Integrated Resource Plan
Stakeholder Engagement Meeting Series

GRU More than Energy IRP
Integrated Resource Plan
Get Connected | A community engagement process.

IRP Stakeholder Meeting Agenda

Stakeholder Engagement and Participation

Cantrece Jones, Acuity Design Group Team

GRU Electric System Overview
Chuck Heidt, Project Engineer and IRP Technical Lead, GRU

What is an IRP

Brad Kushner, Acuity Design Group Team

GRU's Mission and the IRP

Eric Walters, Interim Chief Sustainability Officer, GRU

Open Discussion & Next Steps

Cantrece Jones, Acuity Design Group Team

Stakeholder Engagement and Participation

Open and Inclusive

Participation

with Every Stakeholder

Stakeholder Participants

Alachua County School Board
Theresa Spurling-Wood

Alachua County Sustainability Manager
Betsy Riley

Audubon
Helen Warren

Builders Association of North Central Florida
Sara Emmanuel

Central Florida Community Action Agency
Caroline W. Ruff-Looney

Citizen Climate Advisory Board Member
John Nix

COG Chief Climate Officer
Dr. Dan Zhu

Community Weatherization Coalition
Alane Humrich

Housing and Community Development Director
Corey Harris

League of Women Voters
Janice Garry
Roberta Gastmyer

Ministerial Alliance
Elder Karl Anderson

NAACP Environmental Justice
Nkwanda Jah

Rotary Club
Casey Fitz

Santa Fe College
Gary Cothren

SciVance
Jason Roe

Sierra Club
David Hastings

SWAG
Dorothy Benson

TriMark
John Fleming

UAB & Solar Impact
Barry Jacobson

United Way
Amber Miller

University of Florida
Chris Whitehurst

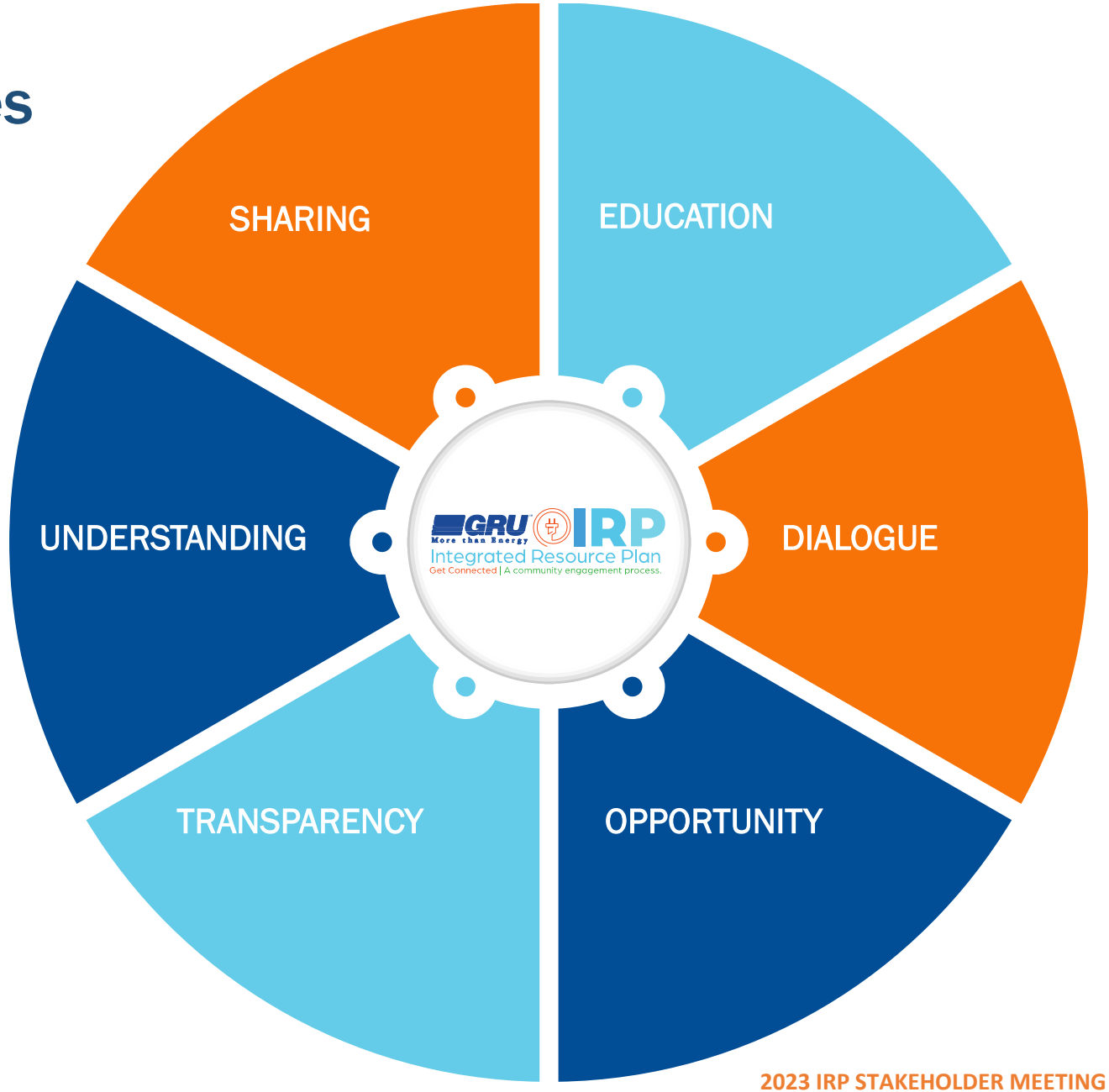
University of Florida - Director of Energy Studies Public Utility Research Center
Ted Kury

University of Florida - Health
Bobby Baird

Participation Guidelines

You and your organization represent the diverse community we serve.

We appreciate the value your time and effort will bring to the future of GRU and our region.



What is Important to YOU?

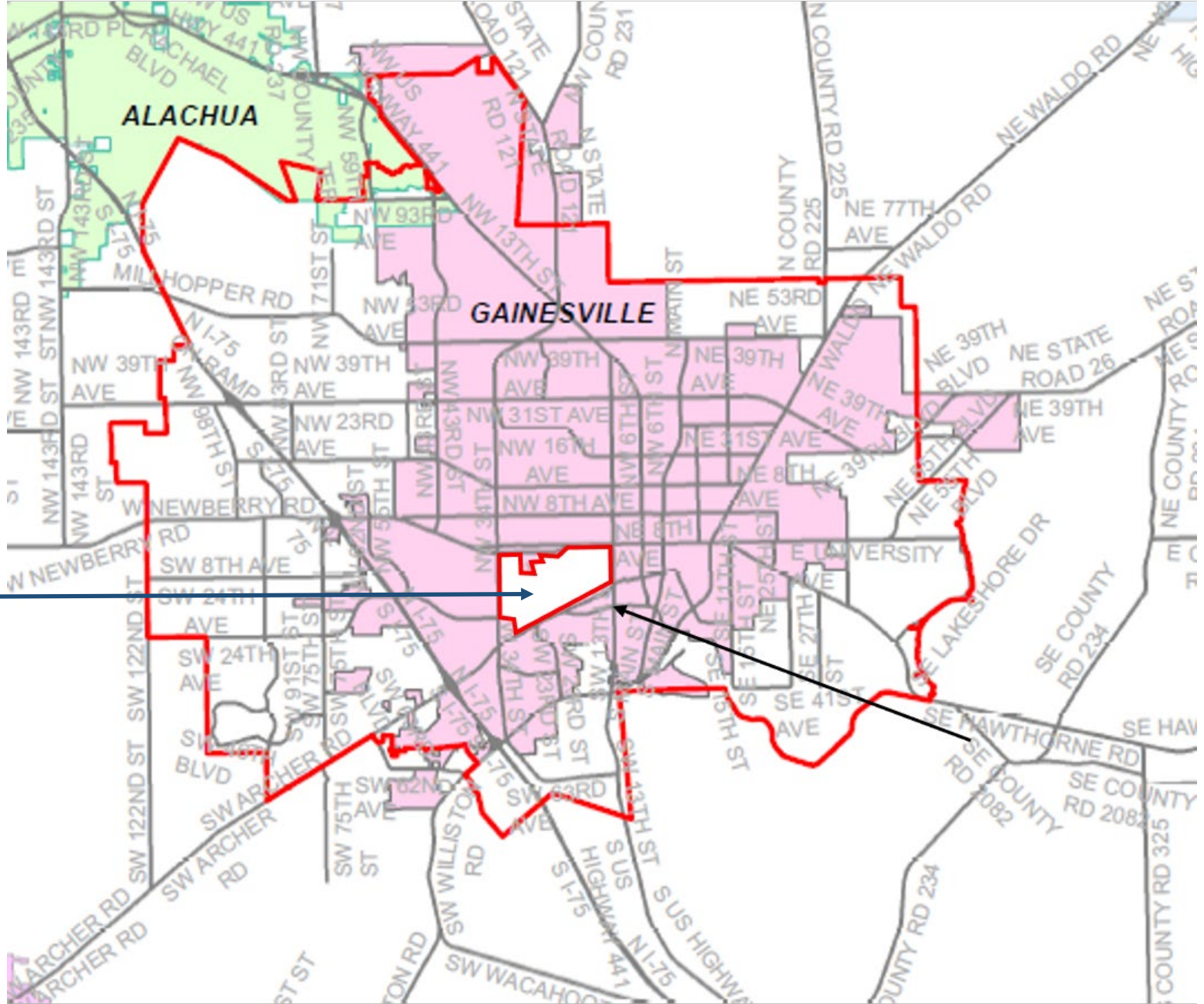
GRU Electric System Overview

Chuck Heidt

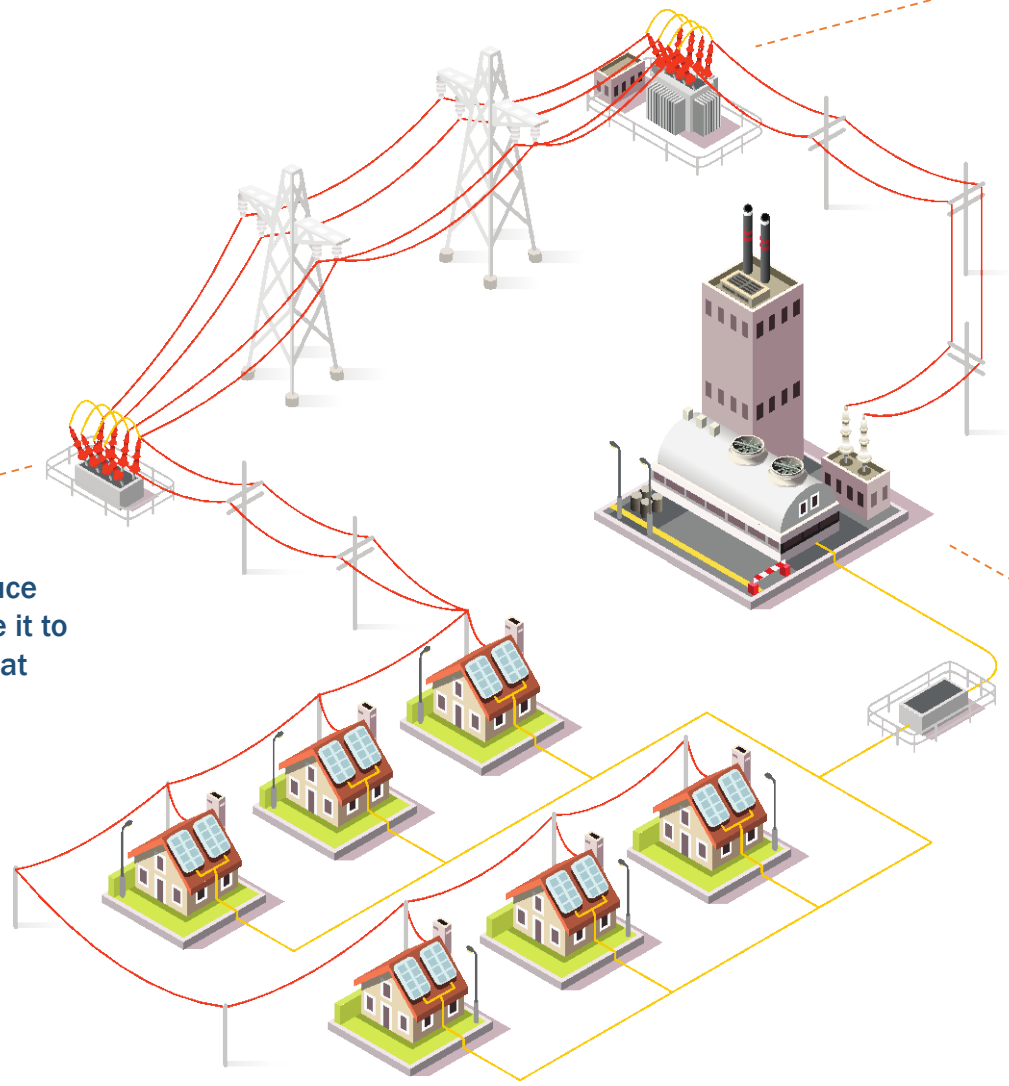
Project Engineer and IRP Technical Lead, GRU

GRU's Service Territory

UF Main Campus (not served by GRU)



How GRU's Electrical System Works



Transmission

Electric current then moves to an interconnected group of power lines and other equipment. These lines move electricity from its source, often transmitting high voltage electric current across great distances.

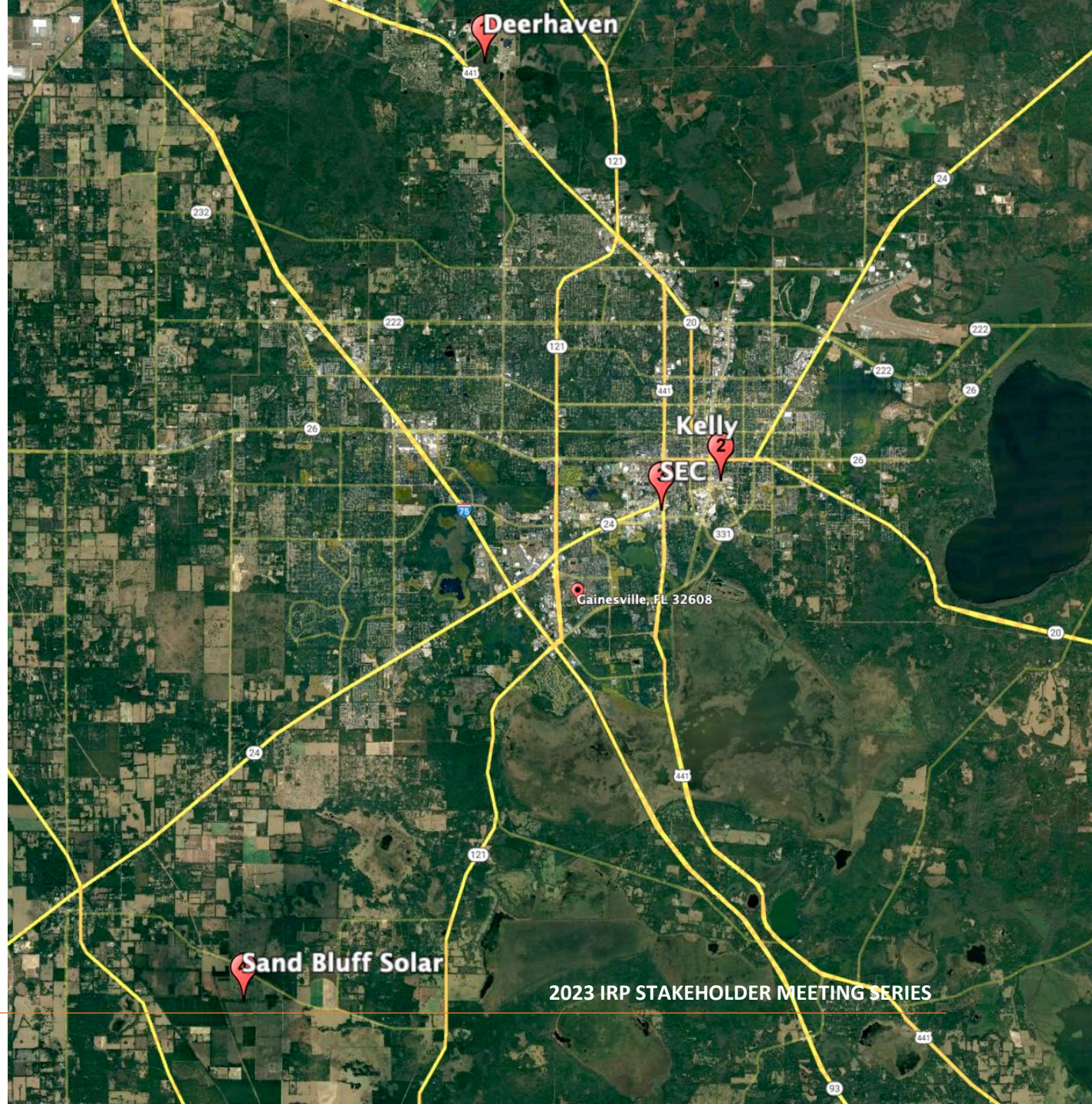
Distribution

Devices called transformers then reduce the voltage of the electricity and move it to another set of lines and equipment that connect directly to the homes and businesses in our community.

Generation

Electricity is generated when certain forces interact with energy resources–sunlight, wind, water, natural gas, coal, oil, nuclear. Various processes convert the potential energy from these resources to electric current, which is the movement of charged particles.

Electric Generation Assets



Electric Transmission & Distribution Assets

TRANSMISSION

GRU's bulk electric power transmission network (System)

- **The System is planned, operated, and maintained to be in compliance with all FERC, NERC, and FRCC requirements to assure the integrity and reliability of Florida's Bulk Electric System (BES).**

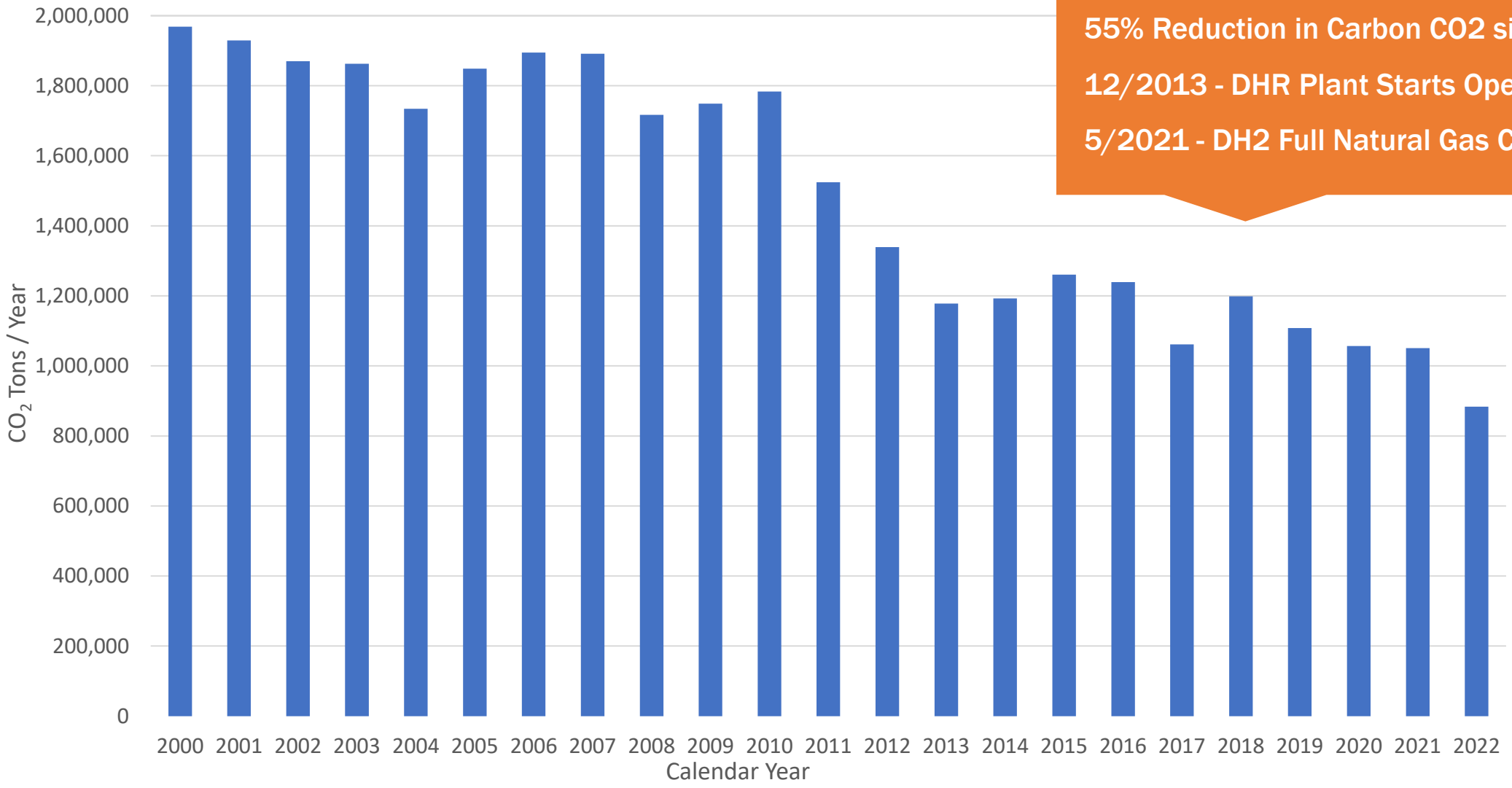
The System consists of a 230 kV radial and a 138 kV loop connecting the following:

- **GRU's three primary generating stations**
- **GRU's eleven distribution substations**
- **One 230 kV and one 69 kV intertie with Duke Energy Florida (DEF)**
- **A 138 kV intertie with Florida Power and Light Company (FPL)**
- **An interconnection with Clay at Farnsworth Substation**
- **An interconnection with the City of Alachua at Alachua No. 1 Substation**

DISTRIBUTION

72 distribution circuits feeding 1,458 miles of 12KV distribution circuits with 62.1% underground.

GRU Carbon Dioxide (CO_2) Emissions

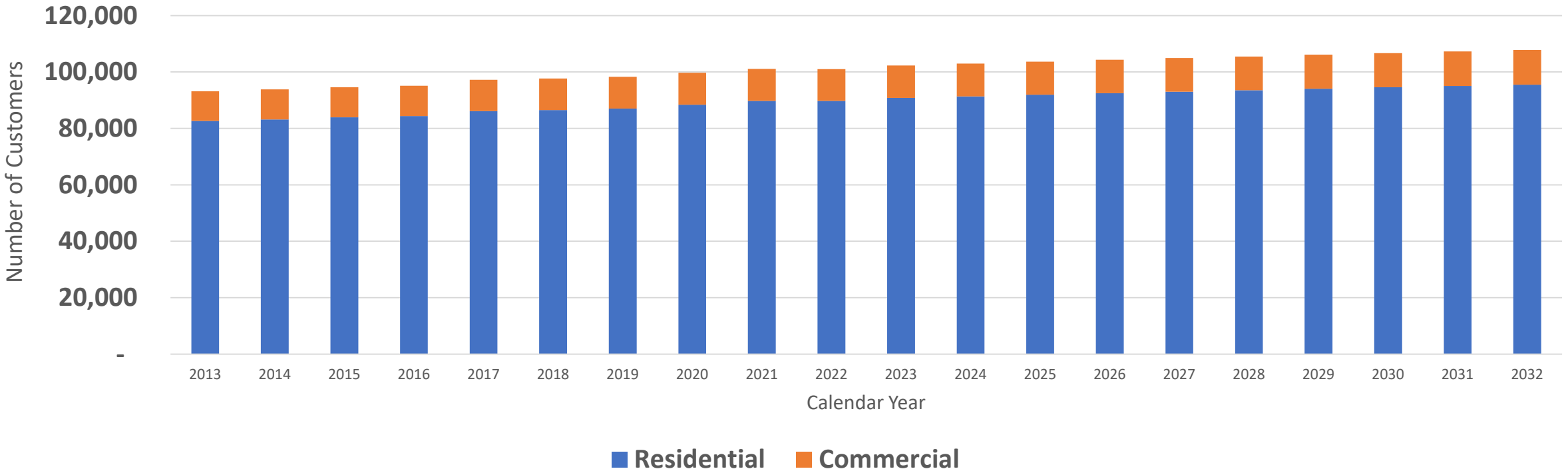


55% Reduction in Carbon CO2 since 2000

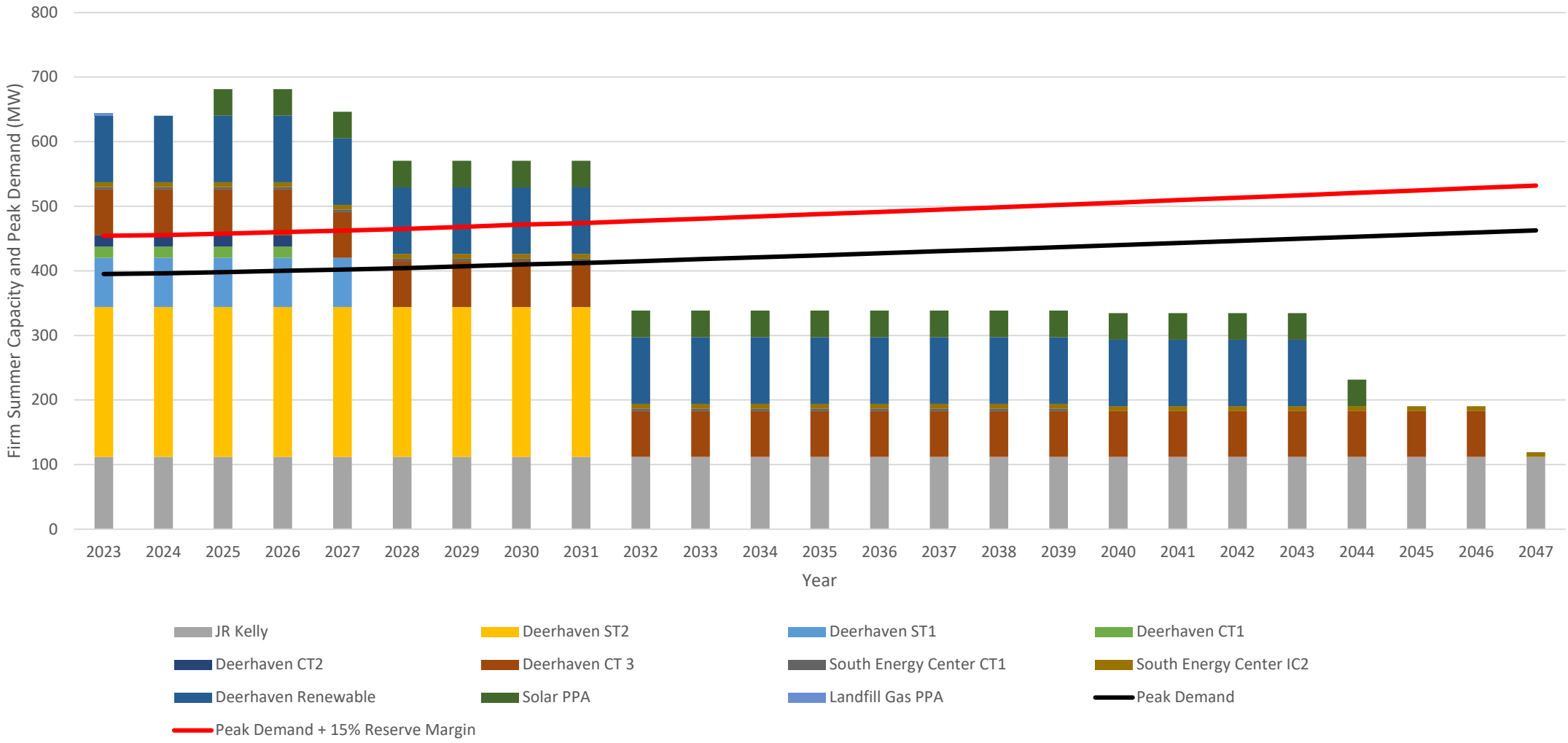
12/2013 - DHR Plant Starts Operation

5/2021 - DH2 Full Natural Gas Capability

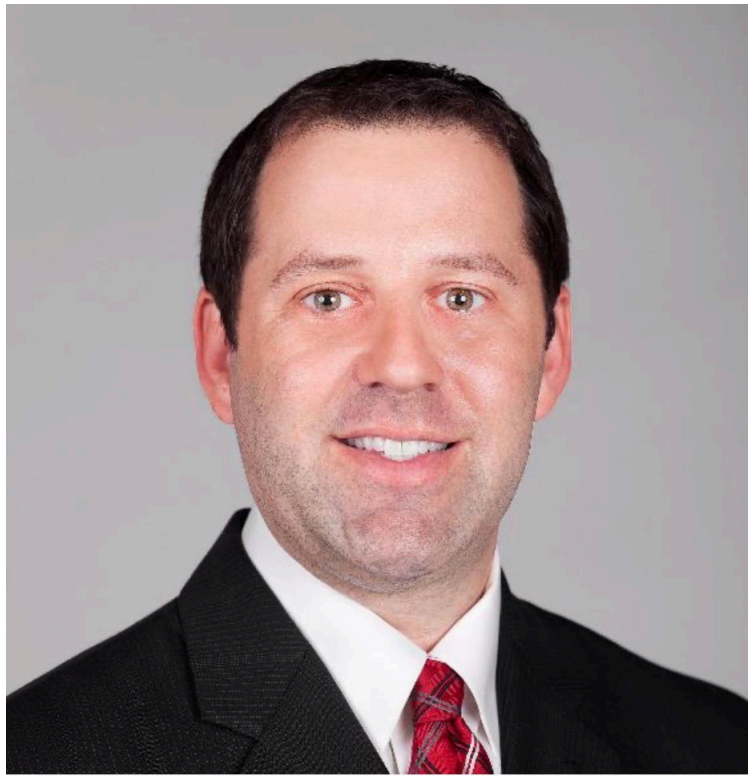
Customer Growth



Summer Peak Demand and Firm Capacity Resources



What is an IRP

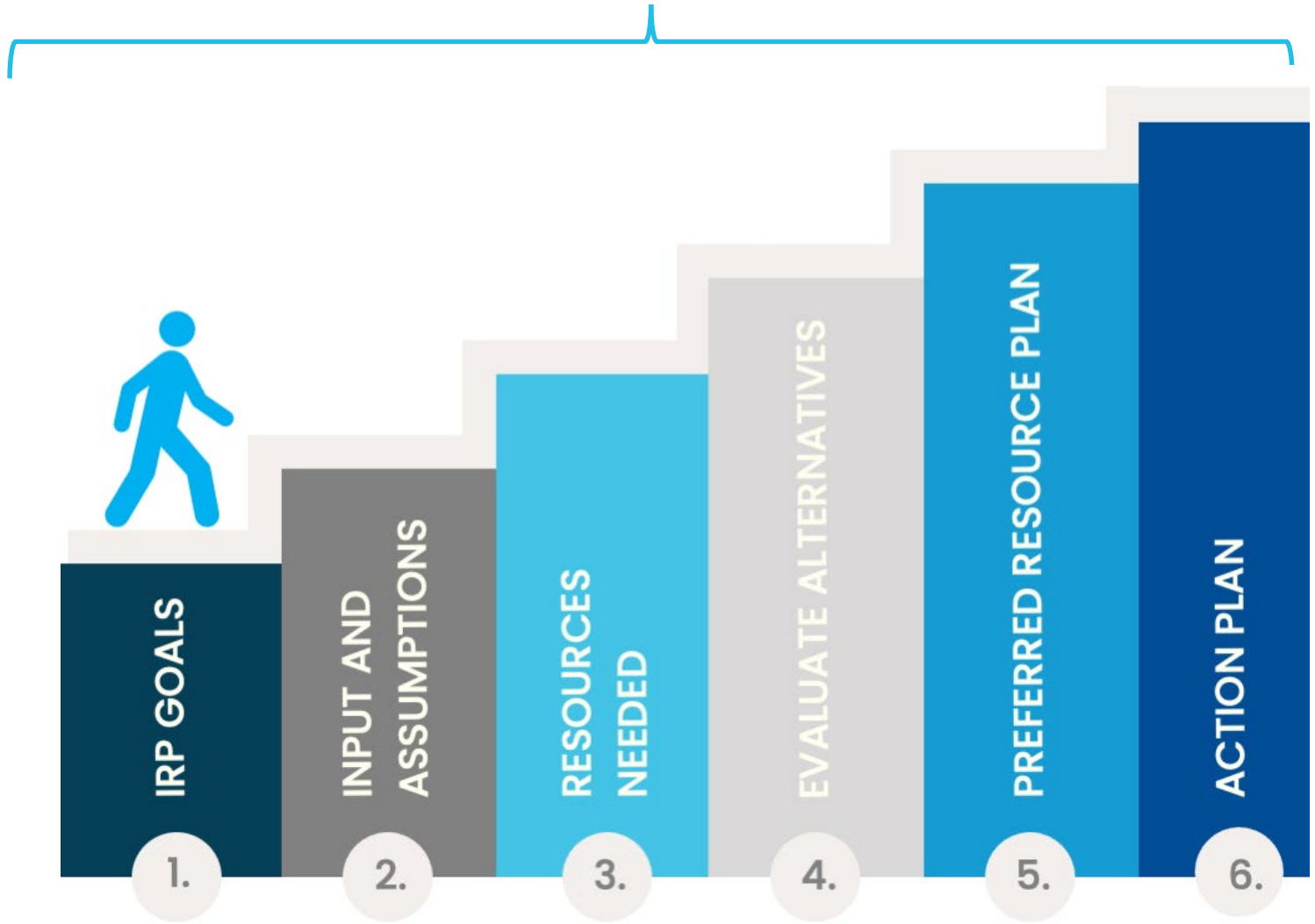


Brad Kushner
Acuity Design Group

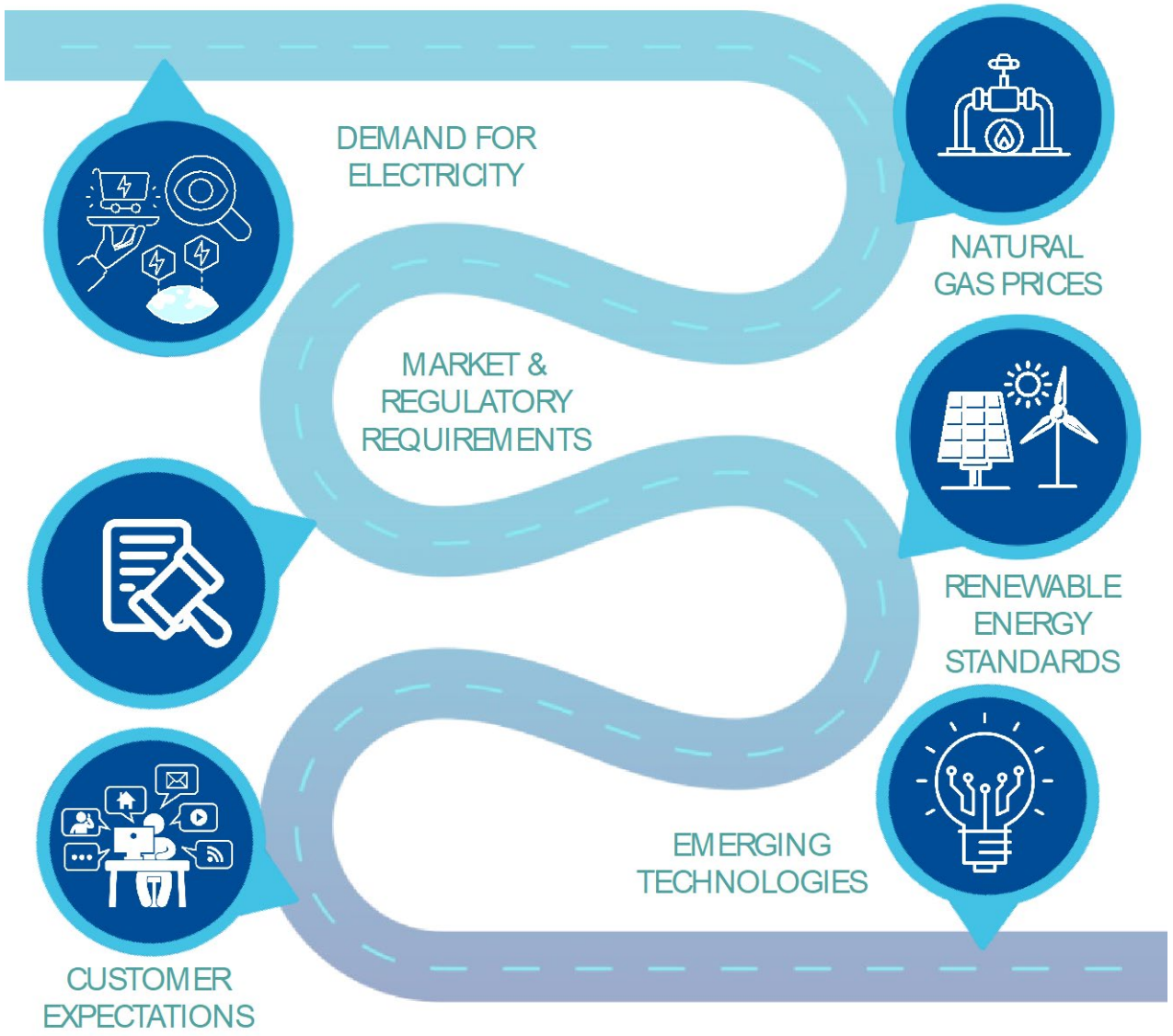
What is an Integrated Resource Plan?

- Integrated Resource Plan (IRP) is standard practice within the electric utility industry
- Specific to GRU, the IRP will provide a roadmap to meet the future power requirements of the Gainesville community
- IRP is used as a resource for strategic planning to inform GRU's decisions related to:
  - Economics
  - Reliability
  - Environmentally Responsible

The IRP Process



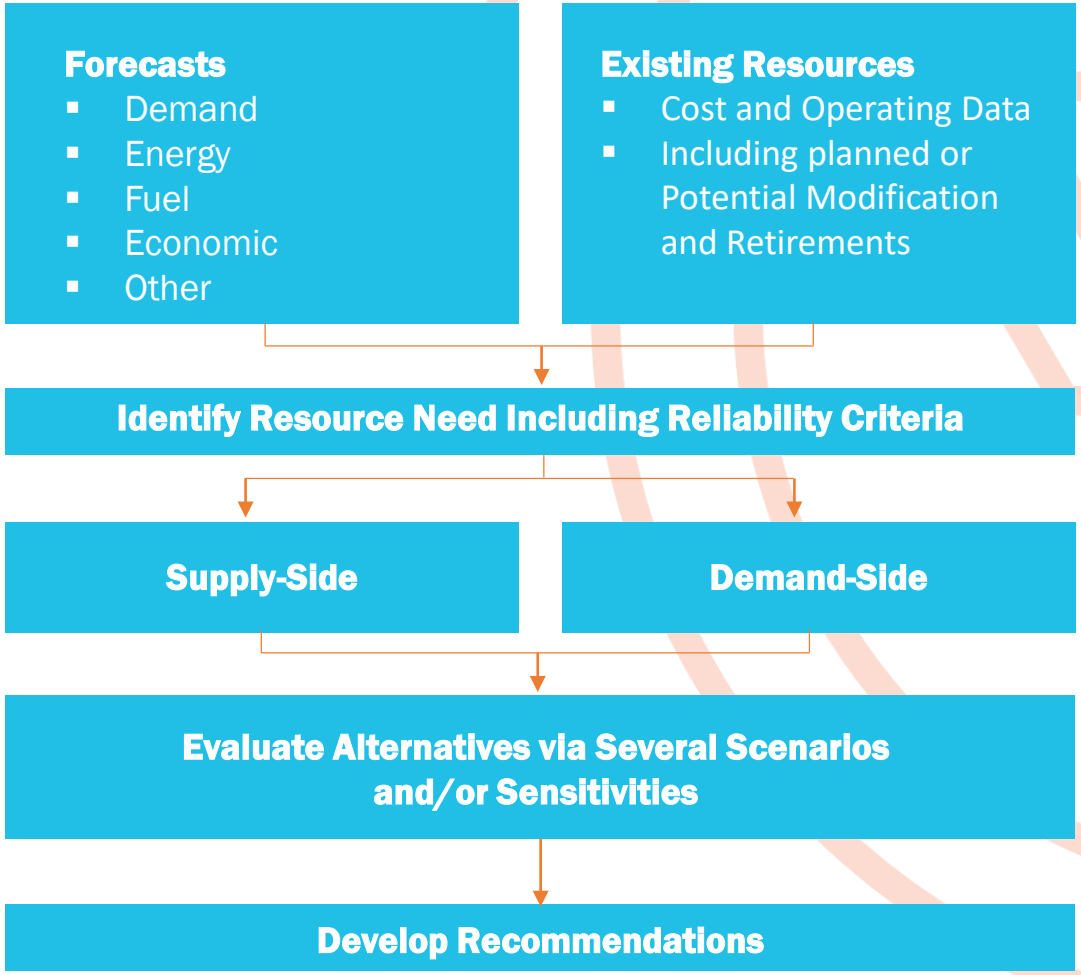
The IRP Process



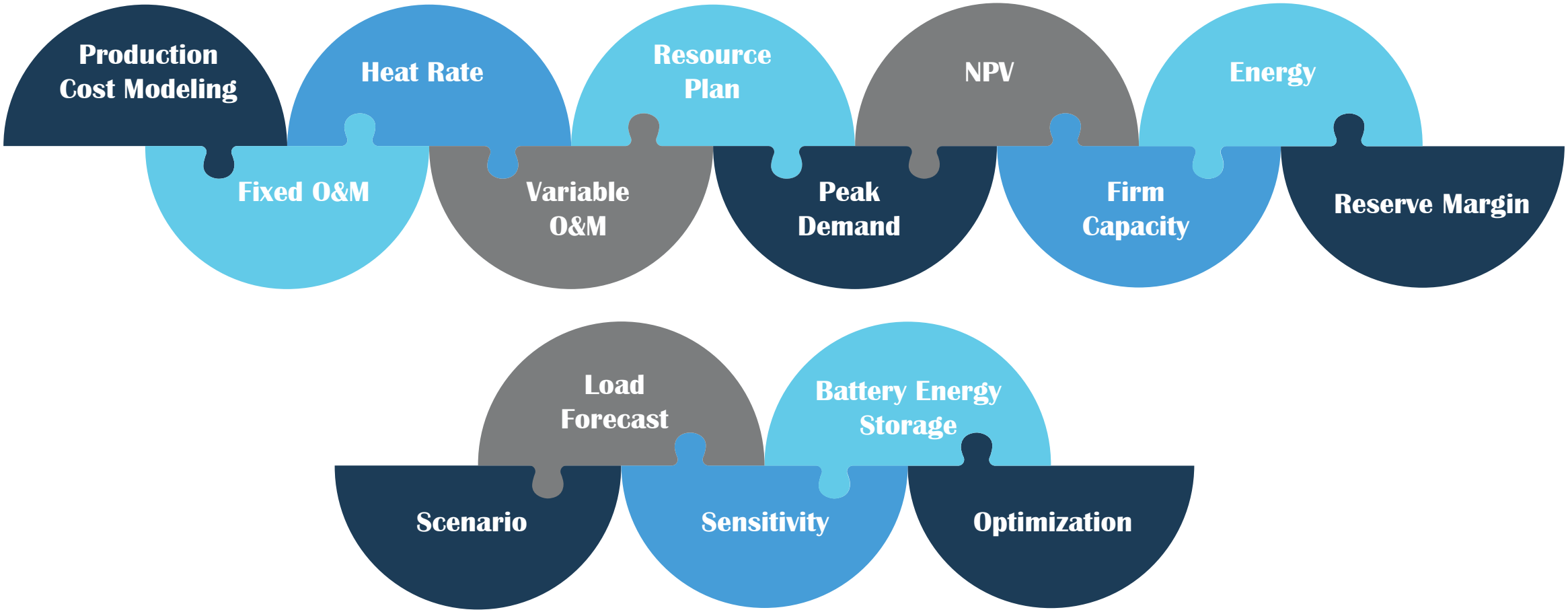
IRP Considerations

- Existing generating resources
- Demand and energy forecasts
  - Customer growth
  - Electrification
  - Electric vehicles
  - Customer-sited renewables
  - Demand-side management/energy efficiency/conservation
- Natural gas, coal, and biomass fuel price projections
- New generating resources
  - Renewables
  - Conventional
- Emissions of carbon dioxide (CO_2)

IRP Approach and Methodology



Integrated Resource Plan Terms



GRU's Mission

Eric Walters
Interim Chief Sustainability Officer

GRU's Mission

- About GRU:
  - Multi-service utility owned by the City of Gainesville
  - 5th largest municipal electric utility in Florida
  - We serve approximately 100,000 electric customers in Gainesville and surrounding areas, offering:
    - Electric
    - Natural gas
    - Water
    - Wastewater
    - Telecommunications services

Mission:

To provide safe, reliable, competitively priced utility services in an environmentally responsible manner to enhance the quality of life in our community

GRU's Sustainability

What is Sustainability?

- The ability to maintain or support a process continuously over time:
  - Meeting present needs without compromising the ability of future generations to meet their needs
  - In one word: Stewardship
- Three pillars of Sustainability:
  - People
  - Economic
  - Environmental

GRU's Sustainability

Balancing Act

- People
  - Customers
  - Employees
  - Community
- Economic
  - Fiscal Responsibility
  - Find Efficiencies
  - Recognize the long-range path to financial responsibility
- Environmental
  - Protection
    - GRU has a culture of "more than meeting" regulations
  - Intentional Planning

GRU's Net Zero Goals

- October 18, 2018: Commission adopted Net Zero 2045 resolution
- GRU current renewable generation (~139 MW total):
  - ~18.5 MW of solar feed-in tariff
  - ~14 MW of net-metered solar
  - 103 MW biomass
  - 3.8 MW landfill gas
  - Highest percentage of renewable energy in the state
- Renewable utility-scale options available in Florida: solar and biomass
- Solar must play a significant role in reaching 2045 resolution

Why is GRU doing an IRP now?

- An IRP is a strategic look at future generation needs and how to meet them
- Performed periodically
- Last IRP was completed in 2019
  - 15 unique scenarios were modeled
  - Common recommendations were completed
  - No long-term path was selected
- Significant changes in pricing and available technology
- Energy landscape has shifted dramatically
- The IRP will inform GRU's decision related to resource planning

What Does the IRP Mean for the Community?

- We are glad that you are here
- Touch point for community
- Input to how the community meets its energy needs
- Economic and environmental input

Open Discussion and Next Steps

Cantrece Jones
Acuity Design Group

Open Discussion and Next Steps

- IRP Stakeholder Engagement Meetings
  - Meeting 2 – IRP Variables 6/6/23
  - Meeting 3 – Potential IRP Sensitivities and Scenarios 7/26/23
  - Meeting 4 – Preliminary Modeling Results 10/19/23
  - Meeting 5 – Refined Modeling Results and GRU's Path Forward 1/10/24
- We value your feedback