

2016 TYSP Workshop



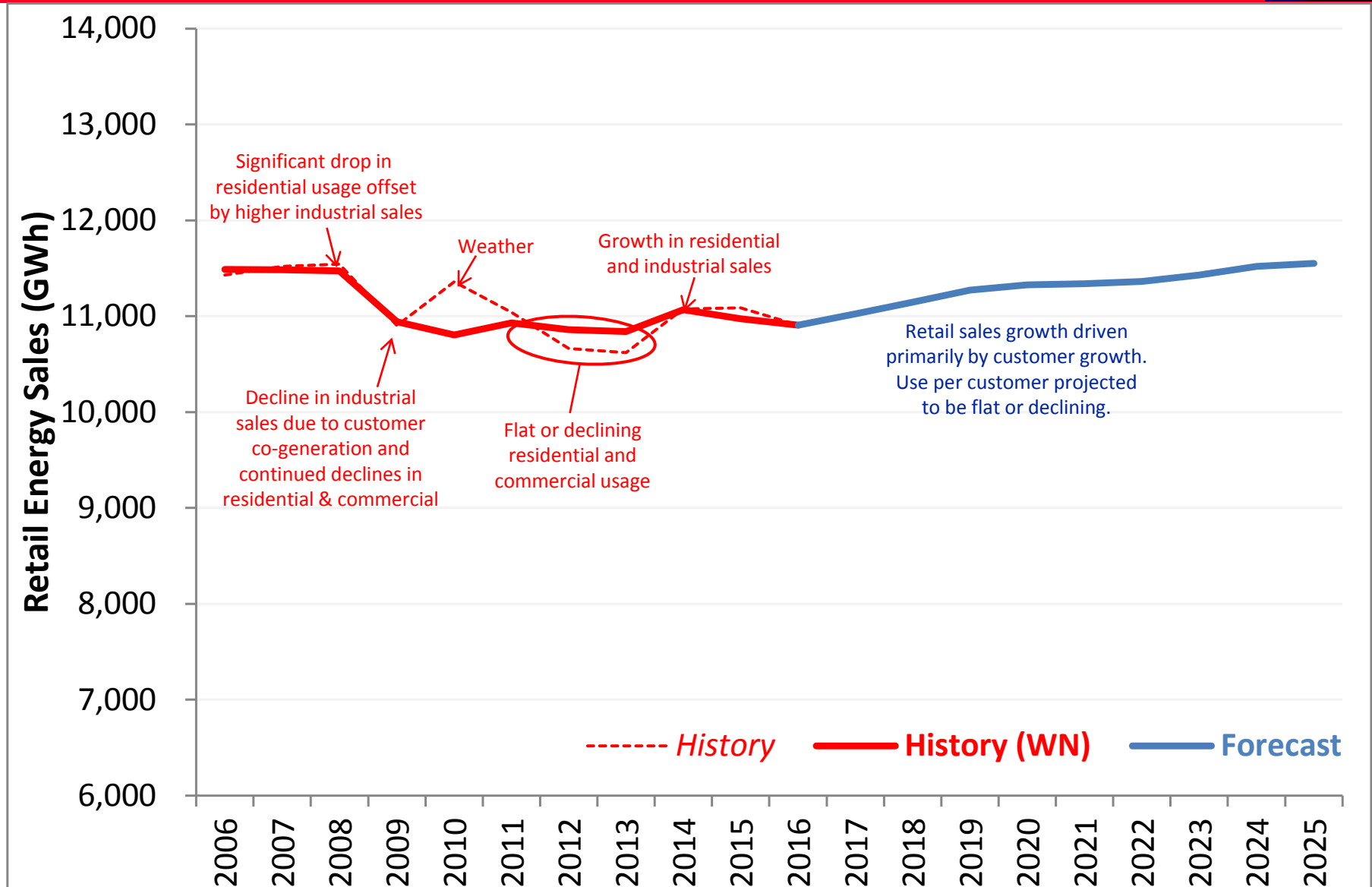
Gulf Power Company
Presentation before the
FLORIDA PUBLIC SERVICE COMMISSION
Sybelle Fitzgerald
September 14th, 2016

Overview



- **Load Forecast**
- **Factors Considered for Next Resource Need**
- **Need Year Driver**
- **Gulf's Generation Energy Sources**
- **Gulf's 2016 TYSP Next Resource Need**
- **Site and Technology Selection**

Gulf Power Retail Energy Sales



2016 TYSP Workshop



Gulf's Next Resource Need



Factors Considered for Next Resource Need



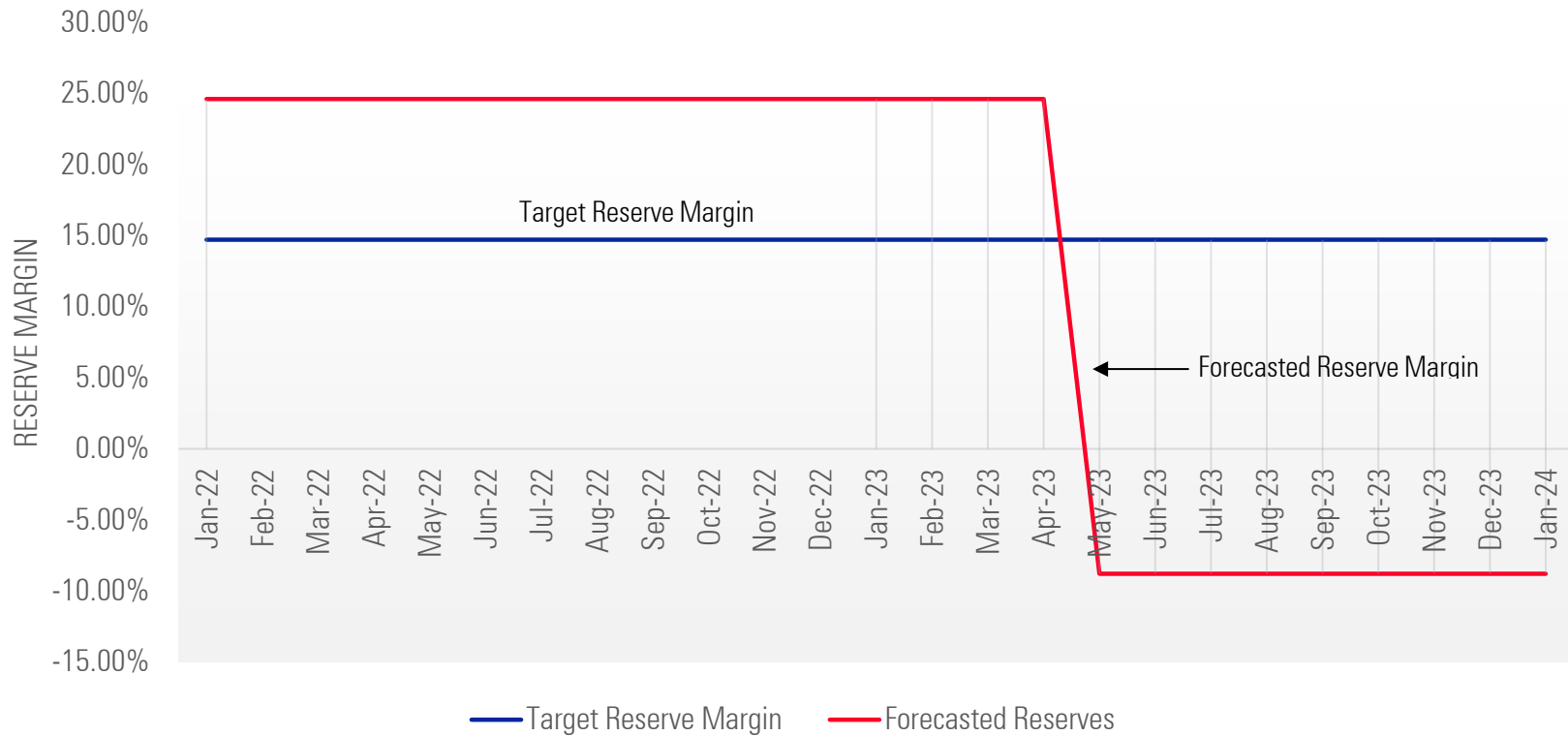
- **Technology**
- **Fuel**
- **Transmission**
- **Site Factors**
- **Performance**

Need Year Driver



2023 Expiration of Gulf's 885 MW PPA

Gulf Power Reserve Margin



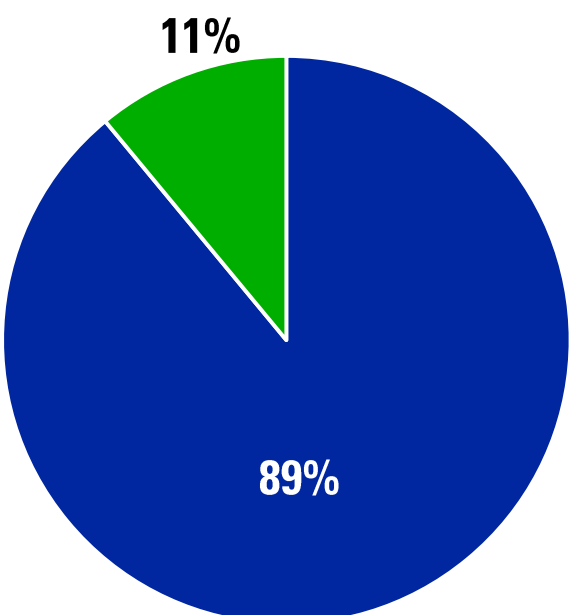
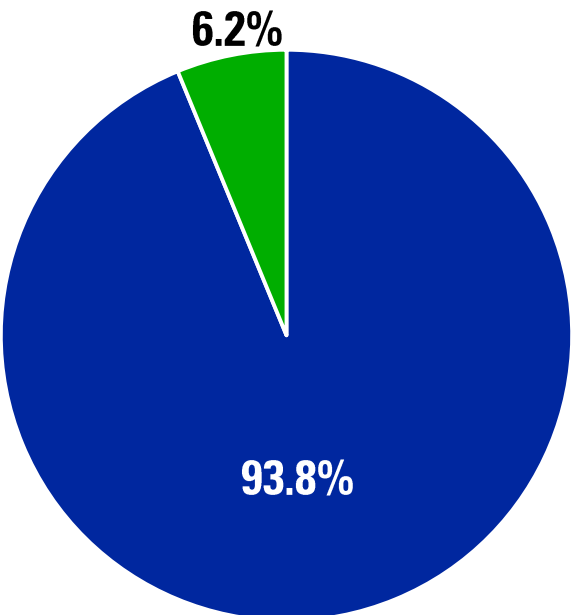
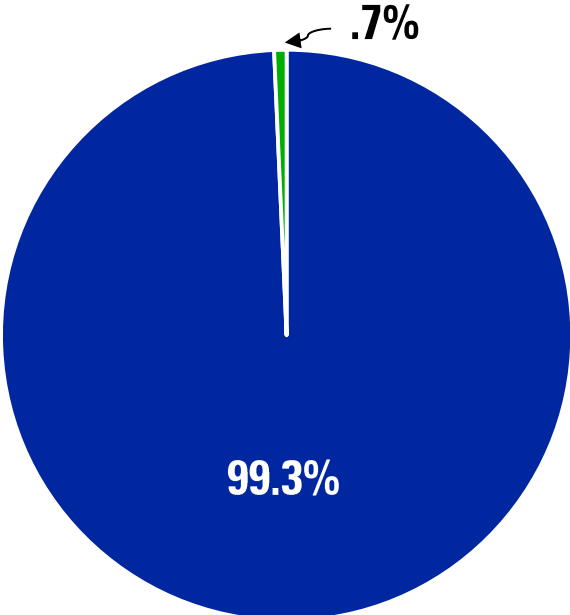
Gulf Generation Energy Sources



2015

2016

2017



 Fossil

 Renewables

Gulf's 2016 TYSP Next Resource Need



Technologies to meet Gulf Power capacity need:

- **Combustion Turbine (CT)**
 - Lower installed cost (\$/kW) & higher energy cost (\$/MWh) than CC
- **Combined Cycle (CC)**
 - Better efficiency (\$/MWh) but at higher installed cost (\$/kW) than CT

Components:

- **Capital Costs**
- **Operations and Maintenance Costs**
- **Energy and Capacity Value**

Site and Technology Selection



Site and Technology screen:

- **2 technologies (CC and CT) across 6 site locations**

Gulf's 2016 TYSP Anticipated Technology: CT

- **Additional studies are required to finalize technology**

Anticipated Sites: North Escambia and Smith

- **Preliminary studies show these sites to be economically favorable**
 - **Close proximity to electrical transmission, gas pipeline, and water supply**
- **Additional studies are required to finalize site selection**



Questions