



| United States Nuclear Regulatory Commission Official Hearing Exhibit                           |                     |                        |
|--|---------------------|------------------------|
| In the Matter of: FLORIDA POWER & LIGHT CO.<br>(Turkey Point Nuclear Generating Units 6 and 7) |                     |                        |
| Commission Mandatory Hearing   |                     |                        |
| Docket #:  | 05200040   05200041 | Identified: 12/12/2017 |
| Exhibit #:   | FPL-004-MA-CM01     | Withdrawn:             |
| Admitted:  | 12/12/2017          | Stricken:              |
| Rejected:  |                     |                        |
| Other:   |                     |                        |

# Turkey Point Nuclear Power Plant

## Units 6 & 7

### Overview Panel

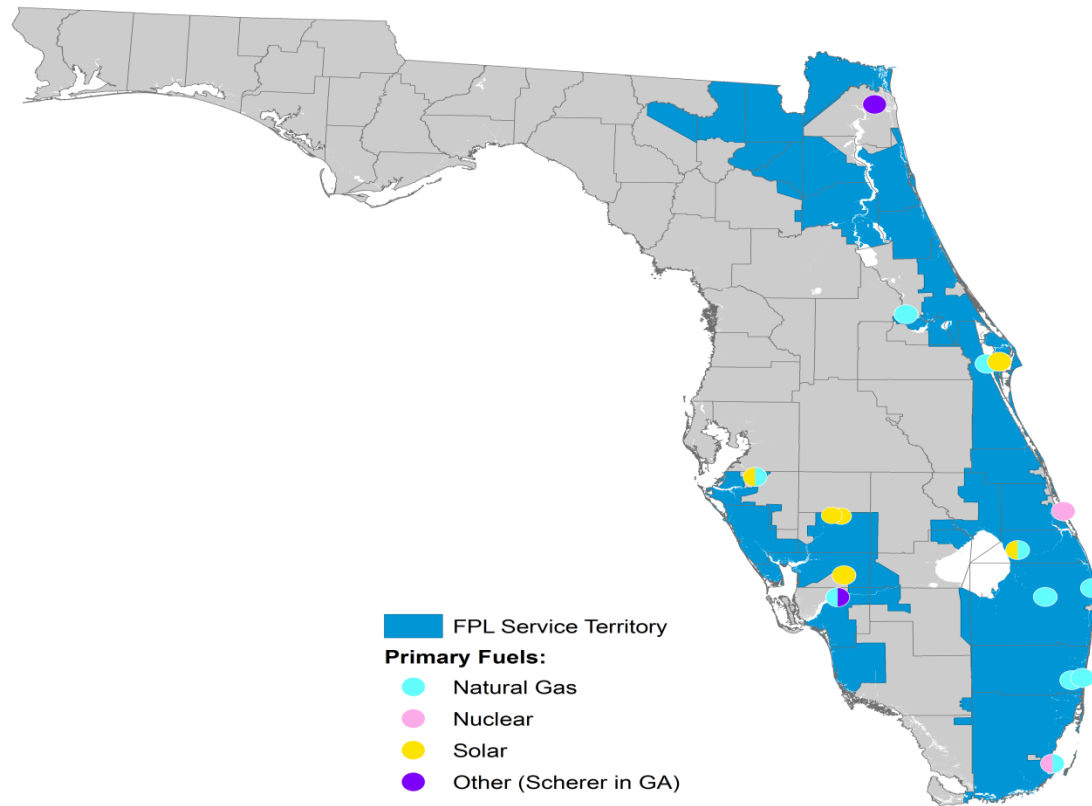
**Mano Nazar**  
President, Nuclear Division and  
Chief Nuclear Officer

**Bill Maher**  
Senior Licensing Director  
New Nuclear Projects

**Steve Franzone**  
Licensing Manager  
New Nuclear Projects

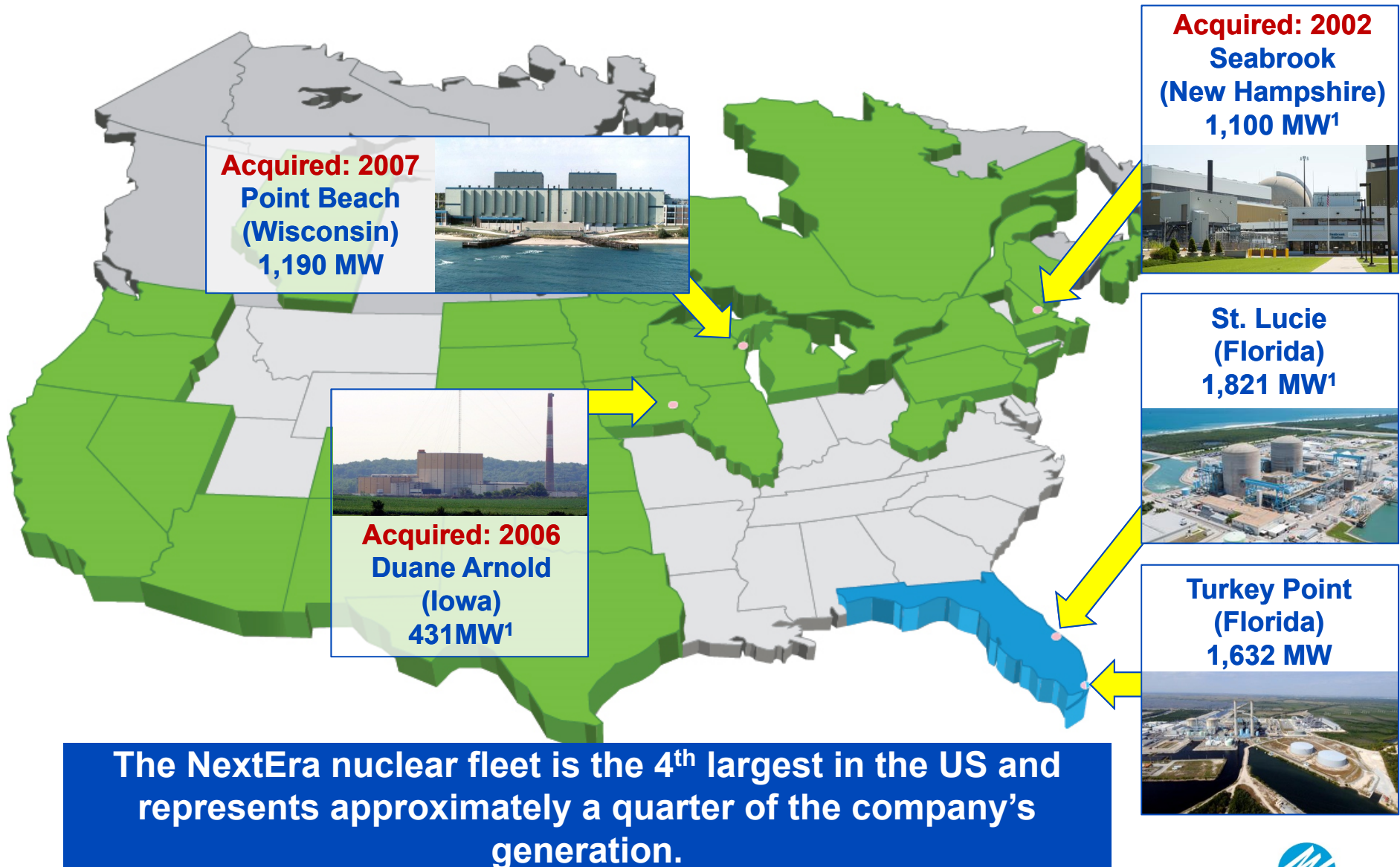


## FPL Service Territory

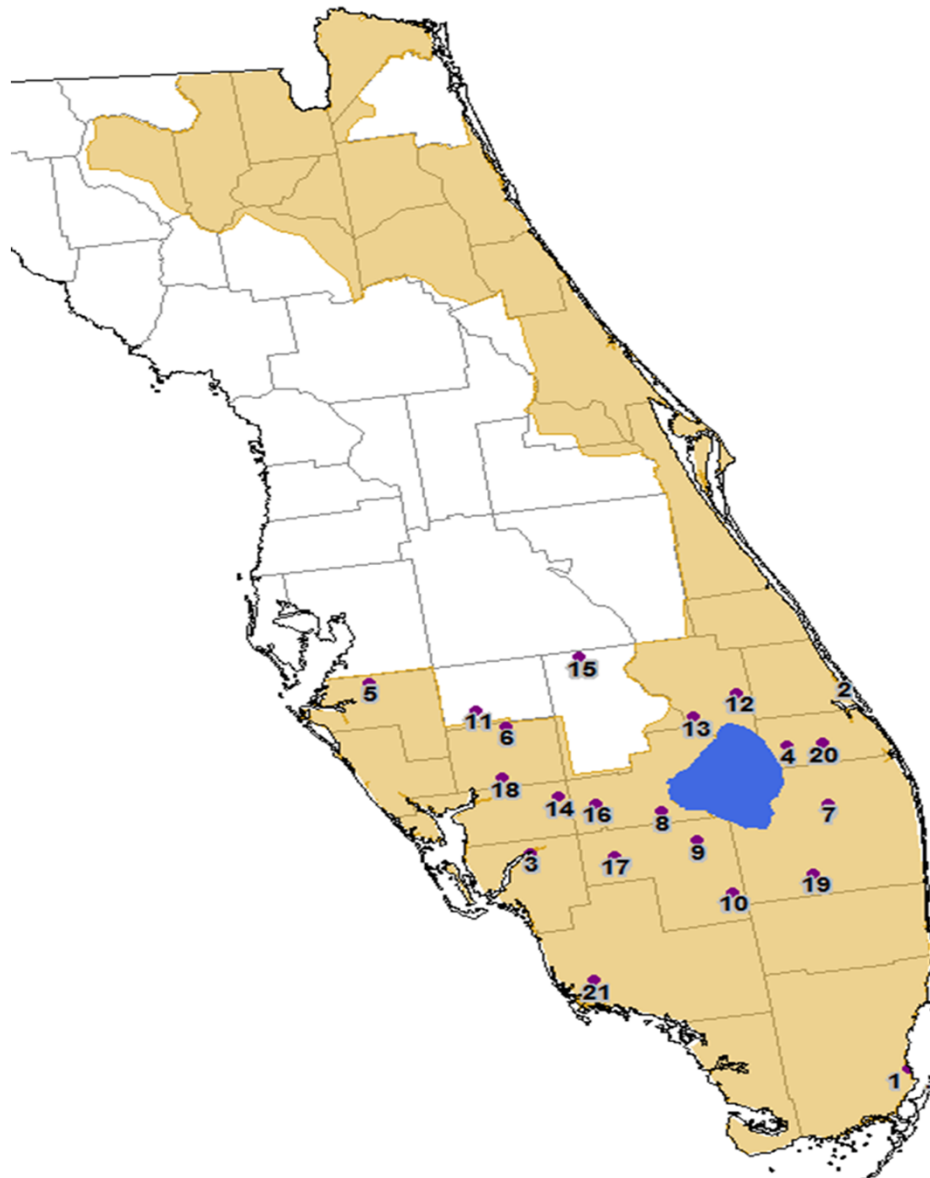




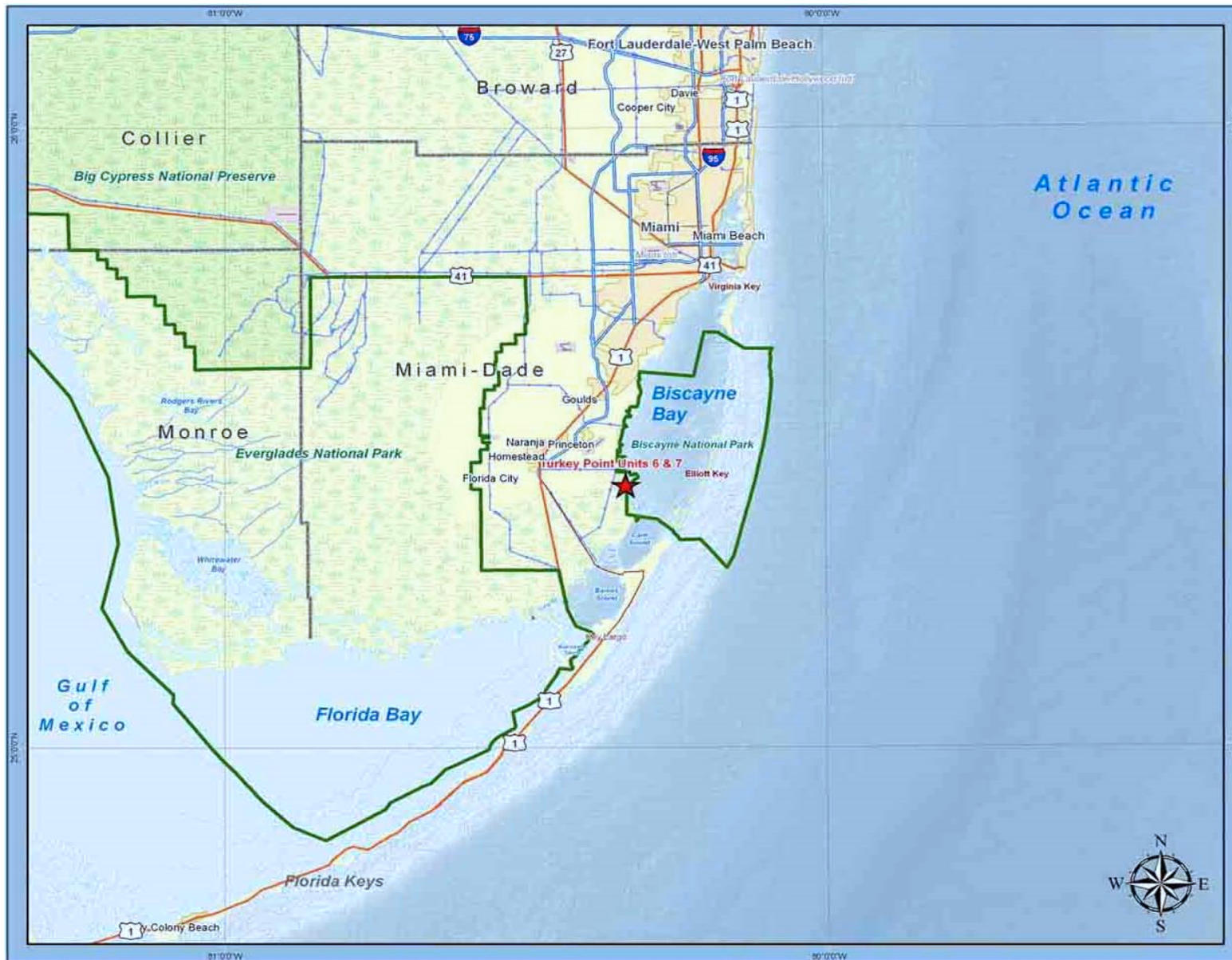
## FPL's nuclear plants are part of the NextEra Energy fleet.



## FPL performed a comprehensive Site Selection Process



# Turkey Point Site Overview





## Turkey Point Site Overview

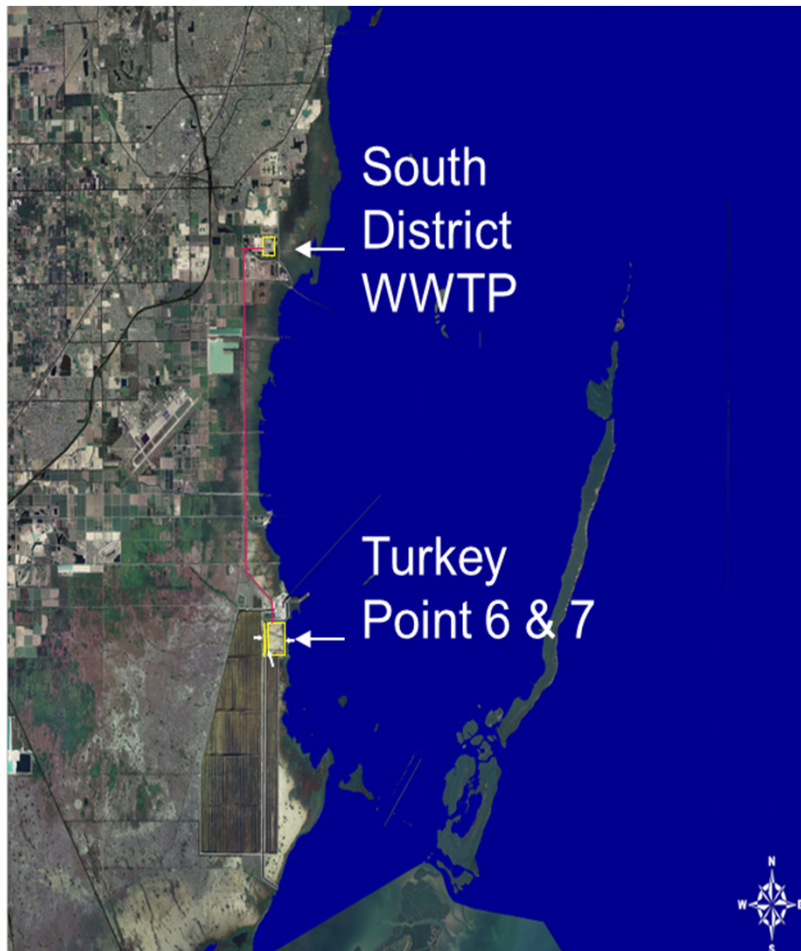


**The project would be located within the existing industrial wastewater facility that provides cooling for Units 3 & 4**

**The project will use reclaimed water from Miami-Dade County as its primary source of cooling water for electric generation**

**Backup system of radial collector wells**

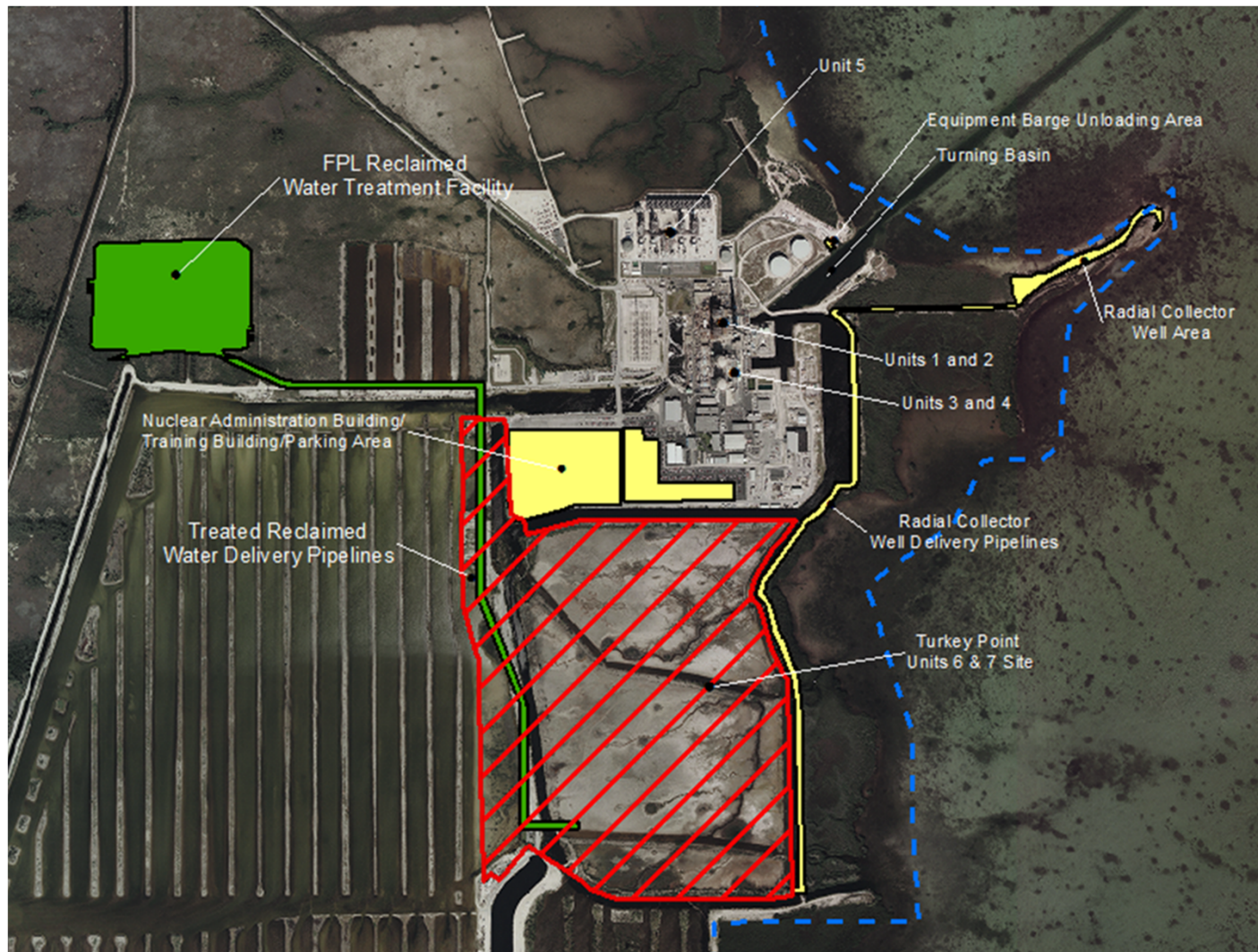
**Reclaimed water**



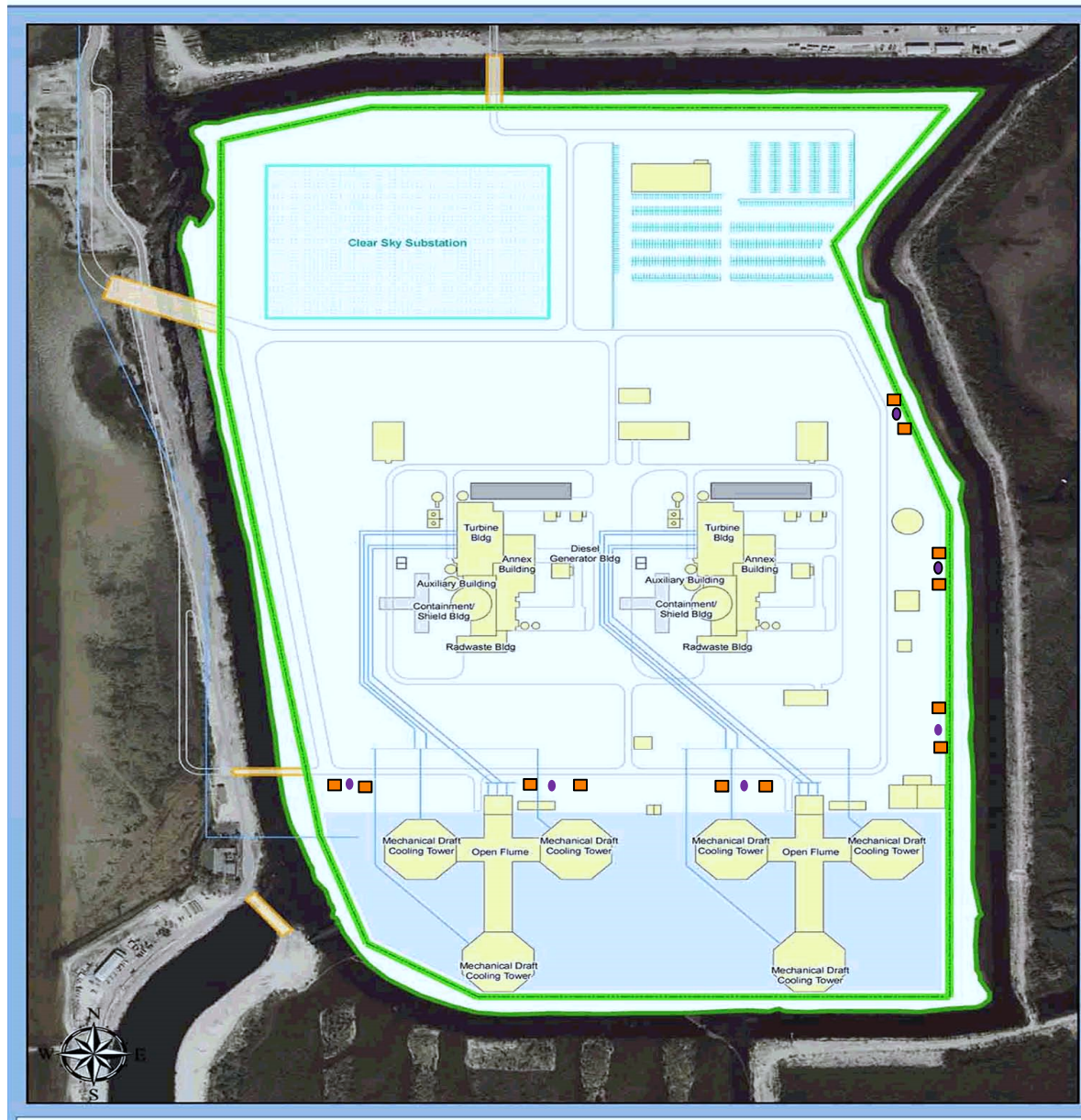


**Project takes advantage of existing site attributes with improvements to facilitate construction**

## General Arrangement



# Site Plot Plan





## Turkey Point Units 1 to 5



## Turkey Point Units 6 & 7



## **Turkey Point Units 6 & 7 COL Application**

- **Combined License Application (COLA) for two units**
  - Submitted June 2009
  - Incorporates by Reference the AP1000 Design Control Document (DCD), Rev. 19
  - S-COLA adopts the R-COLA resolution of standard plant licensing issues
- **NRC Guidance Utilized**
  - Regulatory Guide 1.206 “Combined License Applications for Nuclear Power Plants”
  - NUREG-0800 “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants”
  - NUREG-1555 “Standard Review Plans for Environmental Reviews for Nuclear Power Plants”
  - RIS 2006-06 “New Reactor Standardization Needed to Support the Design-Centered Licensing Review Approach”

**Followed design centered working group process throughout review**



## **Turkey Point Units 6 & 7 COLA: Exemptions**

- **Two Standard Exemptions**
  - Combined License (COL) Application Organization and Numbering
  - Special Nuclear Material Control and Accountability (MC&A) Program Description (Consistent with Part 50 requirements)
- **Five Previously Resolved Generic Issues**
  - Condensate Return Design Change
  - Main Control Room Dose
  - Main Control Room Heatup
  - Combustible Gas Control in Containment
  - Source Range Neutron Flux Doubling Block Permissive
- **Turkey Point Site Specific Exemption**
  - Maximum Safety Wet Bulb (noncoincident) Air Temperature

# Water resource selection was an important project design consideration

## FPL's Turkey Point Environmental Stewardship

- Use of an existing site
- Extensive use of existing transmission corridors
- Construction road network restoration
- Wetland mitigation projects
- Beneficial reuse of reclaimed water
- Novel backup water supply using radial collector wells



## **Summary of Environmental Review**

- **Environmental Report (ER) completed in 2009**
  - Thorough NRC staff audit of ER and alternative site analysis
  - Public outreach
  - Consultations with Federal, Tribal, State, and Local Government entities
- **FEIS published – October 2016**
  - Performed a comprehensive review of the environmental impacts of Units 6 & 7 as well as mitigation and alternatives
  - Staff concluded that the COLs should be issued
- **Contested hearing before ASLB**
  - Reviewed Staff's consideration of the environmental impacts of liquid effluent injection
  - ASLB approved the Staff's treatment of this issue in the FEIS



