#### BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition by Progress Energy Florida, Inc. for approval to recover modular cooling tower costs through environmental cost recovery clause.

DOCKET NO. 060162-EI ORDER NO. PSC-07-0722-FOF-EI ISSUED: September 5, 2007

The following Commissioners participated in the disposition of this matter:

LISA POLAK EDGAR, Chairman MATTHEW M. CARTER II KATRINA J. McMURRIAN NANCY ARGENZIANO NATHAN A. SKOP

### APPEARANCES:

GARY V. PERKO, ESQUIRE and CAROLYN S. RAEPPLE, ESQUIRE, Hopping Green & Sams, P.A., Post Office Box 6526, Tallahassee, FL 32314, and R. ALEXANDER GLENN, ESQUIRE, Deputy General Counsel, Progress Energy Services Company, LLC., 100 Central Avenue, Suite 1D, St. Petersburg, FL 33701-3324

On behalf of Progress Energy Florida, Inc.

JOSEPH A. McGLOTHLIN, ESQUIRE, Associate Public Counsel, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, FL 32399-1400

On behalf of Office of Public Counsel.

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On behalf of the Florida Public Service Commission (Staff).

# ORDER APPROVING RECOVERY OF MODULAR COOLING TOWER COSTS THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE

### BY THE COMMISSION:

## **BACKGROUND**

On February 24, 2006, Progress Energy Florida, Inc. ("Progress") petitioned for approval to recover the costs of its modular cooling tower project through the Fuel and Purchased Power Cost Recovery Clause (the Fuel Clause). On July 13, 2006, after discussions with staff, Progress filed an amended petition to recover the costs of the project through the Environmental Cost Recovery Clause (ECRC) rather than the Fuel Clause.

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Progress implemented its modular cooling tower project on June 9, 2006, to comply with wastewater discharge standards required by the Florida Department of Environmental Protection (FDEP). These standards are codified in Chapter 62-620, Florida Administrative Code, entitled "Wastewater Facility and Activities Permitting." Progress's wastewater discharge permit, issued initially in 1988 and renewed most recently on May 9, 2005, limits the temperature of discharge water in the discharge canal at Progress's Crystal River plants to 96.5 degrees Fahrenheit. Because of increased inlet water temperature from the Gulf of Mexico into the plant during the summers of 2004 and 2005, Progress was forced to temporarily reduce the output of both Crystal River Units 1 and 2 to remain in compliance with its water discharge permit. Progress asserts that the modular cooling towers along the discharge canal provide additional cooling capacity, allowing the company to remain in compliance with its FDEP permit.

At our August 29, 2006, Agenda Conference, we heard comments from our staff, the company, and the Office of Public Counsel (OPC) regarding the cooling tower project. OPC objected to the proposal to pass the costs of the project through either the ECRC or the Fuel Clause instead of recovering them through base rate revenues. After deliberation, we decided to schedule this matter directly for a formal administrative hearing. In Order No. PSC-06-0771-PCO-EI, issued September 18, 2006, we determined that the broad issue to be considered at the hearing was whether Progress's cooling tower project is eligible for recovery of the costs associated with the project either through the ECRC or the Fuel Clause.

We held an administrative hearing on the matter on May 1, 2007. By stipulation of the parties we heard opening statements and entered the prefiled direct and rebuttal testimony and exhibits of all witnesses into the record, along with a stipulated exhibit of discovery documents prepared by our staff. The parties waived cross examination. Following the hearing, each party filed a post-hearing brief and statement of issues and positions.

Upon review of the record in this matter, we find that Progress's modular cooling tower project costs are eligible for recovery through the ECRC. We find that recovery of the project costs through the ECRC is reasonable and consistent with our prior decisions, and cost recovery will be reviewed annually as part of the ongoing proceedings in the ECRC. The reasons for our decision are set out in detail below. We have jurisdiction pursuant to section 366.8255, Florida Statutes.

### **DECISION**

# The Modular Cooling Towers Project and Projected Savings

At its coal burning Crystal River Units 1 and 2, Progress uses permanent cooling towers to condense the turbine exhaust steam to water, using water drawn from the Gulf of Mexico as the cooling agent. In this process, heat is transferred from the steam to the cooling tower water,

<sup>&</sup>lt;sup>1</sup> In the 2006 ECRC proceeding, we approved a stipulation to include the costs of the modular cooling tower project in Progress's 2007 ECRC factors subject to refund with interest pending resolution of this docket. See, Order No. PSC-06-0972-FOF-EI, issued November 22, 2006, p.8.

which is then discharged into a canal leading back to the Gulf. The industrial wastewater permit for the Crystal River Plant includes a thermal limit of 96.5 degrees Fahrenheit on the cooling water discharge from the plant, which has been in effect continuously since 1988. Because the discharge temperature limit must always be met, the cooling capacity of the permanent cooling towers is affected by the temperature of the inlet cooling water at the time it is drawn from the Gulf. The higher the intake Gulf water temperature, the smaller the quantities of water that can accept heat from the steam and remain below 96.5 degrees. Once the cooling capacity of the towers is reached, the only immediate option is a temporary reduction in the output, a derate, of a generating unit. Because Crystal River Units 1 and 2 are base-load coal units, whenever those units are derated Progress must replace the lost generation by using more expensive oil or gas-fired units, or by purchasing higher-cost power on the open market.

Progress states that the temperature of the inlet water into the Crystal River site has increased significantly in recent years due to hotter weather, especially in the summer of 2005. As a result, more derates were necessary to comply with the thermal limit of 96.5 degrees for the discharge water. In order to minimize the derates, Progress initiated this project, which involves the lease, installation and operation of modular cooling towers in the summer months. The company asserts that the resulting reduction in derates will restore generating unit availability to its pre-existing level. The use of leased modular towers will allow the company to evaluate whether the increase in Gulf water temperatures and the resulting derate situation is a temporary or cyclical problem before implementing a permanent solution. The modular cooling towers were placed in service in June 2006, after the submittal of Progress's petition for cost recovery. Progress incurred \$516,000 in capital costs and \$4.6 million in Operations and Maintenance (O&M) costs for the project during 2006. Progress estimates future costs to be approximately \$3 to \$4 million annually.

According to Progress's calculations, the project has yielded net fuel savings of \$3,743,963 in 2006. Witness Lawery explained in his direct testimony that the net fuel savings were calculated based on an industry standard unit commitment dispatch model. The model compares generating unit commitment between the actual case and the modeled case for each event where derates were avoided; the fuel cost differences between the cases were then calculated to arrive at the gross benefit of reduced fuel costs associated with avoided derates as a result of the modular cooling towers. Using this methodology, the gross benefits from avoided derates yields a total of \$4,033,020. The value of additional auxiliary loads to power the modular cooling towers is \$289,057. The net of the two numbers yields net savings of \$3,743,963. Additional fuel costs of \$3,743,963 would otherwise have been passed on to Progress's customers through the fuel clause in 2006 if the modular cooling towers had not been installed.

The pertinent facts regarding Progress's modular cooling tower project and the benefits of the project are not disputed. The reasonableness of the project is also not disputed. The primary issue in the case is what is the appropriate cost recovery mechanism for the project. Progress believes the project is eligible for recovery either through the ECRC or the Fuel Clause. OPC believes the project is not eligible for recovery through either clause. While OPC and Progress differ in their legal and policy interpretations of the allowable recovery under the two

clauses, they agree that if the costs of the project are not recoverable through a clause, they would be incorporated in base rates.

## ECRC Recovery

Section 366.8255, Florida Statutes, authorizes us to review and decide whether a utility's environmental compliance costs are recoverable through an environmental cost recovery factor. Electric utilities may petition us to recover projected environmental compliance costs that are required by environmental laws or regulations and not included in base rates or other cost recovery clauses. Environmental laws or regulations include "all federal, state, or local statutes, administrative regulations, orders, ordinances, resolutions, or other requirements that apply to electric utilities and are designed to protect the environment." Section 366.8255(1) (c), Florida Statutes. A utility may submit a petition describing its proposed environmental compliance activities and projected costs, and if the activities are approved, we "shall allow recovery of the utility's prudently incurred environmental compliance costs, including the costs incurred in compliance with the Clean Air Act, and any amendments thereto or any change in the application or enforcement thereof. . . . "Section 366.8255(2), Florida Statutes. The statute provides that:

'Environmental compliance costs' includes all costs or expenses incurred by an electric utility in complying with environmental laws or regulations, including, but not limited to:

- 1. Inservice capital investments, including the electric utility's last authorized rate of return on equity thereon;
  - 2. Operation and maintenance expenses;
  - 3. Fuel procurement costs;
  - 4. Purchased power costs:
  - 5. Emission allowance costs:
  - 6. Direct taxes on environmental equipment; and
- 7. Costs or expenses prudently incurred by an electric utility pursuant to an agreement entered into on or after the effective date of this act and prior to October 1, 2002, between the electric utility and the Florida Department of Environmental Protection or the United States Environmental Protection Agency for the exclusive purpose of ensuring compliance with ozone ambient air quality standards by an electrical generating facility owned by the electric utility.

Section 366.8255(1) (d), Florida Statutes. Finally, the statute provides that any costs recovered in base rates may not also be recovered in the ECRC. Section 366.8255(5), Florida Statutes.

We first implemented the provisions of section 366.8255 by Order No. PSC-94-0044-FOF-EI, issued January 12, 1994, in Docket No. 930613-EI, <u>In re: Petition to establish an</u>

environmental cost recovery clause pursuant to Section 366.8255, Florida Statutes (Gulf Order). There we identified the criteria required to demonstrate eligibility for cost recovery under the ECRC. We interpreted the statute to prescribe three eligibility requirements for recovery of environmental compliance costs through the clause: the costs had to have been incurred after April 13, 1993, the effective date of the statute; the costs had to have been incurred to comply with a governmentally imposed environmental requirement, not a voluntary, discretionary environmental activity; and the costs could not already be included in base rates or another cost recovery mechanism. At the time, we focused our concern on avoiding the possibility that utilities would recover costs through the ECRC that they were already recovering through base rates, because the Gulf proceeding was the first time we were faced with separating the two. (Gulf Order at 6-7) That concern is the focus of the second and third eligibility criteria. We said:

Upon petition, we shall allow the recovery of costs associated with an environmental compliance activity if:

- 1. such costs were prudently incurred after April 13, 1993;
- 2. the activity is legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and,
- 3. such costs are not recovered through some other cost recovery mechanism or through base rates.

The Gulf Order also included other findings that are relevant to the decision to be made in this case. The Gulf Order allowed recovery through the ECRC of Gulf's Environmental Auditing Program even though no specific environmental regulation mandated such a program, because the program ensured the efficient management of approved environmental programs. (Gulf Order at 19) It also allowed recovery for general air quality costs and emission monitoring costs associated with changes in the scope of compliance with existing environmental regulations and new environmental regulations. (Gulf Order at 17) The Gulf Order demonstrates that from the beginning of our administration of section 366.8255, we have applied the statute on a case-by-case basis, not formalistically, but with enough flexibility to respond reasonably to complex and variable circumstances. This approach is consistent with the broad language of the statute, which provides that we shall allow recovery of prudently incurred environmental compliance costs, including costs such as operations and maintenance costs typically included in base rates.

For other examples of the manner in which we have viewed ECRC eligibility, see Order No. PSC-99-1954-PAA-EI, issued October 5, 1999, in Docket No. 990667-EI, <u>In re: Petition by Gulf Power Company for approval of Plant Smith Sodium Injection System as new program for cost recovery through environmental cost recovery clause</u>, where we approved the project both to comply with new Clean Air Act Amendment (CAAA) Phase II requirements and to maintain compliance with existing air permit requirements. See, also, Order No. PSC-98-1764-FOF-EI, issued December 31, 1998, in Docket No. 980007-EI, <u>In re: Environmental Cost Recovery Clause</u>, where we approved Gulf's additional groundwater monitoring equipment to continue to

comply with an existing environmental requirement, because greater treatment capacity was needed. In that order, we also approved two additional coal crushers that contributed to compliance with the CAAA at the TECO Gannon station. We said: "We do not know if the additional Gannon coal crushers were initially intended as part of TECO's overall NOx compliance strategy for Phase II of the CAAA. . . . However, it appears that additional crushers at the Gannon Station will contribute in the overall efforts to achieve lower NO<sub>x</sub> emissions if TECO continues to use PRB coal at Gannon." Order No. PSC-98-1764-FOF-EI, at 17.

Order No. PSC-02-1421-PAA-EI, issued October 17, 2002, in Docket No. 020648-EI, In re: Petition for approval of environmental cost recovery of St. Lucie Turtle Net Project for period of 4/15/02 through 12/31/02 by Florida Power & Light Company, also demonstrates our approach to the eligibility of environmental compliance costs for recovery through the ECRC. Florida Power & Light's (FPL) Nuclear Regulatory Commission (NRC) license to operate the St. Lucie nuclear power plant included Appendix B, which contained environmental requirements associated with non-radiological requirements, including those for the protection of endangered Appendix B imposed certain requirements on FPL to protect several species of endangered sea turtles from entrapment in the cooling water intake canals of the plant. The NRC requirements included installation and maintenance of a five inch mesh barrier net across the intake canal. Although the NRC requirements had not changed, FPL requested recovery of the costs for a new turtle net project through the ECRC.<sup>2</sup> The new project included installation of a new net of sturdier material and support structures, conducting a bottom survey of the intake canal, maintenance dredging the canal in the vicinity of the net, and installing a sand pump near the net. These additional activities were not specifically required by Appendix B, but FPL explained that they were necessary to ensure that the net worked properly so that it could continue to comply with its NRC license.

We approved the project even though the environmental requirement had not changed and even though the environmental requirement did not mandate the specific engineering steps FPL proposed to take. We found that by requiring installation of a turtle net with no other engineering details "... the license impliedly requires that FPL take whatever measures are necessary to make the net work properly." The project was "... within the scope of work authorized by the license, because it is needed to ensure that the net functions properly." Order No. PSC-02-1421-PAA-EI at 5.

With respect to the application of the three eligibility criteria in the Gulf Order in this case, the parties agree that the project meets the first criterion; its costs were incurred after April 13, 1993. There is a disagreement, however, over whether the Minimum Filing Requirements (MFRs) Progress filed in its last rate case offer sufficient evidence to support Progress's contention that the project complies with the third requirement that the costs are not recovered through some other cost recovery mechanism or through base rates. Citing general cost recovery principles, OPC argues that base rates are designed to recover operation and maintenance costs. OPC's position that the we should deem the project costs as having been recovered in base rates reflects its concern that utilities have an incentive to pass operation and maintenance costs

<sup>&</sup>lt;sup>2</sup> Appendix B was modified in 2002, but there was no change made to the earlier requirements regarding the turtle net.

normally recovered in base rates directly to customers through the recovery clauses, rather than through the usual rate setting process. Progress contends that the project itself was not contemplated when the MFRs providing the basis for its rate case settlement with OPC were filed, and that the project's operation and maintenance costs are not appropriate for base rate recovery because the project is not designed to replace or repair existing cooling tower facilities due to normal wear and tear.

There is no record support for OPC's contention that the project's costs are recovered through base rates. Progress's evaluation of the modular cooling tower project was prompted by record high temperatures and derates in the summer of 2005. The analysis occurred in the last quarter of 2005, and Progress's decision to install the modular cooling towers was not made until February 2006. The company provided data from its last rate case, showing that the costs of this project were not anticipated in the last rate case and were not included for cost recovery within base rates. We find that the costs of the project are not being recovered through base rates or another recovery mechanism, and therefore the project meets the Gulf Order's third eligibility criterion.

The main dispute over eligibility of the modular cooling tower costs for recovery through the ECRC focuses on the second criterion of the Gulf Order, that: "The activity is legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last test year upon which rates are based." According to the parties, the meaning of the phrase "whose effect was triggered" is the crux of the issue.

The thermal limit of 96.5 degrees Fahrenheit on the cooling water discharge imposed by the FDEP's industrial wastewater permit has been in place and has not changed since 1988, which predates Progress's last rate case. OPC argues that only a change in the terms of the underlying environmental regulation could "trigger" additional compliance costs eligible for recovery through the ECRC. OPC's witness Hewson suggested that an example of this interpretation would be a case where the environmental requirements are phased in over time following the original date of enactment of a regulation. OPC argues that since there has been no change in the environmental requirement since 1988, before the company's last rate proceeding, the additional cooling tower costs are not eligible for ECRC recovery. OPC contends that use of the disjunctive "or" in the language of the Gulf Order indicates that an environmental requirement cannot be both effective before the most recent test year and have its effect triggered after the most recent test year. Witness Hewson argues that the warmer inlet water temperature is not a change in a governmental requirement but a change in operating conditions. He contends that Progress's broad interpretation would suggest that any future changes in fuel market conditions that would trigger different environmental compliance measures should also qualify for ECRC treatment.

Progress's interpretation of the second eligibility criterion is broader than OPC's and includes changes in environmental conditions that trigger a change in the scope of activity necessary to comply with existing regulations. Progress argues that the effect of the wastewater discharge license was triggered after its last rate case, because the unanticipated high inlet water

temperatures in 2005, and the prospect that high water temperatures will continue in the future, required additional measures to remain in compliance with the permit without derating its baseload plants.

We do not agree with OPC's interpretation of the language in the Gulf Order's second eligibility criterion for ECRC cost recovery. We believe that the language contemplates a variety of circumstances and times when a utility would incur costs to comply with environmental requirements. The criterion -- the activity is legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last test year upon which rates are based -- would include an environmental requirement enacted after the utility's last test year on which rates were based. It would include an environmental requirement that had been enacted before the utility's last test year but was not effective until after the test year. It would also include a requirement enacted and effective before the last test year, but whose effect had changed over intervening years necessitating a change in the scope of activity required to remain in compliance with the regulation.<sup>3</sup> This interpretation encompasses both OPC's example of a regulation that phases in its requirements over time and Progress's example of a change in real world environmental conditions that necessitates incurring additional environmental compliance costs.

We believe that this interpretation is consistent with our prior decisions, and with the intent of section 366.8255, Florida Statutes, which permits recovery of a wide variety of costs associated with compliance with governmentally imposed environmental requirements, if the costs were incurred after section 366.8255 was enacted, and if the costs are not being recovered in base rates or another cost recovery mechanism. We understand OPC's concern that utilities have the incentive to pass many costs through cost recovery mechanisms, and we are attuned to that concern, but that cannot lead us to restrict the eligibility of environmental costs beyond what the statute contemplates. It is our opinion that, with respect to ECRC recovery, OPC's position restricts the eligibility of environmental costs beyond what the statute contemplates.<sup>4</sup> Further, we are not persuaded that a decision to approve the eligibility of the modular cooling towers project would lead to the scenario OPC's witness Hewson describes, as long as we continue to require a direct nexus between the project, its compliance costs, and the relevant environmental requirement.

For the reasons explained above, we find that Progress's modular cooling tower project meets the requirements of section 366.8255, Florida Statutes, and ECRC recovery of the associated, prudently incurred costs is reasonable and consistent with our prior precedent.

We note that there may be other factual circumstances as well that would be eligible for recovery in the future, given the fact intensive, case-by-case nature of the Commission's review of ECRC projects.

<sup>&</sup>lt;sup>4</sup> "An administrative agency has no power to act in a manner that enlarges, modifies, or contravenes the authority that the legislature has delegated to it." 2 Florida Jur 2d, Administrative Law, § 31, p.47-48.

## Fuel Clause and Base Rate Recovery

Progress contends that the costs associated with its modular cooling tower project are eligible for recovery through the fuel cost recovery clause as well as the ECRC, and should not be recovered through base rates. With respect to the fuel clause, Progress argues that the project will result in fuel savings, and project costs were not recognized or anticipated in the cost levels used to determine current base rates.

OPC asserts that the modular cooling tower costs are not fossil-fuel related and are well-removed from the fuel process. According to OPC, the cooling tower costs are necessary to enable Progress to operate its units at full capacity when they are the most economical resources available to serve customers. OPC contends that we did not contemplate that such operation and maintenance costs would be flowed through the fuel cost recovery clause, and accordingly they belong in base rates.

As set forth above, we have determined that the prudently incurred costs associated with Progress's modular cooling tower project are eligible for recovery through the ECRC. Therefore, we do not need to address the issues of fuel clause and base rate recovery.

## CONCLUSION

Progress's modular cooling tower project provides a reasonable means to remain in compliance with its wastewater discharge permit, and the project's costs are eligible for recovery through the ECRC. ECRC treatment for the project is consistent with the intent of section 366.8255, Florida Statutes, our eligibility standards, our prior decisions, and the public interest. The project is a compliance option that has been shown to reduce the fuel costs that would otherwise be passed on to Progress's customers if Progress was forced to derate its baseload power plants. For these reasons, we approve this project as eligible for cost recovery through the ECRC. The project costs will be included in the annual cost recovery factors in accordance with our prior practice and precedent, subject to prudence review and true-ups.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the Petition by Progress Energy Florida, Inc. for approval to recover modular cooling tower costs through the environmental cost recovery clause is approved as described in the body of this Order. It is further

ORDERED that this docket shall be closed 32 days after the issuance of this Order, to allow the time for filing an appeal to run.

By ORDER of the Florida Public Service Commission this 5th day of September, 2007.

ANN COLE
Commission Clerk

Bv

Hong Wang

Office of Commission Clerk

(SEAL)

**MCB** 

# NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.