

# Turkey Point Nuclear Power Plant Fact Sheet

### Description

| LOCATION:                           | 25 miles south of Miami, Florida  |
|-------------------------------------|---|
| OWNERSHIP:                          | 100% owned by Florida Power<br>& Light Company  |
| CAPACITY:                           | Two units, each with an electrical<br>output of 693 Mwe, for a total plant<br>electrical output of 1386 Mwe<br>(named Turkey Point Units 3 and 4) |
| TYPE:                               | Westinghouse 3-loop<br>Pressurized Water Reactors (PWR)   |
| TURBINE/GENERATOR:                  | Westinghouse  |
| ARCHITECT-ENGINEER/<br>CONSTRUCTOR: | Bechtel Power, Inc.   |
| TOTAL INVESTMENT:                   | \$1.2 billion   |

### Primary Systems

| Reactor Type:   | Westinghouse PWR, licensed power of 2300 Mwt                          |
|-----------------|---|
| Reactor Core:   | 157 fuel assemblies<br>12 foot active length<br>45 control assemblies |
| Reactor Vessel: | 42' 7" high   |

155.5" inside diameter 7.75" thick at beltline low alloy carbon steel, clad with stainless steel and inconel

Westinghouse 1800 rpm, double

flow with 1HP and 2 LP turbines

## Secondary Systems

Turbine:

Generator:

Westinghouse 22KV, 894 MVA at 0.85 PF

Cooling Canal System:

168 miles of canals provide cooling water for the fossil and nuclear units

#### **Milestones** Activity

|   | DAIL             |  |  |  |  |
|---|------------------|--|--|--|--|
| Construction license granted:                   | April 27,1967    |  |  |  |  |
| Operating license granted:                      |                  |  |  |  |  |
| Unit 3  | July 19,1972     |  |  |  |  |
| Unit 4  | April 10,1973    |  |  |  |  |
| Initial criticality:                            |                  |  |  |  |  |
| Unit 3  | October 20,1972  |  |  |  |  |
| Unit 4  | June 11,1973     |  |  |  |  |
| Commercial operation started:                   |                  |  |  |  |  |
| Unit 3  | December 14,1972 |  |  |  |  |
| Unit 4  | September 7,1973 |  |  |  |  |
| Steam generators replaced:                      |                  |  |  |  |  |
| Unit 3  | 1982             |  |  |  |  |
| Unit 4  | 1983             |  |  |  |  |
| Two additional safety<br>grade emergency diesel |                  |  |  |  |  |
| generators installed:                           | 1991             |  |  |  |  |
| Received renewed operating licenses:            | June 2002        |  |  |  |  |
| expiration Unit 3                               | 2032             |  |  |  |  |
| expiration Unit 4                               | 2033             |  |  |  |  |

DATE

## **Environmental Information**

The 22,000-acre Turkey Point tract is dominated by mangrove swamps. A small part of the site has been filled in to provide for the generating plant. The cooling canals encompass an additional 6,800 acres. In addition, 2,500 acres of the original site were deeded to the State of Florida in 1972. Today, that land is part of the Biscayne National Park. The balance of the mangrove swamp remains in its natural state, serving as the McGregor Smith Wildlife Preserve for numerous birds, fish, reptiles and mammals native to this area, many of which are endangered or threatened.

Biological monitoring has demonstrated that a variety of flora and fauna coexist with the plant and cooling canal systems. For instance, a large population of endangered American crocodiles inhabits the site. The shy reptiles have nested repeatedly along the cooling canals. The least tern, a state-protected bird, also has nested along the canals.

