



United States Department of the Interior

FISH AND WILDLIFE SERVICE Florida Ecological Services Field Office



March 21, 2022

Memorandum

To: Briana Arlene, Conservation Biologist & ESA Consultation Coordinator, U.S. Nuclear Regulatory Commission

From: Robert L. Carey, Division Manager, Environmental Review, Florida Ecological Services Office, Gainesville, Florida

Subject: Amendment to the July 25, 2019, Biological Opinion for the Turkey Point Nuclear Plant Units 3 and 4 License Renewal, 2014-F-0177-R001

This transmits an amendment to the U.S. Fish and Wildlife Service's (Service) July 25, 2019, Biological Opinion for effects of the operation of Turkey Point Turkey Nuclear Generating Units Nos. 3 and 4 (Turkey Point) on the American crocodiles (*Crocodylus acutus*; crocodiles) in Homestead, Florida. Specifically, this amendment addresses the two instances of incidental take of crocodiles within the 2021 calendar year. The Biological Opinion allowed for the take of one crocodile in each calendar year. On January 25, 2021, and April 21, 2021, crocodiles were struck and killed by vehicles within the Action Area. These mortality events have been determined to be causal to the operation of Turkey Point. On November 18, 2021, the Nuclear Regulatory Commission (NRC) requested reinitiation of consultation for the crocodile.

For the purposes of this Biological Opinion, the Action Area will remain the same as the Biological Opinion dated July 25, 2019 stated. The Action Area for the Project includes: the Turkey Point site (including the cooling canal system); wetlands adjacent to the Turkey Point site; and areas in Biscayne Bay where barges may travel. The total Action Area is 24,013 acres.

Beneficial effects

Monitoring of crocodile body condition will continue, but blood samples will no longer be taken. The body condition metrics for determining crocodile health have been proven to be accurate without the inclusion of blood analysis.

AMOUNT OR EXTENT OF TAKE

American crocodile

The proposed Project is expected to result in the incidental take of crocodiles in the form of harm from habitat loss and injuries or mortalities from vehicle collisions and/or plant operation. The

Service expects no more than three crocodiles be taken within a calendar year or ten crocodiles within a five-year period.

REASONABLE AND PRUDENT MEASURES

When providing an incidental take statement, the Service is required to provide: 1) reasonable and prudent measures it considers necessary or appropriate to minimize the take; 2) terms and conditions that must be complied with to implement the reasonable and prudent measures; and 3) procedures to be used to handle or dispose of any individuals taken. The Service believes the following reasonable and prudent measure is necessary and appropriate to reduce take and to minimize the direct and indirect effects of the proposed project on the crocodile:

Minimize the adverse effects of the ongoing operation of the Turkey Point Power facility by implementing measures to increase employee awareness of the presence of the crocodile and improve the safety of roadways for the crocodile.

TERMS AND CONDITIONS

To implement the above reasonable and prudent measures, the Service has outlined the following terms and conditions. In accordance with the Interagency Cooperation Regulation (50 CFR 402), these terms and conditions must be complied with to implement the reasonable and prudent measures:

1. The wildlife safety video will be viewed by all employees every 6 months and the list of employees that attended the training will be provided to the Service annually. Viewing the wildlife safety video is recommended for all contractors visiting the site.
2. The three 25 mph speed limit signs will be maintained along Grand Canal Road.
3. Add an educational sign that talks about crocodiles on site and includes information about how the hatchlings and juveniles are small and extra care should be taken to avoid them on the roads.
4. New lighting will be added along Palm Drive.

Disposition of dead or injured specimens

Upon locating a dead, injured, or sick threatened or endangered species, initial notification must be made to the Service Law Enforcement Officer David Pharo (david_pharo@fws.gov) as well as the Florida Fish and Wildlife Conservation Commission's (FWC) snap hotline at 866-392-4286. Secondary notification should be made to the biologist identified below at the Florida Ecological Services Office, Lindsay Nester (lindsay_nester@fws.gov). Care should be taken in handling sick or injured specimens to ensure effective treatment and in the handling of dead specimens to preserve biological material in the best possible state for later analysis as to the cause of death. In conjunction with the care of sick or injured specimens, or preservation of biological materials from a dead animal, the finder has the responsibility to carry out instructions provided by Law Enforcement to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

MONITORING AND REPORTING REQUIREMENTS

Pursuant to 50 Code of Federal Regulations 402.14(i)(3), the NRC and FPL must provide adequate monitoring and reporting to determine if the amount or extent of take is approached or exceeded. FPL must notify the Service’s Vero Beach office (lindsay_nester@fws.gov) and NRC at endangeredspecies@nrc.gov within 24 hours whenever a dead or injured crocodile is observed within the power complex or along an access road.

Scenario	Reporting
<p>Dead or injured crocodile within Action Area</p> <p>This includes the following categories of take:</p> <ul style="list-style-type: none"> • Dead causal • Dead non-causal • Injured causal • Injured non-causal 	<ul style="list-style-type: none"> • Notify the Service and FWC by email: Lindsay_nester@fws.gov; John_Wrublik@fws.gov; Laura_Brandt@fws.gov; Ryan.Ford@myFWC.com • Notify Service Law Enforcement David Pharo (david_pharo@fws.gov) • Notify NRC by email: endangeredspecies@nrc.gov and Briana.Arlene@nrc.gov
<p>Discovery of a dead, injured, or sick threatened or endangered species within the Action Are</p> <p>This includes all non-causal deaths, injuries, or sickness of any listed species including, but not limited to, eastern indigo snakes.</p>	<ul style="list-style-type: none"> • Notify FWS Law Enforcement David Pharo (David_Pharo@fws.gov) • Notify NRC at endangeredspecies@nrc.gov and Briana.Arlene@nrc.gov • Notify FWC’s snap hotline at 866-392-4286 • Notify Service biologist Lindsay Nester (Lindsay_nester@fws.gov)