



Turkey Point Units 6 & 7 Operational Program Considerations

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Turkey Point Units 6 & 7 Operational Considerations

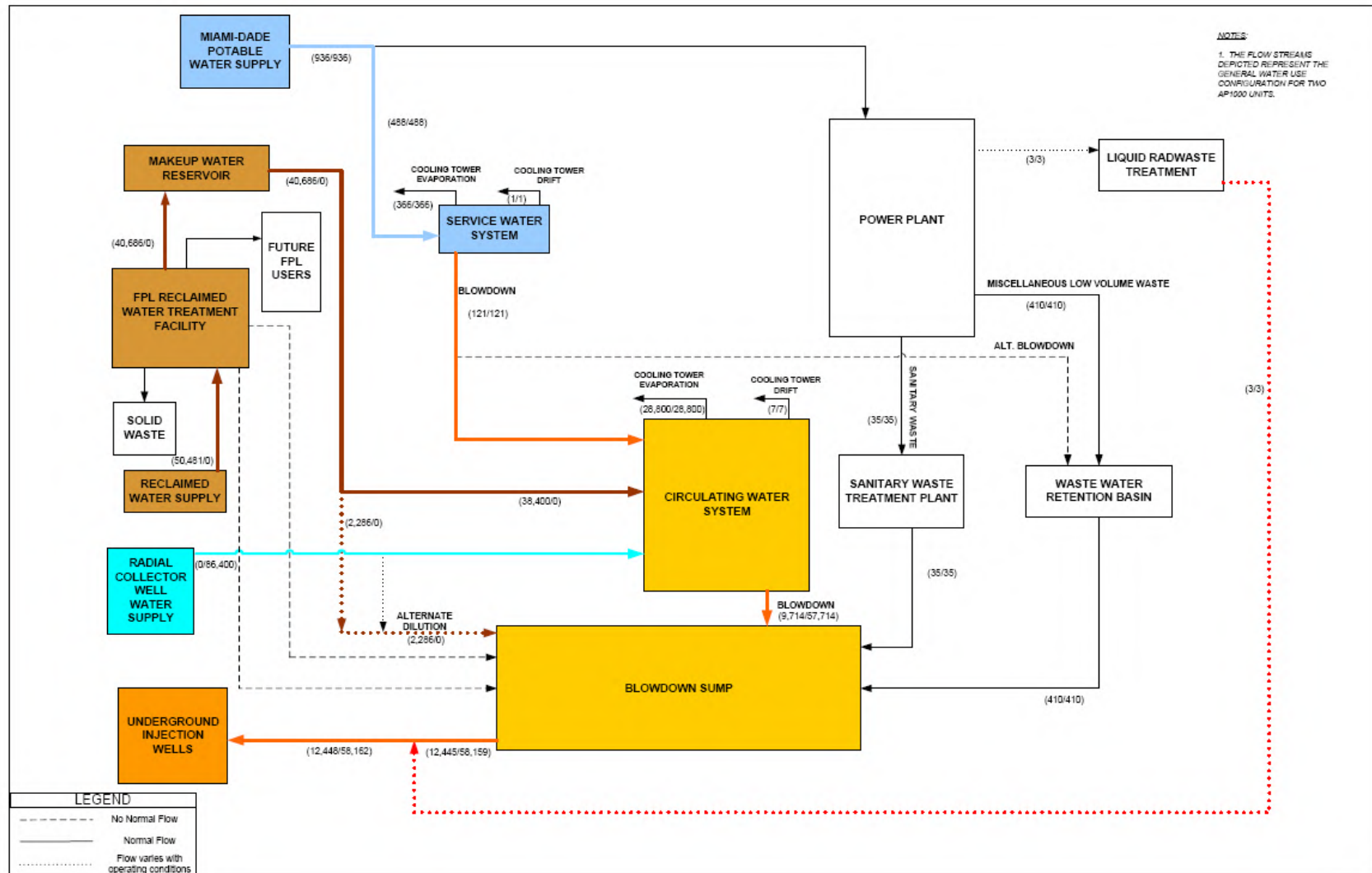
**The information provided in the following
presentation is of a preliminary nature
and is considered DRAFT**

Turkey Point Units 6 & 7 Operational Considerations

Cooling Water Supply

- **Reclaimed Water**
 - 100% Capacity – approximately 41,000 gpm
 - Provide Cooling Water for other FPL use – approximately 10,000 gpm
- **Saltwater**
 - 100% Capacity – approximately 86,000 gpm
- **Mixed**
 - Up to full capacity

Turkey Point Units 6 & 7 Operational Considerations



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Liquid Effluent Disposal

- **Method**

- Underground Injection Control (UIC) Program Class I well injection to the Boulder Zone, a saline confined aquifer
- Authorized under Subpart K to 10 CFR 20 and 40 CFR 146.5
- Principal Criteria
 - Hazardous waste prohibited
 - Hydrologic confinement
 - Hydraulic containment (materials selection)
 - Injection velocity

Turkey Point Units 6 & 7 Operational Considerations

Liquid Effluent Description

- **Sources**

- Non-radioactive Blowdown Sump effluent
 - ~12,500 gpm Reclaimed Water
 - ~58,000 gpm Saltwater
- Radioactive LRW System Monitor Tank releases to Blowdown Sump effluent
 - DCD Table 11.2-7 PWR-GALE code effluent source term
 - 2020 Ci/yr for tritium (both units)
 - 0.52 Ci/yr for other isotopes (both units), including 0.32 Ci/yr adjustment for anticipated operational occurrences
 - Expect ~3 gpm average (both units) varying with unit operations
 - Blowdown sump effluent is the dilution supply

Turkey Point Units 6 & 7 Operational Considerations

ESRP Considerations

- **5.4.1 Exposure Pathways**
 - The nearest present and known future locations from which an individual can be exposed to effluents
- **5.4.2 Doses to Members of the Public**
 - Maximum individual & 80 km collective
- **5.4.3 Impacts to Members of the Public**
 - Compare doses to 10 CFR 50, Appendix I design objectives
 - Compare all-pathway doses to 10 CFR 20, Subpart D
 - Evaluate collective dose for the 80 km population

Turkey Point Units 6 & 7 Operational Considerations

Liquid Effluent Constraints

- **Effluent Concentration (10 CFR 20 Compliance)**
 - FPL anticipates concentrations within DCD Table 11.2-8, which conform to effluent concentration limits (ECLs) in 10 CFR 20, Appendix B
 - Demonstrate ECL compliance onsite before well injection

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Liquid Effluent Constraints

- **Effluent Dose (10 CFR 50, Appendix I Compliance)**
 - No existing or reasonably foreseeable exposure pathways affected by Monitor Tank releases have been identified by FPL
 - Accordingly, FPL anticipates an Appendix I evaluation on the basis of zero dose deliverable to individuals and population would be appropriate