

June 24, 2003

Dr. Roy Crabtree
Regional Administrator
National Marine Fisheries Service
Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, FL 33702

SUBJECT: REQUEST FOR MODIFICATION AND CLARIFICATION TO THE
AUGUST 8, 2002, CRYSTAL RIVER UNIT 3 BIOLOGICAL OPINION
(TAC MB1562)

Dear Dr. Crabtree:

On August 8, 2002, the Southeast Regional Office (SERO) of the National Marine Fisheries Service issued a biological opinion (BO) for the Crystal River Energy Complex (CREC) owned and operated by Florida Power Corporation (FPC or the licensee) doing business as Progress Energy Florida. On September 26, 2002, the U.S. Nuclear Regulatory Commission (NRC) staff met with SERO personnel to discuss Section 7 consultations at three southeastern nuclear facilities. During the meeting, the NRC staff discussed a number of issues related to the recently issued BO for CREC. The purpose of this letter is to request several changes to the August 8, 2002, BO. Although the staff herein requests that the August 8, 2002, BO be modified, it is important to note that the licensee is implementing the Reasonable and Prudent Measures and the Terms and Conditions of the Incidental Take Statement (ITS) in the August 8, 2002, BO. Also, turtle takings have decreased significantly at CREC since the large numbers reported in calendar years 2000 and 2001.

The August 8, 2002, BO clearly states in the ITS and the Conservation Recommendations that the NRC shall do the monitoring, record keeping, and perform immediate notification. The BO also recommends that NRC continue the evaluation and experimentation on turtle deterrence in front of the intake bar racks. Previous BOs for Crystal River and other facilities did not specifically identify the NRC as the organization that would do the monitoring, records retention and notifications. The NRC staff recognizes that the Endangered Species Act of 1973 places requirements on the permitting agency to assure that the Reasonable and Prudent Measures and the Terms and Conditions of the BO are carried out. The present language in the BO unnecessarily hampers the NRC's ability to assure that the requirements in the ITS are met. Each nuclear power facility holds an operating license that contains technical specifications (TS) in an appendix to the license that require the licensee to conduct operations in a prescribed manner. Within those TS are requirements for the protection of the environment. In the case of CREC Unit 3, the nuclear unit, the TS state that the licensee shall protect endangered and threatened sea turtles consistent with the ITS issued by the SERO.

The NRC staff's concern is that because the BO states specifically that the NRC shall conduct the monitoring, data collection, and reporting, the NRC's enforcement authority may be limited should the licensee fail to comply with the requirements in the BO. The NRC staff requests that SERO approve the proposed changes to the BO that would facilitate incorporating the requirements of the ITS into the CREC Unit 3 license. The proposed changes and a redline/strikeout version of the ITS and Conservation Recommendations are provided in the enclosure.

In a recent telephone conversation between the NRC staff and the licensee, concerns were raised related to the last sentence of the Terms and Conditions of the BO. The sentence states that "The NRC [the licensee has assumed that they would be the organization that complies with this requirement] must immediately provide an explanation of the causes of the taking and review with NOAA Fisheries the need for possible modification of the reasonable and prudent measures." First, the licensee pointed out that neither it nor the NRC would likely be in a position to provide a meaningful explanation of the high incidental take numbers. The extremely high year-to-year variability in turtle takes, apparently unrelated to plant operating conditions, is likely related to population fluctuations, climactic variation, or changes in critical resources. SERO staff would be in the best position to speculate on which of these phenomena are responsible for the increased takings. The NRC staff, therefore, recommends that the last sentence of the Terms and Conditions be amended to remove the requirement to provide an explanation of the cause of the taking unless it is related to a change in the plant operating conditions or site modification. Furthermore, the NRC staff is concerned with the meaning of the phrase "immediately provide." Recognizing the fact that any analysis on population dynamics, climactic changes, or changes in resources available to turtles is likely to take months to generate, the NRC staff asked SERO staff on September 26, 2002, to clarify the meaning of "immediately provide." The staff was informed that within one week (7 days) of exceeding the annual take limit of 78 turtles that either the NRC or licensee should notify SERO staff, either telephonically or by electronic mail, that the limit had been met or exceeded and that an explanation would be provided for the increased taking. The NRC staff requests that this clarification of the phrase "immediately provides" be included in the BO. Proposed changes to the last sentence of the Terms and Conditions section of the BO are provided in the enclosure.

At the September 26, 2002, meeting, the NRC also asked that the start date of the annual limits on turtle takings be defined in the BO. SERO staff replied that counts are on a calendar year basis. We request that the Terms and Conditions of the BO be modified to state that the counts for the annual limit begin on January 1 of each year. Also, the NRC staff, after a careful rereading of the ITS, requests that the BO identify Florida Power Corporation as the licensee of the CREC and that the word "impingement" be substituted for the word "entrainment" in the section entitled Amount or Extent of Anticipated Take.

R. Crabtree

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Enclosed is a list of the proposed changes along with a redline strikeout version of the ITS and the Conservation Recommendations from the August 8, 2002, BO. If you have comments or questions related to the NRC staff's request, please contact Dr. Michael T. Masnik at 301-415-1191 or MTM2@NRC.GOV.

Sincerely,
/RA/

Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts Program
Division of Regulatory Improvements Programs
Office of Nuclear Reactor Regulation

Docket No: 50-302

Enclosures: As stated

cc: w/enclosures: See next page

R. Crabtree

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PROPOSED CHANGES TO THE AUGUST 8, 2002, BIOLOGICAL OPINION

The NRC staff recommends the following changes to the August 8, 2002 Crystal River BO:

1. Page 23, third line of the section entitled "**Amount or Extent of Anticipated Take**", the line should read: "...information on the relationship between sea turtles and Florida Power Company's (the licensee) CREC cooling water intake system..."
2. Page 23, fifth line of the section entitled "**Amount or Extent of Anticipated Take**", the word "entrainment" should be changed to "impingement."
3. Page 24, under **Reasonable and Prudent Measures**, item 1, the sentence should read: "Monitoring of sea turtle activities around the bar racks and rescuing sea turtles stranded on the bar racks will be conducted."
4. Page 24, under **Reasonable and Prudent Measures**, item 2, the sentence should read: "Records of sea turtle strandings at CREC will be maintained."
5. Page 25, **Terms and Conditions**, last three lines of item 4, the lines should read in part: "...requiring this information in case there are other issues it may need to look into) in any one year, on a calendar year basis, NRC will assure that the licensee notifies the SERO Assistant Regional Administrator, Protected Resources Division, either by telephone or electronic mail within five days."
6. Page 25, last three lines of the **Terms and Conditions**, the lines should read in part: "...and prudent measures provided. The NRC will require the licensee to notify the SERO Assistant Regional Administrator, Protected Resources Division, by telephone or electronic mail, within five days, if any of the above limits are met or exceeded, and provide any information that might relate to the meeting or exceeding the limits particularly if the taking might be related to a change in plant operating procedures." Strike all after "The NRC..."
7. Page 25, the indented sentence under **Conservation Recommendations**, the sentence should read: "The NRC should encourage the licensee to continue the evaluation and experimentation on methods to be employed that could be used to keep sea turtles away from the bar racks."

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REDLINE STRIKEOUT COMPARISON OF PROPOSED CHANGES TO THE AUGUST 8, 2002, BIOLOGICAL OPINION

VII. Incidental Take Statement

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary and must be undertaken by the NRC so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The NRC has a continuing duty to regulate the activity covered by this incidental take statement. If the NRC fails to assume and implement the terms and conditions, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the NRC must report the progress of the action and its impact on the species to NOAA Fisheries as specified in the incidental take statement.

Amount or Extent of Anticipated Take

Based on stranding records, incidental captures aboard commercial shrimp vessels, and historical data, five species of sea turtles are known to occur in the action area. Current available information on the relationship between sea turtles and Florida Power Company's (the licensee) CREC's cooling water intake system indicates that injury and/or death of sea turtles is likely to occur from ~~entrainment~~impingement on the bar racks of the water intake system. Therefore, pursuant to section 7(b)(4) of the ESA, NOAA Fisheries anticipates an annual incidental take of up to **seventy-five** live sea turtles and three sea turtles killed as a result of plant operations, in any combination of loggerheads, greens, Kemp's ridleys, hawksbills or leatherbacks. This level of take is anticipated for the operation of CREC's cooling water intake system. If the actual incidental take meets or exceeds this level, the NRC must immediately request reinitiation of formal consultation. NOAA Fisheries' Southeast Region will cooperate with the NRC in the review of the incident. NOAA Fisheries also expects that the CREC may capture and collect an additional unquantifiable number of previously dead sea turtles (turtles not killed as a result of plant operations) such as turtles with obvious signs of injury, such as prop scars, or disease.

Effect of the Take

NOAA Fisheries believes that the aforementioned level of anticipated annual take, over the next five years, is not likely to appreciably reduce the survival and recovery of Kemp's ridley, green, loggerhead, hawksbill, or leatherback sea turtles in the wild by reducing their reproduction, numbers, or distribution, even if all incidental takes are from the same species. In particular, NOAA Fisheries determined that it does not expect activities associated with the proposed action, when added to ongoing activities affecting these species in the action area and cumulative effects, to

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affect sea turtles in a way that reduces the number of animals born in a particular year (i.e., a specific age-class), the reproductive success of adult sea turtles, or the number of young sea turtles that annually recruit into the adult breeding population.

Reasonable and Prudent Measures

NOAA Fisheries believes the following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take of Kemp's ridley, green, loggerhead, leatherback, and hawksbill sea turtles:

1. ~~NRC will monitor~~ Monitoring of sea turtle activities around the bar racks and ~~rescue~~ rescuing sea turtles stranded on the bar racks will be conducted.
2. ~~NRC will keep records~~ Records of sea turtle strandings at the plants CREC will be maintained.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the NRC must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting and monitoring requirements. These terms and conditions are nondiscretionary.

1. Continue implementation of the procedures outlined in the Florida Power Corporation's Sea Turtle Rescue and Handling Guidelines (AI-571) which are incorporated by reference. All updates of the rescue plan will be reviewed by the FWC and NOAA Fisheries.
2. If any listed species are apparently injured or killed in the intake canal or the bar racks, a report summarizing the incident must be provided to the NOAA Fisheries' Southeast Regional Office (SERO) Assistant Regional Administrator, Protected Resources Division, within 30 days of the incident.
3. All sea turtle takings at the plant will be recorded by species, size, date and time collected, location, condition, and disposition. Details on the information to be collected and recorded shall be specified in the Sea Turtle Rescue and Handling Guidelines. Data collected will be tabulated and submitted to NOAA Fisheries' SERO Assistant Regional Administrator, Protected Resources Division and the FWC by March 1 of each year.
4. If non-lethal take reaches 70 individuals, causally related lethal take reaches 2 individuals, or if take of non-causally related dead turtles reaches 8 individuals (although there is no specified take limit on non-causally related dead turtles, NOAA Fisheries is requiring this information in case there are other issues it may need to look into) in any one year, ~~NRC will notify the SERO~~ on a calendar year basis, NRC will assure that the licensee notifies the SERO, Assistant Regional Administrator, Protected Resources Division, by telephone or electronic mail, within 5 days.

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NOAA Fisheries anticipates that no more than 78 sea turtles will be incidentally taken annually as a result of the proposed action and that three of these takes will be lethal. The reasonable and prudent measures and their implementing terms and conditions are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of this action, this level of incidental take is met or exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The NRC must immediately provide an explanation of the causes of the taking and review with NOAA Fisheries the need for possible modification of the reasonable and prudent measures will require the licensee to notify the SERO, Assistant Regional Administrator, Protected Resources Division, by telephone or electronic mail, within 5 days, if any of the above limits are met or exceeded, and provide any information that might relate to the meeting or exceeding the limits, particularly if the taking might be related to plant operation.

VIII. Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorizations to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

NRC should encourage the licensee to continue the evaluation and experimentation on methods to be employed that could be used to keep sea turtles away from the bar racks.

In order for NOAA Fisheries to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, NOAA Fisheries requests notification of the implementation of any conservation recommendations.