TurkeyPointCEm Resource

From: Fernandez, Elizabeth (DP&Z) [EFERN01@miamidade.gov] on behalf of LaFerrier, Marc C. (DP&Z) [mclf@miamidade.gov]
Sent: Monday, August 16, 2010 5:29 PM
To: TurkeyPointCOLEIS Resource
Cc: McInnis, John (CAO); Halpin, Mike; rholmes@SFWMD.gov; cdekle@sfrpc.com
Subject: Scoping comments for FPL Turkey Point Power Plant Expansion and Transmission Lines
Attachments: NRC scoping comments.pdf

Please find attached Miami-Dade County's scoping comments for the FPL Turkey Point power plant.

Marc C. LaFerrier, AICP
Director
Department of Planning & Zoning
111 NW 1 Street, 11th Floor Miami, Fl 33130
Phone: 305-375-2840 Fax: 305-375-2795
www.miamidade.gov
"Delivering Excellence Every Day"

Federal Register Notice: 75FR33851
Comment Number: 23

Mail Envelope Properties (8F4F81954C79C94CB456DA8462876DC406DB93C5)

Subject: Scoping comments for FPL Turkey Point Power Plant Expansion and Transmission Lines
Sent Date: 8/16/2010 5:29:19 PM
Received Date: 8/16/2010 5:29:09 PM
From: Fernandez, Elizabeth (DP&Z)

Created By: EFERN01@miamidade.gov

Recipients:
"McInnis, John (CAO)" <JDM@miamidade.gov>
Tracking Status: None
"Halpin, Mike" <Mike.Halpin@dep.state.fl.us>
Tracking Status: None
"rholmes@SFWMD.gov" <rholmes@SFWMD.gov>
Tracking Status: None
"cdekle@sfrpc.com" <cdekle@sfrpc.com>
Tracking Status: None
"TurkeyPointCOLEIS Resource" <TurkeyPointCOLEIS.Resource@nrc.gov>
Tracking Status: None

Post Office: s0141167.miamidade.gov

Files	**Size**	**Date & Time**
MESSAGE	368	8/16/2010 5:29:09 PM
NRC scoping comments.pdf	3062004	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

MIAMI-DADE COUNTY

Carlos Alvarez, Mayor

Planning and Zoning
111 NW 1st Street • Suite 1210
Miami, Florida 33128-1902
T 305-375-2800

miamidade.gov

August 16, 2010

Mr. Andrew Kugler
Division of Administrative Services
Office of Administration
Mail Stop TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

RE: Scoping Comments for Florida Power and Light Company Turkey Point Power Plant Expansion and Transmission Lines

Dear Mr. Kugler:

Miami-Dade County has previously provided the U.S. Nuclear Regulatory Commission with a copy of our comments on the State of Florida Site Certification Application for the Turkey Point Power Plant. The County would like to point out one discrepancy between the state and federal applications, the Florida Power and Light owned fill source was removed from the state application but remains part of the federal application. The proposed fill source may adversely impact groundwater, destroy wetlands and advance salt water intrusion closer to wellfields. Additional details on these concerns are provided in the attached table summarizing our initial comments on the state application. This table, as well as, the documents previously submitted to the NRC should be considered as part of the record for the scoping process.

If you have any questions or require additional information, please do not hesitate to contact me at (305) 375-2840.

Sincerely,

Marc C. LaFerrier, AICP
Director

Cc: John McInnis, Miami-Dade County Attorney's Office
Mike Halpin, Florida Department of Environmental Protection
Ruth Holmes, South Florida Water Management District
Carolyn Dekle, South Florida Regional Planning Council

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

7/28/09

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
	POTABLE WATER	
1	Pipe installation and canal crossing details were not provided	
2	Flow rate used to calculate water demands on Table 4.5-1 not provided	Not clear on how water demands for potable water use were calculated.
3	The application proposes to dewater up to 26 MGD of groundwater by discharging it to the cooling canals. Pursuant to Condition No. 15 of the Unusual Use Approval Resolution Z-56-07, a DERM approved hydrologic study is required. The study results are required to evaluate all impacts to surface and groundwater, including but not limited to all dewatering activities.	The hydrologic study should include, but not be limited to providing data and modeling to show how the existing groundwater plume under the Cooling Canal System would respond to the dewatering activities.
4	Not enough information provided to assess water supply alternatives. Appendix 10.9 is a summary of alternative water supply study conducted by FPL .	MDWASD has not received the reports cited in the Appendix (Analysis of Baseline Water Source, HDR Dec. 2007; Task 1 Initial Water Source Alternative Screening , HDR March 2008; Task 2 and 3 Water Source Alternative Characterization and Scope, HDR March 2008; Conceptual Engineering of Cooling Water supply and Disposal for Turkey Point Units 6 & 7, HDR, June 2008; Cooling Water Supply and Disposal Conceptual Design Report, HDR, March 2009).

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
	DEWATERING	
5	Sufficient information is not provided to make a determination of dewatering impacts. Please provide a description of all required dewatering activities and the techniques that will be used to ensure that all surface and groundwater quality standards will be met. The application states that "General area dewatering activities will be confined to areas associated with construction within the power block and the effluent released to the existing industrial wastewater facility. Localized dewatering activities may occur during the construction of some associated non-linear facilities. Water produced during dewatering will be managed local to each facility or released to the industrial wastewater facility." Please detail which facilities will require dewatering during construction, provide a dewatering plan for each facility that includes impact to the groundwater (e.g. radius of influence, drawdown), the method of discharging the recovered groundwater, groundwater assessment, potential treatment requirements, and providing a comprehensive monitoring plan are required, a water quality analysis of the source water, duration and total volume for each dewatering project, disposal options for any contaminated water, applicable calculations and supporting models, and justification for why dry conditions are required for each specific construction element where dewatering is proposed. Mention is made of a MODFLOW groundwater model within the submittal, however, no model runs or data is provided for review. The modeling efforts must be provided, including, but not limited to the capabilities and limitations of the model, the assumptions made during the construction of the model, boundary conditions and variables (including background data) utilized, the method in which the groundwater and surface water interaction is simulated, method of calibration, and the resulting reporting outputs.	The CEIS should include, at a minimum, an analysis of the water quality for the source water for each dewatering project, including radionuclides such as tritium.
	WASTEWATER	
6	It is acknowledged in the application that sanitary sewer connection is required unless a variance to Chapter 24, Miami-Dade Code is granted. The application, however, proposes to forego connection to the sanitary sewer, even though the facility is within feasible distance under Chapter 24. The application does not contain sufficient information to evaluate whether or not a variance to Chapter 24 can be granted. The applicant shall provide all required information to determine whether a variance to this requirement of the County Code can be granted.	Chapter 24 wastewater disposal requirments in general

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
7	The application proposes the construction of an on-site sewage treatment plant (STP) in lieu of connecting to the nearest public sanitary sewer line, which is prohibited under Chapter 24 unless a variance is granted. Pursuant to Condition 6 of Z-56-07, FPL shall justify potential variances to Chapter 24. Specifically, page 4-18 acknowledges that the proposed project meets the feasible distance requirement and would be required to connect to the nearest public sanitary sewer line as per Section 24-43.1(6) of the Code. The application does not provide sufficient information to determine whether the proposed STP is appropriate and whether a variance to the County Code can be granted to construct a wastewater treatment plant. Therefore, the Applicant must provide, at a minimum, the following items: 1) all information required for a complete EQCB application, along with the supporting justification for the need of the variance; 2) the technical specifications of the proposed treatment train; 3) the method of the proposed disposal activities; 4) the identification of environmentally sensitive receptors; 5) supporting information demonstrating the ability to comply with the applicable effluent standards, and 6) demonstration of compliance with Condition 6 of Z-56-07.	Addresses Zoning approval specific to STP
8	Pursuant to Condition 6 of Z-56-07, FPL is required to prepare and submit a wastewater discharge plan that meets the requirements of Chapter 24. The information submitted in the application is not sufficient to determine if the proposed project meets the requirements of Chapter 24. The application proposes to comingle multiple wastewater streams and dispose of them via deep-well injection. It is acknowledged that, due to volume and/or water quality characteristics, it may be inappropriate to dispose of blowdown water to the County sewer system, as required by Code. The applicant shall provide sufficient information to demonstrate the project meets the requirements of Chapter 24, including but not limited to justification for why all other wastewater streams cannot be conveyed to the public sewer system.	Deals with disposal of comingled waste streams other than blowdown

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
9	The disposal of the waters utilized in the cooling water system (CWS) are proposed to be combined with other sources of wastewater from the site (not including stormwater) and is to be collected in a lined sump and discharged via the proposed deep injection well system. A detailed stoichiometric process flow diagram, including, but not limited to, mass balances, flow rates, and concentrations, need to be provided in this application in order to determine whether or not the information of the waste characterizations listed in Tables 4.6-2 and 4.6-3 are accurate. In addition, the applicable target limits for the ultimate disposal of the water need to be referenced so that an evaluation of the proposed methodology is sufficient to meet the discharge criteria.	
	INDUSTRIAL WASTE	
10	Table 4.5-3 lists the projected water quality characteristics of the cooling waters from the reclaimed water source and that projected from the secondary source (water from radial wells). Given the high evaporation rate, the concentrations of the analytes leaving the cooling tower system will be significantly higher than the concentration of those analytes entering the system. Considering that the final discharge point of the cooling system blowdown water is proposed to be the boulder zone (via underground injection wells), projected water quality characteristics for the blowdown must be provided. This information is needed in order to determine whether the proposal can be approved and whether treatment is needed prior to discharge into the proposed underground injection system.	
11	Liquid waste other than domestic sewage will be generated, used, and handled at the proposed facility which is not connected to sanitary sewer. The application did not provide sufficient information to evaluate the project with regard to requirements of Section 24-43.1 of the code of Miami-Dade County.	
12	Four (4) sixty thousand gallon above ground diesel fuel tanks, four (4) 1300 gallon diesel generator day tank, and two (2) diesel driven fire pumps are mentioned. No details and specification were provided to establish compliance with Chapter 24 and FAC 62-762 or obtain the necessary approval of the Director of DERM or his designee.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
13	The application proposes the discharges of industrial wastes from several sources to injection wells. No information was provided to ascertain compliance with the applicable discharge standards. No information was provided to show that no treatment is necessary or that contamination will not result from such discharges.	
14	The application proposed the discharges of potentially contaminated industrial waste from the maintenance of boiler, equipment closed cooling water system maintenance, and other areas to cooling canals. Although the use of oil-water separators is mentioned, no information was provided to allow for evaluation of potential impacts to sensitive ecological receptors, and surface and groundwater quality. No information was provided to show that no contamination will result from such discharges.	
15	The use of hazardous materials (e.g. treatment chemicals, solvents, paints, lubricants, etc.) is mentioned throughout the application for maintenance operations, water and wastewater (influent and effluent) treatment systems. The size of tanks or containers is not specified nor are their locations identified. In addition, no details of the release detection methods or pollution prevention measures to be implemented are provided.	
16	The generation of hazardous wastes (as defined in Section 24-5) and other regulated "non-hazardous" wastes is mentioned throughout the application. The size of tanks or containers is not specified nor their locations, nor details of the release detection methods or pollution prevention measures to be implemented .	
	STORMWATER/FLOOD	
17	No information was provided to show that the facility will be in compliance with the Flood Plain Management requirements including "flood proofing" as may be required.	
18	Please explain why existing runoff from pre-development conditions results in more runoff volume than post development conditions, despite the fact that the pre-development plant site is mosty undeveloped and should have no runoff volume to be pre-treated.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
19	The Report does not provide flood information for the 100-year, 3-day storm event, which is part of the evaluation of the local requirements for flood protection for all building floor elevations. However, the applicant should be advised that other regulations (i.e. "Regulatory Guide 1.102, Flood Protection for Nuclear Plants", U. S. Regulatory Nuclear Commission, September 1977, or newer) may be more stringent than the FEMA FIRM, the SFWMD, and the Miami-Dade County Flood Protection Regulations. The report does not address this issue, which is required for the determination of the Maximum Probable Flood, for the safety of nuclear plants.	
20	The Report does not cover enough drainage area within the hydrologic model. Simulation should cover, at a minimum, the area bounded by SW 344th St in the north, Old Card Sound Road in the west, and the coastline in the south and east. The EPA-SWMM and XP-SWMM are recommended models to simulate the variety of structures within the area, in order to obtain hydrographs and pollutographs at selected points. The model should also simulate contaminant transport and dilution effect. Event simulations should be run to obtain the conditions before and after the proposed development, including the new inflow and loads from the proposed Administrative/Training Buildings, Parking area, and Reclaimed Water Treatment Facility. Please provide model runs with the expanded area.	
	COOLING CANAL	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
21	The SCA does not include sufficient information to evaluate the results and applicability of the referenced models, and does not contain sufficient information to ascertain the effect that the proposed facility would have on surface and groundwater quality, and groundwater table elevation within the C111 Basin (Model Land Area). Furthermore, any model used for evaluation of this project should be able to predict changes, if any, in the contaminant concentrations; in the water table elevations; and in the salinity wedge movement under different scenarios (baseline and post-construction conditions, for a wet, dry, and average year, etc). Models should combine groundwater with surface water and contaminant transport, and shall include the effect of the difference in densities between salt and fresh water. In addition, the area in the model should be large enough to avoid any boundary-induced bias; boundary conditions could be taken from South Florida Water Management District regional models. EPA authorized models, such as MODFLOW, MODPATH, and FEMWATER should be considered for use in this study. Another possible model would be the FEFLOW, which combines the groundwater contaminant transport (MODFLOW and MODPATH capabilities) with the two density fluids wedge salinity difference (FEMWATER capability).	
22	The application does not address any proposed treatment of biocide additive in the cooling waters, and how biocides are removed before reinjection into the proposed deep wells. It also does not address the effect of aerial dispersal of biocides from the cooling towers on surrounding areas, including surface and groundwater. Please submit additional information on the use and fate of biocides.	Disposal of cooling water requires written DERM approval

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
	VEGETATIVE IMPACTS	
23	These sections characterize the plant site as "sparsely-vegetated hypersaline mud flats" which "provide limited habitat for aquatic biota due to fluctuations in water levels and salinity associated with the cooling canal system". DERM staff observations of the plant site during site visits, however, indicated that the site was heavily vegetated during the early wet season 2009. A Comprehensive Environmental Impact statement is needed pursuant to Chapter 24 of the Miami-Dade Code that addresses this and other issues.	CEIS should include, at a minimum, a complete seasonally-based biological surveys for the proposed facility site that includes, but is not limited to, total plant cover, plant species abundance, utilization by wildlife species including but not limited to birds, insects, fish, reptiles and amphibians, mammals, and aquatic invertebrates.
24	Impacts to submerged aquatic vegetation: Please submit a description of expected short term and long term anticipated impacts resulting from the proposed scope of work.	
25	Pursuant to Condition 1 of Z-56-07, the applicant shall submit a wetlands mitigation plan for the Units 6 and 7 Site. This plan shall be developed in accordance with the substantive requirements of Chapter 24, Miami-Dade Code, and shall be reviewed by DERM for compliance with Chapter 24 as interpreted by DERM based on the impacts of this application. Pursuant to Condition 1 of Z-56-07, the plan shall identify the specific mitigation that is for the Units 6 and 7 Site.	
	SPOIL / SOIL	
26	Proposed Spoil Areas: Please submit the earthwork and materials disposal plan required under Condition 7 of Z-56-07. The plan should include, but not be limited to plans and sketches pertaining to the proposed Spoil Areas including elevation details and slope stabilization. The applicant should also provide the management plan for listed species required under Condition 2 of Z-56-07, which should include but not be limited to identifying the plans established to protect endangered or threatened species from impacts resulting from the proposed work.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
27	Please provide plans for the handling and disposal of the spoils generated from demucking of the Units 6 & 7 site.	
28	Please submit evaluation criteria for non-acceptable vs. acceptable material that would be used for common or structural backfill and demonstrate how the criteria for material that would be used for common or structural backfill meet the clean fill requirements of Section 24-48, Miami-Dade Code.	
	ENDANGERED SPECIES	
29	The application does not include the listed species management plan, as required under Condition 2 of Z-56-07. Please provide the required plan.	
30	The application states that "multi-season threatened and endangered species surveys were combined with the evaluation of habitat conditions to determine the presence or absence of threatened and endangered species." The application alludes to a June-November 2008 survey, which is insufficient to document seasonal use by listed species. Please provide details of the sampling that has already occurred, including but not limited to survey dates, locations, sampling methodology utilized, and species and numbers of individuals for each species that were sampled. A Comprehensive Environmental Impact statement is also needed pursuant to Chapter 24 of the Miami-Dade Code that addresses this and other issues.	The CEIS should include, at a minimum, a comprehensive species survey that utilizes professionally-accepted sampling standards to survey plants and animals at multiple locations in the mudflat at least quarterly for a minimum of one year. Sampling should include, but not be limited to algae, vascular plants, insects, birds, reptiles, amphibians, fish, aquatic invertebrates, and mammals.
31	The application does not provide sufficient information to demonstrate how manatees will be protected during construction of the barge slip improvements. The information to be provided should include, but not be limited to a list of precautions that will be taken to ensure that manatees will not be harmed.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: PLANT SITE FOR UNITS 6 & 7 INCLUDING BARGE AREA	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
	BARGE AREA IMPACTS	
32	Please identify temporary vs. permanent impacts expected to result from the proposed work within the barge unloading area, and provide a detailed description of these impacts.	
33	The application did not provide sufficient information to fully evaluate work proposed in the barge area. Please submit detailed plans, including but not limited to applicable site surveys, site plan and cross sectional views with mean high water and mean low water lines, existing depth and proposed resulting depth of the turning basin, details of any proposed alteration of the existing shoreline inclusive of complete designs for creating any vessel notches or bays, as well as detailed stabilization methodology for any portion of the shoreline that is to be modified as a result of the proposed expansion of the Barge Turning Basin.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: WASTEWATER REUSE		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
1	Table 4.5-1 (Stream Number 36) lists the reclaimed water volume to FPL as 72.7 MGD (50,481 gpm) and Appendix 10.9, Section 2.0 states "Turkey Point Units 6 & 7 will require 55.3 million gallons per day (MGD) if supplied from reclaimed water". The discrepancy in the reclaimed water volume is not addressed	Explain discrepancy to address the requiremend in condiiton 5 to "utilize reclaimed or reuse water to the maximum extent possible"
2	Application fails to provide an alternatives analysis for routing of the proposed reuse pipeline. Please provide an alternatives analysis that considers and compares the benefits and impacts of all feasible alternative routes for this pipeline, including but not limited to wetland impacts, impacts to state and federally protected species, impacts to existing water management features. Alternatives evaluated should include but not be limited to options that minimize wetland impacts.	
3	There is concern that constituents in the cooling water will be emitted in the aerosol/drift exhaust from the cooling towers and additional information is necessary regarding the chemical makeup of all the cooling water. Provide water quality/chemical analysis reports for the reclaimed water to be received from WASD and the water from FPL's reclaim treatment plant. Provide a process flow with description of the proposed FPL reclaim treatment plant & plant effluent. Provide technical discussion and analysis of the effect that the cooling tower (heat transfer) process has on the reclaim water constituents and the facility's air emissions (both criteria and hazardous air pollutants). Source water analysis constituents to be addressed include: total dissolved solids, total suspended solids, salinity, organics, metals, and 'EPOCs' (emerging pollutants of concern addressed in USGS 2006 Report identifying organic wastewater compounds, pharmaceutical compounds, antibiotic compounds, and hormones detected in effluent from the South District WW Treatment Plant). In addition to PM and PM10, provide emissions calculations for other criteria pollutants and hazardous air pollutants.	Applicant indicates that the water cooling towers will include high efficiency drift eliminators designed to limit drift to 0.0005% of the circulating water rate of the cooling towers.
4	Section 4.5.1 states that salt water from the radial collector wells will be used as makeup for the CWS when reclaimed water is not available in sufficient quantity and/or quality, however, the application does not provide sufficient detail on what standard of reclaimed water quality is required. This information is necessary to evaluate the application.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
1	The land use statement in Appendix 10.5 is inaccurate and sufficient information has not been provided to make a land use/zoning consistency determination. The plant site is located in Environmental Protection Subarea F, and is consistent only if the use is deemed consistent with the goals, objectives and policies of the Comprehensive Development Master Plan (CDMP). Conditions outlined in Zoning Resolution Z-56-07 must be met to achieve land use/zoning consistency. This resolution stated that no water will be withdrawn from the Biscayne Aquifer (Condition 4) and that a hydrologic study (Condition 15) will be performed. The radial well component does not demonstrate consistency with these two conditions; therefore this component will be subject to a land use/zoning consistency determination.	
2	Application does not adequately demonstrate that the proposed radial collector wells do not volate Condition 4 of Z-56-07 which prohibits withdrawal from the Biscayne Aquifer.	
3	Adequate hydrogeologic data have not been presented	Selection of potential locations, idealized designs, number of wells, and even the pipe sizes of the radial lines of the collector wells should be based on hydrogeologic data within the areas Biscayne Bay that the wells will tap. Such data has not been provided.
4	Site specific aquifer characteristics have not been made available	The information presented in the application is based on a literature search of published information and is not specific enough to be relied on to produce credible conceptual design information. Results of the site specific testing conducted by FPL has not been provided.

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
5	Lithologic descriptions are contradictory. The observations from the site subsurface investigation (Section 3.3.2.2) contradict expectations that almost all the water withdrawn by the radial collector wells would be recharged from the Bay (Section 3.3.4.1). Therefore additional information is necessary to evaluate this aspect of the proposal.	The lithologic descriptions (Section 3.3.1.2.) do not address hydraulic conductivity but do show the thickness of the Miami Limestone that overlies the Fort Thompson Formation near the proposed sites of the radial collector wells.
6	FPL proposes to withdraw cooling water from the Biscayne Aquifer. Such withdrawal is specifically prohibited pursuant to Condition 4 of Z-56-07. In addition, the application does not provide sufficient information to support stated conclusions or to adequately evaluate the affect of the radial collector well system on hydrology and water quality. Specifically, the application does not provide adequate information to determine the impact of the radial collector well system on the fate and transport of the groundwater plume associated with the cooling canal system, the potential for and effect of the recharge of the radial collector well system through horizontal preferential flow zones in the aquifer, the impact of the radial collector well system on salt intrusion, and the impact on wetlands and nearshore surface and groundwater water quality in Biscayne Bay, including as it relates to CERP efforts to promote estuarine conditions in nearshore areas.	
7	The proposed radial collector wells would be located within or adjacent to a groundwater plume emanating from FPL's Cooling Canal System, which contains high levels of chlorides. It also contains tritium, which may be used as a tracer. In addition, portions of this plume contain heated water, although underground directional travel of the heated water has not been established. No information regarding the delineation of this plume is contained within the application and the extent to which this plume would be affected by the proposed groundwater withdrawals is not documented. In addition, no information was found in the application discussing potential effects of inducing ground water flow towards the proposed withdrawal wells. The applicant needs to provide a hydrologic study, as required under Condition 15 of Z-56-07, that shall include but not be limited to delineation of the existing plume that emanates from the Cooling Canal System and characterization of the tritium levels of the groundwater in the area of the Biscayne Aquifer where the wells are proposed. Any existing heat plume that may extend towards Biscayne Bay should also be delineated as part of the hydrologic study to determine whether warmer water would be induced into the cooling water radial collector lines or the Bay during pumping.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR
FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
8	Neither preferential vertical nor horizontal stratigraphic flow directions have been established. Vertical hydraulic conductivity data is not presented in the application, but it is needed to properly evaluate how the horizontal screens installed in the Fort Thompson Formation 30 to 35 feet below the shallow bay bottom are expected to preferentially draw water from the less transmissive Miami Limestone above instead of from the much more transmissive Fort Thompson.	
9	Cones of influence are not defined and aquifer pump-test data has not been presented to properly evaluate hydrologic conditions under which the collector wells would be operated. Neither has there been any data presented to indicate the potential cone of depression that pumping more than 120 million gallons a day from a wellfield located along the shoreline would have on the movement of the salt front line. In order to evaluate the application, the results (including all the data) for all the aquifer pumping tests conducted from 2006 to present shall be provided.	
10	Water quality data summarized in Table 3.3.4-2 is not sufficient to fully assess the hydrologic characteristics of the cooling canal system.	Cooling canal system is complex hydrology and includes interaction with Bay and groundwater (Section 3.3.2.1), and as such may have temporal and spatial variability.
11	Data presented for Groundwater Impact assessment is not sufficient. Visual MODFLOW data files are not provided for assessment.	Not able to evaluate model sufficiency as no data provided for model construction and no model files provided to simulate model runs.
12	Not enough data provided to assess statement that radial collector wells are substratum collectors of saltwater that will recharge from below Biscayne Bay.	no data provided to support statement.

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
13	The applicant states that almost all the water withdrawn by the proposed radial collectors will be recharged from the Bay; however, no data to support this statement is provided in the application. The applicant shall provide all relevant data relating to recharge of the Biscayne Aquifer that would be induced by operation of the radial collectors.	Pursuant to Condition No. 4 of the Unusual Use approved by the BCC through resolution Z-56-07, FPL shall not apply for any withdrawals from the Biscayne Aquifer as a source of cooling water for the propose facilities.
14	The applicant has not provided sufficient geologic, hydrologic and water quality data to evaluate the application.	
15	The applicant has not provided sufficient information to evaluate the mixing chamber model that was used to project impacts from the radial collector wells. The applicant shall provide a modeling development report that meets all professional modeling standards and provides background information, including but not limited to the capabilities and limitations of the model, assumptions made during model construction, boundary conditions and variables (including background data) utilized, the method in which the groundwater and surface water interaction is simulated, method of calibration, and the resulting reporting outputs.	
16	The application states "During the wet season, a seaward gradient exists and groundwater flow is southeasterly towards Biscayne Bay. This gradient tends to disappear during the dry season, where the groundwater levels are depressed below the sea level, resulting in a reverse flow direction. The groundwater at the Turkey Point Plant is classified by FDEP as Class G-III (see Appendix 10.6) that has no reasonable potential as a future source of drinking water due to the high dissolved solids." The radial wells are located so as to draw from the easterly groundwater flow. Please resolve the apparent conflict between the location of the wells and the water from which they are drawing and Condition 4 of Z-56-07, which prohibits withdrawal from the Biscayne Aquifer.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
17	Please revise Figure 4.5-2 to include sufficient information for the radial collection wells, specifically the spacing between the well screen laterals and the maximum distance that the well screen laterals will extend under Biscayne Bay. Please also revise Figure 4.5-3 to show the boundaries of sovereign submerged lands and the extent to which the radial collection wells would be located within sovereign submerged lands. In addition, the representation of the Biscayne National Park Boundary on Figure 4.5-3 is incorrect. Please correct this figure to accurately reflect the boundary of Biscayne National Park and that shows the actual proposed location of the entire radial collection well system, including the well screen laterals.	
18	Adequate hydrogeologic data have not been presented and the application does not include sufficient information to determine whether the proposed withdrawals from the radial collector wells would meet the requirements of Section 24-43.2 Miami-Dade County Code.. Selection of potential locations, idealized designs, number of wells, and even the pipe sizes of the radial lines of the collector wells should be based on hydrogeologic data within the areas under Biscayne Bay that the wells would tap. Such data has not been presented in the application. The applicant shall provide information that is sufficient to determine whether the radial collector wells meet the requirements of Chapter 24 and the CDMP for this aspect of the proposed project.	
19	The application indicates that a surface water sample from Biscayne Bay was collected to characterize the water from the radial collectors. Providing a surface water sample as a surrogate for groundwater data is inappropriate. The applicant shall provide a characterization of groundwater based on actual data from the area in which the radial collector wells are proposed.	
20	Please submit a plan for avoidance and minimization of adverse impacts to existing high quality coastal wetlands along the fringes of the proposed area of work.	High quality coastal wetlands exist on the shoreline along the proposed area of work.
21	A plan is needed for in-kind, in-situ mitigation for impacts to existing wetlands related to the Radial Collection Well Area and Radial Collector Well Delivery Pipeline. Please include planting scheme, success criteria, monitoring and maintenance schedules.	High quality coastal wetlands exist on the shoreline along the proposed area of work.

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: RADIAL COLLECTOR WELLS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
22	Please provide adequate analysis in support of the conclusion made that the Biscayne Aquifer is not affected by the Radial Collector wells. A fully three dimensional mathematical model should be used to detemine the boundary conditions (influence cones) of the proposed radial collector well. These boundary conditions should be simulated in the overall ground water model, which was described in the Cooling Canal/Industrial Wastewater Treatment and Disposal Facility.	
23	A fully three dimensional mathematical model is needed in support of the conclusion made that the Biscayne Aquifer would not be affected by operation of the radial collector wells. This shall assist in the determination of the boundary conditions (influence cones) of the proposed radial collector wells. These boundary conditions should be simulated in the overall ground water model, which was described in the Cooling Canal/Industrial Wastewater Treatment and Disposal Facility. Whether the extraction of water from the Biscayne Bay system will change or reduce the freshwater inflow to the bay and/or increase salinity at least seasonally shall be examined through additional modeling as part of the application.	
24	Please provide a more detailed justification (including all supporting data and assumptions) in selecting the Biscayne Aquifer Radial Collector Well alternative instead of the Floridan Aquifer and offshore (marine surface) water alternatives as secondary	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
	GENERAL	
1	The application does not address biological, hydrological, and ecological impacts resulting from road construction and operation. Impacts that shall be addressed include but are not limited to disruption of ecological corridors, altered hydrology in surrounding wetlands (e.g. via barriers to sheetflow), increased invasion rate of non-native species, increased road-kill, impacts to listed species and their habitat, including but not limited to Florida panthers and Eastern indigo snakes, and increased access that may facilitate illegal dumping, ATV riding, poaching, and other activities that may directly or indirectly impact surrounding wetlands. The applicant shall also address how road construction and operation would compromise the ability of the EEL Program and other agencies to appropriately manage public lands. Please provide an analysis of these impacts on the hydrologic and ecological values of the surrounding lands, including information on how these impacts will be minimized and avoided to the maximum extent possible and how unavoidable impacts will be mitigated. This information is needed to determine compliance with Chapter 24, Miami-Dade Code, and applicable CDMP objectives and policies.	
2	Details for road improvements list "...NHW Elevation to be provided by DERM". Please provide further explanation as to what is expected.	
3	Are there any roads, whether for plant access or associated with the transmission lines, that are being proposed as temporary roads? If so, please identify them and provide a map of their locations.	
4	The proposed access roads are outside the existing "site" of the FPL power plant and are therefore subject to land use/zoning consistency determinations. Such access roadways will be subject to amendments to the Comprehensive Development Master Plan (CDMP). Although an amendment to the CDMP has been filed, no decision by the local government will be reached until April 2010 and wll be dependent on FPL providing complete information.	
5	The application states that the Florida Master Site File forms (FMSF) maintained by the Bureau of Historic Preservation, Division of Historical Resources were reviewed to determine whether any historic or archaeological sites were in the areas of potential effects. However, the County's Office of Historic and Archaeological Resources was not given the opportunity to determine whether these areas impacted locally designated sites or sites which have been determined as eligible for designation. In addition, the application makes the assumption that the probability of impacts on undiscovered sites is considered extremely low. This conclusion is not supported without coordination with the Office of Historic and Archaeological Resources. Sites that the County has surveyed and identified, but may have not yet designated, would not necessarily be recorded in FMSF forms. Additionally, if unforeseen archaeological finds are discovered during construction, the county archaeologist should be notified, not just the Division of Historical Resources (DHR) in accordance with the Miami-Dade Historic Preservation Ordinance (Chapter 16-A). For these reasons, the application pertaining to these issues is incomplete.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
	PARKS/BIKES/TRAILS	
6	Application fails to consider the County's Greenway Plans and Parks and Open Space System Master Plan. The County's Preferred Corridor for the proposed Biscayne Trail Segment D and a portion of the southern route of the Biscayne-Everglades Greenway is located along the north side of SW 328 St. (North Canal Dr.).	It is recommended that the improvements be designed in coordination with the 2009 PD&E study final report for the greenway currently underway by the Park and Recreation Department and that the design is consistent with the goals and principles of the County's Open Space System Master Plan.
7	Application fails to consider the County's Greenway Plans and Parks and Open Space System Master Plan. The County's Preferred Corridor for the Biscayne Trail north-south leg is located along SW 137 Av. from SW 328 St. to Card Sound Rd. The County's Preferred Corridor for the southeastern leg of the Biscayne Trail also extends southeast along the L-31E canal from SW 328 St. to Card Sound Rd.	It is recommended that any future development proposed for these areas be implemented in coordination with the 1994 South Dade Greenway Network Master Plan and that the design is consistent with the goals and principles of the County's 2007 Open Space System Master Plan.
8	Propose roadways improvements do not show bicycle facilities. Include bicycle facilities as part of the road construction.	
	WETLANDS/EEL/TREES	
9	Construction and use of new access or improved access roads will provide a conduit for introduction of invasive exotic species on adjacent lands, including but not limited to, EEL conservation lands. The application fails to include the exotic vegetation management plan required pursuant to condition 12 of the Unusual Use Permit. Please provide the required exotic vegetation management plan.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
10	The application does not provide a complete and detailed exotic vegetation management plan as required by Condition 12 of Z-56-07. Please provide said plan.	Pursuant to Condition 12 of the Unusual Use approved by the BCC through resolution Z-56-07, FPL shall prepare and implement an exotic vegetation management plan; this plan shall be reviewed by DERM for compliance with Chapter 24, Miami-Dade Code
11	The application fails to provide sufficient information to determine whether it is in compliance with the tree protection provisions of Section 24-49 of the Miami-Dade Code. The applicant shall provide all information necessary to make such a determination, including but not limited to a tree survey which identifies all trees that are proposed for removal or destruction, including but not limited to along all proposed roadway improvements. This survey shall identify the locations, numbers and species of all trees and whether the tree is a specimen tree pursuant to Chapter 24 of the Miami-Dade County Code. A mitigation plan shall also be provided. If specimen trees are to be impacted, then a separate mitigation plan should be provided for specimen trees.	
12	The application does not adequately depict property ownership in areas surrounding proposed linear features such as access roads, including Miami-Dade County Environmentally Endangered Lands (EEL) Program projects that have been at least partially acquired. Please provide amended maps showing all EEL projects, along with a complete analysis of the direct and indirect effects of proposed linear feature construction and operation on nearby EEL Project lands.	
13	Application fails to provide an alternatives analysis for the proposed access road network, both for construction access to the plant and access to the transmission line corridors, and to adequately deomstrate that impacts to resources are minimized and avoided. Please provide an analysis of alternatives for the access roads that considers and compares the benefits and impacts of all feasible alternative routes for ingress-egress, and demonstrates minimization and avoidance of impacts including but not limited to wetlands, impacts to state and federally protected species, impacts to existing water management features, impacts to Environmentally Endangered Lands projects, Natural Forest Communities, and tree resources protected by Chapter 24, Miami-Dade Code. Alternatives evaluated for ingress-egress to Turkey Point should include but not be limited to utilization of the existing Palm Drive (SW 344 Street) corridor with and without shift change modifications, and alternative construction entrances including but not limited to utilizing the existing plant entrance with shift change modifications or making improvements to the L-31 East levee for use as a temporary construction entrance by backfilling a section of the L-31E borrow canal.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: ACCESS ROAD		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
14	Environmentally Endangered Lands (EEL) owned and/or managed conservation lands exist along proposed access roads. The application has not detailed the potential impacts to EEL land from any work related to the roads. The application should provide information on which roads are proposed as temporary, the ultimate disposition of the access road network, and an analysis of options for remediation of temporary roads after the project has been completed, including but not limited to road removal, restoration of impacted natural areas, and dedication of the restored land to the EEL Program. EEL Program management tasks, such as exotic vegetation control activities, require that EEL Program staff have access to its parcels as well as lands owned by the State. The application does not include sufficient information on whether any rights-of-way will be restricted, and how road alterations will affect access to surrounding lands, and particularly EEL-owned properties. This information is needed to evaluate the impacts of the proposed road network and whether the access road network meets the requirements of Section 24-50 of the Miami-Dade Code and related CDMP policies. The EEL Program owns additional land in other areas in which project features occur, so changes to roads and rights-of-way may impact publicly-held and managed lands beyond the proposed project areas.	
15	Pursuant to Condition 9 of Z-56-07, the applicant shall submit a wetlands mitigation plan for the areas impacted by the construction of the access roads. This plan shall be developed in accordance with the substantive requirements of Chapter 24, Miami-Dade Code, and shall be reviewed by DERM for compliance with Chapter 24 as interpreted by DERM based on the impacts of this application. Pursuant to Condition 9 of Z-56-07, the plan shall identify the specific mitigation that is intended to offset impacts from the access roads.	
16	The application does not detail the ultimate disposition of the proposed access roads after construction of Units 6 and 7 has been completed. A substantial proportion of the access road network passes through and, if approved, will impact the South Dade Wetlands and South Dade Wetlands Addition, both of which are projects designated for acquisition by Miami-Dade County's Environmentally Endangered Lands (EEL) Program. The applicant must provide information on the ultimate disposition of all proposed access roads that occur within the boundaries of these EEL projects, including but not limited to identifying roads that will be downgraded or removed, and which rights of way or road corridors could potentially be transferred or dedicated to the EEL program at the completion of the construction phase of the project after road remediation has been completed.	
17	Please submit information demonstrating that impacts to wetlands within and adjacent to the proposed roadway expansion area have been avoided and minimized to the maximum extent possible.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
	ENDANGERED SPECIES	
18	The application states, "Due to the limited amount of upland habitat, mammalian wildlife species are relatively uncommon in the vicinity of the Site" and fails to acknowledge that there is a possibility for Florida panther in the vicinity. It should be noted that there have been three documented vehicle strikes of Florida Panthers in this region, including two road kills in the recent past. In addition, there have been recent agency reports of additional animals in the area, including a panther/cub pair. The application does not provide sufficient information to evaluate potential impacts to ecological resources including but not limited to rare threatened and endangered species resulting from the installation and use of the proposed access roads. The applicant should provide a Comprehensive Environmental Impact Statement performed pursuant to Chapter 24, Miami-Dade County Code.	The EIS should evaluate the project for consistency with Chapter 24, Miami-Dade Code and the CDMP.
19	The application claims that "The nesting habitat maintained by FPL within the cooling canals and industrial wastewater facility has been responsible for virtually the entire increase in population of the American crocodile reported in South Florida over the past 25 years (Tucker et al., 2004)." Please provide documentation in support of this statement, including but not limited to a copy of the cited report with current data on nesting activity, nest success, hatchling sex ratios and survivorship, and survivorship to adulthood of juveniles hatched at Turkey Point over the period of record during which crocodile monitoring has been occurring at the Turkey Point power plant.	
20	The application states that "Disturbance is one of the major factors adversely affecting the success of crocodiles in South Florida" and "Nighttime traffic may result in abandonment of nests or death of hatchling crocodiles dispersing from the cooling canals to the ID (Wilcox and Mazzotti, 1990)." The application proposes several wildlife underpasses to facilitate movement of crocodiles under construction roads within the plant boundary. Please provide a detailed analysis of how the specified locations were selected and how crocodiles that may occur outside the plant near linear features (such as the transmission lines, access roads and spoil disposal routes) will also be protected from disturbance.	
21	The application notes that the Eastern indigo snake has been observed both within and adjacent to the boundaries of the site. Please provide a Comprehensive Environmental Impact Statement that includes, but is not limited to, the potential effects of the construction and operation of the plant and its associated non-linear and linear features on the Eastern indigo snake.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
22	The application does not include the management plan for all federal and state listed threatened and endangered species documented within the proposed access area, as required under Condition 11 of Z-56-07. Please provide the required plan.	
23	The application does not contain information on wildlife protection features that is sufficient to determine whether the requirements of Condition 9 of Z-56-07 have been met. Pursuant to Condition 9 of Z-56-07, please provide locations, details and descriptions of all wildlife protection features, including but not limited to wildlife fencing and panther underpasses.	
	CERP	
24	Most of the lands adjacent to the proposed roadway segment improvements occur within the boundaries of the Biscayne Bay Coastal Wetlands CERP Project, and several segments would be located where this CERP project proposes infrastructure for restoration of the surrounding wetlands and Biscayne Bay. These road improvements would directly interfere with CERP features associated with the Biscayne Bay Coastal Wetlands Project, including pumps and spreader canals. A pump station is proposed on the south side of the Florida City Canal at the Tallahassee Road (SW 137 Avenue) alignment. The purpose of this pump station is to transfer water south into the Model Lands Basin via a north/south spreader canal that would be constructed within the SW 137 Avenue road right of way. The CDMP requires that the FPL project be consistent with CERP, yet the lands that would be impacted by the FPL roadway improvement feature are the same lands that would be restored under CERP. Please address how the proposed roadway features would be constructed to be consistent with the proposed CERP features.	
25	Pursuant to Condition 9 of Z-56-07, "Planned restoration features such as, but not limited to, pump PU-M3 [BBCW proposed project feature] and downstream hydrologic restoration shall not be compromised or constrained by the roadway(s)." The application does not contain sufficient information to determine whether the requirements of Condition 9 of Z-56-07 have been met. Pursuant to Condition 9 of Z-56-07, please provide complete and detailed information that describes how the planned restoration features will not be compromised or constrained by the roadway(s).	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
26	Pursuant to Condition 9 of Z-56-07, "Sheet flow shall be maintained across roadway alignments by elevating portions of the roadway and through the installation of culverts in other areas." The application does not contain sufficient information to determine whether the requirements of Condition 9 of Z-56-07 have been met. Pursuant to Condition 9 of Z-56-07, please provide locations, details and descriptions of all features that are intended to maintain sheetflow across the roadways.	
	DRAINAGE/FLOOD	
27	Please provide drainage plans and associated calculations for the proposed access roads.	Provide drainage plans in the ERP application
28	Roads are to be constructed to comply with Flood Criteria requirements, at a minimum. Assess impact on a larger study area. See DP&Z comments on Appendices 10.7.4.1 and 10.7.4.2.	
	RIGHTS OF WAY	
29	The application does not provide sufficient information concerning whether additional land must be obtained to accommodate the proposed road improvements. The applicant must provide a detailed map identifying areas where roads or road improvements would not be completely contained within the boundaries of either FPL-owned land or an existing public right-of-way. The applicant must also identify adjacent property owners whose land may need to be obtained to accommodate the road or road improvements, including but not limited to the Miami-Dade Environmentally Endangered Lands Program, and explain the process by which the additional property will be obtained.	
30	No data is provided describing the existing available right-of-way and ownership thereof. Provide clear maps denoting the aforementioned.	
31	Clearly denote which roadways are to be public and which are to be private. Provide clear maps denoting the aforementioned.	
32	All roads to be dedicated as public right-of-way (arterials-section lines and half-section lines) should include the following: dedication of the zoned right-of-way for future widening and no easements within said right-of-way. Any utilities within the right-of-way will be allowed to be installed by permit only.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
33	No sketches are provided clearly denoting if right-of-way shown are FPL right-of-way, road right-of-way or other right-of-way.	
34	No data is provided indicating which roads are temporary, which roads are to be left as-built, and which roads are to be reduced after construction of power generation units and supporting facilities.	
	TRAFFIC STUDY	
35	Transportation Subsection indicates that the Homestead Extension of Florida's Turnpike (SR 821), and South Dixie Highway (US 1/SR 5) are the major transportation corridors for north-south movement in Miami-Dade County. The traffic impact data and analyses presented in Appendices 10.7.4.1 (Traffic Study Peak Construction) and 10.7.4.2 (Traffic Study Operations Analysis) does not consider the impact of the construction and operation of Units 6 and 7 on these two regional corridors.	See DP&Z comments on Appendices 10.7.4.1 and 10.7.4.2 below.
36	The traffic studies provided in Appendices 10.7.4.1 and 10.7.4.2 do not demonstrate the need for construction vehicle traffic access to the power plant site from SW 359 Street.	See DP&Z comments on Appendices 10.7.4.1 and 10.7.4.2 below.
37	The assertion that the proposed access road from the Turkey Point Units 6 and 7 site to theoretical SW 137 Avenue along theoretical SW 359 Street will be improved within the transmission line right-of-way is premature. The traffic studies contained in Appendices 10.7.4.1 and 10.7.4.2 do not consider other alternative roadways such as SW 344 Street and transportation demand management strategies.	See DP&Z comments on Appendices 10.7.4.1 and 10.7.4.2 below.
38	Chapter R9.0, Roadway Improvements, make reference to Appendix 10.7.4 to justify the request for certification for the proposed roadway improvements associated with the linear facilities to the project in order to accommodate peak construction traffic and provide access to Units 6 and 7. However, the traffic studies presented in Appendices 10.7.4.1 and 10.7.4.2 do not provide sufficient data to demonstrate the need for the proposed roadway improvements.	
39	DP&Z staff have the following concerns regarding the traffic study: the assumptions; the methodology; the impact study area; the lack of consideration of alternative roadways including SW 328 Street and SW 344 Street; and the lack of consideration of transportation demand management programs to reduce the overall traffic demand and use of single occupant vehicles.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
40	Assumptions: Substantiate the following assumptions: maximum work-force of 3,650 construction workers and vehicle occupancy of 1.0 worker per vehicle.	We agree with the need to have the first shift scheduled to start working at 6:00 AM in order to reduce the overall peak-hour demand.
41	Study Area. Given the amount of vehicular traffic likely to be generated, the number of employees and the size of the project, the study area to be analyzed shall include all roadway facilities where traffic generated by the proposed project is equal to or greater than five (5) percent of the maximum service volume at the adopted level of service standard applicable to the roadway facility.	
42	Trip Generation. Given the unique characteristics of the use proposed, the trip generation shall include the following information: average daily, AM peak hour and PM peak hour. Consider car pooling, van pooling or employer-based car pooling.	
43	Analysis Period. Consider three analysis periods: Short-term (Concurrency Analysis for 3 years; construction is estimated to begin in 2011); and long-term (Years 2016 and 2020). Peak construction employment for the project is estimated for 2016; Project construction is estimated to conclude in 2020.	
44	Trip Distribution. For the Concurrency Analysis use the Cardinal Directional Trip Distribution from Zone 1401 and Year 2015, and the computerized travel demand forecasting (FSUTMS) model, refined where needed, for Years 2016 and 2020.	
45	Adopted Plans and Programs. The consultant should identify the programmed transportation projects located within the Study Area for roadways and intersections listed in the 2010 Transportation Improvement Program (TIP); and identify the planned transportation projects located within the Study Area listed in Priority I, II and III of the 2030 Long Range Transportation Plan.	
46	Background Traffic. The expected increase in non-development traffic and traffic from other previously approved and unbuilt development should be accounted for in the future years. If travel demand forecasting model is used, the background traffic development should follow demand-modeling procedures outlined in the FDOT Project Traffic Forecasting Handbook.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: ACCESS ROAD	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
47	Future Conditions Analyses. Perform an assessment of future conditions on the study area roadways for the long-term planning horizons without the impacts of the application-generated traffic; perform other assessment of future conditions on study area roadway and intersections with the impacts of the application-generated traffic. Incorporate programmed and planned roadway improvements consistent with Adopted Plans and Programs above.	
48	Mitigation Analysis. If the application causes the study area roadways to fall below their adopted LOS standards, recommend mitigation through physical or operational improvements, travel demand management strategies, fair-share contributions, or a combination of these or other strategies.	Consider Travel demand management techniques such as car pooling, van pooling and parking management strategies to reduce use of single-occupant vehicle (SOV) and highway congestion and encourage the use of transit and ridesharing.
49	Prior to the assumption of new roadway construction (SW 359 Street), traffic impact analyses with the existing and improved existing roadways for concurrency year (usually 3 years in the future), construction opening year (2011), construction peak year (2016) and normal operational year (2020) should be provided.	
50	Provide detailed supporting documents for trip generation of 3,650 construction peak period employees.	
51	Document all the growth rates and estimate growth factors values for different analysis years.	
52	Since there are different peak hours for construction (5:00 AM to 6:00 AM) and regular employees arrival (6:00 AM to 7:00 AM), traffic volumes for these two hours should not be combined in the analysis.	
53	Future roadway improvements in TIP, LRTP and Comprehensive Plans of effected jurisdictions should be investigated and listed in the report. Potential improvements may include bike trails, greenways and roadways etc.	Potential improvements, such as bike trails, greenways and roadway improvements, etc.

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: ACCESS ROAD		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
54	Provide detailed supporting documents for trip generation of 36 construction-related trucks per hour.	
55	The existing truck volumes should also be included in the traffic data collection. This data is needed in the traffic operational analysis as well as pavement design.	This data can provide more accurate operational analysis as well as pavement design.
56	To ease the review process, please provide traffic counts in the form of maps.	
57	Provide detailed supporting documents for trip generation of 806 and 2000 employees in nomal traffic operational analysis for Scenario 1 and 2, respectively.	
58	Presence of only 940 employees during data collection period while 1,467 employees work. Therefore, trips should be adjusted, or it should be documented that only 940 employees are usually present. Please note that traffic data should be adjusted for all types of seasonal variations.	
59	Please note that LOS standards for roadways outside UDB are different than within UDB. Also, Miami-Dade County concurrency tables should not be used for long term future analyses (i.e. years 2016 and 2020), instead FDOT Generalized Tables should be used.	
60	Vehicle occupancy of one construction employee per vehicle needs to be revised since this number is too low. Furthermore, options for shuttle service should be explored.	Options for shuttle service should be explored.
61	Parking demand and supply analysis should be included in the report. These analyses should cover all the analysis years and different type of peak periods.	
62	Regional traffic impact analysis should also be conducted because of the anticipated high peak-hour volumes generated during peak periods.	
63	Different access routes should be explored to the site, such as through SW 328 Street.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: FPL-OWNED FILL SOURCE		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
1	The allowance of rockmining in agricultural areas is subject to approval of an amendment to the Comprehensive Development Master Plan. FPL has filed an amendment; however no action will be taken by the local government until October 2009. Approval of this amendment is subject to extensive informational requests which have not been provided through this application. Therefore land use/zoning consistency cannot be determined at this time.	CDMP application filed by FPL for change to land use text. Final County Commission action in October 2009. Data required by County staff and Board of County Commissioners.
2	Application does not provide the following data/information related to the FPL-filed CDMP amendment application for rock mining in Agriculturally designated land. 1. Plan and data for the design of the leave-behind water management project, including technologies to be used during and after excavation to ensure that the project's waters are isolated from any present or future salt intruded groundwater. 2. Letters from the USACOE and the SFWMD that describe and support the necessity of the proposed water management project for the enhancement of the Alternative "O" Phase 1 CERP project. 3. The quantity of fill needed for Unit 6&7 and associated facility construction, the quantity of fill to be extracted at this site, the dimensions of the rock pit 4. Committment approved by MDC CAO that no fill will be sold.	CDMP application filed by FPL for change to land use text. Final County Commission action in October 2009. Data required by County staff and Board of County Commissioners.
3	Information on costs associated with required "best technologies", including the cost of liners is not provided.	
4	Information on operational and maintenance costs for the leave-behind project.	
5	Costs of pilot studies necessary to determine the adequacy of proposed liners not provided; commitment to conduct and finance pilot studies as indicated by SFWMD and USACE.	
6	Study results/findings as required by the USACE and SFWMD to support the chosen "best technology" to achieve project goals as defined by the USACE and the SFWMD.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: FPL-OWNED FILL SOURCE		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
7	Detailed information on the proposed excavation including the exact proposed location not provided.	
8	Geologic cross section of the proposed excavation (including the amount of water storage above- and below-ground, detailed information on the depth of the area to be mined)	CDMP application filed by FPL for change to land use text. Final County Commission action in October 2009. Data required by County staff and Board of County Commissioners.
9	Sufficient water quality data for the site not provided.	
10	No identification of sea level rise projections used to model the water management project provided.	
11	No studies provided to assess project's impact to surrounding agricultural wells or public wellfields under worst case conditions.	
12	Models and study explaining how preliminary design of the water management project will tie to the CERP Environmental Restoration Project (Alternative "O") missing.	
13	Narrative description of the timing and the approval process of the FPL water management project and the Alternative "O" CERP project, to ensure that both can and will likely be accomplished.	
14	Analysis by FPL, with cooperation from the SFWMD, on whether the incorporation of the water management project into the CERP process will alter or jeopardize the potential approval and funding of the CERP project not provided.	
15	Location and design approval from the Homestead Air Reserve Base for the project's conformance with AICUZ recommendations regarding bird strikes and other potential navigational hazards has not been provided.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR
FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: FPL-OWNED FILL SOURCE		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
16	No data provided to assess groundwater impact as a result of the fill extraction and construction of the water management feature.	Based on 5.3.1 FPL-owned Fill Source not possible to evaluate groundwater impact as no data is provided.
17	No mitigation plan found for possible salt front advancement as a result of rock pit mining.	Planned fill source lies approximately 4 miles to the northeast of MDWASD Newton Wellfield. No mitigation plan provided for possible advancement of salt front as a result of planned rock mine.
18	Insufficient information has been provided to determine whether the rock mine would require a variance to Chapter 24, Miami-Dade Code, and/or applicable water quality standards.	
19	The application does not provide information on how the water management project would operate, the water source for the feature, any related infrastructure, projected water quality of the completed feature, or information on "best technology" regarding a liner or other hydrologic isolation from surrounding ground and surface waters, the hydrologic impact of the feature on adjoining areas.	
20	Information including but not limited to depth, slope, deep cut lines, levee height, etc for the water management feature and rock mining activities proposed for the FPL owned fill source are not provided in the application. The application does not contain sufficient water quality and geotechnical information needed in order to evaluate the proposed FPL fill source. Given that the salt front exists at the proposed rockmining site, FPL must provide data including modeling under normal and drought conditions. FPL shall also specify engineering controls proposed to prevent saltwater intrusion of the surface water body created by the rockmining activity both during construction and over the long term following completion.	

PROJECT COMPONENT: FPL-OWNED FILL SOURCE		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
21	The application does not provide sufficient information to determine facility emissions for the limestone mining operations and grading & fill activities, including whether or not rock mining/non-metallic mineral processing/mining & quarry operations and equipment will be involved. The application needs to provide such information, including but not limited to technical & design specifications on crushing, conveying and screening processes and equipment to be used in the excavation of limestone.	
22	The application does not provide sufficient information to determine that the proposed excavation will not extend into groundwater containing 250 mg/L or greater chloride.	
23	It is unclear from the application whether the proposed rock mines will impact existing wetland restoration areas associated with previous unauthorized impact to wetlands on FPL property in this location.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR
FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: TRANSMISSION LINES		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
1	The applicant states that "an applicant under the PPSA has the option to allow other parties to submit alternate corridors to its own proposed transmission line corridors. FPL is affirmatively exercising this option so that other parties are allowed to file alternate transmission line corridors for consideration in the certification proceeding". The applicant must provide details on what other parties are filing alternate transmission line corridors, along with an explanation of how the process for approving transmission line corridors differs, including but not limited to obligations of other parties to meet applicable Conditions in Z-56-07, when FPL is not the applicant.	
2	The map series showing the transmission corridor locations do not differentiate between existing rights-of-way/easements and areas proposed. Please provide revised figures showing areas where additional rights-of-way/easements are required.	
3	Location of greenways/trails are not shown in map series showing preferred corridors or secondary corridors although the criteria in Tables W 9.3.1-4 and E 9.3.1-4 specifically state that the acquisition status of existing and proposed greenways was included in the Alternative Route Qualitative Evaluation Criteria. Please provide mapping of existing and proposed greenways. The Application does not address the Parks and Open Space System Master Plan prepared in compliance with Policy ROS-4 of the Recreation and Open Space Element of the CDMP and as approved by the Board of County Commissioners.	
4	The application fails to indicate that the area surrounding linear features such as transmission lines includes Miami-Dade County Environmentally Endangered Lands (EEL) Program projects that have been at least partially acquired. Please provide amended maps showing EEL projects, along with a complete analysis of the effects of linear feature construction and operation on nearby EEL Projects.	
5	Application is incomplete and includes incorrect characterization of the vegetation adjacent to the site. Corrected and missing information is needed to determine the potential impacts of the application, especially on state and federally protected species. Vegetation adjacent to the site and located along the transmission line corridors includes freshwater communities, and the coastal vegetation communities are more diverse than characterized. Please provide a complete vegetation survey for all transmission line corridors, including but not limited to complete species lists for each community type and identification and location of state and federally protected species. Please also provide a complete analysis of utilization of these vegetation communities by fauna, including but not limited to insects, birds, fish, aquatic invertebrates, reptiles, amphibians, and mammals, and including but not limited to season of use, use by state or federally protected species, and nature of use.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: TRANSMISSION LINES		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
6	The application claims that "The nesting habitat maintained by FPL within the cooling canals and industrial wastewater facility has been responsible for virtually the entire increase in population of the American crocodile reported in South Florida over the past 25 years (Tucker et al., 2004)." Please provide documentation in support of this statement, including but not limited to nesting activity, nest success, hatchling sex ratios and survivorship, and survivorship to adulthood of juveniles hatched at Turkey Point over the period of record during which crocodile monitoring has been occurring at the Turkey Point power plant.	
7	The application states that "Disturbance is one of the major factors adversely affecting the success of crocodiles in South Florida" and "Nighttime traffic may result in abandonment of nests or death of hatchling crocodiles dispersing from the cooling canals to the ID (Wilcox and Mazzotti, 1990)." The application proposes several wildlife underpasses to facilitate movement of crocodiles under construction roads within the plant boundary. Please provide a detailed analysis of how the specified locations were selected and how crocodiles that may occur outside the plant near linear features (such as the transmission lines, access roads and spoil disposal routes) will also be protected from disturbance.	
8	The application states, "Due to the limited amount of upland habitat, mammalian wildlife species are relatively uncommon in the vicinity of the Site" and fails to acknowledge that there is a possibility for Florida panther in the vicinity. It should be noted that there have been three documented vehicle strikes of Florida Panthers in this region, including two road kills in the recent past. In addition, there have been recent agency reports of additional animals in the area, including a panther/cub pair. The application should provide additional information and detailed analysis that fully documents the potential impacts of the project on rare threatened and endangered specis, including preparation of an Comprehensive Environmental Impact Statement performed pursuant to Chapter 24, Miami-Dade County Code. The EIS should evaluate the project for consistency with Chapter 24 and the CDMP.	
9	The application notes that the Eastern indigo snake has been observed both within and adjacent to the boundaries of the site. Please provide a Comprehensive Environmental Impact Statement that details, in part, the potential effects of the construction and operation of the plant and its associated non-linear and linear features on the Eastern indigo snake.	

PROJECT COMPONENT: TRANSMISSION LINES		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
10	The application provides insufficient information on the potential effects of the transmission line corridors on state and federally protected species, designated EEL sites, Natural Forest Communities, and tree resources protected by Chapter 24 of the Miami-Dade Code. Please provide a Comprehensive Environmental Impact Statement for the transmission line corridors that addresses the requirements of Chapter 24 of the Miami Dade Code and the relevant objectives and policies in the Comprehensive Development Master Plan, including but not limited to Objective CM-1, Policy CM-1E, Objective CM- 4, Policy CM-4A, Policy CM-4C, Policy CON-7A, Objective CON-9, Policy CON-9A, Policy CON-9B, Policy CON-9C, Policy LU-3B.	
11	The application states that new rights-of-way will need to be obtained for the east transmission line corridor. Please provide details on where new rights of way will be obtained, and whether there are state or federally protected plant or animal species, designated EEL sites, Natural Forest Communities, or tree resources that could be impacted by the work within these proposed new rights-of-way.	
12	The application does not address the avoidance of Natural Forest Community impacts. The proposed transmission line routes may impact county designated Natural Forest Communities which are protected pursuant to Chapter 24 of the Code of Miami-Dade County and Condition 20 of Z-56-07. Section 24-49.2 of the County Code generally requires that trees and other vegetation, including shrubs and groundcover plants must be preserved. Authorization may only be granted for limited clearing or other work consistent with the detailed standards in Section 24-49.2. Section 24-49.3 (2) (a) states "If it is determined that the proposed development site is within natural forest community ... the standards set forth in 24-49.2 shall apply. Proposed site actions that are not in accordance with said standards shall receive a recommendation of denial from the Department." Section 24-49.3 (2)(b) states, in part, "The DERM or his designee shall issue his written recommendation for approval only if the DERM or his designee determines that a preservation area equivalent in size to the minimum preservation area required for the site under Section 24-49.2(l) has been designated prior to the proposed action." Any improvements to the transmission corridors, including but not limited to the installation of power poles and lines must avoid/minimize impacts to Natural Forest Communities. A survey of all Natural Forest Communities, within and adjacent to the transmission corridors, is required and all proposed impacts to Natural Forest Communities must be identified. Information shall be provided in the application that demonstrates that all requirements contained in Section 24-49 of the Code of Miami-Dade County are being met.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

	PROJECT COMPONENT: TRANSMISSION LINES	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
13	Pursuant to Condition 17 of Z-56-07, improvements to sheet flow are required across the transmission corridors in areas where upgrades are proposed. The application does not provide a description of the specific upgrades FPL proposes to satisfy this condition. A complete and detailed description shall be provided. In addition, FPL shall describe what sheet flow improvements, if any, are proposed within transmission corridors for which mitigation lift is being sought.	
14	Pursuant to Condition 17 of Z-56-07, improvements to sheet flow are required across the transmission corridors in areas where upgrades are proposed. Please resolve the apparent conflict between this condition and the stated intent to install roads in the transmission line corridors where no impediments to sheetflow currently exist, such as the portion of the West transmission corridor in Section 31 T57S R39E.	
15	Environmentally Endangered Lands (EEL) owned and/or managed preserves exist along proposed corridors. Please provide an analysis of the potential impacts to EEL Preserves from any work related to the transmission lines, including but not limited to development of corridors, acquisition to corridors, acquisition of additional easements, etc.	
16	No sketches are provided clearly denoting if rights-of-way shown are FPL right-of-way, road right-of-way or other right-of-way.	
17	No data is provided describing the existing available right-of-way and ownership thereof. Provide clear maps denoting the aforementioned.	
18	Materials provided are not sufficient to determine whether corridor alignments, construction techniques, and proposed pole designs will ensure protection of future inland wetlands, wellfield areas, and Natural Forest Communities from incompatible land use.	
19	Provide contextual perspectives for both existing and proposed electric poles and supporting infrastructure to demonstrate that chosen technology and structures will be compatible with the surrounding land uses.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: TRANSMISSION LINES		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
20	Provide narrative analysis of issues necessary to determine compliance with LU-4A. Of particular concern would be design compatibility related to shadows, traffic, height, bulk and scale of architectural elements and how pole placement and design will address these standards.	
21	Design details, including proposed materials, visual buffering, complementary vegetation, and fencing must be addressed to determine consistency with LU-4D for each proposed new pole and corridor alignments generally.	
22	Application does not supply sufficient design and placement information on Eastern corridor and location-specific pole placement to determine whether this activity is well designed and conducive to both pedestrian and transit use, and architecturally attractive.	
23	Information on the potential degradation of health, safety, tranquility, character, and overall welfare of residential neighborhood conditions with respect to transmission line corridors has not been provided. Information should include recent academic studies regarding EMFs and high kV electrical transmissions.	
24	Information is not provided on how activities will impact approved Urban Centers and their respoective Regulating Plans and will be in compliance with the County's Urban Design Manual.	
25	Maps and narratives do not demonstrate existing rights-of-way or existing certified corridors along the proposed east and west transmission corridor alignments.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
1	Disposal of the facility's wastewater is proposed via deep well injection into the boulder zone. The application does not include an evaluation of the technical feasibility for reuse of the wastewater discharge for the benefit of the Biscayne Bay Coastal Wetlands Project as required pursuant to Z-56-07. Please provide said evaluation.	Condition No. 6 of the Unusual Use approved by the BCC (resolution Z-56-07) states, FPL shall prepare and submit a wastewater discharge plan, which among other things shall evaluate the potential technical feasibility for reuse of the discharge of the wastewater for the benefit of Alternative O of the Biscayne Bay Coastal Wetlands Project.
2	The expiration date on the copies of USFWS permits No. MB697722-0, MB697722-1 and MB1335540-0, included in Appendix 10.2.10 indicate that these permits expired on March 31, 2009; The applicant shall provide copies of the current permits.	Condition No. 3 of the Unusual Use approved by the BCC (resolution Z-56-07) states, all permits and assessments required by the USFWS for the proper preservation and management of habitat for "Threatened" or "Endangered" species shall be obtained by FPL prior to construction.
3	The application predicts the potential for additional salinization throughout the area as a result of the project by drawing salty water landward via the radial collector wells and from deposition of salts as a result of cooling tower operations. In contrast, the CERP BBCW project seeks to reduce salinity levels in and adjacent to Biscayne Bay to restore more natural estuarine conditions. No documentation is provided to examine the specific impacts to the area from additional salinization generally and for CERP consistency specifically. A study is needed that includes a salt budget and an examination of the cumulative effects of existing and proposed operations at Turkey Point including but not limited to the existing chloride plume created by the cooling canal system and the additional salts that would be added to the area as a result of the proposed project. The study shall also be sufficient to determine the extent to which the radial collector wells would capture, redirect, or otherwise affect groundwater from the existing plume emanating from FPL's Cooling Canal System.	

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
4	Condition 5 of Z-56-07 requires FPL to analyze the potential use of marine water as a secondary source of cooling water. Under this scenario, a directional bore would be used to construct a pipeline under the Florida Keys National Marine Sanctuary or under Biscayne National Park in order to obtain salt water from the ocean with limited or no permanent impacts to benthic resources. Provide a detailed analysis that documents the reasons why this potential secondary source of cooling water was not selected. Pursuant to Condition 5, the potential to utilize fill generated by the directional boring for construction of the proposed facility should also be addressed as part of the analysis.	
5	Condition 5 of Z-56-07 requires FPL to provide an alternative water source plan that will outline all sources of water not supplied by WASD through reuse. Appendix 10.9 does not provide background data to support the presented conclusions. The applicant shall provide all background data and analysis used to draw the conclusions presented in Appendix 10.9.	
6	DERM has determined that the proposed work or activity may result in adverse environmental impacts as defined in Section 24-5 of the Code of Miami-Dade County. The application does not contain sufficient information to evaluate the project's environmental impacts, benefits, and detriments with regard to assessement points numbers 1 thru 6 as defined in Section 24-5 of the Code of Miami-Dade County under "Comprehensive Environmental Impact Statement."	
7	The mitigation plan proposes to discharge wastewater into the Model Lands and to seek mitigation credit for this discharge. Since the area proposed for discharge is a sawgrass wetland, pollutant levels, including but not limited to nutrient levels, would need to be very low (e.g. less than 10 ppb phosphorous). The application, however, provides insufficient information on the treatment methodology, the resulting quality, volume, and timing of the discharge. The applicant shall provide complete and detailed water quality information for the proposed discharge water that is sufficient to determine whether the water quality of the proposed discharge water is sufficient to prevent degradation of the receiving wetlands.	
8	In addition to applicable elevation requirements, Pursuant to Condition 21 of Z-56-07, the design and elevation of FPL project features shall be based on the planned higher water levels in the area due to regional restoration projects and sea level rise. Information in the application was not sufficient to determine whether the elevation of project features such as but not limited to roadways and other fill pads meet the requirements of this condition. The applicant shall provide detailed information on the elevation of all project features that is sufficient to determine whether this requirement has been met.	

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
9	Pursuant to Condition 21 of Z-56-07, FPL has agreed to allow water level increases on the project site on the order of one foot or more, pursuant to regional restoration projects, and will design the project to accommodate these water level increases at FPL's expense. Information in the application is not sufficient to determine whether the requirements of this condition have been met. The applicant shall provide detailed information on all project design elements that must be modified to meet Condition 21 of Z-56-07 that is sufficient to determine whether this requirement is being met.	
10	Maps in the site certification application fail to depict conservation lands held and/or managed by the Environmentally Endangered Lands (EEL) Program. For example, the maps depicting jurisdictions fail to include MDC EEL holdings. Direct, indirect and cumulative impacts to these lands associated with any of the proposed work or changes in hydrology is not addressed and needs to be detailed.	
11	Permitted land use within EEL acquisition project areas must be compatible with the environment and objectives of the Comprehensive Everglades Restoration Plan (CERP) and shall not adversely affect the long-term viability, form or function of these ecosystems. Any land use or site alteration should be carefully evaluated on a case by case basis by federal, state, regional and county agencies for conformity with all prevailing environmental regulations and compatibility with the objectives of CERP. Land Use Element LU-3B states that all significant natural resources and systems shall be protected from incompatible land use. Conservation Objective CON-4 and Policy CON-4A of the CDMP recognize the importance of these wetlands for their aquifer recharge and storage capacity and states these values shall be maintained, enhanced or restored. Objective CON-7 and related policies state that Miami-Dade County shall protect and preserve the biologic and hydrologic functions of the Future Wetlands identified in the Land Use Element. (The Future Wetlands includes all of the South Dade Wetlands area). Some of the proposed features are within Environmental Protection SubAreas E and F of the CDMP which both require that the approval of any use and access roads or easements should be conditioned on demonstrated consistency of that use with the adopted goals, objective and policies of the CDMP and conformity with all prevailing environmental regulations. The application does not provide sufficient information to evaluate whether the project is in compliance with the aforementioned policies. Please provide this information as part of the Comprehensive Environmental Impact Statement (CEIS) required pursuant to Chapter 24 of the Code in order to assess the overall environmental impacts of the project.	CEIS must address whether the project features are consistent with CERP BBCW and C-111 projects and all applicable CDMP objectives and policies.

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
12	In Section 5.12, the application states that "No variances from applicable regulatory standards are being sought for construction of the Project." In Section 4.5.5, however, the application states that a variance is needed. Please reconcile these differences and list all variances and EQCB approvals that are required pursuant to Chapter 24, Miami-Dade Code, including but not limited to sewer connection variance, and wastewater treatment plant construction variance. In addition, insufficient information has been provided to determine whether facilities such as, but not limited to, the rock mine, dewatering operations, and/or certain Class I dredge and fill activities would require a variance.	
13	Pursuant to Condition No. 15 of the Unusual Use Approval Resolution Z-56-07, included in Appendix 10.3, a DERM approved hydrologic study and its results shall be provided that evaluates all impacts to surface and groundwater. This study should include consideration of seasonal differences in groundwater flow cited in Section 3.3.3.2 and determine the extent to which these differences are due to current operations at Turkey Point.	
14	Further clarification of the hydraulics and management of the treated reclaimed water is needed. Specifically, Figure 4.5-1 illustrates a by-pass of water intended for the CWS that is re-routed directly to the blowdown sump for disposal via the underground injection system. Given the value of utilizing the treated reclaimed water as a part of the cooling process, it seems beneficial to store or reroute this by-passed water for beneficial use rather than disposal. Where possible, recycling / reuse efforts should be utilized to maximize the use of the reclaimed waters to supplement operations that have traditionally utilized other surface water or groundwater as sources for cooling and/or for environmental enhancement.	
15	Further elaboration is needed on item 49 on Table 4.5-1 and noted in Figure 4.5-1 (Effluent from FPL Reclaimed TP to Future FPL Users = 9,739 gallons per minute). Please define "Future FPL Users" and describe methods, timetables, etc for this use.	
16	The application does not contain sufficient information to demonstrate that the proposed alternaitves adequately minimize and avoid adverse environmental impacts.	
17	Please submit updated U.M.A.M. and W.A.T.E.R. scores for any assessments that were performed more than one year ago.	
18	Please submit all data, field sheets, field reports and all associated information related to the preparation of the U.M.A.M. and W.A.T.E.R. analysis.	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
19	Please submit a proposed schedule for long term monitoring, maintenance and financial assurances for all proposed mitigation areas.	
20	Please submit more detailed information about the location and types of anticipated impacts associated with the secondary impacts.	
21	Please submit a detailed assessment of the time lag and risk associated with the restoration of the temporary impacts.	
22	Please clarify mitigation success criteria for the proposed mitigation plans. What are the projected goals? What will constitute success? Please include details of the routine monitoring and maintenance plans designed to achieve planned success levels that are required in order to evaluate the adequacy of the proposed mitigation.	
23	Please submit plans for the protection of Endangered and Threatened Species both during construction and for the temporary and long term use of the proposed roads and facilities.	
24	Please provide a detailed description of the construction methodology that will be used to limit secondary impacts, especially along the linear infrastructure features.	
25	Chapter 24 and the Landscape Code of Miami-Dade County require that all invasive/exotic plant species be removed prior to site development, even outside of mitigation areas. Please address exotic plant management for all parcels where impacts will occur.	
26	Please verify whether all proposed road construction, including stabilization slopes, will fall within the road ROW's. How will proposed impacts, either direct or secondary, adjacent to private property and areas held under conservation easement be addressed?	
27	For those mitigation projects proposing hydrologic enhancements, such as the S20A/L-31E, Card Sound Road Plug, Model Lands Enhancements, and EMP seepage management, detailed information on the acreage associated with the functional lift must be provided. Greater hydrologic improvements would be expected near the location of the project, reducing with distance, explain how was this accounted for?	
28	How was the risk score determined with the hydrologic improvement mitigation projects? What is the estimated uncertainty in the hydrologic improvements and ecosystem response?	

MIAMI-DADE COUNTY COMPLETENESS COMMENTS FOR FPL SITE CERTIFICATION APPLICATION - TURKEY POINT UNITS 6 and 7

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
29	In order to have hydrologic improvements, with the exception of reclaimed water, water must be captured or diverted from other areas. Please describe in detail how the redirection of water will affect those "donor" areas, such as Biscayne Bay. Is there a loss of function from some areas associated with the diversion of water for the proposed hydrologic improvements?	
30	Please provide additional information on the quality, quantity, timing and reliability of the proposed reclaimed water for hydrologic improvements.	
31	It was stated that the Basis of Review and ratios were used to determine the mitigation credits necessary in the HID. According to the Basis of Review, the ratios should be 1.5/1 to 4/1. How was the proposed 1/1 determined and how is it consistent with the Basis of Review and the agency decisions used for other wetland impacts in the area?	
32	The preservation and restoration of land within the basin where the impacts are to occur is preferred, please provide a detailed map of all FPL land holdings within the Biscayne Coastal Wetlands and Model Lands Basins. Please identify on the map which areas are proposed for development and which are proposed for mitigation.	
33	Is FPL aware that the County has a project in design very similar in function and location to the Card Sound Road Weir? Please coordinate with Miami-Dade DERM to determine if the proposed mitigation project will be necessary or beneficial, or whether the calculated lift needs to be adjusted.	
34	The HID Mitigation Bank has a finite amount of mitigation that they can perform annually and receives funding from other impact associated with private development. Please provide evidence that the large amount of mitigation, as proposed, can be accomplished in the projected time frame.	
35	The time lag associated with the proposed mitigation projects must be calculated from the initiation of the impacts to the time in which the mitigation reaches the proposed "with mitigation" score. Please provide additional documentation to describe the time associated with the proposed functional gain, especially in areas where the ecology, including change in the floral and faunal composition, is projected to recover based on relatively minor changes in hydroperiod and/or hydropattern.	

	PROJECT COMPONENT: MISCELLANEOUS	
	COMPLETENESS DEFICIENCY DESCRIPTION	COMMENTS
36	Application does not provide information on demolition or renovation that may occur as part of this project. Applicant needs to provide statements to the effect that if there are any demolition activities &/or renovation of existing buildings, either on-site or off-site, all applicable asbestos notifications & surveys will be submitted.	Federal & State Asbestos Rules adopted by MDC.
37	Application mentions that open burning may occur during site preparation, but does not address requirements for open burning in Chapter 24, Miami-Dade Code. Applicant needs to provide information sufficient to determine whether open burning operations would be consistent with the requirements of Chapter 24.	
38	The application provided insufficient details related to the "General Purpose Diesel Engines" on what equipment the engines are to service or what fuel tanks and day tanks will be associated with the engines. The applicant needs to provide design and technical specifications on the various "General Purpose Diesel Engines" (similar to that provided on generators and fire pump engine) mentioned in the application.	Specifications for the generators & fire pump engines were clearly detailed in the SCA. However, regarding the general purpose diesel engines, no details were specified on equipment the engines are to service or what fuel tanks and day tanks will be associated with the engines. FDEP is the lead review agency on the Air Construction Permit Application & PSD Report.
39	The application does not provide information on how the proposed project will address the conditions of Zoning Resolutions #4-ZAB-559-71 and #CZAB15-11-99. Please provide this information.	
40	Please provide documentation that demonstrates that critical habitat for threatened and endangered species will not be degraded and/or destroyed, as required pursuant to the Miami-Dade County CDMP.	
41	Data indicate that migration of the cooling canal system water is impacting adjoining surface and groundwater in the vicinity of the cooling canal system. The SCA makes numerous references to discharges of various wastewater streams into the "industrial wastewater system", however, the application does not provide sufficient information to evaluate the impact of these discharges on water quality of adjacent surface and groundwater, including non G-III waters.	

PROJECT COMPONENT: MISCELLANEOUS		
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
42	The application does not provide sufficient information to determine whether all construction operations involving earthwork, including disposal, are limited to clean fill. Further, it is not clear that disposal of materials will meet the clean fill definition in Chapter 24 as required pursuant to Condition 14 of Z-56-07. Please provide the required information necessary to demonstrate consistency with Condition 14 of Z-56-07 and Chapter 24, Miami-Dade Code. This shall include, but not be limited to characterization of materials proposed for disposal to demonstrate that they are free of contaminants.	
43	The application does not provide the planting plan required under Condition 13 of Z-56-07 for material that will not be planted at the proposed plant site. Please provide a planting plan that meets the requirements of Condition 13 of Z-56-07, including but not limited to locations, timetables, numbers and species of trees, numbers and species of shrubs.	
44	Proposed Spoil Areas: Please submit the earthwork and materials disposal plan required under Condition 7 of Z-56-07. The plan should include, but not be limited to plans and sketches pertaining to the proposed Spoil Areas including elevation details and slope stabilization. The applicant should also provide the management plan for listed species required under Condition 2 of Z-56-07, which should include but not be limited to identifying the plans established to protect endangered or threatened species from impacts resulting from the proposed work.	
45	The application does not include the listed species management plan, as required under Condition 2 of Z-56-07. Please provide the required plan. Pursuant to Condition 2 of Z-56-07, the plan shall include but not be limited to identification, location, and description of features such as permanent physical barriers, visual buffers, and the establishment of development setbacks necessary to prevent both direct and indirect impacts to adjacent critical habitat and disruption of sensitive behaviors such as breeding, nesting and foraging within the adjacent critical habitat.	

	PROJECT COMPONENT: MISCELLANEOUS	
	COMPLETENESS DEFICIENCY DESCRIPTION	**COMMENTS**
46	The application states that muck removed from several construction sites will be stored in the spoil disposal site identified in Figure 5.1-1. It is not possible to determine from the information provided in the SCA whether the spoil disposal site meets the requirements of Chapter 24, Miami-Dade Code and the requirements of Condition 7 of Z-56-07. The applicant must provide the earthwork and spoil disposal plan required under Condition 7 of Z-56-07, which should include but not be limited to information on whether the disposal of spoil in the referenced location will be permanent or temporary, final slopes and elevations for the piles, what measures will be taken to address stormwater runoff from the spoil piles, characterization of the material including but not limited to contamination levels, potential impacts to threatened and endangered species including but not limited to potential impacts to critical habitat, and potential impacts to surrounding coastal wetlands.	
47	The application states that "FPL will prepare and submit an earthwork and materials disposal plan prior to the start of construction." It is not possible to evaluate whether the spoil disposal proposed in the application meets the requirements of Chapter 24 and Condition 7 of Z-56-07 without evaluating the earthwork and materials disposal plan required under Condition 7 of Z-56-07. The applicant must submit the required plan.	