

# TURKEY POINT PUBLIC MEETING WILL BEGIN SHORTLY ...

Public Meeting Information:

https://www.nrc.gov/pmns/mtg?do=details&Code=20230969

Meeting Slides: ML23258A026



# Preliminary Findings of the Environmental Review for Turkey Point Nuclear Generating Units 3 & 4 Subsequent License Renewal

September 19, 2023
Lance Rakovan, Environmental Project Manager



- Opening Remarks
- Introductions and Purpose
- Environmental Impact Statement Preliminary Findings
- Public Questions on the Presentation
- Public Comments on the Environmental Impact Statement



### **Meeting Logistics**

- NRC is actively soliciting comments on the draft site-specific Environmental Impact Statement (EIS) to aid the NRC staff's review
- Participants are in listen-only mode until the comment session
- No regulatory decisions will be made at today's meeting



- Jessica Hammock, Safety Review Lead, NRC Office of Nuclear Reactor Regulation (NRR)
- Lance Rakovan, Environmental Review Lead, NRC Office of Nuclear Material Safety and Safeguards (NMSS)
- John Moses, Deputy Director, Division of Rulemaking, Environmental, Financial Support, NMSS



- NRC's Governing Statutes
  - Atomic Energy Act
    - 10 CFR Part 54
  - National Environmental Policy Act (NEPA)
    - 10 CFR Part 51
- NRC's Mission
  - Protect Public Health and Safety
  - Promote Common Defense and Security
  - Protect the Environment



### Plant Background

Description	Unit 3	Unit 4
Operating Licenses Issued	7/19/1972	4/10/1973
Renewed Licenses Issued	6/6/2002	
Subsequent Licenses Issued	12/4/2019	
Current Expiration Dates	7/19/2032	4/10/2033
Proposed Expiration Dates	7/19/2052	4/10/2053



#### **Environmental Review**

- Generic Environmental Impact Statement (GEIS)
  - Addresses "Category 1" environmental issues common to all plants (or a distinct subset of plants) during the license renewal term
- Final Supplemental Environmental Impact Statement (FSEIS)
  - Addresses "Category 2" site-specific environmental issues during the license renewal term
  - Includes any new and significant information regarding Category 1 issues, an evaluation of alternatives, and an evaluation of cumulative impacts
  - FSEIS for Turkey Point Subsequent License Renewal issued in October 2019

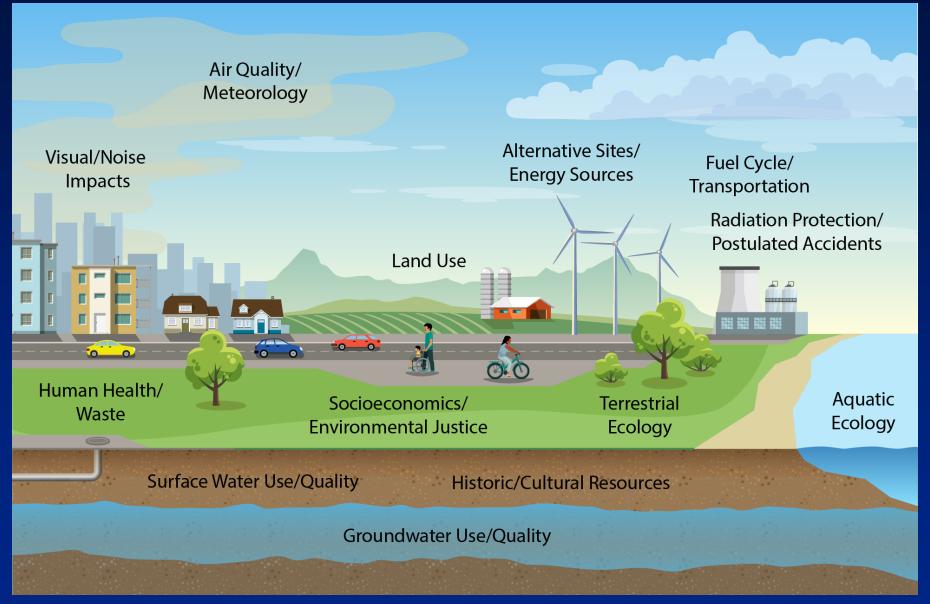


#### **Environmental Review**

- Site-Specific Environmental Impact Statement
  - Addresses Category 1 environmental issues during the license renewal term on a site-specific basis
  - Includes any new information deemed significant regarding Category 2 issues, and supplements the other information in the FSEIS, as appropriate
  - Draft Site-Specific Environmental Impact Statement for Turkey Point Subsequent License Renewal issued for public comment on September 8, 2023



#### **Environmental Review**





### **How Impacts are Defined**

#### SMALL

Effects are not detectable or are so minor that they
will neither destabilize nor noticeably alter any
important attribute of the resource

#### MODERATE

 Effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource

#### LARGE

 Effects are clearly noticeable and are sufficient to destabilize important attributes of the resource



- Federally Listed Species and Critical Habitat (Endangered Species Act)
  - No effect
  - May affect but is not likely to adversely affect
  - May affect and is likely to adversely affect
- Essential Fish Habitat (Magnuson-Stevens Act)
  - No adverse impacts
  - Minimal adverse impacts
  - More than minimal, but less than substantial adverse effects
  - Substantial adverse impact



# How Impacts are Defined (cont.)

- Natural Marine Sanctuary Act (NMSA)
  - No effect
  - May effect but is not likely to destroy, cause the loss of, or injure
  - May effect and is likely to destroy, cause the loss of, or injure



# How Impacts are Defined (cont.)

- Cultural and Historic Resources (National Historic Preservation Act)
  - Would adversely affect
  - Would not adversely affect
- Environmental Justice\* (Executive Order 12898)
  - Disproportionally high and adverse human health and environmental effects

<sup>\*</sup>The NRC chooses to address EJ, though not required. There is a pending vote by the Commission on addressing EJ.



## Draft EIS Preliminary Findings (cont.)

#### Resource Area

- Historic and Cultural Resources
- Environmental Justice

Cumulative Impacts

#### **Impacts**

- Would not adversely affect known historic properties
- No disproportionately high and adverse human health and environmental effects on minority and low-income populations
- See FSEIS Section 4.16



### **Draft EIS Preliminary Findings**

#### Resource Area

#### **Impacts**

- Land Use/Visual Resources
- Air Quality/Noise
- Geologic Environment
- Surface Water Resources
- Terrestrial Resources
- Socioeconomics
- Transportation
- Human Health
- Postulated Accidents
- Uranium Fuel Cycle
- Waste Management and Pollution
- Termination of Nuclear Power Plant Operations and Decommissioning

### ALL SMALL



# Draft EIS Preliminary Findings - Special Status Species and Habitats

The NRC staff identified no new and significant information that would change the conclusions made in the FSEIS. These were:

- Likely to adversely affect American crocodile and eastern indigo snake
- May result in adverse modification to designated critical habitat of the American crocodile
- May affect but is not likely to adversely affect Florida panther, West Indian manatee, red knot, wood stork, loggerhead sea turtle, green sea turtle, leatherback sea turtle, hawksbill sea turtle, Kemp's ridley sea turtle, and smalltooth sawfish
- No adverse modification of designated critical habitat of West Indian manatee
- No adverse effects on essential fish habitat
- No effect on sanctuary resources of the Florida Keys National Marine Sanctuary

## **Draft EIS Preliminary Findings – Groundwater Resources**

Resource Area	Impacts
Groundwater quality degradation (plants with cooling ponds in salt marshes)	SMALL to MODERATE
Groundwater use conflicts (plants that withdraw more than 100 gallons per minute)	SMALL to MODERATE
All other categories	SMALL



# Draft EIS Preliminary Findings - Aquatic Resources

Resource Area	Impacts
Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds)	SMALL to MODERATE
Thermal impacts on aquatic organisms (plants with oncethrough cooling systems or cooling ponds)	SMALL to MODERATE
All other categories	SMALL



#### **Alternatives**

- No new and significant information identified regarding the following alternatives analyzed in the FSEIS
- Alternative energy sources (power replacement)
  - New nuclear power
  - Natural gas combined-cycle power
  - A combination of new natural gas combinedcycle and new solar photovoltaic power
- An alternative cooling water system
- No-action alternative



### Preliminary Recommendation

The adverse environmental impacts of subsequent license renewal for Turkey Point for an additional 20 years beyond the current expiration dates are not so great that preserving the option of subsequent license renewal for energy-planning decisionmakers would be unreasonable



# Environmental Review Milestones

Milestone	Date
Draft EIS published	August 31, 2023
Start of Comment Period	September 8, 2023
Draft EIS Public Meetings	September 19, 2023 September 27, 2023
Draft EIS Comments Due	November 7, 2023
Final EIS	March 2024



- Public Library: (printed copy for inspection)
   Naranja Branch Library, 14850 SW 280th Street,
   Homestead, Florida 33032
- Turkey Point Project Public Website:
   https://www.nrc.gov/reactors/operating/licensing/renewal/applications/turkey-point-subsequent.html
- Agencywide Documents Access and Management System (ADAMS):
  - https://www.nrc.gov/reading-rm/adams.html
  - Draft EIS accession number: ML22321A323



### **Additional Information**

#### Turkey Point Project Public Website:

https://www.nrc.gov/reactors/operating/licensing/renewal/applications/turkey-point-subsequent.html

- Turkey Point subsequent license renewal application
- The environmental report
- The current schedule
- The project managers associated with Turkey Point

#### Turkey Point Correspondence:

 https://www.nrc.gov/public-involve/listserver/plants-byregion.html



### **Submitting Comments**

By mail

Office of Administration

Mailstop TWFN-7-A60M

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

Website

http://www.regulations.gov

Docket ID NRC-2022-0172

By Email: <u>TurkeyPoint34Environmental@nrc.gov</u>

Comments should be submitted by November 7, 2023





### **Public Participation**



# Draft EIS Participant Contact Information

#### Meeting Summary

- Meeting participant list
- NRC presentation
- Transcript of the meeting

#### Final EIS

- To receive the final EIS, email contact information to <a href="mailto:Lance.Rakovan@NRC.gov">Lance.Rakovan@NRC.gov</a>