

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: PROGRESS ENERGY)
FLORIDA, CRYSTAL RIVER UNIT 3)
UPRATE PROJECT POWER PLANT) Case No. 07-2713EPP
SITING APPLICATION NO PA77-09A2)
_____)

RECOMMENDED ORDER ON CERTIFICATION

The certification hearing in this case was held on March 17, 2008, in Crystal River, Florida, before Administrative Law Judge Bram D. E. Canter of the Division of Administrative Hearings.

APPEARANCES

For Florida Power Corporation:

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STATEMENT OF THE ISSUE

The issue to be determined in this case is whether the Siting Board should certify Crystal River Unit 3 at the Crystal River Energy Complex in Citrus County, Florida, owned and

operated by Florida Power Corporation, doing business as Progress Energy Florida, Inc. (Progress Energy).

PRELIMINARY STATEMENT

On June 12, 2007, Progress Energy filed its application for site certification with the Florida Department of Environmental Protection (Department), pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes (2007),¹ and Florida Administrative Code Chapter 62-17. Copies of the application were distributed to other agencies for their review and copies were made available for public review at the local library. The application for certification was prompted by Progress Energy's proposal to add 180 megawatts (MW) of nuclear-powered electrical generating capacity to Crystal River Unit 3 (the "Uprate Project"). Because Crystal River Unit 3 has not previously been certified, it is the intent of Progress Energy and the Department that all of Crystal River Unit 3, both the existing facilities and the proposed Uprate Project, be certified at this time.

On July 20, 2007, the Department issued a Determination of Incompleteness and requested additional information from Progress Energy concerning its application. On August 22, 2007, Progress Energy filed its responses to the Department's Determination of Incompleteness. On September 11, 2007, the Department determined that the application was complete.

On August 1, 2007, Citrus County issued its Determination of Compliance with Local Land Use Plans and Zoning, pursuant to Section 403.50665, Florida Statutes, finding that the Uprate Project was consistent with the comprehensive plan and zoning ordinances of Citrus County. Following public notice of the determination, no person filed a petition to challenge the County's land use consistency determination.

On February 1, 2008, the Department issued its Staff Analysis Report pursuant to Section 403.507(5), Florida Statutes. The Staff Analysis Report contained reports from other agencies and proposed Conditions of Certification.

No person sought to intervene and participate as a party in the certification hearing. Progress Energy and the Department filed a Prehearing Stipulation in which no disputed issues of fact or law were identified.

At the certification hearing, Progress Energy presented the live testimony of Ken Wilson, Harold Frediani, Jr., David Bruzek, and Kelly Gleaton. The pre-filed testimony of these witnesses was also presented by Progress Energy and accepted into evidence. Additional pre-filed testimony was presented and accepted into evidence for David Bear, Carl Bullock, Jason Collins, and Scott Osborne. Progress Energy's Exhibits 1 through 9 were admitted into evidence. The Department presented the testimony of Cindy Mulkey. The Department's Exhibits 1 and

2 were admitted into evidence. No agency other than the Department appeared at the hearing.

Following the presentation of evidence by the parties, a hearing was held for the exclusive purpose of receiving testimony from members of the general public. Four members of the public provided testimony. None opposed the Uprate Project.

On May 1, 2008, the Administrative Law Judge requested, and the parties agreed to file, supplemental written testimony and proposed findings of fact regarding the structures, operations, and permitting conditions associated with the existing Crystal River Unit 3 facilities. The parties jointly filed the supplemental information on May 23, 2008, which included additional sworn written testimony by Ken Wilson.

The one-volume Transcript of the hearing was filed with the Division of Administrative Hearings. Progress Energy and the Department filed a joint proposed recommended order which was duly considered in the preparation of this Recommended Order.

FINDINGS OF FACT

1. Florida Power Corporation, doing business as Progress Energy Florida, Inc., is an investor-owned utility that provides electric service to more than 1.7 million customers in its Florida service area. Progress Energy's service area covers 20,000 square miles in 35 Florida counties.

2. Crystal River Unit 3 is part of Progress Energy's 738-acre Crystal River Energy Complex, which is located in an unincorporated area of northern Citrus County. Yankeetown, Inglis, and the City of Crystal River are within a five-mile radius of the Complex.

3. The Crystal River Energy Complex has five electrical generating units. Units 1 and 2 are coal-fired units which were constructed in the 1960s and produce approximately 900 MW. Unit 3 is a nuclear-powered unit that went into operation in 1977, and also generates about 900 MW. Units 4 and 5 are 750 MW coal-fired units which became operational in the mid-1980s after being certified under the Power Plant Siting Act. The electrical power generated by the five units is delivered to Progress Energy's electrical transmission system through shared 230 kV and 500 kV switchyards on the Crystal River Energy Complex site.

4. Cooling water for Crystal River Units 1, 2, and 3 is withdrawn from an intake canal which connects to Crystal Bay and the Gulf of Mexico. Water is pulled from the intake canal by pumps, sent through the condensers for Units 1, 2 and 3, where it becomes heated, and then is carried out to Crystal Bay via the discharge canal. The discharge canal extends approximately 1.2 miles offshore.

5. Crystal River Units 1, 2, and 3 share a supplemental or "helper" cooling tower system, which uses mechanical draft towers through which air is moved by large fans. When the temperature of the combined discharge water approaches 96.5 degrees Fahrenheit, heated water is withdrawn from the discharge canal and sent through the helper tower cells to cool the water enough so that when it is returned to the discharge canal, the combined temperature in the water will not exceed the permitted limit of 96.5 degrees F on a three-hour rolling average.

6. Progress Energy operates a Mariculture Center at the Complex, which is a multi-species marine hatchery established in the early 1990's to mitigate fisheries impacts caused by the introduction of heated water into adjacent waters. Progress Energy has also implemented a Department-approved manatee protection plan that establishes a number of guidelines to minimize adverse impacts to manatees at the intake and outfall areas.

7. A sea turtle monitoring and rescue program has been initiated by Progress Energy to reduce potential sea turtle strandings and mortalities at Crystal River Unit 3. Progress Energy has implemented a Sea Turtle Rescue and Handling Guidance program which provides instructions for sea turtle observation, rescue, handling, notifications, and reporting requirements. Rescued sea turtles are transferred to the Mariculture Center

for health evaluation, and either tagged and released or transferred to a qualified center for treatment and rehabilitation, as appropriate.

8. The land uses in the area immediately surrounding the Complex are primarily undeveloped agricultural and forested lands, and some mining operations. Most of the area within a five-mile radius of the Complex consists of agricultural, industrial, or open lands. The nearest occupied residence is over three miles away to the northeast.

9. Since Unit 3 began operations, there has been active mining and some rural residential and commercial development along US 19 between Crystal River and the plant site, all of which is more than five miles away.

Crystal River Unit 3 - Existing Facilities to be Certified

10. Crystal River Unit 3 was not previously certified under the Power Plant Siting Act, because it was under construction before the Siting Act took effect. If the Uprate Project is certified, it is the intent of Progress Energy and the Department to make all of Unit 3 subject to the Conditions of Certification and to the Siting Act.

11. Unit 3 is a pressurized water nuclear reactor. The unit operates in a baseload condition, which means it operates on an almost continuous basis throughout the year except for scheduled outages. The unit is composed of a primary and

secondary system. The primary system is comprised of the nuclear reactor, four reactor cooling pumps, and two steam generators. The steam generators convert the heat from the nuclear reaction into steam that is transferred to the secondary system. In the secondary system, the steam is used to drive a steam turbine/electrical generator. Electricity is then sent to the existing electrical onsite switchyards for distribution over Progress Energy's electrical transmission system.

12. The condenser is essentially a large metal box with thousands of small diameter tubes through which "circulating water" is flowing. Steam from the steam turbines is introduced into the condenser box and when the steam contacts the outer wall of a water-laden tube, heat is drawn from the steam, through the tube wall, and into the circulating water. This causes the steam to cool and condense. The condensed steam, called "condensate", is collected in the bottom of the box, and recycled to minimize water consumption. Warmed water from Unit 3 is then released to the discharge canal.

13. The Unit 3 site is 26.86 acres of developed land within the Crystal River Energy Complex. The site contains no significant environmental features. No archaeological or historical features have been found on the site, but Progress Energy has agreed to consult with the Division of Historical

Resources if any archaeological or historical finds are made at the site.

14. The major components of Unit 3 to be certified are the nuclear reactor and its related facilities. The facilities to be certified include the control complex, the turbine building, and auxiliary and intermediate buildings which are associated with the normal operation of Unit 3, the nuclear administrative building, plant administrative buildings, the technical support center, and warehouse and support buildings, the Unit 3 intake and discharge structures, and the reactor head storage building and maintenance training facility.

15. Unit 3 is supported by several common facilities that also serve some or all of the other generating units at the Complex. These common facilities include the helper cooling towers along the discharge canal, onsite warehouses, site administrative building, parking lots, electrical switchyards, transmission lines and the site access road. The intake and discharge canals also serve all of the existing units and are considered to be common facilities for the Complex. These common facilities are not being proposed for certification.

16. There is a potable water treatment facility and a domestic wastewater treatment plant that serve Units 1, 2 and 3. No changes to these facilities are required for the Upgrade

Project. Both are located outside of the Unit 3 certification area.

Existing Permits

17. There is an existing state industrial wastewater permit that applies to the operation of all five generating units at the Complex. This permit covers a series of basins that act as settling and percolation ponds. The basins are subject to a groundwater monitoring program to monitor for compliance with state groundwater standards.

18. Under federal delegation, the Department issued a National Pollutant Discharge Elimination System (NPDES) permit for Units 1, 2 and 3. The NPDES permit covers the discharge of once-through condenser cooling water from Units 1, 2 and 3, Unit 3's auxiliary cooling water, treated coal pile runoff from Units 1 and 2, and other liquid waste streams.

19. The Department has also issued a Title V air operation permit for the Crystal River Energy Complex that covers all five generating units. This permit was issued by the Department under the federal Clean Air Act, acting on behalf of the federal EPA. Unit 3 does not have air emissions that are subject to the permit, except for any air emissions from the existing helper mechanical cooling towers. The Title V permit covers three diesel generators for Unit 3 as unregulated air emissions units.

20. Progress Energy is operating Crystal River Unit 3 in compliance with all of the conditions of these permits.

21. The result of certification of the Uprate Project under the Siting Act will be the combining of all required state permits into one complete set of Conditions of Certification. Because several of the existing permits issued to Progress Energy for Unit 3 cover other uncertified units at the Complex, those permits would continue in force and would not be replaced by the Conditions of Certification. Instead, those separate permits are incorporated by reference in the body of, and attached as appendices to, the proposed Conditions of Certification.

22. The common permits that apply to Unit 3 and other units at the Complex, and which were described above as not part of the Unit 3 certification, would not be renewed pursuant to the Siting Act. They would be renewed under the "normal" procedures applicable to other regulated industrial facilities. However, modified and reissued permits, as they relate to Unit 3, would be incorporated by reference into the Conditions of Certification.

23. The permits issued by the Department under the federal Clean Air Act and Clean Water Act are not subject to the Florida Power Plant Siting Act. The Siting Act provides that federal permits are reviewed and issued separately by the Department,

but in coordination with the Siting Act process to the extent possible. However, these federal permits would also be attached to and incorporated into the Conditions of Certification for Crystal River Unit 3. As those permits are modified or reissued in the future, they would be incorporated.

24. The Department has already issued a Prevention of Significant Deterioration (PSD) permit for the proposed South Cooling Tower. The PSD permit is also incorporated by reference into the proposed Conditions of Certification.

25. The conditions provide for post-certification review of the proposed South Cooling Tower. Progress Energy will design that tower and select its final site. Progress Energy will then submit to the Department documentation on stormwater management and wetland impacts, as well as a wetlands mitigation plan, if necessary, for the cooling tower site. The Department will then review and approve this tower under its Environmental Resource Permitting requirements. Construction of the tower cannot begin until the Department approves it. This post-certification review is typical for power plant siting cases and insures compliance with applicable agency criteria and Conditions of Certification.

The Uprate Project

26. The Uprate Project would add 180 MW of generating capacity to Unit 3, for a total of 1,080 MW. The Uprate Project

does not affect the other four generating units within the Crystal River Energy Complex.

27. Unit 3 would not have to be physically expanded to obtain the additional electrical generation. The Uprate Project involves modifications and replacements of existing plant components to increase the efficiency of the unit, principally within the secondary system of the unit, as well as to support increased electricity production.

28. The Uprate Project would be undertaken in two phases. In 2009, during an already-scheduled refueling outage and steam generator replacement for Unit 3, the low pressure turbines and electrical generator would be replaced or rebuilt, as needed. Additionally, a number of secondary side components, including heat exchangers and associated piping and valves, would be modified or replaced. The net effect of these initial modifications would be to increase the efficiency of the secondary plant portion of Unit 3 so that the same primary plant output results in approximately 40 MW greater electrical output.

29. In the second stage of the Uprate Project, additional plant modifications will be undertaken during a scheduled outage in 2011. These modifications would include replacing the high pressure turbines, replacing the condensate, feed-water booster and circulating water pumps and/or motors to increase their flow capacity, and other associated modifications. This second set

of modifications is expected to increase the electrical output by an additional 140 MW, and allow Unit 3 to generate approximately 1080 MW.

30. The Uprate Project would include alterations that would elevate Unit 3's thermal, or warm water, discharge. As one option for offsetting the increased thermal discharge, Progress Energy has developed a conceptual design plan for a new South Cooling Tower. The planned additional cooling tower would also be operated to avoid or minimize increased flow to the intake canal from Crystal Bay. This would be accomplished by routing a portion of the new cooling tower's discharge to the intake canal, thus avoiding additional intake or withdrawal of water from Crystal Bay.

31. The modifications to the circulating water system would be addressed in a detailed engineering study. Options would be discussed with the regulatory agencies. These options would be designed to result in equivalent or less thermal and biological impacts compared to the cooling system that currently exists. The options would maintain existing thermal discharge limits for plant cooling water and minimize impacts to aquatic organisms. The final design of the new South Cooling Tower would be addressed as part of the National Pollutant Discharge Elimination System permit renewal in 2009.

32. Electricity generated at the Complex is distributed from shared 230 kV and 500 kV switchyards on the site. The Uprate Project will utilize these existing electrical transmission lines. No changes to the transmission system are required for the additional electricity that would be produced.

33. The Uprate Project will not significantly alter fuel utilization by Unit 3. Additional enriched fuel will be used in the unit following the Uprate Project, through increases in the size of the refueling batches, to supply the energy to support operation of the unit at the higher power levels.

34. The construction and operation of the uprated Unit 3 would not generate any hazardous wastes. Its construction and operation would not cause any change in Progress Energy's spent fuel storage systems, which store spent nuclear fuel in onsite facilities.

35. In 2009 (in support of the more substantial uprate activity in 2011), Progress Energy would request that the US Nuclear Regulatory Commission increase the licensed rated thermal output of Unit 3 from 2609 MW thermal to 3010 MW thermal. In a nuclear power plant, the thermal capacity is approximately three times greater than its electrical capacity. Therefore, the plants are often identified by both their thermal capacity (MWt) and their electrical capability (MWe).

Uprate Project Impacts

36. Net environmental impacts associated with construction and operation of the Uprate Project are expected to be minimal. The principal impacts are related to the potential increase in cooling water flow through Unit 3 following the Uprate Project's completion, and the potential effects of the increased temperature of the cooling water. These effects are expected to be offset by modifications to the circulating water system. Construction impacts of the Uprate Project will be minimal, with expected construction traffic volumes falling within acceptable levels.

37. The modifications involved in the Uprate Project would be conducted within areas already used for electrical power generation. Therefore, there are no expected impacts to wildlife habitat. Only common bird species typical of urban/industrial areas have been observed within the project area. No threatened, endangered, or plant or animal species of special concern (listed species) are found within the project area. Wading birds classified as species of special concern by the Fish and Wildlife Conservation Commission occasionally forage within wetlands outside of the project area. Gopher tortoises have been observed outside of the project area along the rail line on the Crystal River Energy Complex. However, no adverse impacts to listed species are anticipated as a result of

the Uprate Project. Construction "laydown" and parking areas associated with the separate Steam Generator Replacement Project for Unit 3 would also be utilized for the Uprate Project in order to avoid or minimize impacts.

38. No wetland habitat will be disturbed as a result of the Uprate Project itself. The location of the proposed supplemental cooling tower has not been finalized. The new South Cooling Tower would be located to avoid and minimize impacts to wetlands. If unavoidable wetland impacts would occur at the site that is selected, appropriate mitigation would be provided in accordance with a post-certification Environmental Resource Review.

39. The Uprate Project is expected to result in an increase in heat produced by the Unit 3 reactor. This increase in heat would result in an increase in the heat rejected by the Unit 3 condenser to the circulating water which is then released to the discharge canal. The heat rejection will increase by an estimated 768 million Btu per hour, an increase of about 13 percent over current levels. Progress Energy can accommodate this increase in rejected heat by increasing the circulating water flow rate through Unit 3, by increasing the temperature rise of the circulating water from Unit 3, or by increasing both.

40. The Unit 3 circulating water pumps may be modified to increase their design flow rate by up to an additional 150,000 gallons per minute ("gpm"). At this flow rate, the temperature of the Unit 3 discharge water would decrease. However, if the circulating water flow rate is not increased, the temperature of the discharged water could increase due to the increased heat rejection from the uprated unit. The actual operation is expected to have results somewhere between these two extremes of increased flow and increased temperature of the circulating water.

41. There are four potential adverse impacts that might result from either increasing Unit 3's circulating water flow or increasing the temperature of the cooling water discharge from Unit 3. First, there could be an increase in the temperature of the water discharged into Crystal Bay. Second, there could be an increase in the area of offshore waters affected by the heated water discharge. Third, there could be an increase in the number of aquatic organisms "impinged" or trapped on the cooling water intake screens. Fourth, there could be an increase in the number of aquatic organisms entrained in the intake canal and the cooling system. Entrainment refers to passage of eggs and early larval stage organisms through the intake canal, intake screens, and ultimately through the circulating cooling water system. However, Progress Energy

intends to avoid or minimize these potential environmental impacts.

42. To avoid or minimize the impacts of increased cooling water flow and temperature, Progress Energy is evaluating a series of modifications to the existing cooling water system, including the installation of the South Cooling Tower. The intake and flow modifications will be designed to reduce the increased thermal load from the Uprate Project by removing heated effluent from the discharge canal and to avoid or minimize any net increase in the number of organisms being drawn into Unit 3.

43. The proposed new South Cooling Tower would be located between the intake canal and discharge canal, west of Units 1, 2 and 3. Detailed design and location of the South Cooling Tower would be addressed as part of the renewal of the NPDES permit renewal in 2009. That renewed permit would be incorporated into the conditions of certification for Unit 3.

44. As part of potential cooling water modifications, the South Cooling Tower could withdraw water from the discharge canal to remove the incremental rejected heat anticipated by the Uprate Project. The new South Cooling Tower would be designed to dissipate the increased rejected heat from Unit 3. All or a portion of the cooled water from the South Cooling Tower could be returned to the discharge canal.

45. In addition to offsetting the increased water temperature, the South Cooling Tower design could be increased in size and provide for the return or recirculation of a portion of the cold water from the Cooling Tower to the intake canal instead of releasing it to the discharge canal. Recirculation of a portion of the South Cooling Tower's effluent back to the intake canal could be used to maintain the intake flow in the intake canal so as not to increase the existing intake flow rate from Crystal Bay. This would prevent an increase in entrainment of aquatic organisms into the intake canal.

46. Re-circulating a portion of the South Cooling Water effluent to the intake canal should prevent any increase in impingement associated with increased flow in the intake canal. Although the uprate may result in an increase in through-screen velocity, Progress Energy does not anticipate that this increase in velocity would alter present impingement levels. If increased impingement does occur, Progress Energy would take further steps to avoid or minimize increased impingement.

47. Progress Energy proposes to continue to evaluate the entrainment and impingement impacts associated with the Uprate Project. These impacts would be addressed during the NPDES renewal which is scheduled for submittal in 2009. The Uprate Project is not expected to have a negative impact to aquatic species.

48. Progress Energy currently mitigates the impacts on aquatic organisms in the circulating water system in several ways. It operates several helper cooling towers to reduce the thermal discharges from these three units. It seasonally reduces the condenser cooling water flow through Crystal River Units 1 and 2 to reduce impingement and entrainment of aquatic species. Pursuant to the current federal NPDES Permit, Progress Energy also operates a multi-species mariculture facility within the Crystal River Energy Complex. It raises several species of important marine species, such as red drum, spotted sea trout, and pink shrimp which are periodically released to adjacent surface waters. Progress Energy's mariculture operations have contributed to the restoration of red drum and scallop fisheries in the offshore and adjacent waters.

49. The associated circulating cooling water flow rate through the new South Cooling Tower will increase air emission impacts associated with increased cooling water flow in the form of particulate matter (PM). PM emissions are the dissolved minerals contained in the "drift" from the new cooling tower. This is most commonly seen as the condensed water vapor plume from a cooling tower. Other regulated air emissions, such as nitrogen oxide (NO_x) and sulfur dioxide (SO₂), will not be affected by the Uprate Project, as there will be no additional fossil fuel combustion sources for these pollutants. The Uprate

Project will not result in an increase in greenhouse gas emissions.

50. The South Cooling Tower requires an air construction permit and Prevention of Significant Deterioration ("PSD") review and approval by the Department. The Department has already issued a PSD permit for the new South Cooling Tower. The term "PSD" denotes a regulatory program, established by the U.S. Congress and implemented by the U.S. Environmental Protection Agency (USEPA) through the states, including Florida, that limits the amount of air quality degradation that can occur from new or modified air emission sources. The new cooling tower will be a modification to an existing major air emissions source, which is the Crystal River Energy Complex. The USEPA and the Department have implemented regulations requiring PSD review and permitting for new or modified sources that increase air emissions above certain threshold amounts.

51. For the proposed cooling tower, a Best Available Control technology (BACT) analysis was conducted as part of the PSD analysis for PM. BACT is an emission limit based on the maximum degree of reduction of each pollutant which, on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, is achievable through available methods, systems and technologies for control of an air pollutant. The net increase of PM exceeds the Department's

significance emission rate and, therefore, is subject to BACT review. Drift eliminators are the best available control technology utilized for cooling towers. Drift eliminators are usually incorporated into the tower design to remove as many droplets as practicable from the air stream before exiting the cooling tower. Highly efficient drift eliminators have been designated for use in the proposed South Cooling Tower to control these emissions.

52. Crystal River Unit 3 is located in an area classified by the Department as attainment for all criteria air pollutants. Citrus County's air quality meets all of the federal and state ambient air quality standards. The Chassahowitzka Wilderness Area is the closest Class I area to the Crystal River site. Project air emissions are not expected to have an adverse effect on this Class I area.

53. The Uprate Project is not expected to result in any increase in the number of employees or truck deliveries after construction and upon operation of the uprated Unit 3. There should be no impact on the existing transportation infrastructure and level of service (LOS) standards as a result of the Project. No permanent traffic capacity improvements are necessary as a result of the Uprate Project.

54. During construction, the Uprate Project will cause incremental increases in traffic in the Project vicinity, but

Progress Energy has agreed to implement traffic control measures if needed.

55. A noise impact assessment was performed for the Uprate Project, both for construction and operation impacts. Baseline noise measurements were taken and projected noise levels were evaluated for potential changes in noise levels. Construction noise levels were predicted to not exceed applicable County standards. Following completion of construction of the Uprate Project, the Uprate Project will not result in an increase in noise levels in the vicinity of the plant site. The construction and operation of the uprated Unit 3 will comply with applicable Citrus County noise standards.

Land Use and Socioeconomic Effects

56. The Uprate Project would be compatible with the existing area land uses because Unit 3 is currently in operation and the Uprate Project will not change the existing land use of the site or the area. In addition, there are existing power generation units located to the west and north of Unit 3. The Uprate Project will not have an adverse effect on nearby public recreational or environmentally protected areas.

57. Construction and operation of the Uprate Project will have a benefit to the local and regional economy. Construction of the Project is in two phases. Phase 1 is anticipated to begin in 2009 and Phase 2 in 2011. The anticipated total

workforce during peak construction activities for the Uprate Project could total up to 650 employees in 2009 and 580 employees in 2011. The estimated cost for the Uprate Project is \$250 million for the installation and equipment upgrade requirements. These costs are split between the two construction phases: Phase I has an estimated \$100 million in Project costs and Phase II has an estimated \$150 million in Project costs. The major costs associated with this construction Project include approximately \$200 million for major equipment and materials and approximately \$20 million for labor over the construction period.

58. Employment opportunities and purchases of goods and services to support the Uprate Project are anticipated to occur over the four-year construction period. It is expected that the majority of the construction wages paid for the Uprate Project construction will be spent within Citrus County and the surrounding region. These wages will create additional demands for goods and services. As this money is spent, it will create a multiplier effect within the area, thereby generating economic activity, including additional jobs and earnings.

59. Operation of Unit 3 following the Uprate Project will result in positive impacts to the local economy. The annual local property taxes paid by Progress Energy are expected to increase from \$8.5 million currently to \$10 to 12 million after

Project completion. No increase in employment is expected as a result of the Project, and thus, there will be no increase in local residents. The Crystal River Energy Center is largely self-sufficient and does not require public utilities or services such as water and wastewater from local governments.

60. The Uprate Project would be consistent with the Citrus County Comprehensive Plan, the Withlacoochee Regional Planning Council's Strategic Regional Policy Plan and the State Comprehensive Plan.

Determination of Need

61. The Florida Public Service Commission determined that there is a need for the Uprate Project. The Project will displace higher-cost fossil-fuel electrical generation with low-cost nuclear power generation, "resulting in substantial fuel savings that provide a net benefit to customers." Nuclear energy is the lowest cost energy available on Progress Energy's system. Producing additional electricity with nuclear energy from the Uprate Project would produce electricity at the lowest possible fuel cost. The Uprate Project would also provide a stable source of additional base load power. Nuclear generation is not subject to the same supply interruptions or changes in price volatility that can affect generation with fossil fuels, such as natural gas. The PSC concluded that expanded energy conservation programs cannot displace the Uprate Project.

Progress Energy is already exceeding its PSC-approved numeric energy conservation goals.

Agency Positions and Stipulations and Conditions

62. The Department, the FFWCC, the SWFWMD, the Florida Department of Transportation (FDOT), and the Withlacoochee Regional Planning Council prepared written reports on the Uprate Project, and all recommended its approval.

63. The Department found that it "has reasonable assurance that the Uprate Project would be able to comply with applicable agency standards and criteria as long as compliance with the proposed conditions of certification is achieved." The FDOT, SWFWMD and FFWCC recommended approval of the Project subject to their proposed conditions, which are included within the Conditions of Certification. The Withlacoochee Regional Planning Council found the Uprate Project to be consistent with the Strategic Regional Policy Plan and recommended approval of the Project.

64. The Florida Department of Community Affairs did not prepare a report on the Project, but indicated in the Prehearing Stipulation it does not object to the certification of the Uprate Project.

65. No state, regional or local agency has recommended denial of certification.

66. Conditions of Certification have been agreed to by Progress Energy and other agencies to ensure the Project's compliance with state and federal regulatory standards.

Public Comments

67. The public was notified of the specific time and place for providing comments to the Administrative Law Judge regarding the Uprate Project. Very few members of the public attended. Only four persons presented comments under oath. Three persons expressed appreciation for Progress Energy's charitable work and services to the local communities. Another person asked for and received information about the Uprate Project.

CONCLUSIONS OF LAW

68. The Division of Administrative Hearings has jurisdiction of the parties to and the subject matter of this proceeding pursuant to Chapter 403, Part II, Florida Statutes, the Florida Electrical Power Plant Siting Act.

69. The Crystal River Unit 3 Uprate Project involves an increase in the steam electric generating capacity of the Crystal River Unit 3. The Power Plant Siting Act, in Section 403.506(1), Florida Statutes, provides that any increase in steam electric generating capacity of an existing non-certified power plant requires certification under the Siting Act. Certification of the Uprate Project results in Unit 3 being brought under the Siting Act.

70. The Florida Public Service Commission has certified the need for the electrical generating facility to be supplied by the Crystal River Unit 3 Uprate Project as required by Sections 403.507(4) and 403.519, Florida Statutes.

71. In accordance with Chapter 120, the Power Plant Siting Act, and Florida Administrative Code Chapter 62-17, notice was given to all persons, entities and parties entitled thereto, as well as to the general public. All necessary and required governmental agencies participated in the certification process. Reports and studies were issued by the Department, SWFWMD, FFWCC, Withlacoochee Regional Planning Council, and FDOT, in accordance with their various statutory duties.

72. Proposed Conditions of Certification have been recommended by the Department and accepted by Progress Energy. The Conditions of Certification incorporate by reference existing permits that apply to Unit 3 as well as other existing generating units at the Crystal River Energy Complex. Applicable provisions of those separate permits that apply to Unit 3 are made a part of the Conditions of Certification and would become enforceable under the Siting Act.

73. The Department issued and would continue to issue separate federally-required permits under the federal Clean Water Act and federal Clean Air Act that apply to Unit 3 as well as the other units at the Complex. Applicable provisions of

those federal permits that apply to Unit 3 are also incorporated into the Conditions of Certification. A violation of any of the permits incorporated into the Conditions of Certification, as they relate to Unit 3, would be subject to enforcement under the Siting Act.

74. Competent substantial evidence presented by Progress Energy demonstrates that Crystal River Unit 3, as modified by the proposed Uprate Project, is entitled to certification pursuant to Section 403.509(3), Florida Statutes. Competent substantial evidence produced at the hearing demonstrates that the construction and operational safeguards for Crystal River Unit 3, as modified by the proposed Uprate Project, is technically sufficient for the welfare and protection of the citizens of Florida, and are reasonable and available methods to achieve that protection. Crystal River Unit 3, with its increased electrical output, would produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. Crystal River Unit 3, as modified by the proposed Uprate Project, will not conflict with the goals, objectives, or policies of the Citrus County Comprehensive Plan.

75. If operated and maintained in accordance with this Recommended Order and the recommended Conditions of Certification, Crystal River Unit 3, as modified by the proposed

Uprate Project, would comply with the applicable non-procedural requirements of all agencies. Certification of Crystal River Unit 3, as modified by the proposed Uprate Project, would fully balance the demand for electrical power plant location and operation with the broad interests of the public.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that Progress Energy Florida be granted final certification, pursuant to Chapter 403, Part II, Florida Statutes, for Crystal River Unit 3 at the Crystal River Energy Complex, including the addition of 180 megawatts of nuclear-fueled electrical generating capacity through the Uprate Project, as proposed in the Site Certification Application, and subject to the Conditions of Certification attached to the Staff Analysis Report of the Florida Department of Environmental Protection, Exhibit FDEP-2.

DONE AND ENTERED this 5th day of June, 2008, in
Tallahassee, Leon County, Florida.



BRAM D. E. CANTER
Administrative Law Judge
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Filed with the Clerk of the
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this 5th day of June, 2008.

ENDNOTE

^{1/} All references to the Florida Statutes are to the 2007
codification.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.