# Ten-Year Site Plan Comparison Orlando Utilities Commission

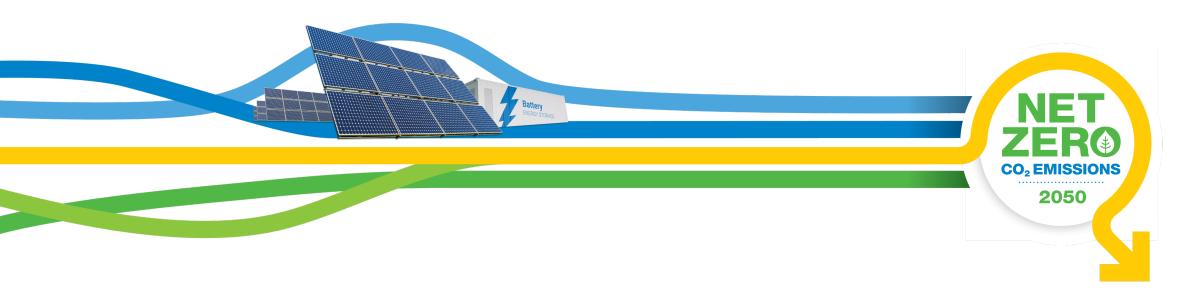
OUC100

A Century of Reliability



## **OUC Commitment to Net-Zero by 2050**

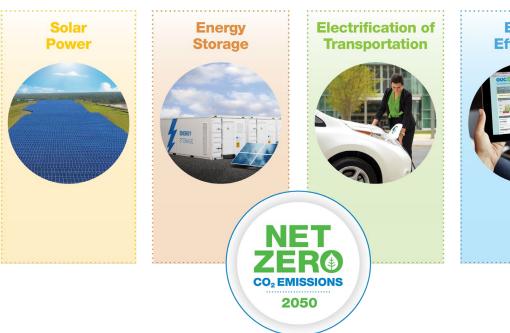
- Orlando Utilities Commission ("OUC") continues its commitment to achieve Net-Zero CO<sub>2</sub> emissions by 2050.
- Electric Resource Planning is an ongoing process. OUC will continue on its path to Net-Zero CO<sub>2</sub> emissions while maintaining very high service reliability, maintaining appropriate planning flexibility, and ensuring reasonable costs to OUC's customers.





## **OUC Commitment to Interim Targets**

- OUC established interim goals for CO<sub>2</sub> emissions reduction from 2005 levels in 2020
  - 2030 Goal: 50% Reduction
  - 2040 Goal: 75% Reduction
  - 2050 Goal: Net-zero
- OUC is on-track to meet its 2030, 2040, and 2050 CO<sub>2</sub> Net-Zero goals through strategic investments in solar, energy storage, vehicle electrification, energy efficiency and more.







## **Customer, Demand, & Fuel Forecasts**

#### **2022 TYSP**

Metric	2021 Starting Value	Average Annual Growth Rate (%)
Residential Customers	228,707	(2021 – 2031): 2.35%
Commercial Customers	27,128	(2021 – 2031): 1.38%
Industrial Customers	5,210	(2021 – 2031): 0.99%
Summer Peak Demand (MW)	1,404	(2021 – 2031): 1.87%
Winter Peak Demand (MW)	1,135	(2021 - 2031): 2.85%
Net Energy for Load (GWh)	7,013	(2021 – 2031): 1.96%
Natural Gas (\$/MMBtu)	_*	_*

#### **2023 TYSP**

Metric	2022 Starting Value	Average Annual Growth Rate (%)
Residential Customers	236,057	(2022 – 2032): 2.02%
Commercial Customers	28,013	(2022 – 2032): 1.35%
Industrial Customers	5,102	(2022 – 2032): 1.16%
Summer Peak Demand (MW)	1,420	(2022 – 2032): 1.89%
Winter Peak Demand (MW)	1,156	(2022 – 2032): 2.09%
Net Energy for Load (GWh)	7,259	(2022 – 2032): 1.07%
Natural Gas (\$/MMBtu)	_*	_*

Source: Schedules 2.1, 2.2, 3.1, 3.2, 3.3

All values represent total of OUC and St. Cloud.

Summer Peak Demand, Winter Peak Demand, and Net Energy for Load exclude wholesale power projected to be provided via contractual power sales to other utilities.

<sup>\*</sup>OUC considers fuel prices to be proprietary and confidential and are therefore not reported.



## **Generation Additions**

	Туре	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
	Solar (Nameplate) <sup>(1)</sup>			149	224	149	149	224	224	298			1,417
<b>a</b>	Batteries			40	60	50		50		150			350
TYSP	Natural Gas				471 <sup>(2)</sup>		350 <sup>(4)</sup>						821
2022	Other												
7	Retirements				-312 <sup>(3)</sup>		-350 <sup>(4)</sup>						-662
	Net Total			189	443	199	149	274	224	448			1,926
	Solar (Nameplate) (1)				149		149		149	149	149	149	894
_	Batteries						100				100	150	350
TYSP	Natural Gas		157 <sup>(2)</sup>		314 <sup>(2)</sup>		352 <sup>(4)</sup>						823
2023	Other												
7(	Retirements				-311 <sup>(3)</sup>		-352 <sup>(4)</sup>						-663
	Net Total		157		152		249		149	149	249	299	1,404

Source: Schedule 8 and Table 6-1

<sup>1.</sup> Nameplate rating shown. OUC utilizes 50% of nameplate for contribution to summer peak demand and 0% of nameplate for contribution to winter peak demand for solar PV.

<sup>2. 2025: &</sup>quot;Natural Gas" reflects Osceola Generating Station ("OGS") Units 1 – 3. In 2022 TYSP, OGS Units 1-3 were anticipated to first be capable of providing power to OUC by Summer of 2025. OGS Unit 2 is currently capable of providing power to OUC, so 2023 TYSP shows capacity from OGS Units 1 and 3 beginning Summer 2025.

<sup>3. 2025: &</sup>quot;Retirements" reflects retirement of Stanton Energy Center Unit 1.

<sup>4. 2027: &</sup>quot;Natural Gas" and "Retirements" reflect conversion of Stanton Energy Center Unit 2 to 100% natural gas.



# **Summer Reserve Margins**

	2022	TYSP	2023 TYSP			
Year	Reserve Margin (MW)	Reserve Margin (% of Peak)	Reserve Margin (MW)	Reserve Margin (% of Peak)		
2022	340	24%	-	-		
2023	318	22%	310	21%		
2024	340	23%	263	18%		
2025	930	62%	731	48%		
2026	763	50%	454	29%		
2027	825	53%	624	40%		
2028	987	62%	609	38%		
2029	1,067	65%	657	41%		
2030	1,339	81%	708	43%		
2031	1,308	77%	875	52%		
2032	-	-	721	42%		

Source: Schedule 7.1



# Winter Reserve Margins

	2022	TYSP	2023 TYSP			
Year	Reserve Margin (MW)	Reserve Margin (% of Peak)	Reserve Margin (MW)	Reserve Margin (% of Peak)		
21/22	397	33%	-	-		
22/23	354	28%	566	47%		
23/24	333	26%	595	51%		
24/25	412	31%	688	57%		
25/26	631	47%	685	56%		
26/27	669	49%	773	61%		
27/28	662	47%	748	58%		
28/29	681	47%	722	55%		
29/30	649	44%	697	52%		
30/31	766	51%	767	55%		
31/32	-	-	541	38%		

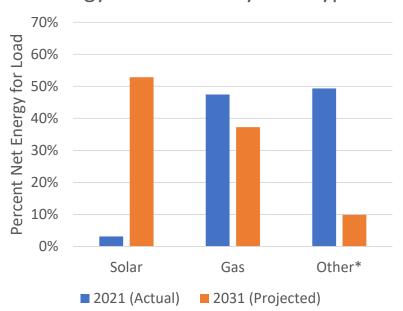
Source: Schedule 7.2



## **Energy Generation by Fuel Type**

### **2022 TYSP**

#### Energy Generation by Fuel Type

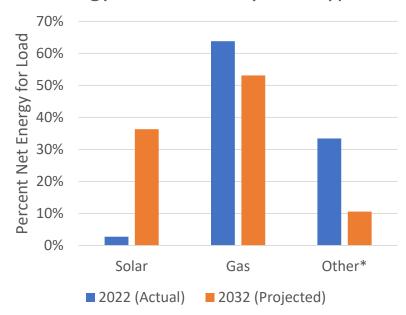


- \* "Other" for "2021 (Actual)" Includes Coal, Nuclear, and Landfill Gas
- \* "Other" for "2031 (Projected)" includes Nuclear and Landfill Gas

Source: Schedule 6.2

### **2023 TYSP**

#### Energy Generation by Fuel Type



- \* "Other" for "2022 (Actual)" Includes Coal, Nuclear, and Landfill Gas
- \* "Other" for "2032 (Projected)" includes Nuclear and Landfill Gas



## **OUC Will Meet Its Net-Zero & Service Goals**

- OUC is on track to meet our Net-Zero CO<sub>2</sub> Goals, including 2030 target of 50% Reduction from 2005 levels
- OUC will maintain superior service reliability
  - Reserve margins more than satisfy minimum requirements
  - Ensure meeting Net-Zero goals while facilitating integration of solar and energy storage
- OUC will maintain planning flexibility
  - To take advantage of projected cost reductions and technology improvements
- OUC planning will ensure that our customers receive clean, reliable service at the lowest reasonable cost