State of Florida

Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: OCTOBER 3, 2002

TO: DIRECTOR, DIVISION OF THE COMMISSION CLERK & ADMINISTRATIVE SERVICES (BAYÓ)

FROM: DIVISION OF ECONOMIC REGULATION (BREMAN, D.LEE) WBM
OFFICE OF THE GENERAL COUNSEL (STERN) MKS JDJ

RE: DOCKET NO. 020648-EI - 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.

AGENDA: 10/15/02 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\ECR\WP\020648.RCM

CASE BACKGROUND

On June 19, 2002, Florida Power & Light Company ("FPL" or "Company") petitioned this Commission for approval of the Company's St. Lucie Turtle Net Project (Turtle Net Project) as a new activity for cost recovery through the Environmental Cost Recovery Clause ("statute" or "ECRC"). The project is intended to protect sea turtles from entering the cooling water intake wells of the St. Lucie facility. Five species of sea turtles are present in the area and all are listed as either endangered or threatened under the Endangered Species Act (ESA).

The Turtle Net Project consists of: 1) installing a new net and support structures across the cooling water intake canal for the St. Lucie facility; 2) conducting a bottom survey of the intake canal; 3) maintenance dredging the canal in the vicinity of the net; and, 4) installing a sand pump in the vicinity of the net.

FPL has been subject to a stipulation that prohibited cost recovery through the ECRC for the past three years. The stipulation reads:

> For 2002, FPL will not be allowed to recover any costs through the environmental cost recovery docket. FPL may, however, petition to recover in 2003 prudent environmental compliance costs incurred after the expiration of the three-year term of this Stipulation and Settlement in 2002. FPL is authorized to recover these prudently incurred environmental costs in 2003. Interest, however, will not accrue on these expenses.

Order No. PSC-01-2463-FOF-EI issued in Docket No. 010007-EI (addressing the interpretation of a stipulation attached to Order No. PSC-99-0519-AS-EI in Docket Number 990067-EI). The stipulation expired on April 15, 2002. Order No. PSC-99-0519-AS-EI issued in Docket No. 990067-EI. FPL is not asking to recover any costs incurred prior to April 15, 2002.

Section 366.8255, Florida Statutes, the ECRC, gives the Commission the authority to review and decide whether a utility's environmental compliance costs are recoverable through an environmental cost recovery factor. Electric utilities may petition the Commission to recover projected environmental compliance costs required by environmental laws or regulations. Section 366.8255(2), Florida Statutes. 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. If the Commission approves the utility's petition for cost recovery through this clause, only prudently incurred costs can be recovered. Section 366.8255(2), Florida Statutes.

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve FPL's proposed Turtle Net Project as a new project for cost recovery through the ECRC?

PRIMARY RECOMMENDATION: The Commission should approve only the costs incurred for installation and maintenance of the new net because those are the only costs that are environmental compliance costs under Section 366.8255. Costs incurred for diving are typical ongoing O&M costs being recovered by FPL's current base rates and therefore are not appropriate for recovery through the ECRC. (STERN/BREMAN)

ALTERNATIVE RECOMMENDATION: Yes. The activities FPL has proposed are necessary to prudently implement an environmental requirement. Costs incurred for diving are typical ongoing O&M costs being recovered by FPL's current base rates and therefore are not appropriate for recovery through the ECRC. (BREMAN/HELTON)

PRIMARY STAFF ANALYSIS: The Nuclear Regulatory Commission (NRC) issued a license to FPL to operate the St. Lucie Unit 2, a nuclear power plant. Environmental requirements associated with non-radiological activities are contained in Appendix B to the license. Appendix B was last revised July 2, 1999, to require the following activities relevant to FPL's Petition:

> 4.2.2.2 Terms and Conditions of the Incidental Take Statement
>
> The following terms and conditions are established to monitor the level of take and to minimize the adverse impacts of entrapment and the possibility of lethal takes:
>
> 1) FPL shall install and maintain a five inch (12.7 cm) mesh barrier net across the intake canal, east of the previously existing eight inch mesh barrier net. The new net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

> 2) The existing eight inch mesh barrier net shall be retained to serve as a backup to the new five inch mesh barrier net, which may be lowered occasionally because of fouling and water flow problems. The eight (8) inch mesh net shall receive regular inspection, maintenance, and repair on at least a quarterly basis. The regular maintenance schedule notwithstanding, any holes or damage to the net that are discovered shall be promptly repaired to prevent the passage of turtles through the barrier net.

The license does not require FPL to conduct a bottom survey, maintenance dredge the canal, or install a sand pump in the vicinity of the net. FPL contends that the maintenance dredging and the sand pump are needed to make the 5 inch mesh net operate more effectively.

It should be noted that on August 28, 2002, the NRC license was modified, in part due to sea turtle considerations. The above stated requirements were not changed; however, the Appendix B attached to the Petition and the Appendix B currently attached to the license are now different documents. All references to Appendix B in this recommendation refer to the modified document.

The capital cost of the activities listed above plus the additional work proposed by FPL is estimated at $694,142 (system). All of the capitalized activities were competitively bid except for the canal bottom survey which is estimated to be $9,000 (system). The majority of the capital costs, $400,000 (system), would be incurred for maintenance dredging.

There are projected annual O&M costs of $24,000 (system) for divers to conduct maintenance work and quarterly inspections of the nets. Costs incurred for diving are typical ongoing O&M costs being recovered by FPL's current base rates and therefore are not appropriate for recovery through the ECRC. FPL began installation of the net in June 2002. The estimated Turtle Net Project in-service date is September 2002.

Staff believes that the only costs FPL should be allowed to recover through the ECRC are those for the activities required by Appendix B. Appendix B qualifies as an environmental law or regulation, pursuant to Section 366.8255(1)(c), Florida Statutes, because it is part of a federal license. The rest of the proposed

activities are being conducted at the discretion of FPL, and should be recovered through base rates.

FPL argues that it is required by the ESA to conduct the activities not included in its NRC license. Staff contends that the ESA does not require those activities. If the Commission believes that the ESA requires those activities, then the costs would be recoverable through the ECRC.

This recommendation is organized into four parts. Part I describes the relevant portions of the ESA. Part II describes the history of turtle protection measures at the site. Part III describes FPL's position in detail, and Part IV describes staff's position in detail.

I. Endangered Species Act (ESA)

The ESA prohibits the taking of endangered and threatened species. 16 USCS 1538(a)(1)(B). The term "take" means to kill, physically harm, interfere with in a harmful way, or to attempt any such act. See 16 USCS 1532(19). Any person who violates the prohibition against takings of endangered or threatened species is subject to civil and criminal penalties. 16 USCS 1540.

Under the ESA the National Marine Fisheries Service (NMFS) determines whether marine species, such as sea turtles, are endangered or threatened. 16 USCS 1533(a)(2) and 50 CFR 402.01(6). If a species receives such a designation, federal agencies, in conjunction with the NMFS, must ensure that their agency action is not likely to jeopardize the existence of the species. 16 USCS 1536(a)(2). In this docket, the agency action is the NRC's issuing a license to FPL for operation of the St. Lucie nuclear plant.

If a federal agency believes that its action will affect a protected species, the agency must initiate the "consultation process" with the NMFS. 16 USCS 1536(a)(3). During the consultation process the NMFS researches the effects of the agency action on the species. 16 USCS 1536(b)(3). At the conclusion of the process the NMFS provides a biological opinion which explains how the proposed action will affect the species. 16 USCS 1536(b)(3)(A).

If the biological opinion concludes that the agency action is not likely to jeopardize the existence of the species, as is the

case in this docket, then the NMFS may issue an incidental take statement, which allows the unintended taking of protected species resulting from the federal action. 16 USCS 1536(b)(4). In this docket, the taking of sea turtles is incidental to the operation of the plant. Incidental take statements have been issued.

The incidental take statement must contain an incidental take limit, and reasonable and prudent measures necessary to minimize the impact of the action on the protected species. 16 USCS 1536(b)(4). It must also set forth terms and conditions that implement the reasonable and prudent measures. Id. The requirements for the nets contained in Appendix B to the NRC license, are terms and conditions included in the incidental take statement.

The ESA contains an exemption for takings that exceed the number allowed in the incidental take statement. That exemption provides:

> Any taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv)[incidental take statement] shall not be a prohibited taking of the species concerned.

16 USCS 1536(o)(2). If the number of takings exceed that authorized in the incidental take statement while the terms and conditions were being met, then the federal agency must reinitiate the consultation process. 50 CFR 402.16. Consultation must be reinitiated for several other reasons, one of them being availability of new information. Id.

II. History of Nets and Turtle Entrapment

A net with an eight inch mesh size was installed in the intake canal in 1978 to keep turtles from moving into the intake wells of the plant. The first biological opinion was issued in 1982 and concluded that the net was adequate to protect the species. No limit on turtle mortalities was provided in that biological opinion.

By the mid-1990s the number of turtles trapped in the net had increased significantly, as did the number of turtles passing through the net. The number of juveniles in the population had

increased, and most of the turtles passing through the net were juveniles. In May 1995, the NRC determined that reinitiation of consultation was required, due to the increasing numbers of sea turtles captured and killed.

Before the consultation process was completed, FPL installed a five inch mesh net upstream of the eight inch mesh net. FPL believed that the NMFS would most likely require installation of the net because it was included in a draft biological opinion.

FPL sought recovery of the cost of the net through the ECRC. However, FPL withdrew its request because the draft opinion did not satisfy the definition of environmental law or regulation in the ECRC. A final document is required to satisfy that definition. The Order on this action states: ". . . it is reasonable for the Commission to disallow further cost recovery of this project until all the criteria for recovery have been met." Order No. PSC-96-1171-FOF-EI, issued in Docket No. 960007-EI on September 18, 1996.

The consultation initiated in May 1995 was completed in January 1997, with the issuance of a biological opinion and incidental take statement. The five inch mesh net was required, and incidental take levels were set. The requirements established in January 1997 are those included in the Appendix B attached to the Petition.

Later in 1999, the NRC reinitiated consultation again for two reasons: 1) more turtles had been taken than was contemplated by the 1997 incidental take statement; and 2) FPL completed a report required by the 1997 biological opinion which contained new information on factors affecting entrapment levels at the plant. A biological opinion, which includes an incidental take statement, was issued on May 18, 2001. Appendix B of the license has been revised to include the entire 2001 biological opinion.

The terms and conditions for the net are the same in both the 1997 and 2001 incidental take statements. Neither requires a bottom survey, maintenance dredging, or a sand pump. The 2001 biological opinion also includes conservation recommendations, which are implemented at the discretion of FPL. These recommendations are for inclusion of research and monitoring activities. No dredging activities are mentioned.

In 2001 turtle mortalities equaled the incidental take limit. FPL explained that there is a debate with NMFS over whether this is an exceedence that triggers reinitiation of consultation. In any event, the NMFS informed FPL that it was dissatisfied, and that mitigative measures may be required.

III. FPL's Position

FPL's Petition explains that the five inch mesh net currently in place stretches and bows when influxes of seaweed and jellyfish are large. When the net becomes deformed, it traps turtles and can kill them if they aren't found in time. In its Petition, FPL proposes to install a new net, made of a different material that is intended to correct the problem of stretching and bowing. FPL wants to maintenance dredge to increase the cross-sectional area of the canal, which will slow water velocity. FPL believes that slower water velocity will further reduce the likelihood of the net becoming deformed. The sand pump will apparently help to maintain the dimensions achieved from maintenance dredging.

FPL contends that to comply with the ESA it must: 1) follow the terms and conditions in its NRC license; and, 2) implement additional measures, if necessary, to ensure that it does not exceed the incidental take limit for mortalities. FPL argues that the incidental take limit is a performance criterion, much like an emissions limit in a Clean Air Act permit. If the limit is exceeded then there is a violation of the permit and a penalty is incurred. FPL argues that exceeding the lethal take limit is the violation and that reinitiation of consultation is the penalty. For this reason, FPL believes it is obligated to take all action it deems necessary to ensure that the incidental take limit is not exceeded, regardless of whether it is expressly required by the license.

FPL also explains that the NMFS has broad discretion in the issuance and administration of an incidental take statement. Loggerhead Turtle v. Volusia County, 120 F.Supp 1005, 1019 M.D. Fla. 2000); Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687, 708 (1995)(citations omitted). FPL further explains that the NMFS has made clear its displeasure with take levels that meet or exceed those set forth in FPL's incidental take statement. FPL claims that investing in the bottom survey, maintenance dredging and sand pump now will ensure that more costly measures will not be required later.

IV. Staff's Position

Staff disagrees with FPL's interpretation of the ESA. Staff also disagrees FPL's assertions that investing in maintenance dredging activities and a sand pump now will avoid higher costs later.

Because the NRC is authorizing the activity that threatens sea turtles - operation of St. Lucie Unit 2 - the NRC is obligated to comply with the ESA. 16 USCS 1536(a)(2). The biological opinion, which includes an incidental take statement, was issued by NMFS to the NRC. The NRC complies with the ESA by incorporating the terms and conditions of the incidental take statement in the license it issues to FPL to operate the plant. The terms and conditions require installation, maintenance, and monitoring of the 8 inch and 5 inch mesh nets. FPL must comply with the license, and that is why the requirements of the license qualify as environmental compliance costs under the ECRC.

FPL is not obligated to do more than what the license requires. If FPL chooses to do more, that is discretionary work and does not qualify for recovery through the ECRC. See Order No. PSC-94-0044-FOF-EI, issued on January 12, 1994, in Docket No. 930613-EI (denying Gulf Power Company's request to recover research costs through the ECRC because they were discretionary); see also Order No. PSC-96-1171-FOF-EI, issued in Docket No. 960007-EI on September 18, 1996 (denying FPL's request to install the first 5 inch mesh turtle net because it was not required by an environmental law or regulation).

If FPL complies with the terms and conditions of its NRC license, then an exceedence of the incidental take limit is not a violation of that license or the ESA. 16 USCS 1536(o)(2). The ESA states that under such circumstances, an exceedence "shall not be a prohibited taking of the species concerned." 16 USCS 1536(o)(2). Such an exceedence does not result in a civil or criminal penalty, but instead triggers the need to reinitiate consultation. 50 CFR 420.16(a).

FPL has not shared with staff its position on the significance of 16 USCS 1536(o)(2). However, courts construing that section of the statute have found that any taking that exceeds the limits of

an incidental take statement is permissible, and is not a violation of the ESA, so long as the terms and conditions of the incidental take statement are complied with. See Ramsey v. Kantor, 96 F.3d 434, 441-2 (9th Cir. 1996)(finding that under 16 USCS 1536(o)(2) "any taking . . . that complies with the conditions set forth in the incidental take statement is permitted."); Center for Marine Conservation v. Brown, 917 F. Supp. 1128, 1148-9 (S.D. Tex 1996)(holding that exceedence of the incidental take limit triggered reinitiation of consultation but did not violate the ESA because the terms and conditions of incidental take statement were complied with); Loggerhead Turtle v. County Council of Volusia County, FL, 148 F.3d 1231, 1245-6 (11th Cir. 1998)(explaining that exceedences of the incidental take limit are not prohibited when there is compliance with the terms and conditions of the incidental take statement, but no similar provision applies to a permit issued under the ESA).

Although FPL has exceeded its incidental take limit in the past, FPL has not alleged any failure to comply with the terms and conditions of the incidental take statement. Staff contends that as long as FPL is in compliance with the terms and conditions, any exceedence of the incidental take limit is not a violation of its license or prohibition against takings in the ESA. See 16 USCS 1536(o)(2).

FPL argues that reinitiation of consultation is a penalty for violation of its license because it is required when the incidental take limit is exceeded. Staff refutes this argument in three ways.

First, Section 16 USCS 1540, which sets forth the types of penalties that can be imposed under the ESA, does not list reinitiation of consultation as a type of penalty.

Second, reinitiation of consultation can be triggered by 4 things: 1) exceeding incidental take limit; 2) availability of new information on the effects of the agency action on listed species; 3) modification of the agency action in a way that will cause effects on listed species not previously considered; and, 4) designation of a new species (as threatened or endangered) which can be found in the project area, and may be affected by the agency action. 40 CFR 402.16.

If reinitiation is a penalty, as FPL argues, then this penalty is imposed for actions that actually benefit species, such as

availability of new information, as well as for actions that harm them. Staff believes a more rational interpretation of the rule is that reinitiation is required when events allow for or necessitate that additional protection be provided to listed species.

Third, FPL has not been subjected to civil or criminal penalties for its exceedences, although the NRC has had to reinitiate consultation at least two times (three times according to the NMFS). As far as staff knows, FPL has not even received a warning or notice that it might be subjected to a penalty. The fact is that FPL cannot be subjected to any such penalties, because FPL has not violated the ESA or its license. Under 16 USCS 1536(o)(2), exceedences in excess of the incidental take limited do not violate the ESA when the terms and conditions of the incidental take statement have been complied with. See Ramsey v. Kantor at 441-2; Center for Marine Conservation v. Brown at 1148-9; Loggerhead Turtle v. County Council of Volusia County, FL at 1245-6.

The NRC could have required the dredging and sand pump even though the NMFS did not. The substantive responsibilities of the NRC under the ESA derive from 16 USCS 1536(a)(2), which states: [e]ach federal agency shall ... ensure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species. . . ." This language imposes an affirmative requirement on the NRC to ensure that listed species are protected. See Pyramid Lake Paiute Tribe of Indians v. U.S. Dep't of the Navy, 898 F.2d 1410, 1414-5 (9th Cir. 1990); Stop H-3 Ass'n v. Dole, 740 F.2d 1442, 1459-60 (9th Cir. 1984).

An agency may not rely solely on compliance with a biological opinion to satisfy its obligations under the ESA. See id. If an agency believes the biological opinion is flawed or additional precautions are needed, the agency must act accordingly. See e.g. Environmental Coalition of Broward County, Inc. v. Myers, 831 F.2d 984, 987 (11th Cir. 1987)(noting that the U.S. Army Corps of Engineers imposed eight conditions to protect manatees in its dredging permit, in addition to those required by the biological opinion). An agency's decision to rely on a biological opinion is reviewable by a court under the abuse of discretion standard. See Stop H-3 at 1460. Thus, there were two opportunities for the dredging and sand pump to become requirements - through the NMFS

and through the NRC - but still these activities did not make it into any legally significant document.

Neither the NRC nor the NMFS overlooked questions about water velocity. The 2001 biological opinion states: "The flow rate in the canal varies from 0.9 to 1.1 ft/sec (27-32 cm/sec) depending on tidal stage." In addition, the biological opinion contains detailed evaluations of the dimensions of and velocities in the intake pipes, which discharge into the canal. Furthermore, the NMFS and NRC were aware of the potential for bowing because the 2001 biological opinion noted that "[d]ue to potential fouling situations from jellyfish or seaweed, the top of the net can be quickly released from tensioning towers so that it can drop to the bottom of the canal." Finally, the NRC wrote to the NMFS for clarification of the 2001 biological opinion.

The NRC was well informed on the nature of the intake canal. The NRC was actively involved in the ESA process, and had sufficient information to determine if extra measures, such as maintenance dredging, were needed. The NRC decided no extra measures were needed.

FPL does not supply any type of quantitative analysis demonstrating the degree to which water velocity must be slowed to prevent the new net from stretching and bowing. FPL is proposing to dredge 15 feet of sediment to restore the original canal depth. It may be that deepening the canal by only half that amount would slow velocities enough to ensure that stretching and bowing is never a problem. This would reduce the cost of maintenance dredging since the volume of material dredged and disposed of would be cut in half. Staff believes the prudent approach would be to determine whether dredging 15 feet deep is necessary.

FPL asserts that if dredging is not conducted and the sand pump not installed, more costly mitigation requirements will be imposed in the future. FPL provides no cost projections or logical argument to support this position. It is clear, however, that the NMFS has examined the site extensively, prepared 3 biological opinions in the past six years, and has not found that the dredging related work is needed. If the NMFS requires mitigation, which does not include dredging and a sand pump, then FPL will have passed money through the clause unnecessarily. Staff believes the prudent course of action is to see what the NMFS requires, if anything.

It appears that the experts at the NMFS and NRC do not believe dredging and a sand pump are necessary, but that experts at FPL believe those things are necessary. Staff does not have the expertise to decide which set of experts is right. Staff has the expertise to evaluate whether costs qualify as environmental compliance costs. The bottom survey, maintenance dredging, and the sand pump are not required by the NRC license or the ESA and are therefore not environmental compliance costs.

Staff's position will not prevent FPL from recovering the costs of the maintenance dredging and sand pump. FPL can recover those costs through base rates.

ALTERNATIVE STAFF ANALYSIS: Alternative staff's analysis is based on the concept that although dredging is not required per se, FPL is doing the dredging to reduce water velocity through the net so that turtle mortality is reduced. There is a maximum mortality limit in the incidental take statement.

FPL asserts that the existing five inch mesh net does not enable them to meet the turtle mortality limit. FPL's proposed remedial activities are intended to avoid failures similar to those that occurred in the past. Alternative staff agrees with FPL that by slowing the water velocity in the canal, turtles are less likely to become trapped in the net and die.

The NRC license leaves almost all the details of net design and installation up to FPL. For example, the license does not require FPL to install a new net made out of new material, but FPL is doing so. The license does not require tensioning towers to support the net such that it can drop to the bottom of the canal quickly when it becomes fouled with jellyfish and seaweed. FPL is doing this too. These actions were undertaken to enhance the functioning of the net. Both primary and alternate staff believe that these costs are recoverable through the ECRC even though they are not expressly required by the license. By requiring the net, and no other engineering details, the license impliedly requires that FPL take whatever measures are necessary to make the net work properly.

A question arises as to the scope of work authorized by the license to ensure that the net works properly. Alternative staff believes that maintenance dredging is, in this particular case,

within the scope of work authorized by the license because it is needed to ensure that the net functions properly.

For this reason, FPL's proposed activities, excluding diving, are reasonable and necessary to achieve compliance and to maintain compliance with a new environmental requirement as defined by Section 366.8255, Florida Statutes. Therefore, alternative staff recommends that prudently incurred costs to implement FPL's proposed Turtle Net Project which are incremental to FPL's base rates qualify for recovery through the ECRC.

ISSUE 2: Should this docket be closed?

RECOMMENDATION: Yes, this docket should be closed upon issuance of the Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (STERN)

STAFF ANALYSIS: If no timely protest to the proposed agency action is filed within 21 days of the date of issuance of the Consummating Order, this docket should be closed upon the issuance of the Consummating Order.