Turkey Point
Units 6 & 7

SITE CERTIFICATION APPLICATION
AMENDMENT, REV. 1

0938-7652/230

MAY 2010

SITE CERTIFICATION APPLICATION
TURKEY POINT UNITS 6 & 7

VOLUME 1 of 6

AMENDMENT (REV. 1)

Submitted by:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

MAY 2010

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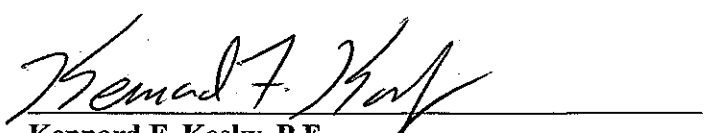
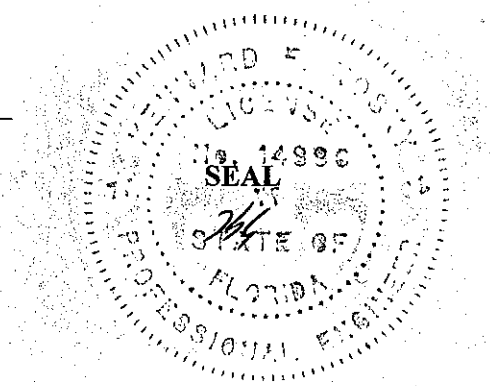
09387652/230





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SITE CERTIFICATION APPLICATION
TURKEY POINT UNITS 6 & 7

VOLUME 2 OF 6

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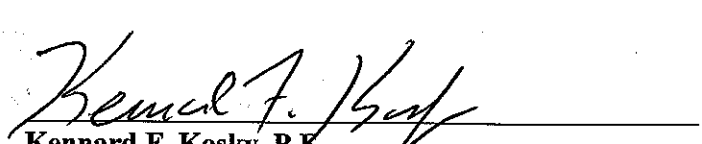

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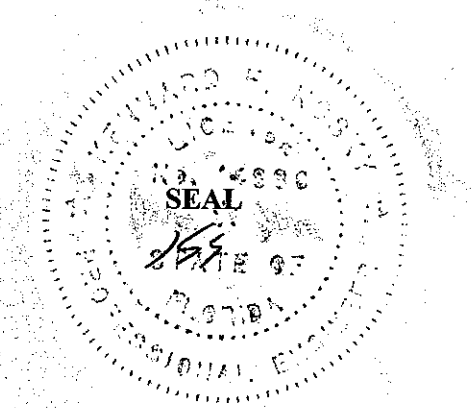

SITE CERTIFICATION APPLICATION
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VOLUME 3 of 6

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VOLUME 4 of 6

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VOLUME 5 of 6

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VOLUME 6 of 6

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LIST OF ABBREVIATIONS AND ACRONYMS

°C	degrees Celcius
°F	degrees Fahrenheit
µg/gdw	micrograms per dray weight
µg/m^3	micrograms per cubic meter
µm	micrometers
µPa	micropascal
AAQS	Ambient Air Quality Standards
ACC	Air cooled condensers
AEC	Atomic Energy Commission
AERMOD	American Meteorological Society and EPA Regulatory Model
ALS	Advanced Life Support
AM	amplitude-modulated
ANSI	American National Standards Institute
APE	Area of Potential Effect
AQRV	Air Quality Related Value
ASCE	American Society of Civil Engineers
ASR	Aquifer Storage and Recovery
ATP	adenosine triphosphate
AVID	American Veterinary Identification Devices
BACT	Best Available Control Technology
BBCW	Biscayne Bay Coastal Wetlands
BEA	Bureau of Economic Analysis
bgs	below ground surface
BLS	Basic Life Support
bls	below land surface
BMPs	Best Management Practices
BNP	Biscayne Bay Aquatic Preserve
BOR	Basis of Review
BPA	Bonneville Power Administration
C.I.E.	Commission Internationale de l'Eclairage, International Commission on Illumination
CAA	Clean Air Act
CadnaA	Computer Aided Noise Abatement
CALPUFF	California Puff

CATC	Clean Air Technology Center
CCC	Civilian Conservation Corps
cd	candela
cd/m^2	candela per square meter
CDMP	Comprehensive Development Master Plan
CDP	County Designated Place
CDP	Carbon Disclosure Project
CEC	cation exchange capacity
CERP	Comprehensive Everglades Restorations Plan
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGI	Clinton Global Initiative
CI ICE	Compression ignition internal combustion engines
CLG	Certified Local Government
CO	carbon monoxide
CO_2	carbon dioxide
Code	Miami-Dade County Land Development Code
COL	Construction and Operation License
CRA	Cultural Resource Assessment
CRAS	Cultural Resource Assessment Survey
CSFFCD	Central and Southern Florida Flood Control District
CT	combustion turbine
CTEMISS	Cooling Tower Emissions Processor
cu yd	cubic yard
CVCS	chemical and volume control system
CWA	Clean Water Act
CWFR	Maximum Circulating Water Flow Rate
CWG	Compatibility Working Group
CWS	circulating water system
DAW	Dry Active Waste
dB	decibel
dBµ	decibels relative to 1 microvolt
dBA	A-weighted decibel
DCD	Design Control Document

DEM	Digital Elevation Model
DERM	[Miami-Dade] Department of Environmental Resources Management
DHR	Division of Historical Resources
DMR	Discharge Monitoring Reports
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
DR	Drift Rate
DRIs	Developments of Regional Impact
DSM	Demand Site Management
EIS	Environmental Impact Statement
EM	Electromagnetic
EMB	Everglades Mitigation Bank
EMF	Electric and Magnetic Fields
EMI	Electromagnetic Interference
EMS	Emergency Medical Services
ENP	Everglades National Park
EPA	U.S. Environmental Protection Agency
ERP	Environmental Resource Permit
F.A.C.	Florida Administrative Code
F.S.	Florida Statutes
FAA	Federal Aviation Administration
FADS	Florida Acid Deposition Study
FAMS	Florida Atmospheric Mercury Study
FCC	Federal Communications Commission
FDACS	Florida Department of Agriculture and Consumer Services
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FFWCC	Florida Fish and Wildlife Conservation Commission
FGDL	Florida Geographic Data Library
FGS	Florida Geologic Survey
FIU	Florida International University
FLEPPC	Florida Exotic Plant Pest Council

FLMs	Federal Land Managers
FLUCFCS	Florida Land Use, Cover and Form Classification System
FLUMs	Future Land Use Maps
FM	Frequency-modulated
FMSF	Florida Master Site File
FNAI	Florida Natural Areas Inventory
FPL	Florida Power and Light Company
fps	feet per second
FPSC	Florida Public Service Commission
FR	Federal Register
FRP	fiberglass reinforced pipe
ft	foot/feet
ft/d	foot/feet per day
ft^2	square feet
ft^2/d	square feet per day
ft^3	cubic feet
g/bhp-hr	gram per brake horsepower-hour
$g/m^2/yr$	grams per square meter per year
GE	General Electric
GEP	Good Engineering Practice
GIS	geographic information system
gpd	gallons per day
gpd/ft	gallons per day per foot/feet
gph	gallons per hour
gpm	gallons per minute
GROCC	Global Roundtable on Climate Change
HAP	Hazardous Air Pollutant
HDD	horizontal directional drilling
HDPE	high-density polyethylene
HID	Hole in the Donut Mitigation Bank
hp	horsepower
hr/yr	hours per year
HRSG	heat recovery steam generator
HSH	highest, second-highest

Hz	hertz
ID	Interceptor Ditch
IESNA	Illuminating Engineering Society of North America
IGCC	integrated coal gasification combined cycle
ISCST	Industrial Source Complex Short-term
IWAQM	Interagency Workgroup on Air Quality Models
IWW	Industrial Wastewater
kcmil	thousand circular mil
kg	kilogram
kg/ha/month	kilograms per hectare/month
km	kilometer(s)
kV	kilovolt
kV/m	kilovolt per meter
kW	kilowatt
L/G	Liquid to Gas Ratio
L_{90}	SPL exceeded 90 percent of the time
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal unit
LDC	Land Development Code
LEED	Leadership in Energy and Environmental Design
L_{eq}	equivalent steady-state SPL
L_{max}	maximum SPL
L_{min}	minimum SPL
LOS	Level of Service
LUP	Land Use Plan
M.W.	Milky Way
m/s	meters per second
MACT	Maximum Available Control Technology
MASW	Multichannel analysis of surface waves
mag/arcsec^2	magnitude per square arcsecond
MCR	Maximum Current Rating
MDC	Miami-Dade County
MDCHPB	Miami-Dade County Historic Preservation Board
MDCT	mechanical draft cooling tower

MDFR	Miami-Dade Fire Rescue
MDPD	Miami-Dade County Police Department
MDWASD	Miami-Dade Water and Sewer Department
mG	milli-Gauss
mg/L	milligrams per liter
MGD	million gallons per day
MHz	megahertz
mi^2	square miles
MIA	Miami International Airport
MLW	Mean Low Water
Mm^{-1}	inverse megameters
MMBtu/hr	million British thermal units per hour
MOR	Monthly Operating Report
mph	miles per hour
MSDS	Material Safety Data Sheet
MW	megawatt
MWD/MTU	megawatt-days per metric ton of uranium
N_2H_4	Hydrazine
NAAQS	National Ambient Air Quality Standards
NACD	Native American Consultation Database
NAD83	North American Data 1983
NAICS	National American Industrial Classification System
NAVD88	North American Datum of 1988
NESC	National Electrical Safety Code
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFC	Natural Forest Community
NGCC	natural gas combined cycle
NGDC	National Geophysical Data Center
NH_4OH	Ammonium Hydroxide
NHPA	National Historic Preservation Act
NMHC	non-methane hydrocarbon
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
none	none are defined herein

NO_x	nitrogen oxides
NP	National Park
NPBAD	North Pinecrest Business Alternative District
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWA	National Wildlife Area
NWI	National Wetlands Inventory
NWS	National Weather Service
O_3	ozone
ODCM	Offsite Dose Calculation Manual
OSHA	Occupational Safety and Health Administration
Pb	lead
PET	Potential evapotranspiration
Plant Area	Turkey Point Plant Area
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic particle size of 10 µm or less
$PM_{2.5}$	particulate matter with an aerodynamic particle size of 2.5 µm or less
ppm	parts per million
ppmw	parts per million by weight
PPSA	Power Plant Siting Act
ppt	parts per thousand
PREP	Preparedness for Response Exercise Program
Project	Turkey Point Units 6 & 7 Project
PSC	Public Service Commission
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
PUDs	Planned Unit Developments
PVC	polyvinyl chloride
PWR	pressurized water reactor
QA/QC	quality assurance/ quality control
R	Risk

RARE	Roadless area and review evaluation
RBLC	RACT/BACT/LAER Clearinghouse
RI	Radio Interference
RICE	Reciprocating Internal Combustion Engine
RO	reverse osmosis
ROW	right of way
RPS	Renewable Portfolio Standard
RTS	radioactive tracer survey
RWTF	Reclaimed Water Treatment Facility
SAM	Sulfuric acid mist
SCA	Site Certification Application
SCRAM	Support Center for Regulatory Air Models
SD	Solution Drift
SDR	standard dimension ratio
SDWWTP	Miami-Dade South District Wastewater Treatment Plant
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Officer
Site	Turkey Point Units 6 & 7 Site
SMA	Square Mile Area
SO_2	sulfur dioxide
SO_4	primary sulfate
SOP	Standard Operating Procedures
SOR	Save Our Rivers
SPCC	Spill Prevention Control and Countermeasure
SPL	sound pressure level
SPT	Standard Penetration Test
SQG	Small Quantity Generator
SQM	[Unihedron's] Sky Quality Meter
SR	State Road
STAR	Stability Array
Stationary ICE	Stationary Compression Ignition Internal Combustion Engines
SUSF	State University System of Florida
SWCT	service water cooling tower

SWSCT	service water system cooling tower
TAC	Technical Advisory Committee
TDS	total dissolved solids
TIITF	Trustees of the Internal Improvement Trust Fund
TKN	total Kjeldahl and Nitrogen
TL	time lag
TLSA	Transmission Line Sitting Act
TPY	tons per year
TSP	Total suspended particulate matter
TSS	Total suspended solids
TTN	Technology Transfer Network
TVI	Television Interference
UFA	Upper Floridan Aquifer
UHF	Ultra-high Frequency
UIC	Underground Injection Control
UMAM	Uniform Mitigation Assessment Method
USACE	U.S. Army Corps of Engineers
USCAP	U.S. Climate Action Partnership
USDA	United States Department of Agriculture
USDI	US Department of Interior
USDW	underground sources of drinking water
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
VHF	Very-high Frequency
VMT	Vehicle Miles Travelled
VOC	volatile organic compound
W.A.T.E.R.	Wetland Assessment Technique for Environmental Review
WCA	Water Conservation Area
WCEC	West County Energy Center
WMA	Wildlife Management Area
WNA	World Nuclear Association
WPA	Works Progress Administration
XLPE	cross-linked polyethylene