

DUKE ENERGY FLORIDA

✓ **Our Commitment to Renewables**

✓ **Solar in Florida**



DUKE ENERGY FLORIDA RESPONSIBLY PURSUING RENEWABLE ENERGY

Duke Energy Florida is committed to providing safe, reliable, affordable and clean renewable energy to the 1.7 million homes and business that depend on us

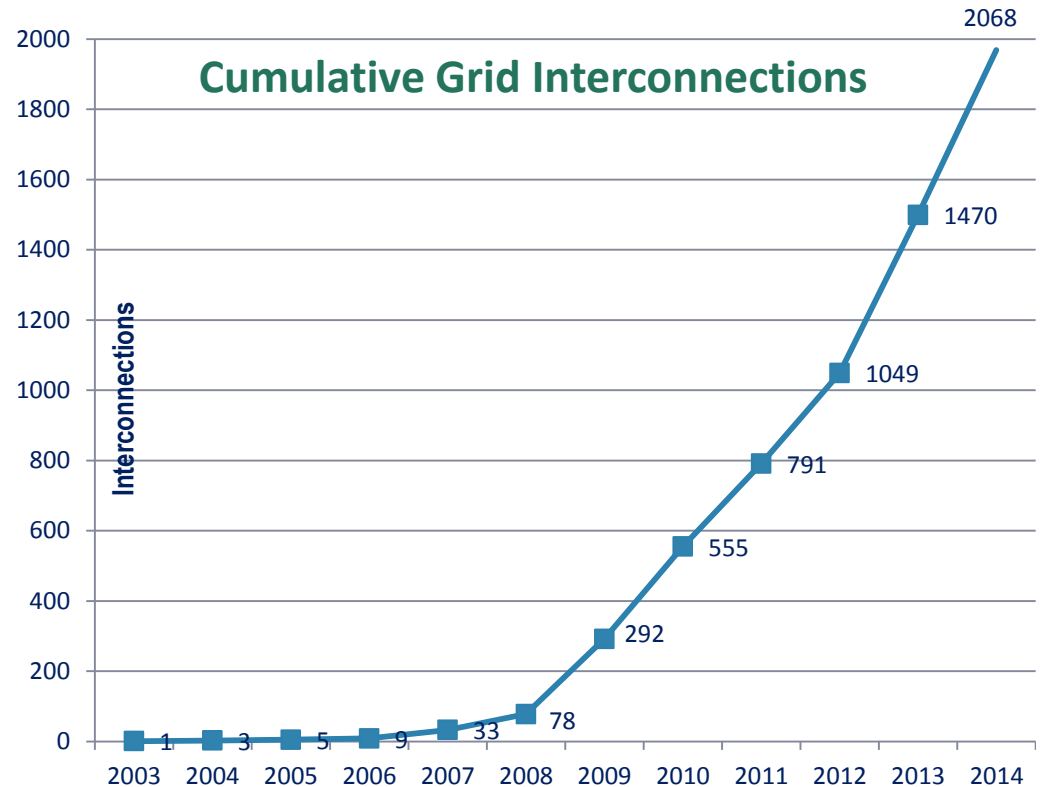
- We served our customers with more than 1.1 million-MWhs from renewable sources in 2014
- In 2015, DEF is forecasted to serve about 3.5 percent of our customers' energy needs with renewable sources

We recognize solar energy will play a significant role in Florida's energy future

- Duke Energy Florida plans to add up to 500 MW of new solar PV facilities by 2024
- The first 5 MW will be under construction by the end of this year
- Duke Energy Florida is committed to interconnecting customer owned renewable generators

DUKE ENERGY FLORIDA SUPPORTING CUSTOMER OWNED SOLAR

- DEF has helped its customers expand their small solar generation from less than 1 MW of solar in 2008 to more than **23 MW** on the grid today
- DEF is interconnecting on average **80** small solar generators per month at our customers' homes and businesses



DUKE ENERGY FLORIDA

NEAR-TERM SOLAR DEMONSTRATION FACILITIES

The near-term scaled demonstration facilities will allow DEF to examine solar PV generation technology efficiency, sufficiency, and adequacy, the cost of providing such technology, and the value of such technology to our customers. This prudent preparation is a natural next step to expand beyond small solar pilot R&D.

Strategically scaled solar facilities to examine:

➤ Physical Integration

- Land and environmental impacts, technology choices , grid impacts, supply chain and construction

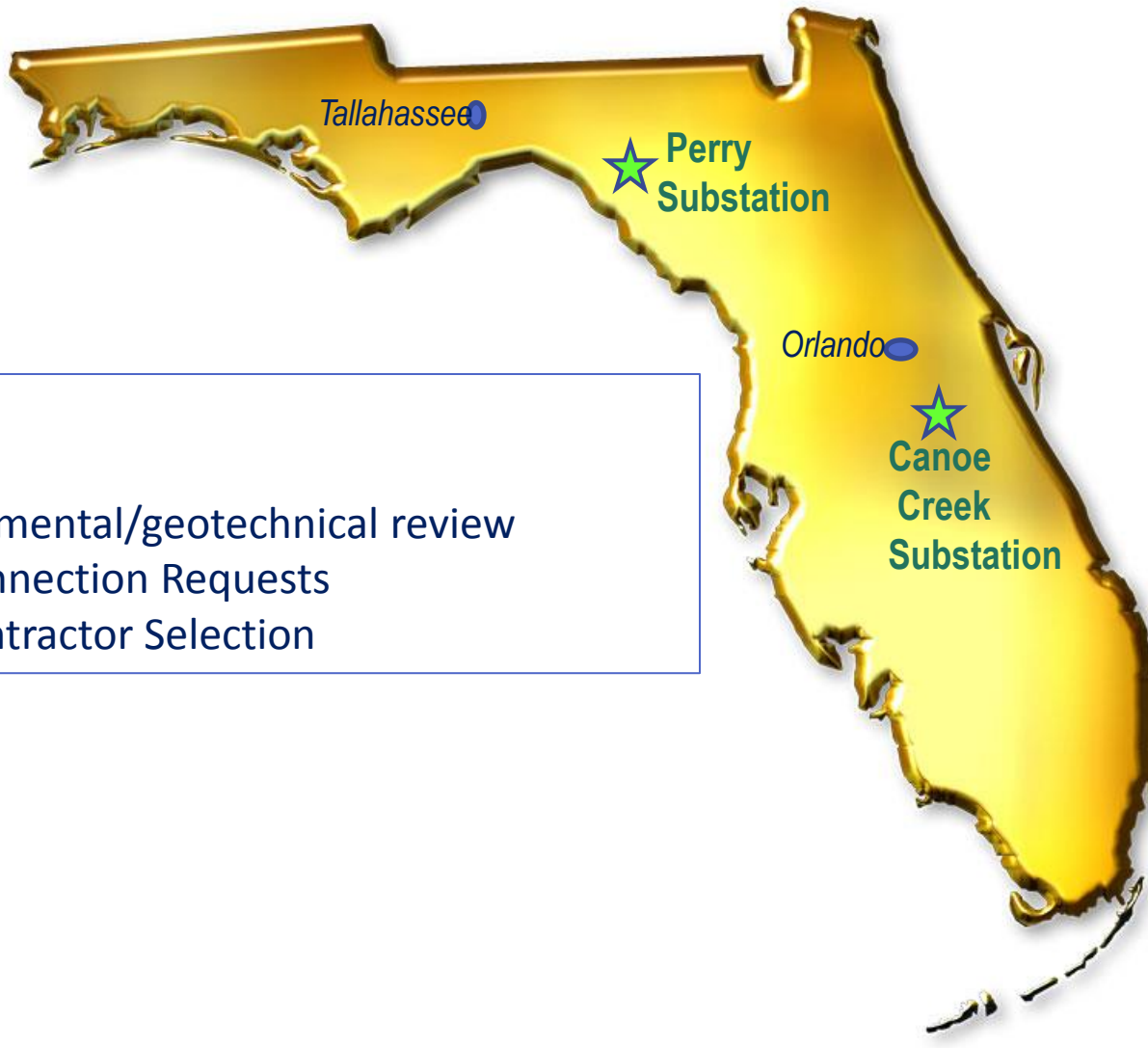
➤ Facility and Technology Operations

- Maintenance, grounds up-keep, location dependencies, grid interconnection, training and experience

➤ Technology Value and Costs

- Soft costs, component costs, solar production data, integration effects, carbon dioxide off-sets

DUKE ENERGY FLORIDA 2015 SOLAR DEMONSTRATION FACILITIES



Complete:

- ✓ Siting
- ✓ Environmental/geotechnical review
- ✓ Interconnection Requests
- ✓ EPC Contractor Selection

OSCEOLA COUNTY SOLAR FACILITY #1 (up to 3.8 MW)

LOCATED 40 MINUTES SOUTH OF ORLANDO AT DEF'S CANOE CREEK SUBSTATION

Status:

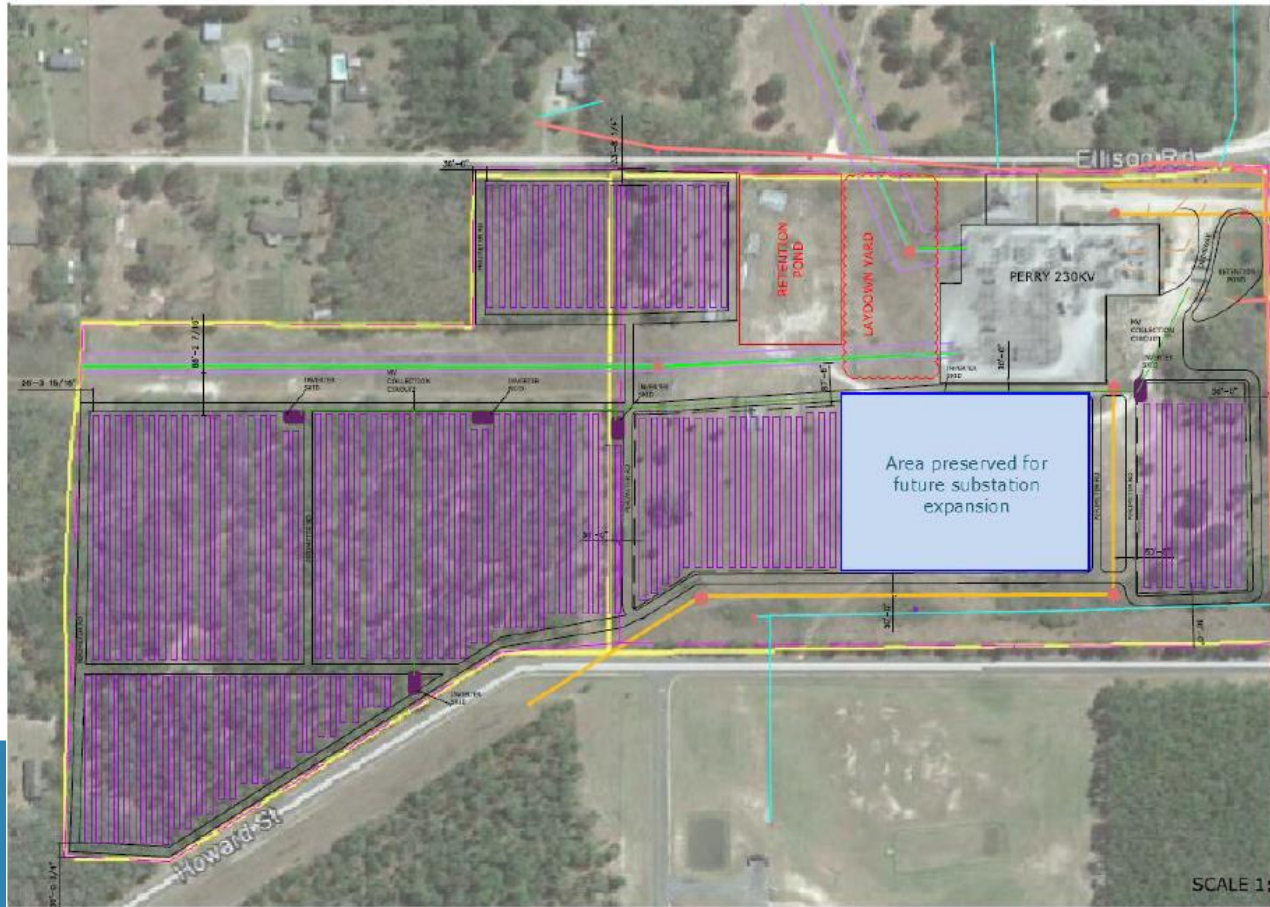
- ✓ Permitting, 9/2015
- ✓ Site Mobilization, 11/2015
- ✓ Commercial Operation, 1Qtr-16



**Site plan and facility size subject to design changes*

TAYLOR COUNTY SOLAR FACILITY #2 (up to 7.65 MW)

LOCATED 50 MINUTES SE OF TALLAHASSEE AT DEF'S PERRY SUBSTATION



Status:

- ✓ Permitting, 11/2015
- ✓ Site Mobilization, 12/2015
- ✓ Commercial Operation, 2Qtr-16

DUKE ENERGY FLORIDA 2016 SOLAR DEMONSTRATION FACILITIES (up to 10 MW each)




Underway:

- ✓ Real estate review
- ✓ Environmental and geotechnical review
- ✓ Interconnection requests

DUKE ENERGY FLORIDA LONG-TERM SOLAR FACILITIES – AS OF 2015 TYSP

Year	2015	2016	2017	2018	2024
MW	5	15	25	35	500



Adding solar PV facilities as part of the normal 10-year resource planning process may support fuel diversity solutions, but relies heavily on:

- Declining solar PV price forecast
- Increasing natural gas forecast
- Value rendered by solar PV technology
- Emerging cost-effective resources
- Pending clean energy policies

