

From: Steven Schoedinger
To: [TurkeyPoint34SLREIS Resource](#)
Cc: [Burton, William](#)
Subject: [External_Sender] Docket NRC-2018-0101 - Scoping Comments on Florida Power & Light's Subsequent License Renewal Application for Turkey Point Nuclear Generating Station's Reactor Units 3 & 4
Date: Thursday, June 21, 2018 9:49:36 PM
Attachments: [NPS TPP WQ Concerns Ltr May 2016.pdf](#)
[Mia Beach Reso re - FPL Discontinue use of CCS 2017 F.A. 3.16.2017.pdf](#)
[Monroe Co FPL CCS Resolution 022217.pdf](#)
[Mia Dade TPP 3 & 4 resolution 07-16.pdf](#)
[ORCA Ltr to County, TPP 3 & 4 CCS Resolution.pdf](#)
[FPL TPP City of Key West Resolution & FKAALtr to NRC.pdf](#)
[FKAA TPPP ltr to BOCC 01-2017.pdf](#)

Dear Ms. Ma and Mr. Burton:

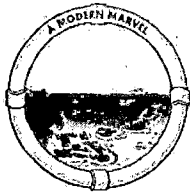
Attached for U.S. Nuclear Regulatory Commission staff review and consideration are 6 PDFs comprising resolutions passed and correspondence sent in the past 3 years by City of Key West, FL Monroe County, FL Florida Keys Aqueduct Authority, Miami-Dade County, FL U.S. National Park Service, Ocean Reef Club, Key Largo, FL Ocean Reef Community Association, Key Largo, FL.

These publicly-recorded documents (1) condemn the water pollution emanating from the FPL TPPP 46 year old open canal reactor cooling water system, (2) support the decommissioning of same open cooling canal system before 2032, and (3) support constructing new mechanical draft cooling towers as soon as possible before the 2032 operating license renewal for the existing nuclear reactors #3 and #4.

The action taken by these organizations is significant and pertinent to Docket # NRC-2018-0101 Scoping Comments Phase of the Florida Power & Light's Subsequent License Renewal Application for Turkey Point Nuclear Generating Station's Reactor Units 3 & 4.

Sincerely,

Steven R Schoedinger, P.E.
Chair, Water Resources Committee
North Key Largo Utility District
58 Anchor Drive, Unit B
Key Largo, FL 33037



Florida Keys Aqueduct Authority

1100 Kennedy Drive
Key West, Florida 33040
Telephone (305) 296-2454
www.fkaa.com



J. Robert Dean
Chairman
District 3

Richard J. Toppino
Vice-Chairman
District 2

David C. Ritz
Secretary/Treasurer
District 5

Antoinette M. Appell
District 4

Cara Higgins
District 1

Kirk C. Zuelch
Executive Director

January 26, 2017

Board of County Commissioners
Monroe County
1100 Simonton Street
Key West, FL 33040

Re: Florida Power and Light

Dear Commissioners:

The Florida Keys Aqueduct Authority Board of Directors requests your support in opposition to Florida Power and Light's (FPL) application to construct and operate two new nuclear plants at their Turkey Point facility. I have attached the letter from our Board to the U.S. Nuclear Regulatory Commission (NRC) and a Resolution from the City of Key West in opposition to the FPL application.

The Authority's letter to the NRC goes into detail explaining the reasons for our opposition; however, the following is a brief summary:

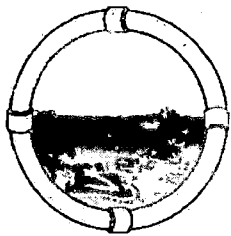
1. FPL has been out of compliance with the operating requirements of the cooling canal system for years and has only now addressed the problem after enforcement was initiated by Florida Department of Environmental Protection and Miami-Dade County. Our Board's position is clear: fix the problem created before expanding the facility.
2. The closed cooling canal system in a subtropical environment is unique among nuclear plants. Most plants use cooling towers or direct sea water pass-through systems. The cooling canal system at Turkey Point hasn't worked properly and agency, university and private sector experts are concerned that FPL will not be able to restore the aquifer to pre-existing conditions and eliminate the existing high salinity plume that threatens our fresh water supply. Our Board, therefore, has suggested to the NRC that cooling towers, which do work, be built to replace the failed cooling canal system.

We appreciate your support of the Authority's position which we believe best protects the water supply for the Florida Keys.

Sincerely,

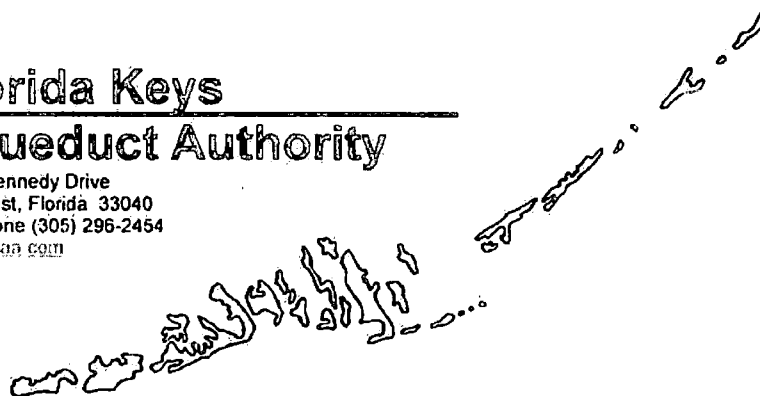
Kirk C. Zuelch
Executive Director

cc: Roman Gastesi
Bob Shillinger



Florida Keys Aqueduct Authority

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Key West, Florida 33040
Telephone (305) 296-2454
www.fkaa.com



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Executive Director

December 29, 2016

Annette L. Vietti-Cook, Secretary
US Nuclear Regulatory Commission
Washington, D.C. 20555-0001

RE: DOCKET'S 52-040 AND 52-041

Issuance of Combined Licenses for FPL's Turkey Point Units 6 and 7

Dear Secretary Vietti-Cook:

This letter is to present issues for consideration at your Evidentiary Hearing on February 9, 2017 regarding the application to construct and operate two new nuclear plants in southeast Miami-Dade County. The Florida Keys Aqueduct Authority is an Independent Special District of the State of Florida with the responsibility of supplying the entire group of islands known as the Florida Keys with drinking water from the Class I Biscayne Aquifer located in southeast Miami-Dade County. Our Board of Directors is appointed by the Governor of the State of Florida and has directed staff to prepare this letter in accordance with your correspondence, dated December 8, 2016.

For more than a decade, Florida Power & Light Company (FPL) has been out of compliance with operating requirements of its cooling canal system (CCS). The salinity values in the CCS have risen to concentrations higher than found in seawater. These high concentrations were not contained to acceptable levels as required by FPL's interceptor canal, and as a result, hypersaline conditions have migrated more than two miles beyond FPL's property and a plume of hypersaline has contaminated a large portion of the Biscayne Aquifer. This hypersaline plume and its influence on the movement of saline water as much as four miles westward toward critical drinking water supplies has been an issue that FPL has ignored for years. In 2014, the CCS temperature increased above the permitted range and emergency provisions were granted to allow higher operating temperatures and to tap into unpermitted surface water supplies to reduce temperatures. The CCS experienced increased salinity, regulated nutrients, and other constituents during this emergency. It was later determined, that the CCS had not been properly maintained for many years resulting in sediment accumulation that limited the volume of cooling water and restricted the water flow regime between the canals and the groundwater below and adjacent to the CCS. The primary impact to the Florida Keys from the failure of FPL to conduct the operation of its plant appropriately is to have put at risk the source of all the potable water we provide to our customers. If our wells, which are located approximately ten miles from the FPL plant, are contaminated by the FPL created high salinity plume, the entire water supply to the Florida Keys is gone.

After these FPL failures were discovered, both the State of Florida and Miami-Dade County found FPL in violation of their operating conditions. Both the State and Miami-Dade County filed regulatory and permit violations against FPL. FPL entered into Consent Orders with both entities rather than contest the violations in court. The primary element of both orders is to reduce the salinities in the groundwater aquifer which have been contaminated by FPL. Secondary impacts include nutrient loading from the CCS into Biscayne Bay. Because of the magnitude of these problems and the sensitivity of adjacent, environmentally-sensitive areas, the improvements will take many years to achieve even under favorable conditions.

There are serious concerns expressed by agency, university, and private sector experts that the plan proposed by FPL to fix the hypersaline problem is based on assumptions and analyses that are incorrect and/or inadequate and therefore will not provide the needed scope, capacities, and cost commitments to bring the aquifer back to pre-existing conditions.

Past and current operational issues caused by FPL have led to the environmental degradation of a sole-source aquifer and Biscayne Bay. FPL had shown little interest in dealing with these unpermitted consequences of its operation until enforcement action was taken. Even with consent orders in place, there is no clear evidence that FPL can resolve the issues they have caused by using the CCS over many years nor can they prove that the CCS is still a viable option to handle thermal loads from the existing nuclear reactors.

FKAA believes that the existing damage to the local environment must be fully reversed before FPL is granted any additional increase to thermal load capacity at its Turkey Point power plant. It makes no sense to allow this expansion when FPL has such a poor track record operating the existing system.

FKAA also requests the USNRC require cooling towers be built for use with the existing operation and the closure of the existing CCS. Once built, the towers would alleviate the thermal loads being imposed by the CCS, leading to recovery of the Biscayne Aquifer and Bay with proven technology.

We appreciate the opportunity to provide these comments to your Commission. If there are any questions regarding our comments, please let me know at your earliest convenience.

Sincerely,


Kirk C. Zuehl
Executive Director

cc: J. Robert Dean, FKAA Board of Directors
Antoinette M. Appell, FKAA Board of Directors
David C. Ritz, FKAA Board of Directors
Cara Higgins, FKAA Board of Directors
Richard J. Toppino, FKAA Board of Directors

George Neugent, Monroe County Commissioner
David Rice, Monroe County Commissioner
Danny Kollhage, Monroe County Commissioner
Heather Carruthers, Monroe County Commissioner
Sylvia Murphy, Monroe County Commissioner
Roman Gastesi, Monroe County Administrator

RESOLUTION NO. 17-033

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF
KEY WEST, FLORIDA, OPPOSING THE APPROVAL OF
ADDITIONAL REACTORS FOR FLORIDA POWER AND LIGHT
(FPL) AT TURKEY POINT NUCLEAR POWER PLANT;
PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, FPL has requested to be granted the right to construct two new nuclear reactors at their Turkey Point facility; and

WHEREAS, the past operations of said nuclear facility by FPL has resulted in the creation of a large saltwater plume which threatens the Florida Keys and Key West with loss of its fresh water supply drawn from wells in the Biscayne Aquifer; and

WHEREAS, the Florida Keys Aqueduct Authority (FKAA), the Florida Keys sole supplier of fresh water, has gone on record opposing the granting of the required permit to erect two new reactors at the Turkey Point Nuclear facility, because FKAA's wells are located within 10 miles of the high salinity plume which exists as a direct result of said facility operations having taken inadequate environmental measures to guard against the possible degradation, past and current of the Keys water supply; and

WHEREAS, the Florida Department of Environmental Protection (FDEP) has found that the past and present operation of said nuclear facility to be in violation of State rules and requirements of the permits for operation granted them; and

WHEREAS, the FDEP and FPL have worked out a settlement over these violations, which calls upon the utility to reverse and eradicate the flow of this plume; and

WHEREAS, there is serious concern that the required eradication could be accomplished within the next 10 years, if at all; and

WHEREAS, there is concern that the addition of more reactors will only acerbate the efforts to eradicate the dangerous plume and further jeopardize efforts to eradicate the plume, leading to the eventual loss of a fresh water supply for over 87,000 residents of the Florida Keys, and the important military installations located there.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA AS FOLLOWS:

Section 1: That the United States Nuclear Regulatory Commission is hereby requested to deny the application of Florida Power & Light Company to construct additional nuclear reactors at its Turkey Point Nuclear Power Plant, until the saltwater plume is completely eradicated and no longer poses a danger to the fresh water supply provided by the Biscayne Aquifer, from which the Florida Keys and its 87,000 residents and military installations receive their supply of fresh water.

Section 2: That the City Commission additionally requests that the United States Nuclear Regulatory Commission not permit the addition of any more reactors, unless and until the electric utility

can demonstrate scientifically that its canal cooling system is a viable method to handle thermal loads from its existing reactors.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this

18th day of January, 2017.

Authenticated by the Presiding Officer and Clerk of the Commission

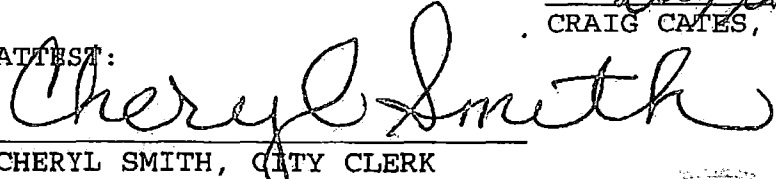
on 18th day of January, 2017.

Filed with the Clerk on January 19, 2017.


Mayor Craig Cates	<u>Yes</u>
Vice Mayor Clayton Lopez	<u>Absent</u>
Commissioner Sam Kaufman	<u>Yes</u>
Commissioner Richard Payne	<u>Yes</u>
Commissioner Margaret Romero	<u>Yes</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Yes</u>


CRAIG CATES, MAYOR

ATTEST:


CHERYL SMITH, CITY CLERK

STATE OF FLORIDA
COUNTY OF MONROE
CITY OF KEY WEST


This copy is a true copy of the original on file in this office.
Witness my hand and official seal
this 19th day of January, 2017

Deputy City Clerk

RESOLUTION NO. 17-033

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF
KEY WEST, FLORIDA, OPPOSING THE APPROVAL OF
ADDITIONAL REACTORS FOR FLORIDA POWER AND LIGHT
(FPL) AT TURKEY POINT NUCLEAR POWER PLANT;
PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, FPL has requested to be granted the right to construct two new nuclear reactors at their Turkey Point facility; and

WHEREAS, the past operations of said nuclear facility by FPL has resulted in the creation of a large saltwater plume which threatens the Florida Keys and Key West with loss of its fresh water supply drawn from wells in the Biscayne Aquifer; and

WHEREAS, the Florida Keys Aqueduct Authority (FKAA), the Florida Keys sole supplier of fresh water, has gone on record opposing the granting of the required permit to erect two new reactors at the Turkey Point Nuclear facility, because FKAA's wells are located within 10 miles of the high salinity plume which exists as a direct result of said facility operations having taken inadequate environmental measures to guard against the possible degradation, past and current of the Keys water supply; and

WHEREAS, the Florida Department of Environmental Protection (FDEP) has found that the past and present operation of said nuclear facility to be in violation of State rules and requirements of the permits for operation granted them; and

WHEREAS, the FDEP and FPL have worked out a settlement over these violations, which calls upon the utility to reverse and eradicate the flow of this plume; and

WHEREAS, there is serious concern that the required eradication could be accomplished within the next 10 years, if at all; and

WHEREAS, there is concern that the addition of more reactors will only acerbate the efforts to eradicate the dangerous plume and further jeopardize efforts to eradicate the plume, leading to the eventual loss of a fresh water supply for over 87,000 residents of the Florida Keys, and the important military installations located there.

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Section 2: That the City Commission additionally requests that the United States Nuclear Regulatory Commission not permit the addition of any more reactors, unless and until the electric utility

can demonstrate scientifically that its canal cooling system is a viable method to handle thermal loads from its existing reactors.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 18th day of January, 2017.

Authenticated by the Presiding Officer and Clerk of the Commission on 18th day of January, 2017.

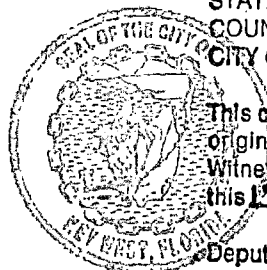
Filed with the Clerk on January 19, 2017.

Mayor Craig Cates	<u>Yes</u>
Vice Mayor Clayton Lopez	<u>Absent</u>
Commissioner Sam Kaufman	<u>Yes</u>
Commissioner Richard Payne	<u>Yes</u>
Commissioner Margaret Romero	<u>Yes</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Yes</u>

ATTEST:

Cheryl Smith
CHERYL SMITH, CITY CLERK

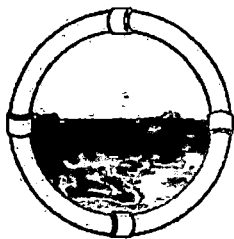
Craig Cates
CRAIG CATES, MAYOR



STATE OF FLORIDA
COUNTY OF MONROE
CITY OF KEY WEST

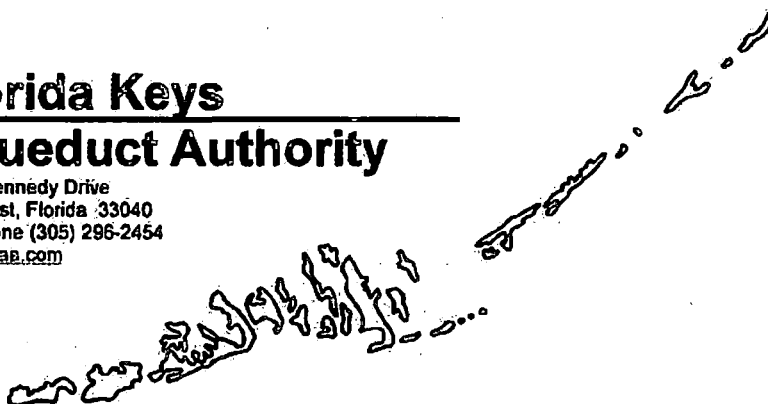
This copy is a true copy of the original on file in this office.
Witness my hand and official seal this 19th day of January, 2017

Deputy City Clerk



Florida Keys Aqueduct Authority

1100 Kennedy Drive
Key West, Florida 33040
Telephone (305) 296-2454
www.fkab.com



J. Robert Dean
Chairman
District 3

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David C. Ritz
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Richard J. Toppino
District 2

Kirk C. Zuelch
Executive Director

December 29, 2016

Annette L. Vietti-Cook, Secretary
US Nuclear Regulatory Commission
Washington, D.C. 20555-0001

RE: DOCKETS 52-040 AND 52-041

Issuance of Combined Licenses for FPL's Turkey Point Units 6 and 7

Dear Secretary Vietti-Cook:

This letter is to present issues for consideration at your Evidentiary Hearing on February 9, 2017 regarding the application to construct and operate two new nuclear plants in southeast Miami-Dade County. The Florida Keys Aqueduct Authority is an Independent Special District of the State of Florida with the responsibility of supplying the entire group of islands known as the Florida Keys with drinking water from the Class I Biscayne Aquifer located in southeast Miami-Dade County. Our Board of Directors is appointed by the Governor of the State of Florida and has directed staff to prepare this letter in accordance with your correspondence, dated December 8, 2016.

For more than a decade, Florida Power & Light Company (FPL) has been out of compliance with operating requirements of its cooling canal system (CCS). The salinity values in the CCS have risen to concentrations higher than found in seawater. These high concentrations were not contained to acceptable levels as required by FPL's interceptor canal, and as a result, hypersaline conditions have migrated more than two miles beyond FPL's property and a plume of hypersaline has contaminated a large portion of the Biscayne Aquifer. This hypersaline plume and its influence on the movement of saline water as much as four miles westward toward critical drinking water supplies has been an issue that FPL has ignored for years. In 2014, the CCS temperature increased above the permitted range and emergency provisions were granted to allow higher operating temperatures and to tap into unpermitted surface water supplies to reduce temperatures. The CCS experienced increased salinity, regulated nutrients, and other constituents during this emergency. It was later determined, that the CCS had not been properly maintained for many years resulting in sediment accumulation that limited the volume of cooling water and restricted the water flow regime between the canals and the groundwater below and adjacent to the CCS. The primary impact to the Florida Keys from the failure of FPL to conduct the operation of its plant appropriately is to have put at risk the source of all the potable water we provide to our customers. If our wells, which are located approximately ten miles from the FPL plant, are contaminated by the FPL created high salinity plume, the entire water supply to the Florida Keys is gone.

After these FPL failures were discovered, both the State of Florida and Miami-Dade County found FPL in violation of their operating conditions. Both the State and Miami-Dade County filed regulatory and permit violations against FPL. FPL entered into Consent Orders with both entities rather than contest the violations in court. The primary element of both orders is to reduce the salinities in the groundwater aquifer which have been contaminated by FPL. Secondary impacts include nutrient loading from the CCS into Biscayne Bay. Because of the magnitude of these problems and the sensitivity of adjacent, environmentally-sensitive areas, the improvements will take many years to achieve even under favorable conditions.

There are serious concerns expressed by agency, university, and private sector experts that the plan proposed by FPL to fix the hypersaline problem is based on assumptions and analyses that are incorrect and/or inadequate and therefore will not provide the needed scope, capacities, and cost commitments to bring the aquifer back to pre-existing conditions.

Past and current operational issues caused by FPL have led to the environmental degradation of a sole-source aquifer and Biscayne Bay. FPL had shown little interest in dealing with these unpermitted consequences of its operation until enforcement action was taken. Even with consent orders in place, there is no clear evidence that FPL can resolve the issues they have caused by using the CCS over many years nor can they prove that the CCS is still a viable option to handle thermal loads from the existing nuclear reactors.

FKAA believes that the existing damage to the local environment must be fully reversed before FPL is granted any additional increase to thermal load capacity at its Turkey Point power plant. It makes no sense to allow this expansion when FPL has such a poor track record operating the existing system.

FKAA also requests the USNRC require cooling towers be built for use with the existing operation and the closure of the existing CCS. Once built, the towers would alleviate the thermal loads being imposed by the CCS, leading to recovery of the Biscayne Aquifer and Bay with proven technology.

We appreciate the opportunity to provide these comments to your Commission. If there are any questions regarding our comments, please let me know at your earliest convenience.

Sincerely,



Kirk C. Zuelch
Executive Director

cc: J. Robert Dean, FKAA Board of Directors
Antoinette M. Appell, FKAA Board of Directors
David C. Ritz, FKAA Board of Directors
Cara Higgins, FKAA Board of Directors
Richard J. Toppino, FKAA Board of Directors

George Neugent, Monroe County Commissioner
David Rice, Monroe County Commissioner
Danny Kolhage, Monroe County Commissioner
Heather Carruthers, Monroe County Commissioner
Sylvia Murphy, Monroe County Commissioner
Roman Gastesi, Monroe County Administrator

RESOLUTION NO. _____

**A RESOLUTION OF THE MAYOR AND CITY COMMISSION
OF THE CITY OF MIAMI BEACH, FLORIDA, SUPPORTING
EFFORTS TO SEEK A COMMITMENT FROM FLORIDA
POWER & LIGHT TO DISCONTINUE THE USE OF THE
COOLING CANAL SYSTEM AT THE TURKEY POINT
NUCLEAR POWER PLANT AS SOON AS POSSIBLE.**

WHEREAS, the Florida Power & Light (FPL) Turkey Point Nuclear Power Plant, located in south Miami-Dade County, utilizes a cooling canal system which consists of a network of approximately 5,900 acres of unlined canals; and

WHEREAS, FPL's Turkey Point Nuclear Power Plant is the only facility in the world that uses a cooling canal system instead of mechanical draft cooling towers; and

WHEREAS, water from this cooling canal system communicates with the surrounding groundwater, and long-term monitoring data has shown that a hypersaline plume of water from the cooling canals has been migrating into and contaminating the groundwater beyond the boundaries of the cooling canals; and

WHEREAS, FPL has a license from the federal government to operate the Turkey Point Power Plant units that use the cooling canal system until 2033; and

WHEREAS, Miami-Dade County took action to address this issue, including, but not limited to, issuing a Notice of Violation in 2015 to FPL for certain water quality violations in the groundwater and requiring, through an administrative consent agreement, that FPL take certain remedial actions to retract and contain the hypersaline ground water plume; and

WHEREAS, at that time, the issues were focused on the westward migration of the hypersaline groundwater plume from the cooling canals; however, more recent water quality sampling has detected levels in excess of water quality standards in certain surface water locations in or connected to Biscayne Bay, adjacent to and east of the cooling canal system; and

WHEREAS, on May 11, 2016, the Mayor and City Commission of the City of Miami Beach passed and adopted Resolution No. 2016-29405 regarding FPL's violation of State water quality standards in the operation of its cooling canal system and urged the Florida Department of Environmental Protection to take action to protect the residents of southeast Florida from the hazards of saltwater intrusion into the Biscayne Aquifer and Biscayne National Park; and

WHEREAS, the Biscayne Aquifer is an important natural resource which supplies fresh drinking water to millions of South Florida residents and is vital to irrigation and to Florida's marsh and wetland communities; and

WHEREAS, the Mayor and City Commission of the City of Miami Beach join Monroe County in seeking a commitment from FPL to discontinue the use of the cooling canal system in favor of a more modern mechanical draft cooling tower system that would remove all future interactions with groundwater and make use of Miami-Dade County's reuse water.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby support efforts that seek a commitment from FPL to discontinue the use of the cooling canal system at the Turkey Point Nuclear Power Plant as soon as possible.

PASSED AND ADOPTED this 22nd day of March, 2017.

ATTEST:

Philip Levine, Mayor

Rafael E. Granado, City Clerk

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

Joe A. Sente for 3/16/17
City Attorney Date

RESOLUTION NO. 043 - 2017

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA SUPPORTING EFFORTS TO SEEK A COMMITMENT FROM FLORIDA POWER AND LIGHT TO DISCONTINUE USE OF THE COOLING CANAL SYSTEM AT THE TURKEY POINT NUCLEAR POWER PLANT AS SOON AS POSSIBLE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, The Florida Power and Light Turkey Point Nuclear Power Plant, located in south Miami-Dade County, utilizes a cooling canal system which consists of a network of approximately 5,900 acres of unlined canals; and

WHEREAS, The Florida Power and Light Turkey Point Nuclear Power Plant is the only facility in the world that uses a cooling canal system instead of mechanical draft cooling towers; and

WHEREAS, water from this cooling canal system communicates with the surrounding groundwater, and long-term monitoring data has shown that a hypersaline plume of water from the cooling canals has been migrating into and contaminating the groundwater, beyond the boundaries of the cooling canals; and

WHEREAS, Miami-Dade County took action to address this issue, including, but not limited to issuing a Notice of Violation in 2015 to Florida Power and Light for certain water quality violations in the groundwater, and requiring, through an administrative consent agreement, the Florida Power and Light take certain remedial actions to retract and contain the hypersaline ground water plume; and

WHEREAS, at that time, the issues were focused on the westward migration of the hypersaline ground water plume from the cooling canals, more recent water quality sampling has detected exceedances of water quality standards in certain surface water locations in or connected to Biscayne Bay, adjacent to and east of the cooling canal system; and

WHEREAS, this Board, the residents of Monroe County and members of the general public are concerned about these recent discoveries and potential impacts on Card Sound, Biscayne Bay, and the Florida Keys' drinking water supply, and such discoveries serve to highlight the challenges posed by the continued operation of the cooling canal system; and

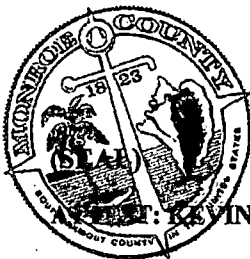
WHEREAS, Florida Power and Light has a license from the federal government to operate the Turkey Point Power Plant units that use the cooling canal system until 2033; and

WHEREAS, this Board is seeking a commitment from Florida Power and Light to discontinue the use of the cooling canal system in favor of a more modern mechanical draft cooling tower system that would remove all future interactions with ground water and make use of Miami-Dade County's reuse water;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA that:

1. The Monroe County Board of County Commissioners seeks a commitment from Florida Power and Light to discontinue the use of the cooling canal system at its Turkey Point Nuclear Power Plant, as soon as possible, in favor of mechanical draft cooling towers.
2. This resolution shall take effect upon adoption.

PASSED AND ADOPTED by the Board of County Commissioners of Monroe County, Florida, at a regular meeting of said Board held on the 15th day of February, 2017.



Mayor George Neugent	<u>Yes</u>
Mayor Pro Tem David Rice	<u>Yes</u>
Commissioner Danny Kolhage	<u>Yes</u>
Commissioner Heather Carruthers	<u>Yes</u>
Commissioner Sylvia Murphy	<u>Yes</u>

By: Kevin Madok, Clerk

By: Famela Stanwick

Deputy Clerk

**BOARD OF COUNTY COMMISSIONERS
OF MONROE COUNTY, FLORIDA**

By: George E. Neugent

Mayor

CLK. CIR. CL.
MONROE COUNTY, FLA.

2017 FEB 22 PM 5:03

FILED FOR RECORD

MONROE COUNTY ATTORNEY
APPROVED AS TO FORM:
Robert S. Shillinger, Jr.
ROBERT S. SHILLINGER, JR.
COUNTY ATTORNEY
Date 2/24/17
*Have you filed
1/31/17*



IN REPLY REFER TO:

1.A.2

United States Department of the Interior

National Park Service
Biscayne National Park
9700 S. W. 328th Street
Homestead, Florida 33033-5634



May 13, 2016

Mr. James D. Giattina, Director
Water Protection Division
US EPA Region 4
61 Forsyth Street
Atlanta, GA 30303

Mr. Jonathan P. Steverson, Secretary
Florida Department of Environmental Protection
3900 Commonwealth Blvd
Tallahassee, FL 32339

Mr. Jack Osterholdt, Director
Department of Regulatory and Economic Resources
Stephen P. Clark Center
111 NW 1st Street, 11th Floor
Miami, FL 33128

Dear Sirs:

Biscayne National Park (BNP) has ongoing concerns with the operation of Units 3 & 4 of Florida Power and Light's (FPL) Turkey Point facility. A primary concern is the potential for salt, nutrients and other pollutants in the facility's Cooling Canal System (CCS) to flow and disperse via ground or surface water connections into Biscayne Bay and BNP. Recent monitoring data has confirmed that water from the CCS is hydrologically connected to the Bay, with CCS water moving through or under CCS berms. These data have also confirmed that nutrients (phosphorus and nitrogen) have been added to the Bay system in concentrations that exceed the Numeric Nutrient Criteria (NNC) (62-302.532 F.A.C.) adopted by the State of Florida Department of Environmental Protection (FDEP) and approved by the U.S. Environmental Protection Agency (EPA) for Biscayne Bay. These nutrients can stimulate algal growth and increase chlorophyll *a* concentrations above the NNC criterion. We are aware that discussions are occurring among the regulatory agencies regarding how to best address this situation. BNP respectfully requests that you include the National Park Service (NPS) in your deliberations. The NPS is required by law to "conserve the scenery, natural and historic objects, and wild life... in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (54 USC 100101(1)) Because of our special expertise regarding BNP and Biscayne Bay, we are well suited to provide assistance.

The original scope and extent of sampling identified in the Units 3 and 4 Uprate Monitoring Plan, approved in the Fifth Supplemental Agreement with the South Florida Water Management District (SFWMD), FDEP, and Miami-Dade County Regulatory and Economic Resources Division of Environmental Resources Management (RER-DERM), needs to be reestablished as a requirement in order to assess the impacts of the CCS. In addition, we request the following new requirements be added.

TAKE PRIDE
IN AMERICA

Violates
*orig design
and NPDES
permit.
*See attached
recent WQ
sample data
that confirms
exceedances
are still
occurring
2017 and
2018.

First, we call for establishing a more extensive nearshore water quality monitoring network that is maintained by FPL and provides data on potential loading of nutrients and other contaminants to the Bay, as well as identifying the ecological impacts that FPL operations have on the Bay. BNP would like to participate in developing this monitoring plan and would like the data to be made available to BNP and regulatory agencies on the same schedule and under the same Quality Assurance Plan that initially was adopted for implementation of the Uprate Monitoring Plan. This monitoring effort would serve as an early warning system to alert all affected parties of any increases in nutrients and other contaminants to the Bay from CCS operations. Moreover, this monitoring could be linked to other monitoring efforts so that managers and decision makers have a broader view of water quality and any potential impacts in the Bay.

Second, we call for FPL to be required to develop a strategy for managing CCS salinity, nutrients, and other potential pollutants to prevent impacts to the Bay. This strategy should be developed in concert with BNP and the regulatory agencies. Every feasible aspect of controlling nutrient and salinity loadings to the Bay should be considered, while not affecting freshwater flows to BNP or the Comprehensive Everglades Restoration Plan (CERP). Performance criteria for the CCS should be established for nutrients (particularly phosphorous, ammonia, total nitrogen and total suspended solids) and salinity. We suggest having this strategy as a requirement of FPL's NPDES (National Pollutant Discharge Elimination System) permit for the CCS.

Third, BNP is concerned with the relatively shallow (45') injection well used for wastewater discharge at the plant. We suggest there is the potential for nutrient-laden wastewater to migrate via the groundwater connection to the Bay, and also contribute to cooling system biofouling which requires chemicals to control. We suggest that the regulatory agencies work with FPL to facilitate wastewater transfer to the regional sewage treatment system or implement another treatment and disposal route that is protective of adjacent waters.

Finally, we suggest the establishment of an interagency adaptive management working group that would biannually review monitoring data and performance criteria, and recommend any adjustments necessary to ensure the water resources of the Bay are protected. The performance criteria established would provide the basis for management actions, should the data indicate the potential for water quality issues and impacts associated with algal blooms, changes in biotic communities, seagrass die-offs, or other ecological concerns. This group would also be valuable in monitoring the effects of construction activities for the proposed Units 6 & 7, should those reactors be built. We recommend that this group be comprised of members of the regulatory community (DERM, FDEP, SFWMD, EPA), as well as the NPS and FPL.

We appreciate your consideration of these matters, irrespective of any enforcement actions the regulatory agencies may take. We believe this level of vigilance is warranted to protect BNP now and in the future. Questions can be addressed to BISC_Superintendent@nps.gov, or you can contact me at 786-335-3646.

Sincerely,

Elsa M. Alman

for
William L. Cox
Interim Superintendent

* FPL neglected
to do this
for 38 yrs
from 1972-2010
* FPL
currently
discharging
pollutants in
canal water
to surface
waters in
violation of
permit's
intent.

Dear County Commissioners,

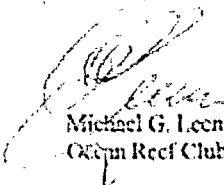
The Florida Power & Light canal system at Turkey Point Nuclear Power Plant has been, and continues to be, a concern to the residents of the Ocean Reef Community. This cooling canal system interacts with the surrounding groundwater; long-term monitoring data has shown that a hypersaline plume in the water has been migrating toward the drinking water beyond the boundaries of the cooling canal and is now entering the surface waters of Biscayne National Park.

We are very concerned about recent discoveries relating to the impacts on Biscayne Bay and believe it is time to discontinue the use of the cooling canal system in favor of cooling towers.

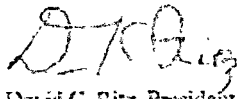
Coincidentally, Miami-Dade County has a need to utilize their reuse water in order to eliminate water quality problems caused by their sewage system. Now is the time to solve these two major environmental issues by building cooling towers and utilizing reuse water.

We encourage the Monroe County Board of County Commissioners to adopt the attached proposed resolution supporting these efforts. We greatly appreciate your attention to this matter.

Sincerely,




Michael G. Leenhuis, President:
Ocean Reef Club, Inc.



David C. Ritz, President:
Ocean Reef Community
Association, Inc.

30 Ocean Reef Drive Suite 200
REF LAKES PLAZA 2002 PHONE 305 251 2627



Final Resolution
Monro...).docx

TITLE

RESOLUTION SUPPORTING EFFORTS TO SEEK A COMMITMENT FROM FLORIDA POWER & LIGHT COMPANY TO DISCONTINUE USE OF THE COOLING CANAL SYSTEM AT THE TURKEY POINT POWER PLANT

BODY

WHEREAS, the Florida Power & Light's (FPL) Turkey Point Power Plant, located in south Miami-Dade County, utilizes a cooling canal system which consists of a network of approximately 5,900 acres of unlined canals no other system of its kind operating anywhere in the world; and

WHEREAS, water from this cooling canal system interacts with the surrounding groundwater, and long-term monitoring data has shown that a hypersaline plume of cooling canal water has been migrating in the groundwater, beyond the boundaries of the cooling canals, contaminating drinking water to the west and entering the surface waters of BNP to the east; and

WHEREAS, Miami-Dade County Department of Environmental Resources Management (DERM) and the Florida Department of Environmental Protection (DEP) have taken some action in response to violations of water quality standards including, but not limited to, issuing a Notice of Violation in 2015 to FPL for certain water quality violations in the groundwater, and requiring, through an administrative consent agreement, that FPL take certain actions to retract and contain the hypersaline groundwater plume; and

WHEREAS, at that time, the issues were focused on the hypersaline groundwater plume migrating west of the cooling canal system; and

WHEREAS, more recent water quality sampling detected exceedances of State and Miami-Dade County water quality standards in surface water locations in and connected to Biscayne Bay, adjacent to and east of the cooling canal system; and

WHEREAS, this Board, as well as residents of this County and members of the general public, are concerned about these recent discoveries and the impacts on Biscayne Bay, and such discoveries further highlight the challenges posed by the continued operation of the cooling canal system; and

WHEREAS, FPL has a license from the federal government to operate the Turkey Point power plant units that use the cooling canal system until 2033; and

WHEREAS, the County is seeking a commitment from FPL to discontinue the use of the cooling canal system in favor of efficient, commonly-employed technology such as cooling towers; and

WHEREAS, information and analysis recently made available to the County suggests that the use of mechanical draft closed-cycle cooling towers combined with the elimination of cooling tower wastewater discharges (through the Zero Liquid Discharge (ZLD) system), represents the best available technology for eliminating the water quality problems being caused by the Turkey Point cooling canal system and would remove all interactions with the aquifer and make use of Miami Dade County reuse water; and

WHEREAS, FPL will spend a minimum of 50 Million Dollars a year for over at least a ten-year period for remediation alone and it is unclear if the extraction wells proposed will have a negative impact on the surrounding environment, while this technology could be completed in a more timely and affordable manner; and

WHEREAS, this technology can be used beyond 2033 if needed for a variety of energy generation technologies that FPL might pursue and can reduce harm to the surrounding environment and water supply in comparison to the failing cooling canal system; and

WHEREAS, current plans for remediation that DEP and DERM have proposed and FPL is operating under will not address the interactions with the Aquifer and Biscayne Bay alone; and

WHEREAS, this Board wishes to express its support for the Miami Dade County Mayor's efforts to obtain such a commitment from FPL,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA, that this Board supports the efforts by Miami Dade County and the Environmental community to seek a commitment from Florida Power & Light to discontinue the use of the cooling canal system at the Turkey Point Power Plant as soon as possible, in favor of cooling towers.

Mia Dade TPP 3 & 4 resolution 07-16.pdf was submitted as a password protected document and could not be opened and added to this Adobe file.

7/5/2018