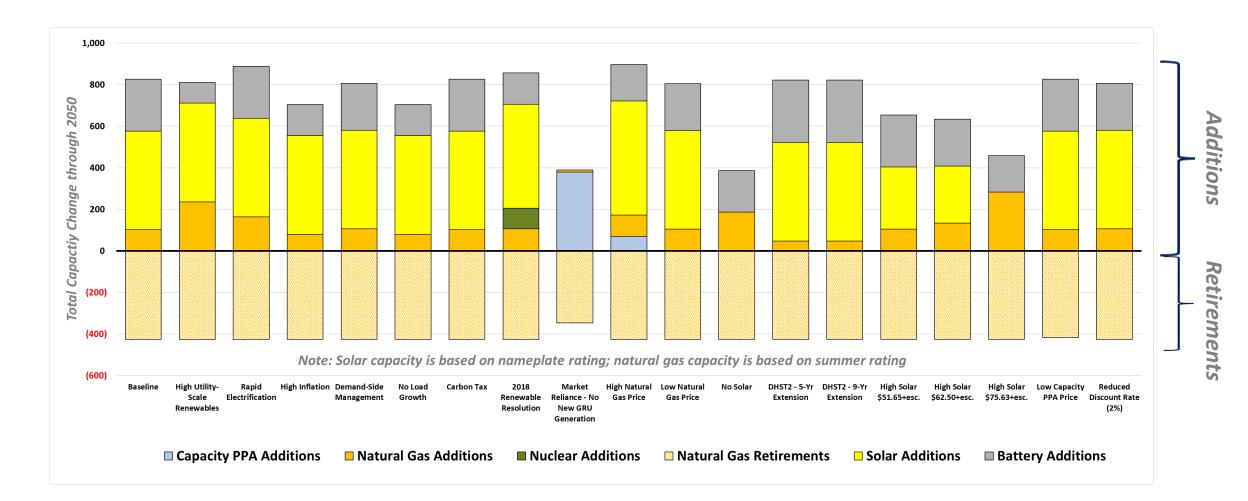
2032 Comparison of Resource Additions and Retirements for All Scenarios and Sensitivities





Page 94 of 191

2050 Comparison of Resource Additions and Retirements for All Scenarios and Sensitivities





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age 96 of 19

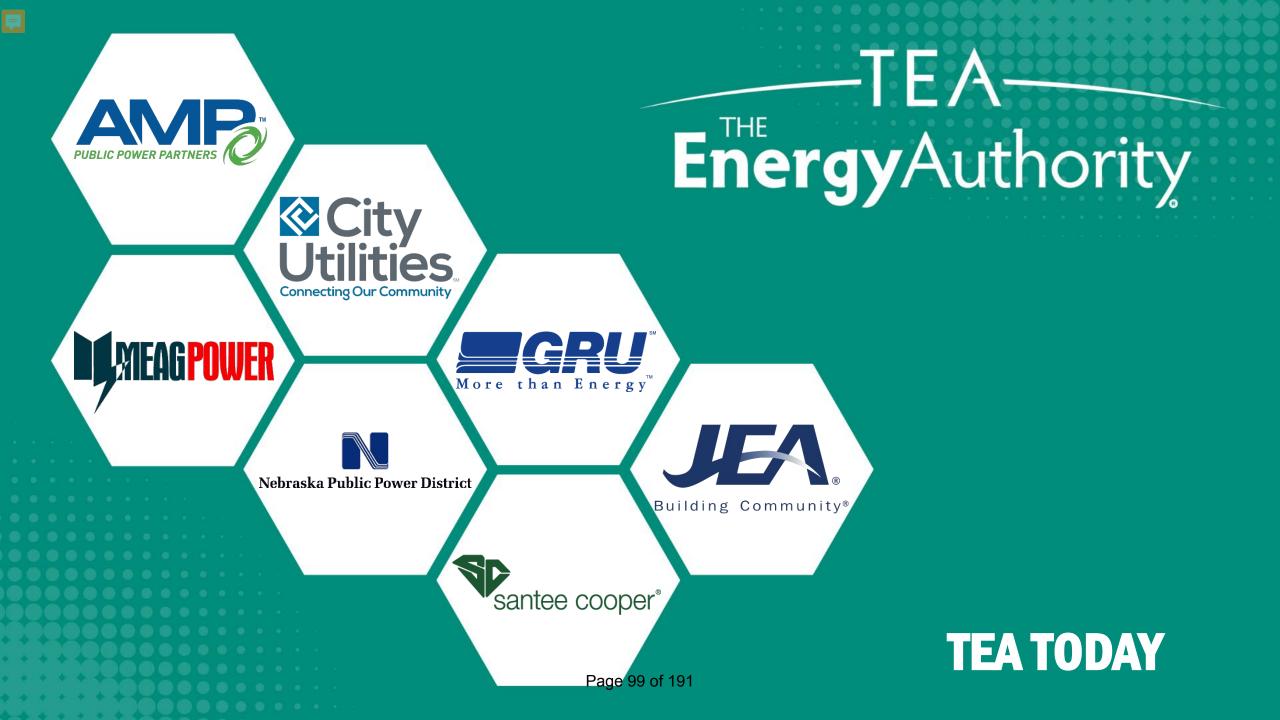


### **THE ENERGY AUTHORITY - INTRODUCTION**

2







## **PUBLIC POWER**

- Local Ownership, Control & Governance
- Non-Profit
- Physical Complexity
- Public Pressures

# **ENERGY MARKET**

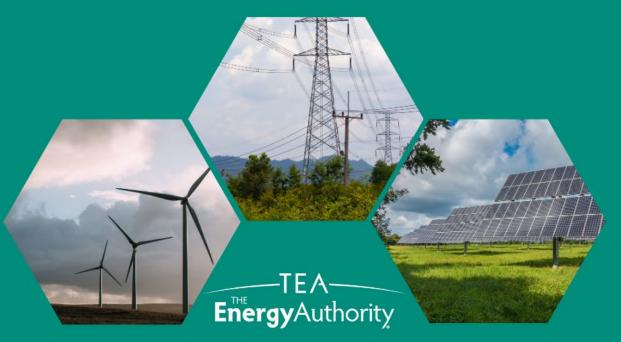
- Financial Complexity
- Dynamic
- Competitive
- Data Intensive
- Specialized Skillsets



IF



### MAXIMIZE THE VALUE OF OUR CLIENTS' ASSETS IN THE WHOLESALE ENERGY MARKETS



Page 101 of 191

#### **ECONOMIES OF SCALE**



- Over \$5B in gross revenues in 2022
- 240 employees
- Offices in Jacksonville, FL & Bellevue, WA

> 60 PUBLIC POWER CLIENTS

- Over 200,000 transactions per year
- #1 in volume among community-owned entities
- Trade across 40 states



- 25,000 MW of Generation
- 30,000 MW of Peak Demand
- > 250 Bcf of NG/year
- 75 Million MWh/year

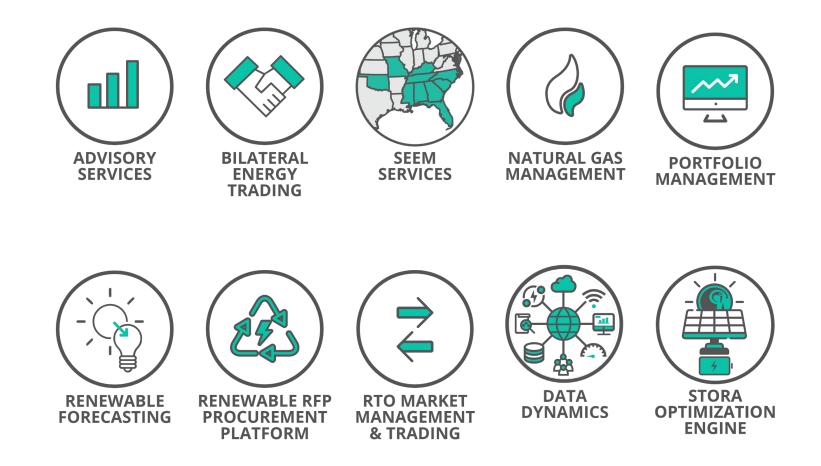
Page 102 of 191



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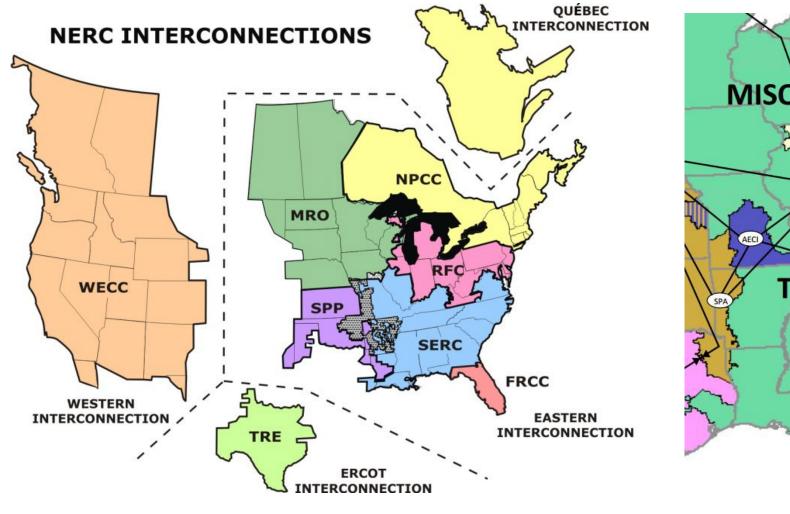
### **STRATEGIC SOLUTIONS**

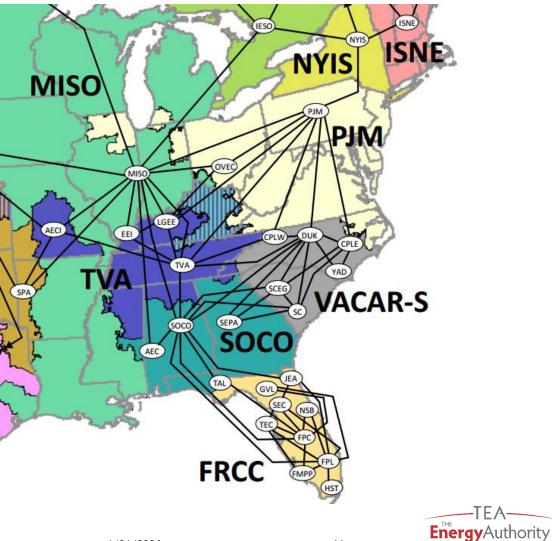




### **MARKET OVERVIEW**

#### **BALANCING AREAS – EASTERN INTERCONNECTION**





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11

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Page 106 of 191

### **PURCHASES AND SALES BETWEEN UTILITIES**

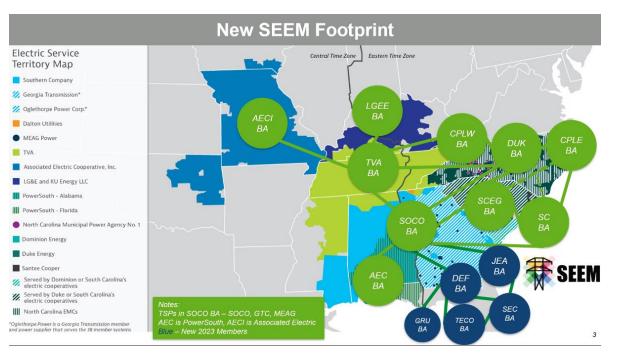
- Factors that affect interchange between utilities:
  - Marginal cost of resources:
    - How does the market compare to utility owned generation?
    - Electricity market is greater than marginal cost, GRU sells electricity into the marketplace
    - Electricity market is less than the marginal cost, GRU purchases electricity from the marketplace and displaces its generation (backs down or turns off a power plant)
  - o Load forecast & unit commitments
  - Transmission cost:
    - o GRU has only two transmission links to other market players (FPL and Duke Energy Florida)
  - Market liquidity depth:
    - $\circ$   $\;$  How many MWs can the market provide? Purchases
    - How many MWs can GRU sell? Sales
  - Credit capabilities:
    - $\circ$   $\,$  Will GRU be paid by the counterparty and can GRU pay for the power?
  - o Risk Management
  - o Emergency needs:
    - $\circ$  Utility losses generation and needs power within 15 minutes

12

1/31/2024

### **MARKET TRANSACTIONS**

- Multiple lengths of time for transactions
  - Long-term Power Purchase Agreements (PPA)
    - Can vary in term but are typically one year or greater through 30 years
      - $\circ~$  Example: GRU/Origis PPA for solar
  - Term Transactions
    - Purchase or sell 3 months to one year
  - One-month transactions
  - Cash or Next Day Transactions
    - $\circ$   $\,$  For tomorrow, or through a weekend and Monday
  - $\circ$  Hourly
  - Southeastern Energy Exchange Market
    - o 15-minute increments within the Southeast only





13



## **INTEGRATED RESOURCE PLAN (IRP)**

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Page 109 of 191

1/31/2024

### **IRP PRIMARY OBJECTIVE**



Forecasting future demand and supply requirements to determine the optimal mix of resources to minimize future costs while meeting reliability, regulatory, and social expectations

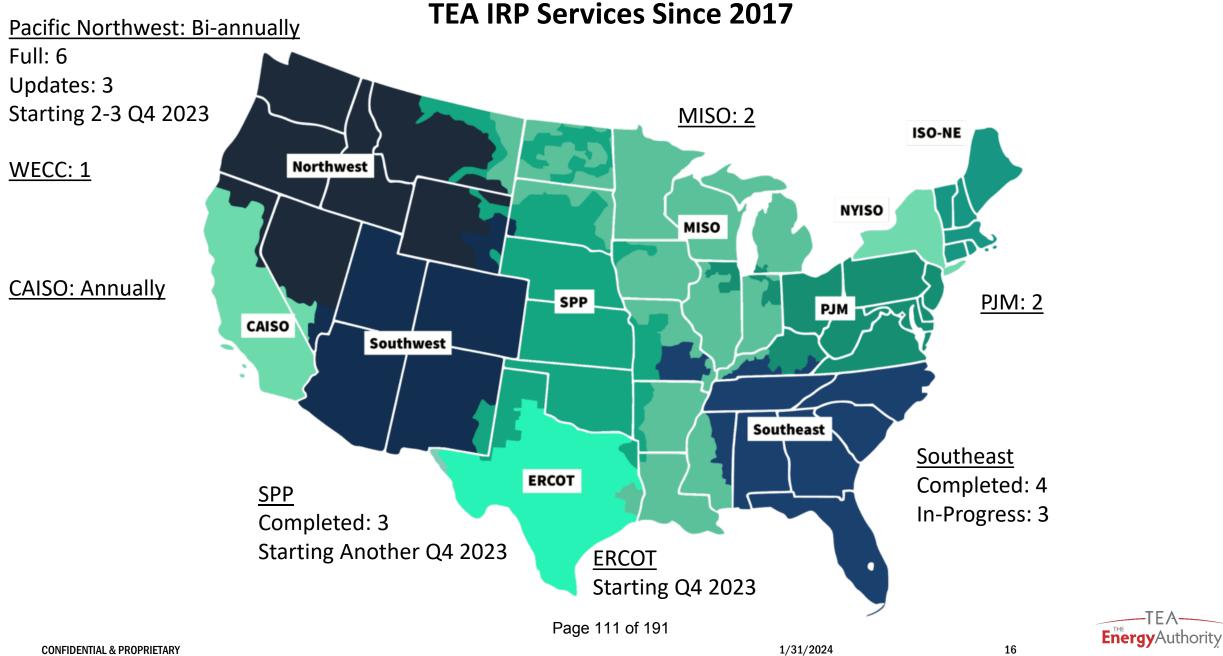


Develop a repeatable process for creating a 20-year strategic resource plan

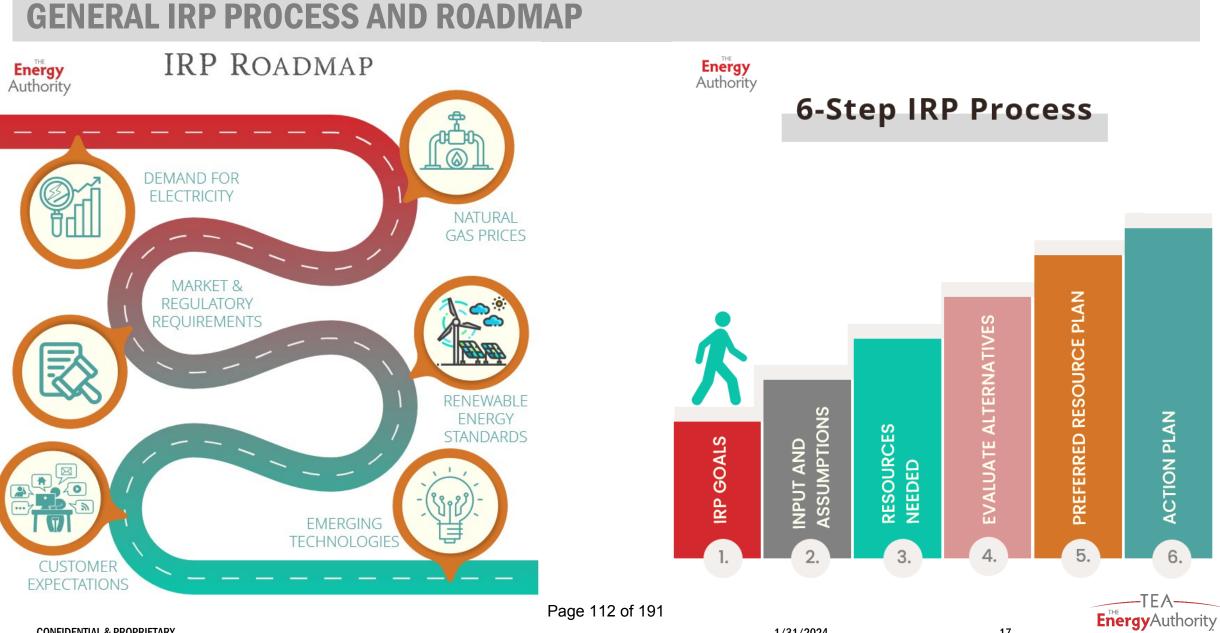


The Strategic Resource Plan is a long-term "buy" or "build" plan for capacity resources needed to meet a utility/state/market capacity, or energy, obligation requirement





### **TEA IRP Services Since 2017**



Page 112 of 191

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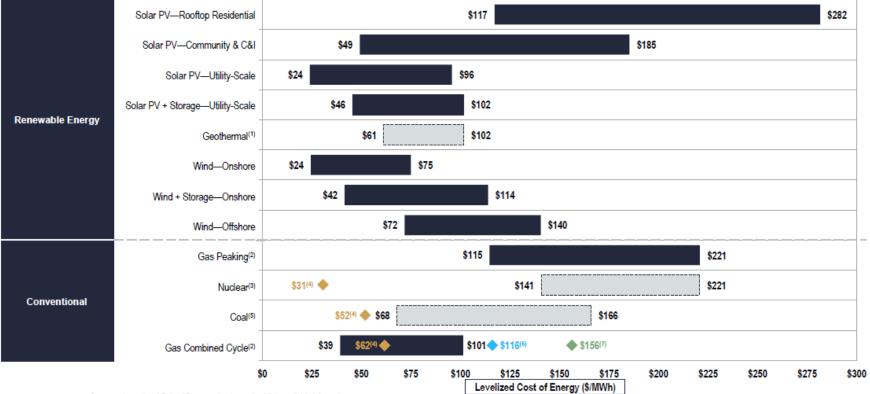
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## **SUPPLY/DEMAND CURVE**

| 450 | Desking   |
|-----|---|
|     | Peaking:  |
|     | Diesel Generators   |
| 400 | Very Low Fixed Costs, Very High Variable Costs, Less than 10 Hours per Year   |
|     |   |
|     | Peaking Generation:   |
| 350 | Low Fixed Costs, High Variable Costs; Less than 25% Capacity Factor   |
|     | Examples:   |
|     | Aeroderivative Gas Turbines, 9-14 MMBtu/MWh Heat Rate   |
| 300 |   |
|     |   |
| 250 |   |
| 250 |   |
|     | Intermediate Generation:  |
| 200 | Medium Fixed Costs, Medium Variable Costs; 40-80% Capacity Factor   |
| 200 | Examples:   |
|     | Older Combined Cycle units, 7.2 - 8.5 MMBtu/MWh heat rate   |
| 150 |   |
|     |   |
|     |   |
| 100 | Baseload Generation:  |
|     | High Fixed Costs, Low Variable Costs; High Capacity Factor  |
|     | Examples:   |
| 50  | Coal Generation, New Combined Cycle, 6.2-7.2 MMBtu/MWh  |
|     |   |
|     |   |
| 0   |   |
| ~   | 10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.100<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.1000<br>10.10000<br>10.10000<br>10.10000<br>10.10000<br>10.100000<br>10.100000000 |
|     |   |
|     | CONFIDENTIAL & PROPRIETARY Max Load — Baseload — Intermediate Peaking 1/31/2024 Gen 18  |

#### Levelized Cost of Energy Comparison—Unsubsidized Analysis

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances



Source: Lazard and Roland Berger estimates and publicly available information.

- Here and throughout this presentation, unless otherwise indicated, the analysis assumes 60% debt at an 8% interest rate and 40% equity at a 12% cost. See page titled "Levelized Cost of Energy Comparison—Sensitivity to Note: Cost of Capital" for cost of capital sensitivities.
- Given the limited data set available for new-build geothermal projects, the LCOE presented herein represents Lazard's LCOE v15.0 results adjusted for inflation.
- (1) (2) The fuel cost assumption for Lazard's unsubsidized analysis for gas-fired generation resources is \$3.45/MMBTU for year-over-year comparison purposes. See page titled "Levelized Cost of Energy Comparison—Sensitivity to Fuel Prices" for fuel price sensitivities.
- (3) Given the limited public and/or observable data set available for new-build nuclear projects and the emerging range of new nuclear generation strategies, the LCOE presented herein represents Lazard's LCOE v15.0 results adjusted for inflation (results are based on then-estimated costs of the Vogtle Plant and are U.S.-focused).

Represents the midpoint of the unsubsidized marginal cost of operating fully depreciated gas combined cycle, coal and nuclear facilities, inclusive of decommissioning costs for nuclear facilities. Analysis assumes that the (4) salvage value for a decommissioned gas combined cycle or coal asset is equivalent to its decommissioning and site restoration costs. Inputs are derived from a benchmark of operating gas combined cycle, coal and nuclear assets across the U.S. Capacity factors, fuel, variable and fixed operating expenses are based on upper- and lower-guartile estimates derived from Lazard's research. See page titled "Levelized Cost of Energy Comparison-Renewable Energy versus Marginal Cost of Selected Existing Conventional Generation Technologies" for additional details.

Given the limited public and/or observable data set available for new-build coal projects, the LCOE presented herein represents Lazard's LCOE v15.0 results adjusted for inflation. High end incorporates 90% carbon capture and storage ("CCS"). Does not include cost of transportation and storage.



(5)

songe ( OC) / Door that methods control in the server of the server of the server of the server of the observed high case gas combined cycle inputs using a 20% blend of "Blue" hydrogen, (i.e., hydrogen produced from a steam-methane reformer, using natural gas as a feedstock, and sequestering the resulting CO<sub>2</sub> in a nearby saline aquifer). No plant modifications are assumed beyond a 2% adjustment to the plant's heat rate. The corresponding fuel cost is \$5.20/MMBTU, assuming ~\$1.40/kg for Blue hydrogen. Represents the LCOE of the observed high case gas combined cycle inputs using a 20% blend of "Green" hydrogen, (i.e., hydrogen produced from an electrolyzer powered by a mix of wind and solar generation and stored in a nearby salt cavern). No plant modifications are assumed beyond a 2% adjustment to the plant's heat rate. The corresponding fuel cost is \$10.05/MMBTU, assuming ~\$4.15/kg for Green hydrogen.

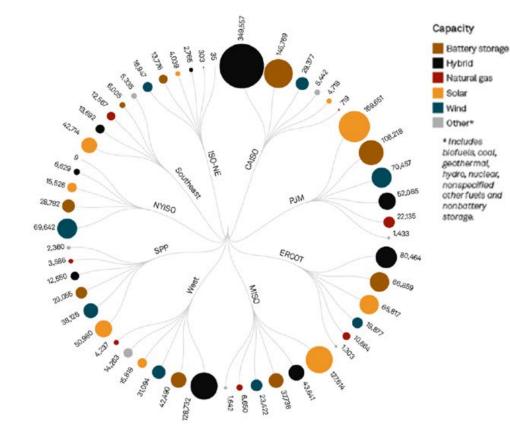
The group as here the part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior consent of Lazard.

1/31/2024

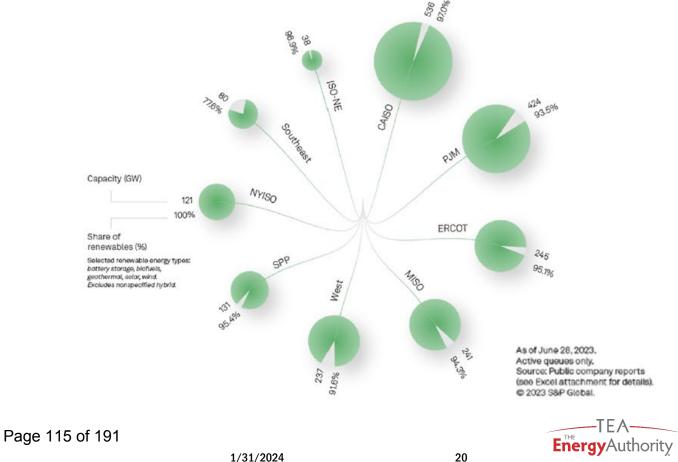
## **CAPACITY TRENDS ACROSS THE US**

Renewable capacity is actively undergoing impact studies for grid connectivity above 90% across all regions  $\bigcirc$ except the Southeast (77.6%)

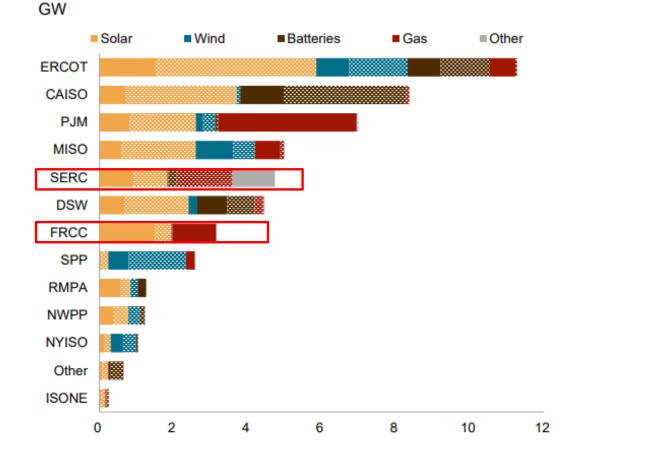
#### Interconnection queue capacity by region, type (MW)



#### Share of renewables in interconnection queue by region

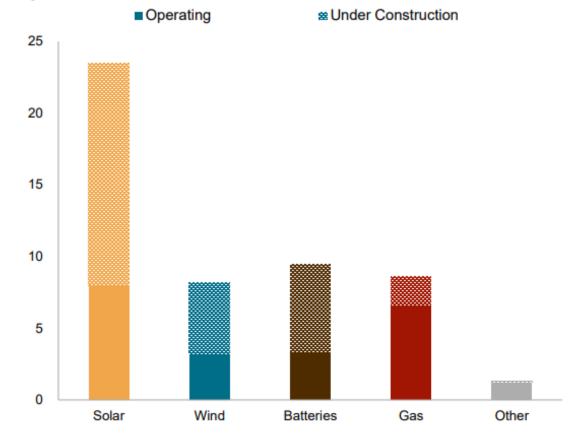


### **2023 - ON TRACK TO SET RECORD FOR ANNUAL CAPACITY ADDITIONS**



US capacity additions 2023, operating and under construction

### US capacity additions 2023, operating and under construction $\ensuremath{\mathsf{GW}}$



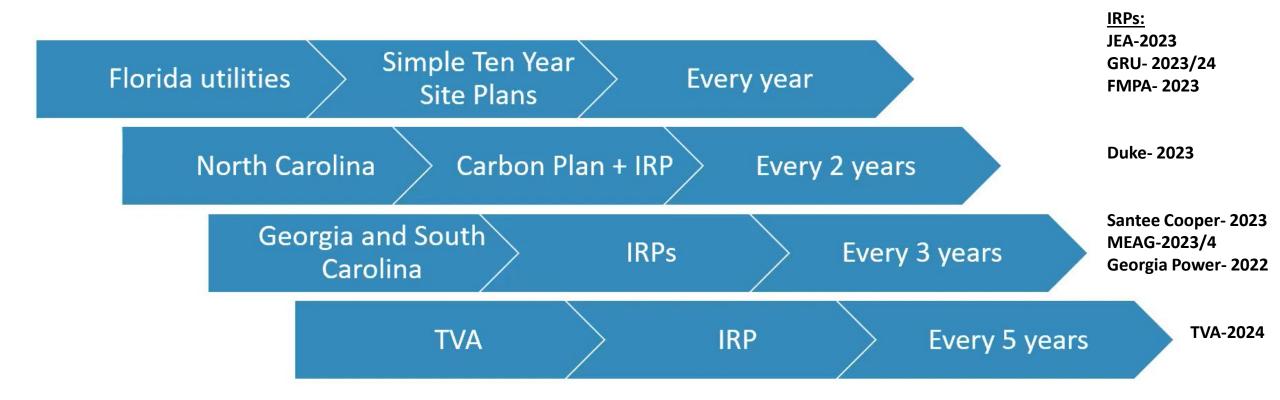
Date compiled September, 2023

Notes: reflects resources with 2023 planned operation dates from EIA's July 860M; Other includes Alaska and Hawaii; solar and battery totals do not include behind-the-meter capacity

Source: S&P Global Commodity Insights, EIA

Page 116 of 191

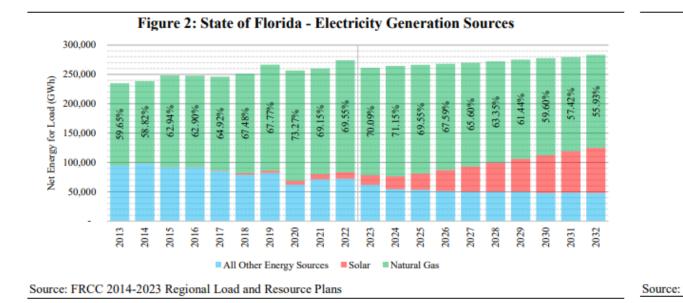
## **IRP - TIMELINE**





### **FLORIDA 10-YEAR SITE PLANS**

- Annual review of demand and supply side management to meet environmental and government mandates
- Update load forecast
- Provide generation expectations with site proposals for the next 10 years
- Calculate reserve margins and generation mix



|                  | 2022 Actual |            |       | 2032 Projected       |            |       |
|------------------|-------------|------------|-------|----------------------|------------|-------|
| Utility          | NEL         | Renewables |       | NEL                  | Renewables |       |
|                  | GWh         | GWh        | % NEL | GWh                  | GWh        | % NEL |
| FPL              | 147,131     | 8,660      | 5.9%  | 152,225              | 54,303     | 35.7% |
| DEF              | 46,141      | 2,225      | 4.8%  | 44,705               | 10,973     | 7.2%  |
| TECO             | 21,572      | 1,492      | 6.9%  | 22,822               | 4,535      | 19.9% |
| FMPA             | 7,097       | 148        | 2.1%  | 6,8 <mark>0</mark> 2 | 764        | 11.2% |
| GRU              | 1,895       | 622        | 32.8% | 1,952                | 881        | 45.1% |
| JEA              | 12,930      | 150        | 1.2%  | 13,765               | 3,298      | 24.0% |
| LAK              | 3,406       | 17         | 0.5%  | 3,740                | 180        | 4.8%  |
| OUC              | 7,764       | 346        | 4.5%  | 8,077                | 3,198      | 39.6% |
| TAL              | 2,611       | 114        | 4.4%  | 3,018                | 115        | 3.8%  |
| SEC              | 16,330      | 463        | 2.8%  | 18,233               | 740        | 4.1%  |
| State of Florida | 274,025     | 15,786     | 5.8%  | 283,094              | 79,134     | 28.0% |



## **FLORIDA 10-YEAR SITE PLANS**

- Load growth: ~1.1% 0
- FPL:  $\bigcirc$ 
  - All of FPL's coal-fired generation is retired by the end of the 10- year reporting period Ο
  - FPL plans on adding ~20,000 MW of solar and ~2,000 MW of battery storage over the 10- year period Ο
- **Duke Energy Florida:** Ο
  - Adding 4,000 MW of solar and battery units in the next 10 years Ο
- JEA  $\bigcirc$ 
  - Adding 550 MW of Combined Cycle (by 2030) and 1275 MW of solar (by 2030) Ο

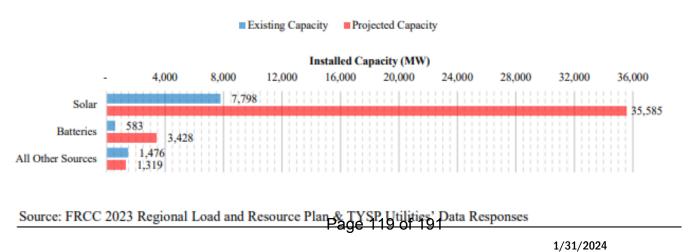


Figure 11: State of Florida - Current and Projected Renewable Resources



## **DUKE AND TVA IRP SUMMARIES**

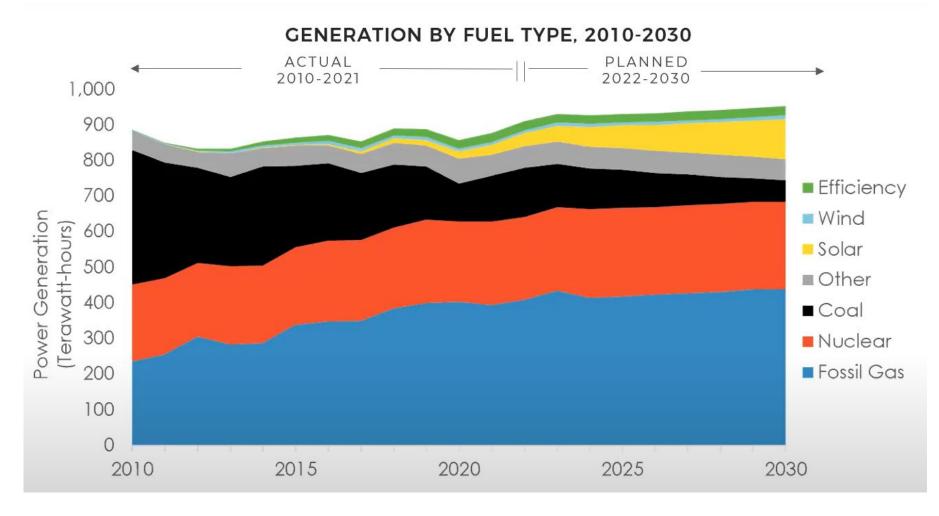
#### DUKE:

- IRP recently released .....update from previous Carbon Plan
- Larger load growth than previously forecasted "Large site developments" between now and 2030 Industrial, manufacturing, commercial, institutional customer
- Increasing planning reserve margin from 17% to 22%
  - Winter capacity risk, increase in load forecast error, increase in unit outages and lower reliance on neighboring utilities
    - 6,000 MW of solar and 2,700 MW battery storage additions by 2031
    - 5,800 MW of hydrogen-capable gas capacity by 2032
    - Retiring Roxboro and Marshall coal plants
    - $\circ$  1,200 MW of onshore wind by 2033 (some offshore wind)
    - 1,700 MW of pumped-storage hydro by 2034

#### TVA:

- TVA board recently approved \$15 billion for system improvements and investments in new generation
- Forecasting roughly 30% load growth in the next 10 years
- Among new resources planned or under consideration:
  - 10,000 MW of <u>solar</u> to be online by 2035
  - Up to 1,200 MW of potential <u>small modular nuclear reactors</u>
  - And a 1,400 MW <u>combined cycle natural gas plant</u> to replace the retiring coal fired Cumberland Fossil Plant.

## **SOUTHEAST GENERATION**







26

1/31/2024

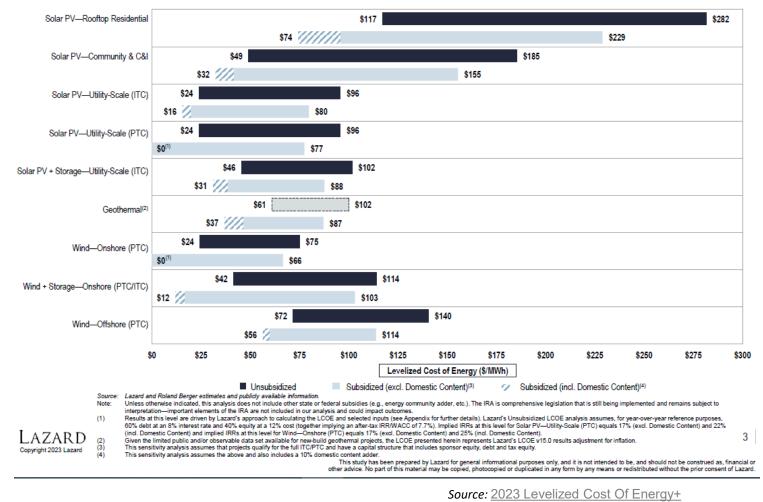


## **APPENDIX**

Current prices for Wind and Solar Are Up 34% (66%) according to Lazard)-But Inflation **Reduction Act Will** likely Have Prices Falling Again

#### Levelized Cost of Energy Comparison-Sensitivity to U.S. Federal Tax Subsidies

The Investment Tax Credit ("ITC"), Production Tax Credit ("PTC") and domestic content adder, among other provisions in the IRA, are important components of the levelized cost of renewable energy generation technologies

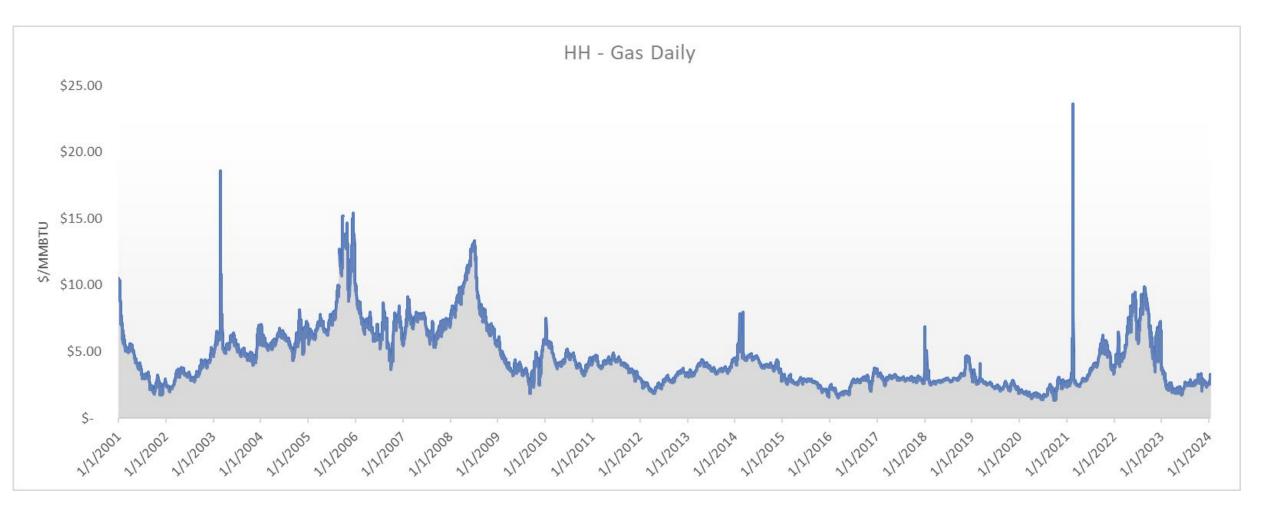


(lazard.com)



Page 123 of 191

## **NATURAL GAS PRICING**

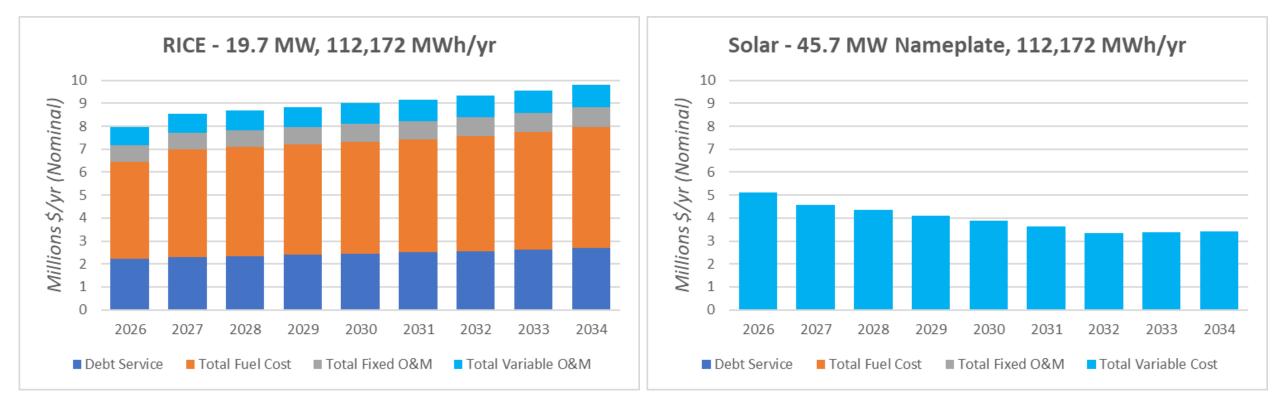




29

1/31/2024

### **RICE AND SOLAR PPA COST COMPARISON**





### 2023-2024 GRU Integrated Resource Plan (IRP) Modeling Assumptions and Considerations



January 2024

Page 126 of 191

#### 1.0 Firm Import Capacity

- 1.1 Transmission upgrade option
- 1.2 Five-year contract capacity agreement
- 1.3 Wheeling cost assumptions

#### 2.0 NERC Regulatory Requirements

- 2.1 NERC-TPL-001-4, "(N-1)"
- 2.2 NERC-BAL-001-2, Area Control Error (ACE)

#### 3.0 Utility-Scale Solar Projects

- 3.1 Tier I projects (275 MW (AC))
- 3.2 Tier II projects (+200 MW (AC), beginning 2028)
- 3.3 Tier III projects (+200 MW (AC) with \$131m investment)
- 3.4 Solar contribution to summer peak
- 3.5 Solar contribution to winter peak

#### 4.0 "Investment Grade" Utility-Scale Energy Storage Projects

#### 5.0 Timeline Considerations

- 5.1 Tier I solar project timeline constraint
- 5.2 Tier II & III solar project timeline considerations
- 5.3 Gas turbine and/or RICE project timeline considerations
- 5.4 Max battery contribution prior to 2023
- 6.0 Demand Side Management (DSM) and Energy Efficiency (EE)
- 7.0 Biomass Resource Option
- 8.0 DHR Retirement Date
- 9.0 CT1 and CT2 Delayed Retirement
- 10.0 CC1 Cycling Constraint

#### Introduction

GRU's 2024 Integrated Resource Plan (IRP) is being completed by The Energy Authority (TEA), of which GRU is a member. TEA is using an energy production cost modeling software package produced by Energy Exemplar named PLEXOS to evaluate available resource options and identify those that most economically meet GRU's customers demand for energy. An important aspect of software like PLEXOS is that it can compare a baseline case to multiple scenarios (where more than one input or constraint is changed) and sensitivities (where only one input or constraint is changed). Using this methodology, a generation portfolio can be tested against a variety of future possibilities, which ultimately helps to mitigate risk.

This document outlines some of the modeling parameters and considerations that were used in GRU's PLEXOS IRP models that may not be readily apparent.

#### 1.0 Firm Import Capacity

GRU has transmission ties with Duke Energy and Florida Power & Light (FPL). Those transmission ties allow GRU to enter into power transactions with other utilities in the southeast when it is economical for GRU to do so. GRU can purchase and sell power on firm and non-firm basis. Non-firm power can be curtailed or cancelled for any reason (e.g. the unit making the power for the transaction suffers a mechanical failure), whereas firm power is considered reliable and must be backed up by the seller with other resources if the unit generating the power for the transaction is not available. Non-firm power purchases and sales are typically made hour-to-hour or on a short-term basis and are made to incrementally move a utility's own generating units output up or down, but not offline. For example, if a utility is purchasing non-firm power, it can turn its own generating unit down, but not off in the event the non-firm transaction is cancelled. Firm power purchases can be used to commit or decommit generating units, meaning that the power transacted is reliable and a utility's own generating units can usually be turned on or off based on that decision.

For the IRP's capacity analysis, only firm transactions are considered for measuring GRU's power supply adequacy. Non-firm transactions, also known as market transactions, are included to allow generating units to move up or down economically, but those transactions do not count toward power supply adequacy. Changes in transmission capacity throughout the IRP study period are detailed in the following sections.

#### 1.1 <u>Transmission upgrade option</u>

GRU's current transmission ties allow for the import of approximately 75 MW of firm power throughout most of the year. However, during winter peak, this capacity typically drops to zero as Duke's system could become overloaded during cold weather events. Duke is in the process of upgrading its transmission system in the area. These improvements should be completed by the end of 2027, and in the summer of 2028, GRU is projected to be able to firmly import up to 200 MW of power throughout the year.

If GRU desires to import more than 200 MW in the summer of 2028 and thereafter, GRU would need to build an additional transmission line(s) to Duke, FPL, or Seminole, and rebuild its transmission line to FPL. The most economical transmission capacity increase for GRU would come from infrastructure built to strengthen connections with FPL and Duke. Under this option, GRU would need to rebuild its transmission line with FPL, build an additional transmission line to Duke's substation, and pay for upgrades within FPL's and Duke's transmission systems. The costs for these upgrades are estimated to be \$131 million (2023 dollars). If PLEXOS deems it more cost-effective than for GRU to generate its own power, PLEXOS can select this investment option in 2028 (or beyond), enabling GRU to procure and import more than 200 MW of power.

#### 1.2 <u>Five-year contract capacity agreement</u>

The model can select to import power in lieu of GRU generating that same power if it is more economical to do so. The cost of that firm import power is modeled as a contract with a five-year term and is based on projected market conditions. Contracts such as this are referred to as power purchase agreements (PPA). For import power considerations, these PPAs include a capacity cost, a non-fuel energy charge, and a fuel charge. The capacity charge begins at \$6.50/kW-month and escalates annually at the inflation rate (GDP deflator). The non-fuel energy charge begins at \$1.50/MWh and escalates annually at the inflation rate. The fuel charge is based on a 7000 BTU/kWh heat rate, combined-cycle unit and the forecasted price of delivered natural gas plus a \$0.55/MMBTU firm transportation capacity adder (escalated annually).

#### 1.3 Wheeling cost assumptions

When power is moved over other utilities transmission lines to GRU, GRU must pay "wheeling costs" to the utility that owns the transmission assets. Wheeling costs are fees set by the Florida Public Service Commission, typically expressed in \$/kW-month. The model uses a beginning wheeling rate of \$2.67/kW-month, and escalates this cost annually based on the inflation rate. Firm power imports with a PPA (as discussed in section 1.2) would require a multi-year transmission capacity reservation, which GRU would need to buy, regardless of how much of its purchased capacity is utilized.

#### 2.0 NERC Regulatory Requirements

The North American Electric Reliability Corporation (NERC) is a regulatory body that enforces standards GRU must follow. For the IRP, there were two applicable standards that were used to add model considerations within PLEXOS:

(NERC-TPL-001-4) is a standard that GRU Transmission Planning personnel must follow. (NERC-BAL-001-2) is a standard that GRU System Control personnel must follow.

#### 2.1 <u>NERC-TPL-001-4, "(N-1)"</u>

According to NERC, the purpose of the NERC-TPL-001 standard is to: "Establish Transmission system planning performance requirements within the planning horizon to develop a Bulk Electric System (BES) that will operate reliably over a broad spectrum of System conditions and following a wide range of probable Contingencies." Effectively, GRU must have enough generation capacity to cover the loss of its largest unit in service or active transmission import. The utility industry calls this requirement their "N minus 1" (N-1) contingency.

Between now and 12/31/2031, Deerhaven Unit #2 (DH2) is GRU's largest generation unit, and therefore its (N-1) unit. The maximum load GRU can place on DH2 is 150 MW while maintaining its ability to recover this loss of generation within ~15 minutes.

GRU is a member of the Florida Reserve Sharing Group (FRSG). Along with the other utility members of this group, each utility maintains a certain share of "spinning reserve" power that must be able to dispatch within 15 minutes to cover the loss of the state's largest generating facility. GRU's portion of this spinning reserve requirement is 38 MW. Portions of this 38 MW can be called upon as needed to maintain grid stability. These reserve calls can be in 1/8 increments. For IRP planning purposes, GRU is modeling a 4/8 reserve call, or 19 MW. This 19 MW reserve call is in addition to the (N-1) requirement of 150 MW.

Lastly, if DH2 were to trip, it requires 14 MW of power to safely shut-down the unit. To prevent damaging the unit in the event of a unit trip, 14 MW of capacity must be always available whenever DH2 is in operation.

After DH2 retires, the largest unit on GRU's system will be the Kelly combined-cycle unit #1 (CC1) at 114 MW. To safely shut-down CC1 requires 2 MW of station service. In addition, it is modeled that GRU can satisfy a 4/8 reserve call.

In summary, PLEXOS includes two "(N-1)" model considerations:

- Between now and 12/31/2031: "(N-1)" = (150 + 19 + 14) = 183 MW
- Beyond 12/31/2031: "(N-1)" = (114 + 19 + 2) = 135 MW

#### 2.2 NERC-BAL-001-2, Area Control Error (ACE)

The NERC-BAL-001 standard aims to control interconnection frequency within defined limits. To maintain frequency within acceptable bounds, System Control operators ensure power generation matches system load with system demand. The effectiveness of GRU's system control is measured by the Area Control Error (ACE) metric, ideally kept at zero. System Control operators adjust generation on the unit with the lowest incremental heat rate to control frequency and maintain ACE near zero. Gas turbines, reciprocating internal combustion engines (RICE), and 25 MW (AC) blocks of four-hour lithium-ion batteries with fast-start capability are options for controlling ACE.

Solar farms, being intermittent, pose challenges, and a 2:1 ratio of nameplate solar capacity to fast-start capability is required for stability. For instance, adding 100 MW (AC) of solar farm capacity necessitates 50 MW (AC) of gas turbine, RICE, or battery farm capacity. This 2:1 ratio is integrated as a constraint in PLEXOS, ensuring stand-alone solar as a resource option is supported by a fast-start resource in the specified proportion.

#### 3.0 Utility-Scale Solar Projects

To be considered as a site for a utility-scale solar facility, several key attributes are required:

- 1) large land area (~5-7 acres / MW (AC)) with suitable zoning and an available and willing counterparty to support the facility
- proximity and cost-effective access of an electrical transmission facility (usually within a few miles);
- 3) available electrical capacity at the transmission facility; and
- 4) absence of impediments to successful siting (wetlands, historical, geological, etc.).

While agricultural land is the typical location for utility-scale solar, it can be unavailable for sale or longterm solar leases due to estate planning, prior commitments to agricultural or silvicultural use, or may be held for future housing or other uses.

Due to the high costs of project development, transmission access, and engineering, size drives project economics. Currently, Florida Statutes require solar facilities that are greater than or equal to 75 MW (AC) to go through the extensive Power Plant Siting Act permitting process. Thus, nearly all utility-scale projects are less than 75 MW (AC). The economic "sweet spot" for projects in Florida is currently between 50 and 75 MW (AC).

The smallest solar project considered within the IRP is 50 MW (AC), and the largest single project considered is 75 MW (AC). Due to limited available land within GRU's service territory, GRU would eventually have to pursue projects outside of its service territory. A such, GRU considered three tiers of solar projects as outlined in the following sections.

#### 3.1 <u>Tier I projects (up to 275 MW (AC) of solar)</u>

Tier I Projects would be connected directly to GRU's transmission system to avoid wheeling costs and minimize transmission system congestion. GRU assessed areas within approximately three miles of its existing transmission facilities to determine the availability of potentially suitable sites and believes that there is a planning level likelihood of two additional 74.9 MW (AC) facilities and one 50 MW (AC) facility (in addition to the Sand Bluff solar project to be completed in late 2024). Due to wheeling costs, it is likely that Tier I projects could be delivered to GRU for a cost lower than projects located outside of GRU's transmission system.

#### 3.2 <u>Tier II projects (+200 MW (AC))</u>

Tier II Projects are solar facilities that are not directly connected to GRU's transmission grid. These projects would connect to another transmission provider and be wheeled into GRU's transmission system. These projects would be subject to wheeling costs, which increases their cost to GRU. Due to limited firm import capability from Duke and FPL, this capability is limited to 200 MW (AC).

Due to wheeling costs, it is likely that economic Tier I opportunities would be exhausted prior to moving on to Tier II.

#### 3.3 <u>Tier III projects (+200 MW (AC) with \$131m investment)</u>

Tier III projects will require an additional grid connection which will have an estimated capital cost of ~\$131 million (2023 dollars) (for additional details regarding this ~\$131 million cost, refer to section 1.1). Also, additional costs may be incurred depending upon transmission provider network upgrades necessitated above the cost of the transmission line.

Within the planning horizon, there would be only one Tier III project that PLEXOS could select prior to 2050 (please refer to Table 2, section 5.2). Therefore, this \$131 million would be a one-time investment in our transmission system upgrades, and the model cannot consider the addition of any Tier III project without this corresponding investment in the transmission system.

#### 3.4 <u>Solar contribution to ummer and winter peak</u>

Solar facility output is a function of the amount of light reaching solar photovoltaic panels. Solar facilities rarely provide output at their full rated capacity. GRU's system peaks tend to occur during summer between 5-7 pm, and in winter around 6-8 am eastern prevailing time. Based on analysis of anticipated solar output at these times, GRU estimates utility-scale solar facilities will contribute 36% of their rated output to summer peak, and 0% capacity contribution towards winter peak.

#### 4.0 "Investment Grade" Utility-Scale Energy Storage projects

There are numerous energy storage technologies that are being tested and developed. Currently, lithium-ion battery technologies appear to be the technology of choice for many utilities, and cost estimates for two-hour and four-hour units is readily available from organizations such as Wood Mackenzie<sup>1</sup>. Solar developers will not finance an unproven technology. However, lithium-lon systems are considered "investment grade" by most financial institutions.

The PLEXOS modeling being performed for GRU allows for the option to select increments of 25 MW (AC) x 4-hour battery systems via a PPA. Each PPA has a 15-year term, with the first system commencing no earlier than 2027.

<sup>&</sup>lt;sup>1</sup> U.S. Energy Storage Monitor | Wood Mackenzie

#### 5.0 Timeline Considerations

To allow for the assimilation of new solar capacity into GRU's system, increments of no more than 75 MW (AC) are considered every four years. This four-year period allows GRU to gather system data for a year following the interconnection of a new solar facility; the commissioning and evaluation of an ACE study, and two years for the procurement, permitting, and construction phases of the subsequent solar facility. This will allow GRU to gain experience with each increment of capacity and ensure that sufficient storage and firm capacity is added to maintain compliance with NERC regulations and to mitigate potential technical risks associated with inverter-based resources.

The PLEXOS model does not permit more than one utility-scale solar project in any specific year. Outlined below are additional timeline consideration that were included in GRU's PLEXOS modeling that enables the portfolio of supply options to comply with market and project implementation considerations.

#### 5.1 <u>Tier I solar project timeline considerations</u>

Tier I projects have a four-year project duration from the time the previous solar project is commissioned. The first Tier I solar implementation is the 74.9 MW (AC) Sand Bluff Solar project that is scheduled to be commissioned in January of 2025. Therefore, the timeline of subsequent utility-scale projects is modeled as follows:

| Project            | Incremental MW (AC) /<br>Cumulative MW (AC) | Earliest Commission Date: |
|--------------------|---|---------------------------|
| Sand Bluff Solar   | 75 / 75                                     | 01/2025                   |
| Tier 1, Project #2 | 75 / 150                                    | 01/2029                   |
| Tier 1, Project #3 | 75 / 225                                    | 01/2033                   |
| Tier 1, Project #4 | 50 / 275                                    | 01/2037                   |

Table 1 – Timeline Considerations for Tier I Utility-Scale Solar Projects

#### 5.2 <u>Tier II & III solar project timeline considerations</u>

Tier II and Tier III projects have a three-year project duration from the time the previous solar project is commissioned. Therefore, the timeline of subsequent utility-scale projects is modeled as follows:

| Table 2 – Timeline Considerations for Tier II and Tier III Utilit | v-Scale Solar Proiects |
|---|------------------------|
|   | y scale solar risjects |

| Projects            | Incremental MW (AC) /<br>Cumulative MW (AC) | Earliest Commission Date: |
|---------------------|---|---------------------------|
| Tier II, Project #1 | 75 / 350                                    | 01/2040                   |
| Tier II, Project #2 | 75 / 425                                    | 01/2043                   |
| Tier II, Project #3 | 50 / 475                                    | 01/2046                   |

| Tier III, Project #1 | 75 / 550 | 01/2049 |
|----------------------|----------|---------|
|----------------------|----------|---------|

\*Note, the Tier III project shown in the bottom of Table 2 would require upgrades to GRU's transmission system for GRU to have the required import capacity.

#### 5.3 <u>Gas turbine and/or RICE project timeline considerations</u>

A typical project execution period for a project involving the addition of a new gas turbine and/or RICE engine is about three years. Therefore, PLEXOS is not allowed to add one of these resource prior to 2027.

#### 5.4 Max battery contribution prior to 2033

The following model considerations were applied: initially, battery additions are capped at 50 MW (AC) from 2027-2029, with the limit rising to 100 MW (AC) from 2030-2032. By 2033, the limit is expanded to 1000 MW (AC) (effectively removing any restrictions).

#### 6.0 Demand Side Management (DSM) and Energy Efficiency (EE)

The IRP includes a sensitivity analysis on the impacts of implementing a suite of DSM programs, with the primary focus for GRU being able to shift customer load off of peak times and into non-peak times. The DSM sensitivity models a 5% summer peak and 5% annual energy reduction. This aggressive sensitivity considered a 0.5% annual peak and energy reduction, requiring 10 years (01/2025 - 12/2034) for a cumulative 5% reduction.

The sensitivity study results compare the net present value (NPV) to the base case, offering insights into potential savings that could be allocated to a DSM program. If the savings are substantial, further evaluation is needed to determine if the costs, risks, and rate impacts of implementing and maintaining a suite of DSM programs outweigh the potential benefits.

#### 7.0 Biomass Resource Option

Early in the IRP process, GRU contracted BioResource Management, Inc. (BRM) to determine fuel availability within a 120-mile radius of Gainesville. The specific type of fuel that was studied is Urban Waste Wood (UWW). Byproducts from the forestry industry were not included in the scope of the study. Based on a reasonable capture rate for the quantity of UWW that could be acquired, the PLEXOS model may select a 30 MW biomass facility.

#### 8.0 DHR Retirement Date

DHR is slated for retirement by the close of 2043, but the PLEXOS model permits flexibility with this date. By 2043, the unit will have operated for around 30 years. This flexibility acknowledges that there is

limited experience with similar biomass-fueled units, though other Rankin-cycle boilers over 50 years old are still in use. The unit's lifespan relies on diligent inspections, maintenance, and potential partial rebuilds or equipment replacements approaching December 2043.

Therefore, PLEXOS may elect to extend DHR's retirement date to the end of the planning horizon (end of 2050) if it is economical to do so.

#### 9.0 CT1 and CT2 Delayed Retirement

GRU currently operates two "peaker" gas turbines (CT1 and CT2) set for retirement in 12/2026. Despite having low run hours and being in good mechanical condition, these gas turbine package units will eventually become unsupportable, primarily due to the unavailability of spare parts.

The PLEXOS model may select to delay the retirement date of these units by up to five years. The onetime cost of needed repairs and upgrades to is estimated to be about \$2 million (in 2023 dollars) per turbine.

#### 10.0 CC1 Cycling Constraint

Anytime a generating unit with a boiler is started and stopped, there is thermal wear-and-tear placed on the system components. As these thermal generation units with a boiler are not particularly "flexible", system control operators always attempt to minimize the number of cycles on these types of units, such as CC1. As GRU adds utility-scale solar to its system, the PLEXOS model may elect to increase cycling of CC1. To prevent excessive cycling of this unit, the PLEXOS model has a cap on the number of allowable cycles on CC1 (one per week).



File Number: 2024-115

Agenda Date: February 7, 2024

**Department:** Gainesville Regional Utilities

Title: 2024-115 Agreements and Associations (B)

Department: CEO/GM Office

**Description:** GRU maintains several formal and informal agreements and associations with General Government (GG). The utility continues to evaluate which can be modified or eliminated to adhere to HB-1645 and evaluating cost-effectiveness.

**Fiscal Note:** The presentation identifies a number of areas where GRU can potentially reduce expenses and raise revenue by changing its current agreements or associations. In some cases, the potential exists to lose revenue and increase expenses. The overall goal is to ensure services are properly being billed and paid

**Explanation:** Gainesville Regional Utilities (GRU) provides services to GG and receives services from GG. Many of these services are captured under a memorandum of understanding or service level agreement; however, many are not as clearly defined. GRU has identified services that it is not receiving during the current fiscal year immediately based on the new direction of the utility through the change in governance; these result in \$1.4 million in savings in FY24. The presentation explores potential additional changes to GRU and GG's agreements and associations (in FY25 and in future years) based on HB-1645's requirement to follow practices that "solely further the fiscal and financial benefit of the utility system and customers."

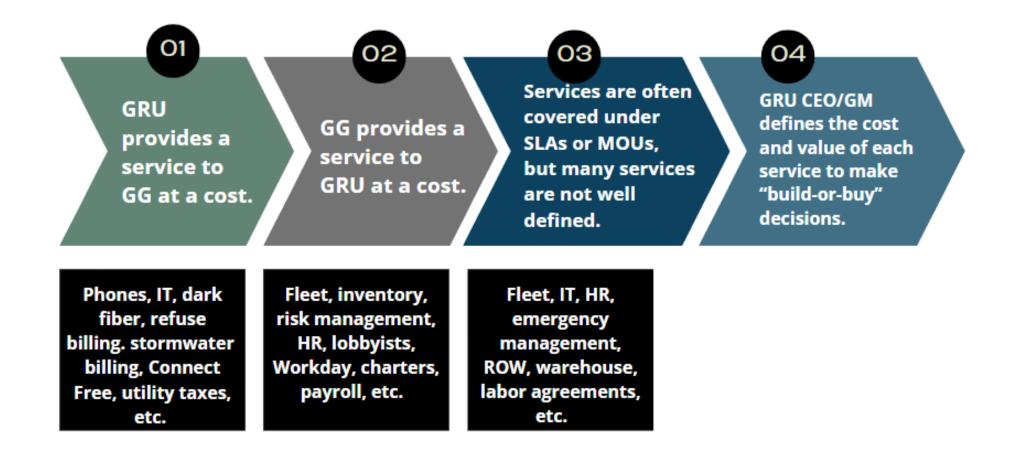
Recommendation: 1.) Implement Phase 2 plan to modify relationships: IT, network connectivity, Connect Free, streetlights and FY24 service reductions.
2.) Evaluate Phase 3, which includes obtaining the most cost-effective services with the highest value and determining whether the best source is internal, external or GG.

# **Associations and Agreements**

Feb. 7, 2024

Page 137 of 191

## $\equiv$ Financial Associations







**Applying Business Principles** 

## Relationship **Overview**

| Relationship                                 | FY24 Cost      | Detail  |
|--|----------------|---|
| GSC  | \$15.3 million | Formula: proxy for property tax + electric franchise fee  |
| Utility Taxes                                | \$16.4 million | Utility taxes collected by the City of Gainesville, as per state law.   |
| Services<br>Provided/<br>Received            | \$9.3 million  | Voted to reduce by \$1.4 million for services no longer rendered;<br>exploring additional reductions for FY25 and beyond. |
| Other<br>Services/<br>Unpaid<br>Partnerships |                | De minimis charges; direct charges for services<br>(warehouse, storm debris cleanup, etc.)                                |





## Phase 1: Immediate Action

## **Beginning February 2024**







Applying Business Principles

## **Phase 2: Actively** Reviewing

| Relationship               | Potential Impacts   |
|----------------------------|---|
| ІТ                         | Offering two options: full service at \$5.8 million; reduced service at \$2.9 million; risk<br>of losing revenue. |
| Network<br>Connectivity    | Collect full amount for fiber services provided to GG up to \$218,000.  |
| Connect Free               | Recommend stop collecting surcharges on connection charges; no impact to GRU.                                     |
| Streetlights               | FY25 and beyond will reduce GSC by cost of streetlights; FY25 cost estimated higher than \$1.1 million.           |
| ROW<br>(Right-of-Way)      | Ordinance being revised; estimated increased cost to GRU between \$100,000 and \$250,000.                         |
| FY24 Service<br>Reductions | FY25 services and costs currently being evaluated.  |





Applying Business Principles

## Recommendation

- Implement Phase 2 plan to modify relationships: IT, network connectivity, Connect Free, streetlights and FY24 service reductions.
- Evaluate Phase 3, which includes obtaining the most cost-effective services with the highest value and determining whether the best source is internal, external or GG.





## Phase 3: Future Relationships

"Appropriate pecuniary factors and utility industry best practices are those which solely further the fiscal and financial benefit of the utility system and customers." – HB-1645

- GRU should obtain the most cost-effective services with highest value and determine whether the best source is internal, external or GG.
- Building new services will require start-up investments and maintenance costs.
- Incremental revenue losses will need to be offset by additional revenue or expense reductions (likely reduce service levels).



Applying Business Principles

# Thank you!



Page 144 of 191

**CONTACT US** 352-334-3434

https://www.gru.com

# Agreements & Associations

### FEB. 2024



Page 145 of 191

## **Table of Contents**

| Execu  | tive Summary                         | . 3 |
|--------|--------------------------------------|-----|
| Sectio | on 1 - Cost Allocation Plan          |     |
|        | Broadcasting                         | . 5 |
|        | City Attorney.                       | . 6 |
|        | City Auditor                         | . 7 |
|        | City Clerk                           | . 8 |
|        | City Commission                      | . 9 |
|        | Human Resources                      | 10  |
|        | Office of Equity & Inclusion         | 11  |
|        | Payroll.                             |     |
|        | Risk Management Department*          | 13  |
| Sectio | on 2 - Direct Payments               |     |
|        | ConnectFree                          | 15  |
|        | County Streetlights                  | 16  |
|        | Desk Phone                           |     |
|        | Fleet                                | 18  |
|        | Government Services Contribution     |     |
|        | Interfund Process.                   | 20  |
|        | IT Services                          | 21  |
|        | ProjectDox                           |     |
|        | Risk Management Department*          |     |
|        | ROW Permit                           |     |
|        | Stormwater & Refuse                  | 24  |
|        | Surplus                              | 25  |
|        | Tax Collection.                      |     |
|        | Warehouse                            | 27  |
|        | Workday                              |     |
| Sectio | on 3 - Shared Contracts & Agreements |     |
|        | City Works                           | 30  |
|        | CoG "CADET" Program                  | 31  |
|        | Commercial Drivers Licensing         | 32  |
|        | Construction Manager at Risk         |     |
|        | CWA Labor Agreements.                |     |
|        | Dark Fiber/Network Connectivity.     |     |
|        | Emergency Management                 |     |
|        | Engineering/Architecture Needs       |     |
|        | Federal Lobbyist.                    |     |
|        | Financial Document Timing            | 39  |
|        | Fuel Tax Refund                      |     |
|        | Power District                       |     |
|        | Recording Fees                       |     |
|        | Security Services.                   |     |
|        | State Lobbyist                       |     |
|        | Sweetwater Wetlands.                 |     |

\*The Risk Management Department topic represents elements that fit under both Section 1 and Section 2.

This topic is located on page 13 and has been listed in both sections for the purposes of completeness and clarity.



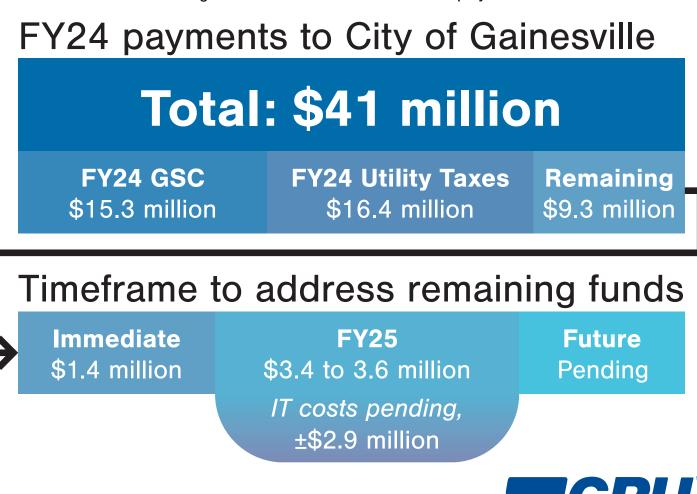
## **Executive Summary**

GRU maintains numerous formal and informal associations and agreements with General Government (GG), which consists of all City of Gainesville departments other than GRU. As the utility works with the GRU Authority to satisfy the requirements of the law created by House Bill 1645, management is evaluating each of these relationships to determine which of them "solely further the fiscal and financial benefit of the utility system and customers."

In the following pages, we describe many of the associations connecting GRU and GG. Some are formalized through memoranda of understanding (MOUs), others through service level agreements (SLAs), and still others are informal arrangements.

This document will serve as a repository of associations and agreements moving forward. The document is organized into three sections: Cost Allocation Plan, Direct Payments and Shared Contracts & Agreements.

GRU will be evaluating its associations and agreements throughout the year and updating this document quarterly to record changes. The graphic below provides a summary of our cost associations with GG and identifies the estimated annual amount we are scrutinizing to obtain the most cost-effective services at the highest value to our customers and employees.



More than Energy

# SECTION 1 COST ALLOCATION PLAN



### **Broadcasting**

- **DESCRIPTION** GG Broadcasting is primarily responsible for recording and broadcasting City Commission meetings for the general public.
- ROLES &GG provides video and production services to assist city communications.RESPONSIBILITIESGG Broadcasting additionally provides occasional video and production<br/>assistance to GRU Communications.
  - **COSTS** GRU's share of the broadcasting allocation was \$95,268 for FY22.

#### RECOMMENDATION

GRU is performing all video and broadcasting services internally and will no longer use GG Broadcasting. This reduces payment to GG and allows GRU to focus on its specific broadcasting needs.

#### FINANCIAL IMPACTS

Costs will be reduced by \$90,505, but costs for internal broadcasting setup and operations are neccesary and ongoing.



### **City Attorney**

**DESCRIPTION** The city attorney has historically provided all legal support to GRU.

ROLES &Legal support provided by the city attorney to GRU has included, but is notRESPONSIBILITIESlimited to: contracts, employee relations, torts, bond closings, legal reviews,<br/>legal representation, mediations, consultations, etc.

**COSTS** GRU has allocated \$295,695 annually (\$114,548 to FCAP and \$181,147 as a direct payment) to cover costs associated with the city attorney's office.

#### RECOMMENDATION

GRU is currently conducting an RFP for complete legal representation from external counsel. GRU has yet to determine how legal responsibilities will be allocated between city attorney and new counsel. Those determinations will influence the cost adjustments.

Acquiring independent counsel would allow that counsel to focus solely on GRU business.

#### **FINANCIAL IMPACTS**

Costs will be adjusted according to above recommendation.



### **City Auditor**

**DESCRIPTION** The city auditor completes internal audit functions, monitors the anonymous fraud hotline and manages the contract for GRU's annual financial statement audit.

#### **ROLES & The city auditor will administer the fraud hotline and pass the information to RESPONSIBILITIES RESPONSIBILITIES** The city auditor will administer the fraud hotline and pass the information to GRU's CEO/GM for action. GRU will assume responsibilities for management of the contract for the financial statement audit. Determination on all other audit functions is pending review.

**COSTS** GRU's share of the city auditor's allocation was \$352,001 for work completed in FY22. Of that amount, \$13,700 was for management of the fraud hotline. This cost is expected to persist. Any other costs will be determined after a recommendation on audit services is made.

#### RECOMMENDATION

GRU's BFA Department should take over responsibility for managing the contract for the annual financial statement audit.

The city auditor should continue to monitor the fraud hotline to maintain a single source, anonymous reporting apparatus. Except for reports that implicate the CEO/GM, any fraud hotline items related to GRU would be reported to the CEO/GM who would determine the course of action and to whom any investigation would be assigned. An SLA will be required to document the responsibilities and associated cost allocations.

GRU will evaluate alternatives to the city auditor performing internal audit functions and prepare a recommendation for consideration during a future GRU Authority meeting.

#### **FINANCIAL IMPACTS**

Costs will be reduced by \$264,000.



### **City Clerk**

| DESCRIPTION      | The city clerk works for the City Commission and assists the City Commission<br>to facilitate their meetings. GRU historically has allocated a significant<br>portion of the expenses associated with the city clerk's office. |
|------------------|--|
| ROLES &          | The city clerk has historicially provided the following services to GRU:   |
| RESPONSIBILITIES | • Serving as the custodian of public records for GRU   |

- Monitoring and updating JustFOIA, the public records storage portal
- Training on the records portal
- · Managing eScribe, the software for public meetings
- Administrative support for City Commission
- **COSTS** GRU's share of the city clerk's allocation was \$652,353 in FY22.

#### RECOMMENDATION

GRU should take responsibility for all clerking responsibilities, except the following, which make up about 25% of responsibilities:

- Custodian of public records
  - JustFOIA
    - eScribe
- Limited clerk consulting/assistance

#### **FINANCIAL IMPACTS**

Costs will be reduced by \$437,000.



### **City Commission**

**DESCRIPTION** All costs associated with the operation of the City Commission.

**ROLES &**The City Commission costs include salaries, supplies, travel and all other**RESPONSIBILITIES**operating costs. A portion of these costs were previously allocated to GRU.

**COSTS** GRU allocated \$212,750 to the City Commission in FY22.

#### RECOMMENDATION

GRU no longer operates under the authority of the City Commission, and therefore should not pay any costs associated with their operation.

#### FINANCIAL IMPACTS

Costs will be reduced by \$212,750.



### Human Resources

**DESCRIPTION** An SLA outlines the relationship between GRU and the City of Gainesville Human Resources Department, which provides services required to support and sustain GRU's human capital.

#### HR provides the following services within the timeframes set forth by the SLA:

#### RESPONSIBILITIES

**ROLES &** 

- Availability to GRU staff via in-person/virtual meetings, telephone support, voicemail and email
- Administration Oversees all HR/OD functions for the city and provides services such as strategic HR/OD planning, HR metrics, public records requests coordination and consistent interpretation of policy.
- Classification & Compensation Support Ensures the city's compensation plan is effectively used to attract, motivate and retain employees; oversees the city's HRIS people analytics, transactions and job descriptions; conducts salary surveys; performs job classification audits; assists with staffing analyses; develops and reorganizes all city pay plans.
- Employee & Labor Relations Support Promotes teamwork between management and employees by assisting with labor and employee relations issues; negotiates with the labor union; applies and monitors polices and procedures, grievances, disciplinary actions, terminations, labor agreements, and other local, state and federal labor laws.
- Talent Acquisition Support Partners with departments to search, acquire, assess and hire the correct talent for the organization; assists in developing effective management reference and interview tools and diversity goals; drives the onboarding process and applicant tracking systems.
- **COSTS** GRU has allocated \$1,337,244 annually for all HR support costs.

#### RECOMMENDATION

GRU should continue the current SLA through FY25 with City of Gainesville's HR Department providing service. GRU should continue to research feasability and benefits of shifting to in-house or contracted HR services for FY26.

#### **FINANCIAL IMPACTS**

Staff is evaluating future financial impacts and benefits.



## **Office of Equity & Inclusion**

**DESCRIPTION** The Office of Equity & Inclusion (OEI) provides expertise, tools, data and programming to promote diversity, equity and inclusion. OEI drives cultural transformation through education, policy development and guidance, the celebration of diversity, and fair and objective responses to complaints and concerns.

### ROLES & T

The OEI provides the following services to GRU:

- Small Business Program Ensures local small, women-, minority-, and service-disabled veteran-owned businesses can participate on a nondiscriminatory basis in all aspects of contracting and procurement.
- **Equity** Assists departments in operationalizing equity in policy, practices, programs and procedures; provides training to departments and individual employees.
- **Compliance** Enforces the City of Gainesville's anti-discrimination and anti-harassment policies and ordinances which prohibit discrimination either by or against its employees or citizens utilitzing city services, programs and activities on the basis of race, color, gender, age, religion, national origin, marital status, sexual orientation, disability or gender identity.
- **COSTS** GRU has allocated \$488,414 annually for all OEI support costs.

#### RECOMMENDATION

GRU should continue the reduced service through FY24 and evaluate conducting only required OEI services in-house or outsourcing services in FY25.

#### FINANCIAL IMPACTS

Costs will be reduced by approximately \$390,701.





| DESCRIPTION                 | GG's Financial Services Department manages the payroll for all GRU employees. |
|-----------------------------|---|
| ROLES &<br>RESPONSIBILITIES | GG will continue to run payroll for all GRU employees.                        |
| COSTS                       | Payroll will be increased beyond \$278,982 annually.                          |

#### RECOMMENDATION

GRU should keep payroll mangement as is.

#### **FINANCIAL IMPACTS**

If GRU pursues its own payroll system, work would increase by an order of magnitude due to knowledge loss and start up costs. Additionaly, external parties could charge more than GG per transaction.



## **Risk Management Department**

**DESCRIPTION** The Risk Management Department manages, directs and delegates all critical risk management programs related to organizational operations and ensures statuatory and regulatory compliance of federal, state and local laws related to employee benefits (health, retirement, pension, etc.) drug testing, workers' compensation and clinical practices.

### **ROLES &** GG provides a monthly invoice to GRU on costs. **RESPONSIBILITIES**

**COSTS** GRU pays \$45,411 annually in the FCAP. GRU pays an additional 44% of the Risk Management Department's personnel, operating expenses and indirect costs which is \$1,131,939 for FY23. GRU also pays claims and amounts associated with GRU employees for workers' compensation, as well as general and auto liability via monthly payments.

#### RECOMMENDATION

GRU should keep all aspects of its relationship to the Risk Management Department the same. GRU needs to add/confirm Risk Management's role in the CWA negotiation process. In addition, GRU should monitor/request summary of services provided each month to demonstrate value.

#### FINANCIAL IMPACTS

As with most services and employee benefits (health, retirement, pension, etc.) there are annual increases. These often represent the increase in cost of services over time or when analysis of the distribution of employees occurs on some frequency. For example, the change in the allocation base to respective percentages to some pension obligation bonds will increase \$826,000 in FY25.



# SECTION 2 DIRECT PAYMENTS



### **ConnectFree**

- **DESCRIPTION** These funds are collected from from a surcharge on W/WW connection fees from new customers outside of city limits. The funds have traditionally been used for water and sewer connections for new affordable housing projects to provide local match for federal tax incentive programs. This has typically included paying for connection charges, W/WW extensions and sometimes plumbing. These funds have also been used for converting owners of malfunctioning well and septic systems to GRU W/WW customers.
- **ROLES &** GRU collects the funds and transfers them in their entirety to GG. The city manager has complete control to dispurse funds within the Resolution No. 2023-806 guidelines.
  - **COSTS** In FY23, GRU passed \$788,065.77 through to GG; since January 2020, GRU has collected and passed through approximately \$3.1 million.

#### RECOMMENDATION

In FY25, GRU should stop collecting the surcharge on collection charges.

#### FINANCIAL IMPACTS

This will have no direct impact on GRU. It will remove the funding source of the GG ConnectFree program.



**SECTION 2 - DIRECT PAYMENTS** 

**15** Page 159 of 191

### **County Streetlights**

#### DESCRIPTION

The agreement between the city and the county to pay for streetlights and fire hydrants in unincoporated areas of GRU's service territory has been governed by the Fire Hydrant and Streetlight Services Agreement, which was drafted in the 1970s in response to the threat of a lawsuit between the two entities over payment of said services. With regard to streetlights, the agreement states, in short, that the county will pay all bills to GRU in relation to streetlights and fire hydrants within 45 days. The city will then reimburse the county those charges minus any charges imposed by the county to the city for use of the county's right-of-way. The city orginally agreed to reimubrse the county from its general fund. The agreement will continue until terminated by mutual agreement of both parties.

In October 2022, GRU and GG entered into an MOU as the result of Resolution No. 21132 (adopted July 14, 2022). The terms state:

- GRU will assume full responsibility of the street lighting charges within unincorporated areas of Alachua County.
- GRU will reduce the GSC paid to GG equal to the same amount for street lighting charges within the unincorporated area of Alachua County.
- GG will adjust its revenue budget based on this reduced transfer and reduced expenditure.
- A true-up of the actual revenue billed each year to the estimated revenue will occur at fiscal year-end and settled between the two parties. During the last budget cycle, the City Commission instructed GRU to carry the cost of the county streetlights without government services contribution reduction.

**ROLES &** In FY24, GRU was directed to pay the county streetlight bill in total without reimbursement from the GSC.

**COSTS** GRU is scheduled to pay approximately \$1.1 million for the streetlight bill in FY24 without reimbursement.

#### RECOMMENDATION

In FY25, GRU should adhere to MOU terms: pay for county streetlights and reduce the GSC accordingly.

#### **FINANCIAL IMPACTS**

GRU would see a cost reduction of approximately \$1.1 million.



**SECTION 2 - DIRECT PAYMENTS** 

**16** Page 160 of 191

### **Desk Phone**

| DESCRIPTION | GRU has the responsibility of operating the phone system. BFA pulls a      |
|-------------|--|
|             | monthly report from AT&T and charges GG their portion. These charges       |
|             | are paid through the interfund process each fiscal year and reconciled and |
|             | balanced at year's end.  |

ROLES &GRU IT specialists work with AT&T phone consultants to identify line usageRESPONSIBILITIES(between GRU and GG) and bill GG accordingly.

**COSTS** Costs depend on phone usage; in 2023, they were \$14,525.

#### RECOMMENDATION

GRU should continue to provide this service. In addition, GRU should review lines bi-annually to ensure accurate billing charges based on actual usage and line ownership.

#### **FINANCIAL IMPACTS**

No impact. Costs are allocated to GG based on usage.



### Fleet

| DESCRIPTION                 | GG provides comprehensive fleet services to GRU, including inventory acquisition and disposal, as well as fuel management.                               |
|-----------------------------|--|
| ROLES &<br>RESPONSIBILITIES | GRU is a customer of GG Fleet. GRU is responsible for paying GG for purchased assets and ensuring said assets are brought to Fleet for proper servicing. |

**COSTS** GRU pays GG \$2.5 to \$3.7 million annually for fleet services.

#### RECOMMENDATION

Given the size and importance of GRU's fleet along with the likelihood that GRU would incur greater costs to internalize or contract fleet services, GRU should continue with the current SLA until a new agreement can be created by Oct. 1, 2024. The new agreement should establish responsibilities, prices and level of service goals for all fleet and fuel management services.

#### FINANCIAL IMPACTS

GG fleet is an "at-cost" service and doesn't have a profit margin to maintain on services provided. External providers may bring more efficiency in specific services, but there is no local provider available that could provide the complete services needed for GRU's inventory during routine and emergency operations for both fleet and fuel management.

Internalizing fleet would incur the significant costs of managing contracts, meeting with vendors and factory representatives, procurement and disposal, and tracking of surplus inventory.



### GSC

- **DESCRIPTION** Formerly the General Fund Transfer, the Government Services Contribution (GSC) is utility revenues transferred annually to GG. The amount transferred in FY24 is \$15.3 million, which is based on the following formula: proxy for property tax plus electric franchise fee.
  - **ROLES &** HB 1645 defines the maximum cap of the GSC as:

#### RESPONSIBILITIES

- For any fiscal year, the GSC may not exceed aggregate utility system net revenues less flow of funds
- Any remaining funds, after deductions for flow of funds and GSC, shall be dedicated to additional debt service or utilized as equity in future capital projects

**COSTS** The FY24 GSC is \$15.3 million.

#### RECOMMENDATION

The GRU Authority should determine the GSC for FY25. On Jan. 17, GRU presented alternate GSC scenarios and illustrated the potential impacts to net debt and rates. The Authority is holding a joint meeting with the City Commission to discuss scenarios.

#### FINANCIAL IMPACTS

The current FY25 budget figure for the GSC is \$15,348,987.



**SECTION 2 - DIRECT PAYMENTS** 

**19** Page 163 of 191

### **Interfund Process**

- **DESCRIPTION** GG and GRU bill one another for services the other provides for day-to-day business. GRU and GG both record the expenses for the items and bill as appropriate, ideally on a quarterly basis.
- **ROLES &** Finance staff in GRU and GG keep track of what items need to be billed or reimbursed.
  - **COSTS** Direct payments are sent often between GRU and GG. The latest FCAP allocated \$8,377 for GG's administrative journal entries.

#### RECOMMENDATION

For the foreseeable future, GRU and GG need to exchange funds. The current process is efficient and GRU should keep it as is.

For next FCAP, since both GRU and GG track entries, GRU should review both GRU's and GG's journal entry metrics to determine if this should be eliminated from FCAP going forward.

#### **FINANCIAL IMPACTS**

For the foreseeable future, GRU and GG need to exchange funds. The current process is efficient and should remain.



**SECTION 2 - DIRECT PAYMENTS** 

**20** Page 164 of 191

### **IT Services**

#### **DESCRIPTION** The SLA between GRU and GG covers the following aspects:

- Enterprise IT services provided to the City of Gainesville.
- General levels of response, availability, and maintenance associated with service.
- Responsibilities of IT as the provider of these services and the corresponding responsibilities of the clients receiving them.

The range of IT services include networking and infrastructure, application development, maintenance and support, service desk support, IT project management, license management, cybersecurity, IT governance and strategy, ERP support and direction, and general operation support.

### ROLES & RESPONSIBILITIES

The chief information officer provides vision and direction to 68 professional staff members through three area directors, each of whom manage:

- Infrastructure: phones, cloud environment, general connectivity
- **ERP Management:** integrations between enterprise systems (e.g. Workday, SAP, Opentext, Service Desk)
- **Governance and Compliance:** documentation of IT processes, cybersecurity, fiscal account management
- **COSTS** Costs are approximately \$5.8 million, based on Microsoft licensing, email, application access, facilities support, and GG-specific application access and support and the removal of all SAP-related application support staff.

#### RECOMMENDATION

#### GRU should:

- 1. Enter discussions with GG about IT services to gain a better understanding of value provided and adjust service amount to actual cost.
- 2. Present service-level options while GG assesses its ability to provide its own IT support (along with facilities and resources).
  - 3. Show prior metrics/processes to inform the GRU Authority.

#### FINANCIAL IMPACTS

GRU offers two options: a full service and scope option defined in the SLA at a cost of \$5.8 million, or a basic break/fix option at a cost of \$2.9 million, with the latter option requiring a revised SLA.

GG may choose to seek IT services from a third party. This would result in a reduction of \$2.9 million of GRU's annual revenue.



**SECTION 2 - DIRECT PAYMENTS** 

**21** Page 165 of 191

### ProjectDox

| DESCRIPTION                 | GRU's New Services and Customer Operations departments use ProjectDox, a platform to collect and process information. |
|-----------------------------|---|
| ROLES &<br>RESPONSIBILITIES | GG manages application and access while GRU purchases licenses per user.  |

**COSTS** Licensing costs are estimated at \$74,000 annually.

#### RECOMMENDATION

The application is essential for the operations of some departments in GRU. In the interest of avoiding disruption, GRU should continue licensing this platform through GG.

#### FINANCIAL IMPACTS

No additional cost beyond the approximate annual \$74,000 licensing cost.



### **ROW Permit**

| DESCRIPTION                 | GRU is currently exempt from paying permit fees in the City of Gainesville rights-of-way. The City of Gainesville is making revisions to ordinances governing the use of the right-of-way (ROW). |
|-----------------------------|--|
| ROLES &<br>RESPONSIBILITIES | GRU has facilities in the City of Gainesville's ROW. GG administers all activites in the ROW.  |
| COSTS                       | GRU does not currently pay for use for the city's ROW.   |

#### RECOMMENDATION

GRU and GG should develop the most efficient and cost effective agreement for maintaining GRU's infrastructure in the city's ROW.

#### FINANCIAL IMPACTS

Costs are unknown until the ordinance is revised. Additional permit fees are estimated between \$100,000 and \$250,000.



### **Stormwater & Refuse Fees**

| DESCRIPTION                 | GG uses the GRU customer information system to maintain data for stormwater and solid waste fees and collection.  |
|-----------------------------|---|
| ROLES &<br>RESPONSIBILITIES | GRU is responsible for monthly invoicing, collection and reporting, ongoing call center support, move-ins, and building of technical master data into the CIS for all new developments and relevant property changes. |
| COSTS                       | GRU currently bills GG approximately \$777,463 annually (\$529,816 for stormwater management utility and \$247,647 for solid waste).  |

#### RECOMMENDATION

GRU should continue to provide this billing service to GG for stormwater and refuse.

#### **FINANCIAL IMPACTS**

This revenue offsets GRU's costs.



### Surplus

**DESCRIPTION** City of Gainesville policy dictates the sale of surplus equipment by public auction. Surplus equipment is composed of vehicles, heavy equipment, yard equipment and office furnishing. GG auctions surplus through Weeks Auction Company and GovDeals.com. In recent years, GRU has sold very few items via the GRU administrative procedure that explains GRU's Investment Recovery Committee (IRC). The procedures are not often used due to the high volume of items neccesary to sell and the efficiency of GG's process. GRU has an administrative policy that details this IRC special process.

#### **ROLES & RESPONSIBILITIES** GG manages surplus for the city. GRU's Facilities Department manages the process of moving items from GRU to GG's warehouse. GRU staff submit items via the online "FacilityDude" platform and the tickets are handled by the GRU Facilities Department in consultation with GG. The money received for sold items specific to GRU items is transferred to GRU via the interfund billing process.

**COSTS** For GRU, costs are mostly staff time. GG manages the process.

#### RECOMMENDATION

GRU should maintain this relationship as is. Before the end of FY24, the processes, roles and responsiblities should be documented via an SLA and an update to GRU's administrative policy.

#### FINANCIAL IMPACTS

Establishing a separate warehouse for GRU to sell surplus would be costly. The current process is efficient.



**SECTION 2 - DIRECT PAYMENTS** 

**25** Page 169 of 191

### **Tax Collection**

#### DESCRIPTION

The City of Gainesville, Alachua County, and the City of Alachua all levy a 10% utility tax on electric, gas, and water charges. These tax revenues are passed directly to the levying authority and allowable by state statute. No administrative fee is currently charged.

For customers living inside Gainesville's city limits:

- Electric, gas and water: 10% city utility tax
- Wastewater: no city utility tax

For customers living outside Gainesville's city limits:

- Electric and gas: 10% surcharge plus 10% county utility tax
- Water: 25% surcharge plus 10% county utility tax
- Wastewater: 25% surcharge and no county utility tax.

GRU collects 10% utility tax plus a franchise fee for Newberry, High Springs and City of Alachua monthly/quarterly. For the City of Gainesville and Alachua County, on the monthly bill that GRU sends to those customers, the bills are paid and the utility tax sums are sent monthly to the City of Gainesville and Alachua County. If amounts are not ultimately collected from the customer due to failure of payment, GRU eventually recovers the bad debt when it is written off after seven years.

ROLES &Each entity (city or legislative body) passes ordinances to alter tax amountsRESPONSIBILITIESand alerts GRU to changes. GRU only collects money from current GRU<br/>customers in those areas.

**COSTS** GRU does not charge an administrative fee and is solely a pass through.

#### RECOMMENDATION

GRU should continue to collect and transfer the tax collected to each levying authority (City of Gainesville, Alachua County, City of Alachua, Newberry and High Springs) for FY24 and FY25 without charging an administrative fee.

#### **FINANCIAL IMPACTS**

See recommendation.



**SECTION 2 - DIRECT PAYMENTS** 

**26** Page 170 of 191

### Warehouse

**DESCRIPTION** GG purchases a variety of material on a regular basis.

**ROLES &** Material requests are sent to Stores, where GRU records item identity, box number, account code for city department, and the name of the requesting employee.

**COSTS** Warehouse charges an 8% administrative fee to GG.

#### RECOMMENDATION

GRU should maintain the current agreement. It is efficient for employees of GRU and GG and changes would be disruptive and would not add value.

#### FINANCIAL IMPACTS

Costs are immaterial to GRU.



### Workday

**DESCRIPTION** A GG-purchased software-as-a-service (SaaS) ERP product that is supported by the Workday operations team. Workday ERP is an integrated suite of business applications that include human capital management (HCM), payroll, time tracking, recruiting, learning, benefits management, financial management and procurement. GRU does not utilize the financial management and procurement modules.

#### **ROLES & RESPONSIBILITIES** GRU's director of ERP is tasked to act as the liasion for Workday. The director oversees day-to-day staffing needs and is a member of the Workday Steering Committee who provides input and insights to ERPs, such as SAP and Workday, that help guide stabilization efforts to meet GRU's requirements.

**COSTS** GG has not developed a Workday SLA for GRU's approval that would assign costs.

#### RECOMMENDATION

GG should be asked to create a defined SLA provided for GRU CEO/ GM approval that reflects the actual costs minus the unused modules and acknowledges the staff time as well as provided space at the Admininistration Building and the Eastside Operations Center.

#### FINANCIAL IMPACTS

All associated costs remain undetermined.



# SECTION 3 Shared contracts & Agreements





- **DESCRIPTION** City Works is an asset, permit, and licensing management software that includes an entire suite of GIS-centric management tools for public works, utilities and governments.
- **ROLES &** GRU operational areas manage enterprise level agreement.

#### RESPONSIBILITIES

**COSTS** Enterprise agreement (three-year agreement: '22/'23 = \$115,000; '23/'24 = \$130,000; '24/'25 = \$150,000). GRU is looking to evenly split costs with GG.

#### RECOMMENDATION

Continue licensing as this platform is essential for operations

#### FINANCIAL IMPACTS

FY25 licensing cost for GRU is \$150,000.



### CoG "CADET" Program

- **DESCRIPTION** The City of Gainesville, Santa Fe College, and CareerSource of North Central Florida have agreed to work together in the CADET (Community Action through Development, Education & Training) program to assist young adults with the training to have careers in public safety and utilities.
- **ROLES &** GG is responsible for the administration of the program. GRU has made commitments to provide training on utility skills.
  - **COSTS** GRU has committed to provide training on utility skills.

#### RECOMMENDATION

If program remains past FY24, GRU should continue to work with GG on providing training resources to the program without incurring additional indirect costs. Developing skilled workers from the local community is advantageous to filling GRU's vacancies in operational areas.

#### FINANCIAL IMPACTS

The program gives GRU access to potential employees that would be untapped otherwise.



### **Commercial Drivers Licensing**

#### **DESCRIPTION** GRU requires CDLs for a significant number of positions in operational areas.

ROLES & RESPONSIBILITIES

- GG provides CDL testing services to GRU.
- **COSTS** GRU does not compensate GG for CDL testing. External services typically charge between \$2,000 and \$6,000 per driver with significant off-site training requirements.

#### RECOMMENDATION

GRU should work with GG to define an SLA to compensate GG for the services being provided to GRU and decide if these services are cost effective in comparison to internalizing the testing or contracting with an external testing and training provider.

#### **FINANCIAL IMPACTS**

GRU would likely need to pay GG between \$30,000 to \$72,000 annually to cover testing costs. The additional cost of using an external provider for off-site training is estimated at 2,000 hours per year.

## **Construction Manager at Risk**

**DESCRIPTION** List of approved CMARs. Current contracts may contain some items that are not in alignment with HB 1645.

### **ROLES &**GG keeps a list of approved vendors to be hired as construction managers at**RESPONSIBILITIES**risk. GRU issues task orders as needed.

**COSTS** Additional City of Gainesville ordinances result in an increased cost to contracts. By eliminating these additional ordinances, GRU could be more competitive. GRU takes on additional administrative burden by managing contracts.

#### RECOMMENDATION

For the sake of efficiency, cost reduction and HB 1645 compliance, GRU's Procurement office should continue working with all GRU departments to establish a separate list of approved vendors in FY25. GRU can develop individual bids as necessary until the contract is complete.

#### **FINANCIAL IMPACTS**

Reduced contract costs would result.



## **CWA Labor Agreement**

| DESCRIPTION                 | GRU's hourly employees are non-exempt from Fair Labor Standards and are represented by CWA.   |
|-----------------------------|---|
| ROLES &<br>RESPONSIBILITIES | GRU is part of the collective bargaining team and co-signer on the CWA agreement. GG administers the CWA agreement through HR and Risk Management. The City Commission historically approves the CWA agreement. |
| COSTS                       | GRU does not currently incur additional costs to be a part of the collective bargaining team.   |

#### RECOMMENDATION

To comply with HB 1645, GRU should collectively bargain a new agreement between GRU and CWA and review the SLA with HR and Risk Management to ensure administration and obligations of the contract are covered within the SLA.

#### **FINANCIAL IMPACTS**

GRU will incur costs to administer the CWA agreement without the assistance of HR and Risk Management.



## Dark Fiber/Network Connectivity

**DESCRIPTION** GRUCom currently provides fiber telecommunications services to GG through contracted terms. Internet services are provided by three vendors: Cox, GRUCom and AT&T.

### ROLES &GG pays market rates for GRUCom's network connectivity services, but doesRESPONSIBILITIESnot currently pay for all fiber circuits.

**COSTS** GG uses nine legacy fiber circuits to provide network connectivity to various GG sites that are not being billed by GRUCom. These circuits have a market value of \$1,915 per month. There is an additional transport circuit with a market value of \$992 per month. The total unbilled market value is \$218,724 annually.

#### RECOMMENDATION

GRUCom should work with GG to determine the level of network connectivity needs for 10 unbilled circuits and recover the costs of service using the standard GRUCom Data Services Order MOU.

GG network connectivity represents an incremental revenue stream that offsets GRU's network costs.

#### FINANCIAL IMPACTS

A potential \$218,000 of incremental revenue if GG continues to use GRUCom for network connectivity services.



### **Emergency Management**

- **DESCRIPTION** GRU is a part of City of Gainesville and Alachua County Emergency Operations.
- ROLES &GRU has a utility emergency manager that participates in city and county<br/>emergency management.
  - **COSTS** There are no costs transferred between GG and GRU for emergency management; however, GG pays disposal costs of debris after major weather events.

#### RECOMMENDATION

GRU should develop a revised policy for declaring emergencies and to clarify its role in the city's emergency operations including responsibilities during and after storms. GRU is part of the City of Gainesville, and this solution maintains essential emergency coordination between the city, county and state.

#### **FINANCIAL IMPACTS**

The cost of debris handling is unknown, but could be significant if not reimbursed from FEMA.



## **Engineering/Architecture Needs**

**DESCRIPTION** List of vendors with approved skills, credentials, degrees, etc. for specialties in professional architectural, engineering, landscape architectural, surveying and mapping services. These are often referred to as "GEAC" (a derivative of the specialties included). Current contracts may contain some items that are not in alignment with HB 1645.

### ROLES &GRU Procurement creates contracts from approved vendors. GG uses theseRESPONSIBILITIEScontracts as needed.

**COSTS** There is an increased cost to the contracts because of additional City of Gainesville ordinances. By eliminating these additional ordinances, GRU could be more competitive. There is additional administrative burden to GRU managing the contracts.

#### RECOMMENDATION

GRU's Procurement office has completed a new solicitation for these specialties. New contracts will be in effect soon (estimated at end of March when the current contracts end). This recommendation is efficient, likely to reduce contract cost, and compliant with HB 1645.

#### **FINANCIAL IMPACTS**

Reduced contract costs.



### Federal Lobbyist

**DESCRIPTION** Both GG and GRU utilize the services of Van Scoyoc Associates for lobbyist services for matters concerning GG and GRU at the federal legislative level.

### ROLES & RESPONSIBILITIES

**COSTS** GRU pays 50% of the contract amount – \$54,000 annually (plus travel, not to exceed \$1,500 per year) – and is billed \$2,250 per month. Contract expires October 2024.

Consultation, advocacy, communications and logistical support.

#### RECOMMENDATION

GRU should continue the current service through FY24. GRU will not continue this service in FY25.

#### **FINANCIAL IMPACTS**

Discontinued service will reduce GRU expense by \$27,000 annually. The state lobbyist contract may include a portion of these services and thereby slightly increase those costs.



## **Financial Document Timing**

**DESCRIPTION** GRU's audit relies on pension information/reports from the actuary. GG should send financial statements to actuary in early November.

**ROLES &** GG Finance staff. **RESPONSIBILITIES** 

**COSTS** None since early completion benefits GG and is needed for their audit.

#### RECOMMENDATION

GG sends the pension information/reports from the actuary to GRU by Dec. 15 each year. GRU should incorporate these documents into financial statements for the financial statement audit and additionally document this timeline with the actuary and GG.

#### **FINANCIAL IMPACTS**

Impacts GRU's debt transactions.



### **Fuel Tax Refund**

- **DESCRIPTION** GG purchases fuel (diesel and gas) and tracks its use. The State of Florida issues a refund on the sales tax paid and GG passes on GRU's portion of the refund.
- **ROLES &** GG files documentation with Florida and transfers GRU's portion of the refund.
  - **COSTS** GRU is not directly charged by GG for the refund.

#### RECOMMENDATION

GRU should document this service in the new fleet SLA for efficiency.

#### FINANCIAL IMPACTS

Additional staff hours will be required to manage the fuel tax refund if this agreement does not continue.



### **Power District**

- **DESCRIPTION** GRU owns approximately 17 acres of surplus property east and south of the Administration Building. In 2011, GRU entered into an MOU with GG and the former Community Redevelopment Agency outlining proposed plans for the redevelopment and/or reuse of the property.
- **ROLES &** The CRA was designated by the City Commission as the lead agency for these efforts, with GRU and GG as partners in the effort.
  - **COSTS** Currently there are no "designated" funds allocated for this project. Expenses are budgeted as needed (appraisals, environmental surveys, etc.). GCRA historically maintained an annual fund for power district related costs.

#### RECOMMENDATION

GRU should assume full control of mangement and disposal efforts to establish a more effeicent plan to dispose of property and yield the highest return to pay down debt.

#### **FINANCIAL IMPACTS**

GRU is issuing an RFP for a commercial real estate brokerage firm. Costs will be included in that agreement.



### **Recording Fees**

| DESCRIPTION                 | The City Clerk's office reimburses GRU for recording fees associated with various real estate documents.   |
|-----------------------------|--|
| ROLES &<br>RESPONSIBILITIES | GRU records legal documents in the Official Records of Alachua County and pays for said recording via NPOD requests to GRU accounts payable (AP). GRU AP coordinates the interdepartmental transfer/billing for reimbursement. |
| COSTS                       | Estimated recording fees are less than \$5,000 annually.   |

#### RECOMMENDATION

GRU Real Estate should continue to manage the process for recording documents. GRU Real Estate budgets to cover recording fees. Recapture current allocation for recording GRU legal documents from the City Clerk's office.

#### **FINANCIAL IMPACTS**

N/A. This is a passthrough charge.



### **Security Services**

| DESCRIPTION                 | GRU is piggy-backing on GG's current contract for security services at GRU facilities. |
|-----------------------------|--|
| ROLES &<br>RESPONSIBILITIES | GRU manages the contract.  |
| COSTS                       | GRU spends \$460,000 on these services annually.                                       |
|                             | RECOMMENDATION   |
|                             | GRU will issue an RFP in February 2024.  |
|                             | FINANCIAL IMPACTS  |
|                             | Anticipate similar or slightly higher costs.   |

## State Lobbyist

- **DESCRIPTION** GG and GRU utilize the services of Peebles, Smith and Matthews and GrayRobinson for lobbyist services for matters concerning GG and GRU at the state legislative level.
- **ROLES &** Consultation, advocacy, communications and logistical support.

### RESPONSIBILITIES

**COSTS** GRU pays half of the \$84,000 contract amount. The contract expires September 2024.

#### RECOMMENDATION

GRU should continue the current service through FY24 and initiate an RFP to contract service separate from the City of Gainesville beginning FY25. GRU should anticipate a slight increase in cost.

#### FINANCIAL IMPACTS

See recommendation above.



### **Sweetwater Wetlands**

| DESCRIPTION                 | Sweetwater Wetlands is the most economical means of meeting regulatory standards for removing nutrients from GRU's permitted discharges.                    |  |
|-----------------------------|---|--|
| ROLES &<br>RESPONSIBILITIES | GRU is responsible for facilities that pertain to meeting our regulatory requirements. GG is responsible for stormwater, sediment, trash and public access. |  |
| COSTS                       | There are no costs transferred between GRU and GG under the MOU.  |  |
| RECOMMENDATION              |   |  |

GRU should continue to fulfill its responsibilities outlined in the MOU.

#### **FINANCIAL IMPACTS**

None under current MOU.



## END OF DOCUMENT





#### File Number: 2024-137

Agenda Date: February 7, 2024

**Department:** Gainesville Regional Utilities

Title: 2024-137 Escrow for Government Services Contribution (GSC) (NB)

Department: GRU Authority Board, Vice Chair Coats

**Description:** The Vice Chair of the GRU Authority Board is recommending that the Gainesville Regional Utilities (GRU) Authority Board discuss the possibility of escrowing scheduled payments for the Government Services Contribution (GSC).

Fiscal Note: None at this time

**Explanation:** In light of various conversations surrounding the current Government Services Contribution (GSC), Vice Chair Coats is recommending the board discuss the possibility of escrowing scheduled payments for the GSC until a final decision regarding the transfer is made.

**Recommendation:** GRU Authority members discuss and recommend next steps.