

### Plans for New Nuclear - US and Florida

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## Development of a nuclear project in the US requires several key steps and approvals from multiple agencies

### **Approval Process for New Nuclear in the US**

- The design of the reactor must be "certified" by the Nuclear Regulatory Commission (NRC)
- The specific plant must obtain a Combined License from the NRC, referencing a certified design
  - Combined license authorizes Construction and Operation
- Any other required federal permits must be received
  - Ex: US Army Corps of Engineers Wetlands permits 404(b)
- State permits must be obtained, including delegated federal programs
  - Ex: Prevention of Significant Deterioration (Air) permits
  - Florida uses the Power Plant Siting Act to provide an umbrella process for addressing all state and local substantive requirements
- Zoning and Land Use approvals must be obtained from the local governing body



# Initial interest was high, but some attrition has occurred as economic and regulatory factors have developed

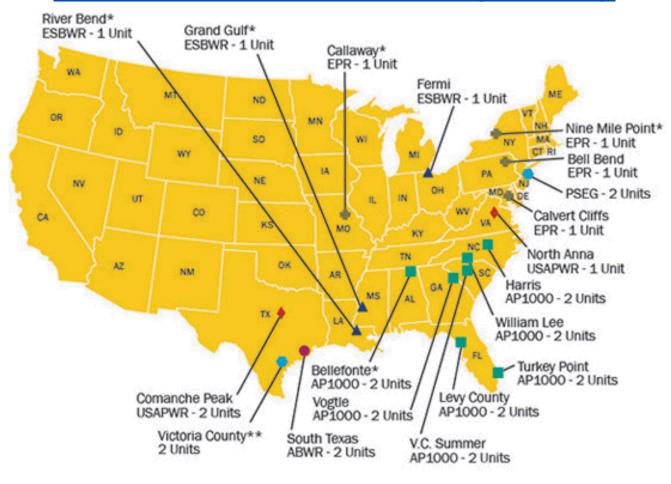
### **Recent History of US Nuclear Projects**

- Five Designs have pursued Certification under the NRC process
- Eighteen Combined License Applications have been submitted

Design (Vendor)	Design Certification Status	Initial License Applications	Active License Applications
AP 1000 (Westinghouse)	Scheduled Q1 2012	7	6
EPR (Areva)	Scheduled Q2 2013	4	2
ESBWR (GE)	Schedule Under Review	4	1
USAPWR (Mitsubishi)	Scheduled Q4 2013	2	2
ABWR (Toshiba)	Suspended	1	0
ABWR (GE)	Suspended	0	0



### **New Nuclear Plant Licensing Activity**





<sup>\*</sup>Review Suspended by Applicant



<sup>\*\*</sup> COL Application Amended by Applicant to ESP on 03/25/2010

### The federal and state licensing processes ensure a thorough review and provides opportunities for public involvement

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



**Turkey Point 6 & 7 Project Rendering** 

- NRC Combined License (target 2013)
  - Under review since June 2009
  - NRC objective is to protect public health and safety
  - Includes full NEPA Environmental Impact Statement (EIS)
- USACE wetland permits will use NRC EIS as record of decision
- State Site Certification (target 2012)
  - FDEP coordinates all state and local reviews under one process
  - Hearings in 2012

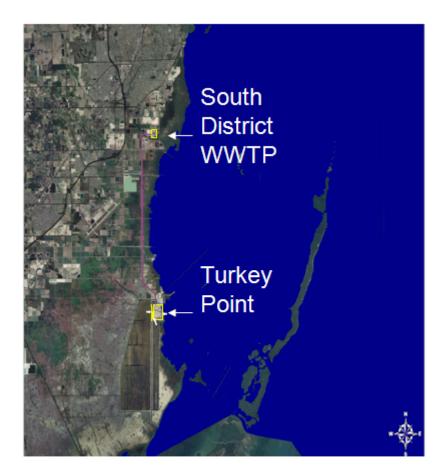
The objective of the licensing phase is to ensure all questions are answered and approvals provided prior to construction decision



# Project will use 59 MGD of reclaimed water as its primary source of cooling water

#### **Reclaimed Water**

- A cost-effective beneficial use of reclaimed municipal wastewater
- Does not use water targeted for Everglades restoration
- County will own/operate a 9 mile reclaimed water pipeline from South District Plant
- FPL will build a 90 MGD wastewater treatment facility on site to manage nutrient and mineral content



Reclaimed water used by Turkey Point 6 & 7 will not compete with reclaimed water reserved for Everglades restoration



### **Questions**

