

# 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**

**08387584**

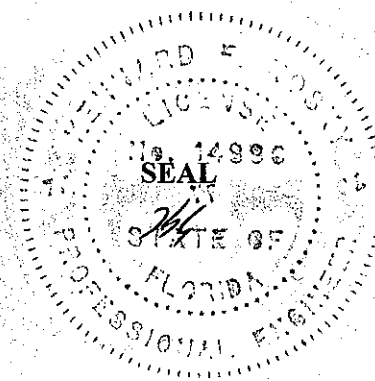
**09387652/230**



**Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996**

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



**SITE CERTIFICATION APPLICATION  
TURKEY POINT UNITS 6 & 7**

**VOLUME 2 OF 6**

**AMENDMENT (REV. 1)**

**Submitted by:**

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

**MAY 2010**

**08387584  
09387652/230**

  
Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



**SITE CERTIFICATION APPLICATION  
TURKEY POINT UNITS 6 & 7**

**VOLUME 3 of 6**

**AMENDMENT (REV. 1)**

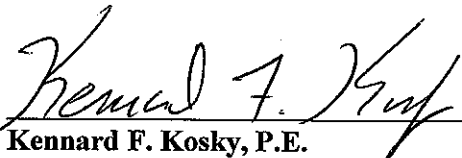
**Submitted by:**

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

**MAY 2010**

**08387584**

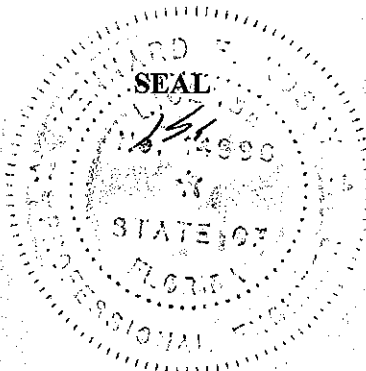
**09387652/230**



**Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996**

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



**SITE CERTIFICATION APPLICATION  
TURKEY POINT UNITS 6 & 7**

**VOLUME 4 of 6**

**AMENDMENT (REV. 1)**

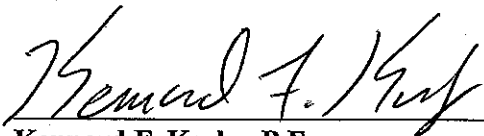
**Submitted by:**

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

**MAY 2010**

**08387584**

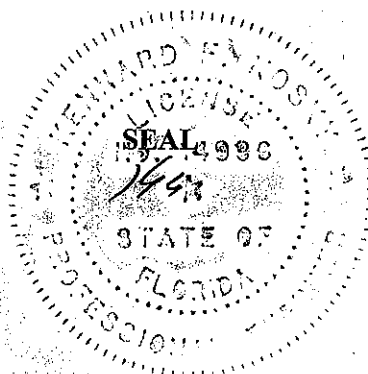
**09387652/230**



**Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996**

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



**SITE CERTIFICATION APPLICATION  
TURKEY POINT UNITS 6 & 7**

**VOLUME 5 of 6**

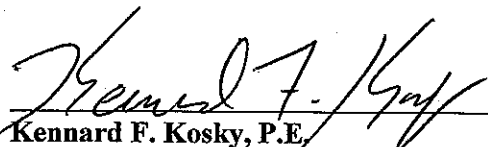
**AMENDMENT (REV. 1)**

**Submitted by:**

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

**MAY 2010**

**08387584  
09387652/230**

  
Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



**SITE CERTIFICATION APPLICATION  
TURKEY POINT UNITS 6 & 7**

**VOLUME 6 of 6**

**AMENDMENT (REV. 1)**

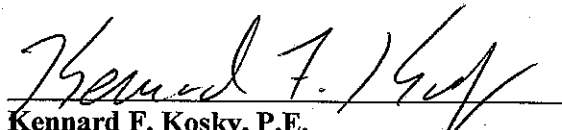
**Submitted by:**

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

**MAY 2010**

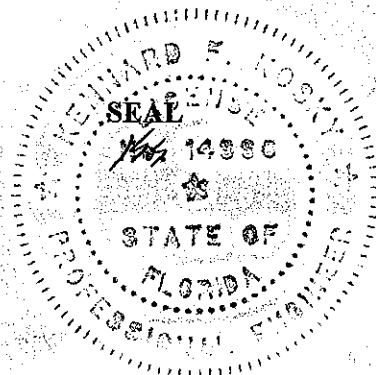
**08387584**

**09387652/230**

  
Kennard F. Kosky, P.E.  
Professional Registered Engineer No. 14996

**Golder Associates Inc.\*  
6026 NW 1<sup>st</sup> Place  
Gainesville, Florida 32607**

**\* Board of Professional Engineers  
Certificate of Authorization No. 00001670**



## TABLE OF CONTENTS

| <u>SECTION</u>                                                                               | <u>PAGE</u> |
|----------------------------------------------------------------------------------------------|-------------|
| <b>VOLUME I</b>                                                                              |             |
| 1.0 INTRODUCTION, GENERAL AND REQUIRED INFORMATION.....                                      | 1-1         |
| 1.1 Introduction.....                                                                        | 1-1         |
| 1.2 The Applicant.....                                                                       | 1-2         |
| 1.3 Information Requirements .....                                                           | 1-3         |
| 1.4 Overview of the Project .....                                                            | 1-4         |
| 1.5 Need for the Project .....                                                               | 1-7         |
| 1.6 Licensing and Permitting Process .....                                                   | 1-8         |
| 1.7 NRC Licensing Process .....                                                              | 1-8         |
| 1.8 Summary of Community Outreach Process .....                                              | 1-9         |
| 1.9 Glossary .....                                                                           | 1-11        |
| 2.0 NEED FOR THE PROPOSED FACILITY .....                                                     | 2-1         |
| 3.0 SITE AND VICINITY CHARACTERIZATION.....                                                  | 3-1         |
| 3.1 Site and Associated Facilities Delineation.....                                          | 3-1         |
| 3.1.1 Site Location.....                                                                     | 3-1         |
| 3.1.2 Associated Non-Linear Facilities.....                                                  | 3-1         |
| 3.1.3 Existing Turkey Point Plant Property Use <del>and FPL Owned Fill</del><br>Source ..... | 3-1         |
| 3.1.4 Adjacent Properties.....                                                               | 3-2         |
| 3.1.5 Proposed Uses within the Site .....                                                    | 3-3         |
| 3.1.6 100-Year Flood Zone.....                                                               | 3-3         |
| 3.2 Social and Political Environment.....                                                    | 3-3         |
| 3.2.1 Governmental Jurisdictions.....                                                        | 3-3         |
| 3.2.2 Zoning and Land Use Plans .....                                                        | 3-4         |
| 3.2.3 Demography and Ongoing Land Use.....                                                   | 3-5         |
| 3.2.4 Easements, Title, Agency Works .....                                                   | 3-6         |
| 3.2.5 Regional Scenic, Cultural and Natural Landmarks .....                                  | 3-6         |
| 3.2.6 Archaeological and Historical Sites .....                                              | 3-7         |
| 3.2.7 Socioeconomics and Public Services .....                                               | 3-8         |
| 3.3 Bio-Physical Environment .....                                                           | 3-13        |
| 3.3.1 Geohydrology.....                                                                      | 3-13        |
| 3.3.2 Subsurface Hydrology.....                                                              | 3-19        |
| 3.3.3 Site Water Budget and Area Users.....                                                  | 3-27        |

## TABLE OF CONTENTS (Cont'd)

|     |       |                                                    |      |
|-----|-------|----------------------------------------------------|------|
|     | 3.3.4 | Surficial Hydrology.....                           | 3-28 |
|     | 3.3.5 | Vegetation/Land Use.....                           | 3-31 |
|     | 3.3.6 | Ecology .....                                      | 3-34 |
|     | 3.3.7 | Meteorological and Ambient Air Quality .....       | 3-49 |
|     | 3.3.8 | Noise .....                                        | 3-55 |
|     | 3.3.9 | Lighting.....                                      | 3-59 |
| 4.0 |       | THE PLANT AND DIRECTLY ASSOCIATED FACILITIES ..... | 4-1  |
| 4.1 |       | Background .....                                   | 4-1  |
| 4.2 |       | Site Layout .....                                  | 4-2  |
| 4.3 |       | Fuel .....                                         | 4-4  |
| 4.4 |       | Air Emissions and Controls .....                   | 4-5  |
|     | 4.4.1 | Air Emission Units.....                            | 4-5  |
|     | 4.4.2 | Air Emission Controls.....                         | 4-8  |
|     | 4.4.3 | Control Technology .....                           | 4-9  |
|     | 4.4.4 | Design Philosophy .....                            | 4-10 |
| 4.5 |       | Plant Water Use .....                              | 4-10 |
|     | 4.5.1 | Heat Dissipation System .....                      | 4-11 |
|     | 4.5.2 | Domestic/Sanitary Wastewater .....                 | 4-16 |
|     | 4.5.3 | Potable Water Systems.....                         | 4-16 |
|     | 4.5.4 | Process Water Systems .....                        | 4-17 |
|     | 4.5.5 | Variances.....                                     | 4-18 |
| 4.6 |       | Chemical and Biocide Waste .....                   | 4-19 |
|     | 4.6.1 | Chemicals or Biocides.....                         | 4-19 |
|     | 4.6.2 | Liquid Effluents .....                             | 4-20 |
| 4.7 |       | Solid and Hazardous Waste .....                    | 4-21 |
|     | 4.7.1 | Solid Waste .....                                  | 4-22 |
|     | 4.7.2 | Hazardous Waste.....                               | 4-23 |
| 4.8 |       | On-Site Drainage System.....                       | 4-23 |
|     | 4.8.1 | Design Criteria and Applicable Regulations.....    | 4-23 |
|     | 4.8.2 | Construction Site Drainage .....                   | 4-23 |
|     | 4.8.3 | Operational Site Drainage .....                    | 4-25 |
| 4.9 |       | Heavy Equipment and Materials.....                 | 4-25 |
|     | 4.9.1 | Construction Materials and Equipment.....          | 4-25 |
|     | 4.9.2 | Roads.....                                         | 4-26 |

## TABLE OF CONTENTS (Cont'd)

|      |       |                                                                                                     |      |
|------|-------|-----------------------------------------------------------------------------------------------------|------|
|      | 4.9.3 | Rail.....                                                                                           | 4-27 |
|      | 4.9.4 | Barge .....                                                                                         | 4-27 |
| 4.10 |       | Associated Linear Facilities .....                                                                  | 4-28 |
| 4.11 |       | Emergency Disaster Preparedness Plans.....                                                          | 4-28 |
| 5.0  |       | ENVIRONMENTAL EFFECTS OF SITE PREPARATION AND PLANT AND<br>ASSOCIATED FACILITIES CONSTRUCTION ..... | 5-1  |
| 5.1  |       | Land Impacts .....                                                                                  | 5-1  |
|      | 5.1.1 | General Construction Impacts.....                                                                   | 5-1  |
|      | 5.1.2 | Roads.....                                                                                          | 5-7  |
|      | 5.1.3 | Flood Zones.....                                                                                    | 5-8  |
|      | 5.1.4 | Topography and Soils .....                                                                          | 5-8  |
| 5.2  |       | Impact on Surface Water Bodies and Uses .....                                                       | 5-9  |
|      | 5.2.1 | Impact Assessment.....                                                                              | 5-9  |
|      | 5.2.2 | Measuring and Monitoring Programs .....                                                             | 5-15 |
| 5.3  |       | Groundwater Impacts.....                                                                            | 5-15 |
|      | 5.3.1 | Impact Assessment.....                                                                              | 5-15 |
|      | 5.3.2 | Measuring and Monitoring Program.....                                                               | 5-18 |
| 5.4  |       | Ecological Impacts.....                                                                             | 5-18 |
|      | 5.4.1 | Impact Assessment.....                                                                              | 5-18 |
|      | 5.4.2 | Measuring and Monitoring Programs .....                                                             | 5-30 |
| 5.5  |       | Air Impacts .....                                                                                   | 5-30 |
|      | 5.5.1 | Air Emissions.....                                                                                  | 5-30 |
|      | 5.5.2 | Control Measures .....                                                                              | 5-34 |
| 5.6  |       | Solid Wastes .....                                                                                  | 5-34 |
| 5.7  |       | Impact on Human Populations.....                                                                    | 5-35 |
|      | 5.7.1 | Construction Workforce.....                                                                         | 5-35 |
|      | 5.7.2 | Transportation .....                                                                                | 5-36 |
|      | 5.7.3 | Housing and Education .....                                                                         | 5-41 |
|      | 5.7.4 | Noise .....                                                                                         | 5-42 |
| 5.8  |       | Impact on Landmarks and Sensitive Areas.....                                                        | 5-48 |
| 5.9  |       | Impact on Archaeological and Historic Sites.....                                                    | 5-49 |
| 5.10 |       | Special Features .....                                                                              | 5-49 |
| 5.11 |       | Benefits from Construction.....                                                                     | 5-49 |
| 5.12 |       | Variances.....                                                                                      | 5-50 |

## TABLE OF CONTENTS (Cont'd)

|       |                                                              |      |
|-------|--------------------------------------------------------------|------|
| 6.0   | EFFECTS OF PLANT OPERATION.....                              | 6-1  |
| 6.1   | Effects of the Operation of the Heat Dissipation System..... | 6-1  |
| 6.1.1 | Temperature Effect on Receiving Body of Water.....           | 6-1  |
| 6.1.2 | Effects on Aquatic Life .....                                | 6-2  |
| 6.1.3 | Biological Effects of Modified Circulation.....              | 6-2  |
| 6.1.4 | Effects of Off-Stream Cooling .....                          | 6-4  |
| 6.1.5 | Measurement Program .....                                    | 6-11 |
| 6.2   | Effects of Chemical and Biocide Discharges.....              | 6-11 |
| 6.2.1 | Industrial Wastewater Discharges.....                        | 6-11 |
| 6.2.2 | Deep Injection Wells Impact Analysis.....                    | 6-12 |
| 6.2.3 | Cooling Tower Blowdown.....                                  | 6-18 |
| 6.2.4 | Measurement Programs.....                                    | 6-18 |
| 6.3   | Impacts on Water Supplies.....                               | 6-19 |
| 6.3.1 | Surface Water.....                                           | 6-19 |
| 6.3.2 | Groundwater.....                                             | 6-20 |
| 6.3.3 | Drinking Water .....                                         | 6-20 |
| 6.3.4 | Leachate and Runoff .....                                    | 6-20 |
| 6.3.5 | Measurement Programs.....                                    | 6-21 |
| 6.4   | Solid/Hazardous Waste Disposal Impacts .....                 | 6-21 |
| 6.4.1 | Solid Waste .....                                            | 6-21 |
| 6.4.2 | Hazardous Wastes .....                                       | 6-22 |
| 6.5   | Sanitary and Other Waste Discharges.....                     | 6-22 |
| 6.6   | Air Quality Impacts.....                                     | 6-22 |
| 6.6.1 | Impact Assessment.....                                       | 6-22 |
| 6.6.2 | Monitoring Programs .....                                    | 6-25 |
| 6.7   | Noise .....                                                  | 6-25 |
| 6.8   | Changes to Non-Aquatic Species Populations .....             | 6-30 |
| 6.8.1 | Impacts.....                                                 | 6-30 |
| 6.8.2 | Monitoring .....                                             | 6-31 |
| 6.9   | Other Plant Operations Effects.....                          | 6-31 |
| 6.9.1 | Operational Traffic.....                                     | 6-31 |
| 6.9.2 | Lighting.....                                                | 6-34 |
| 6.10  | Archaeological Sites .....                                   | 6-35 |

## TABLE OF CONTENTS (Cont'd)

|        |                                                                             |        |
|--------|-----------------------------------------------------------------------------|--------|
| 6.11   | Resources Committed .....                                                   | 6-36   |
| 6.11.1 | Land Use .....                                                              | 6-36   |
| 6.11.2 | Water Use.....                                                              | 6-36   |
| 6.11.3 | Ecology (Terrestrial and Aquatic).....                                      | 6-36   |
| 6.11.4 | Air Quality .....                                                           | 6-37   |
| 6.11.5 | Material Resources.....                                                     | 6-37   |
| 7.0    | ECONOMIC AND SOCIAL EFFECTS OF PLANT CONSTRUCTION AND OPERATION .....       | 7-1    |
| 7.1    | Economic and Social Benefits .....                                          | 7-1    |
| 7.1.1  | Direct Economic and Social Benefits .....                                   | 7-1    |
| 7.1.2  | Indirect Economic Benefits.....                                             | 7-3    |
| 7.1.3  | Net Fiscal Benefits .....                                                   | 7-3    |
| 7.1.4  | Overall Economic Benefits .....                                             | 7-4    |
| 7.1.5  | Environmental Benefits.....                                                 | 7-4    |
| 7.2    | Economic and Social Costs.....                                              | 7-6    |
| 7.2.1  | Temporary External Costs.....                                               | 7-6    |
| 7.2.2  | Long-Term External Costs.....                                               | 7-7    |
| 8.0    | SITE AND DESIGN ALTERNATIVES .....                                          | 8-1    |
| 9.0    | INTRODUCTION TO ASSOCIATED LINEAR FACILITIES.....                           | 9-1    |
| W9.0   | WEST CORRIDORS .....                                                        | W9-1   |
| W9.1   | Maps.....                                                                   | W9-1   |
| W9.2   | Project Description: West Corridors .....                                   | W9-1   |
| W9.3   | Corridor.....                                                               | W9-12  |
| W9.3.1 | Corridor Selection.....                                                     | W9-28  |
| W9.3.2 | West Preferred Corridor Description .....                                   | W9-39  |
| W9.3.3 | West Alternate Corridors .....                                              | W9-46  |
| W9.3.4 | Transmission Line Access Roads.....                                         | W9-48  |
| W9.3.5 | Cost Projections .....                                                      | W9-50  |
| W9.3.6 | Social and Political Environment of the Corridor Area .....                 | W9-50  |
| W9.3.7 | Biological and Physical Environment of the Corridor Area .....              | W9-66  |
| W9.4   | Effects of Right-of-Way Preparation and Transmission Line Construction .... | W9-98  |
| W9.4.1 | Construction Techniques.....                                                | W9-98  |
| W9.4.2 | Environmental Resource Permit (ERP).....                                    | W9-111 |
| W9.4.3 | Solid Wastes.....                                                           | W9-111 |

## TABLE OF CONTENTS (Cont'd)

|        |                                                                 |        |
|--------|-----------------------------------------------------------------|--------|
| W9.4.4 | Changes to Vegetation, Wildlife, and Aquatic Life .....         | W9-111 |
| W9.4.5 | Impact on Human Populations .....                               | W9-115 |
| W9.4.6 | Impact on Regional Scenic, Cultural, and Natural Landmarks .... | W9-118 |
| W9.4.7 | Impact on Archaeological and Historic Sites .....               | W9-118 |
| W9.5   | Postconstruction Impacts and Effects of Maintenance .....       | W9-119 |
| W9.5.1 | Maintenance Techniques .....                                    | W9-119 |
| W9.5.2 | Multiple Uses .....                                             | W9-121 |
| W9.5.3 | Changes in Species Populations .....                            | W9-121 |
| W9.5.4 | Effects of Public Access .....                                  | W9-122 |
| W9.5.5 | Other Postconstruction Effects .....                            | W9-123 |

## VOLUME II

|        |                                                                            |        |
|--------|----------------------------------------------------------------------------|--------|
| E9.0   | EAST CORRIDOR .....                                                        | E9-1   |
| E9.1   | Maps .....                                                                 | E9-1   |
| E9.2   | Project Description: East Corridor .....                                   | E9-1   |
| E9.3   | Corridor .....                                                             | E9-12  |
| E9.3.1 | Corridor Selection .....                                                   | E9-12  |
| E9.3.2 | East Preferred Corridor Description .....                                  | E9-34  |
| E9.3.3 | East Alternate Corridors .....                                             | E9-41  |
| E9.3.4 | Transmission Line Access Roads .....                                       | E9-41  |
| E9.3.5 | Cost Projections .....                                                     | E9-42  |
| E9.3.6 | Social and Political Environment of the Corridor Area .....                | E9-44  |
| E9.3.7 | Biological and Physical Environment of the Corridor Area .....             | E9-76  |
| E9.4   | Effects of Right-of-Way Preparation and Transmission Line Construction ... | E9-104 |
| E9.4.1 | Construction Techniques .....                                              | E9-104 |
| E9.4.2 | Environmental Resource Permit (ERP) .....                                  | E9-114 |
| E9.4.3 | Solid Wastes .....                                                         | E9-114 |
| E9.4.4 | Changes to Vegetation, Wildlife, and Aquatic Life .....                    | E9-115 |
| E9.4.5 | Impact on Human Populations .....                                          | E9-118 |
| E9.4.6 | Impact on Regional Scenic, Cultural, and Natural Landmarks ....            | E9-121 |
| E9.4.7 | Impact on Archaeological and Historic Sites .....                          | E9-121 |
| E9.5   | Postconstruction Impacts and Effects of Maintenance .....                  | E9-122 |
| E9.5.1 | Maintenance Techniques .....                                               | E9-122 |
| E9.5.2 | Multiple Uses .....                                                        | E9-123 |

## TABLE OF CONTENTS (Cont'd)

|      |                                                             |                                                                  |        |
|------|-------------------------------------------------------------|------------------------------------------------------------------|--------|
|      | E9.5.3                                                      | Changes in Species Populations.....                              | E9-124 |
|      | E9.5.4                                                      | Effects of Public Access.....                                    | E9-125 |
|      | E9.5.5                                                      | Other Postconstruction Effects.....                              | E9-125 |
| P9.0 | RECLAIMED WATER PIPELINES .....                             |                                                                  | P9-1   |
| P9.1 | Maps.....                                                   |                                                                  | P9-1   |
| P9.2 | Project Description.....                                    |                                                                  | P9-1   |
| P9.3 | Corridor.....                                               |                                                                  | P9-2   |
|      | P9.3.1                                                      | Corridor Selection .....                                         | P9-2   |
|      | P9.3.2                                                      | Corridor Description .....                                       | P9-2   |
|      | P9.3.3                                                      | Alternate Corridors.....                                         | P9-3   |
|      | P9.3.4                                                      | Access Roads .....                                               | P9-3   |
|      | P9.3.5                                                      | Cost Projections .....                                           | P9-3   |
|      | P9.3.6                                                      | Social and Political Environment of the Corridor Area .....      | P9-4   |
|      | P9.3.7                                                      | Biological and Physical Environment of the Corridor Area .....   | P9-7   |
| P9.4 | Effects of Rights-of-Way Preparation and Construction ..... |                                                                  | P9-15  |
|      | P9.4.1                                                      | Construction Techniques.....                                     | P9-15  |
|      | P9.4.2                                                      | Environmental Resource Permit (ERP).....                         | P9-16  |
|      | P9.4.3                                                      | Solid Wastes.....                                                | P9-17  |
|      | P9.4.4                                                      | Changes to Vegetation, Wildlife, and Aquatic Life .....          | P9-17  |
|      | P9.4.5                                                      | Impacts to Human Populations .....                               | P9-18  |
|      | P9.4.6                                                      | Impact on Regional Scenic, Cultural, and Natural Landmarks ..... | P9-18  |
|      | P9.4.7                                                      | Impact on Archaeological and Historical Sites.....               | P9-18  |
| P9.5 | Postconstruction Impacts and Effects of Maintenance .....   |                                                                  | P9-19  |
|      | P9.5.1                                                      | Maintenance Techniques.....                                      | P9-19  |
|      | P9.5.2                                                      | Multiple Uses .....                                              | P9-19  |
|      | P9.5.3                                                      | Changes in Species Populations.....                              | P9-19  |
|      | P9.5.4                                                      | Effects of Public Access.....                                    | P9-19  |
|      | P9.5.5                                                      | Other Postconstruction Effects.....                              | P9-20  |
| R9.0 | ROADWAY IMPROVEMENTS.....                                   |                                                                  | R9-1   |
| R9.1 | Maps.....                                                   |                                                                  | R9-1   |
| R9.2 | Project Description.....                                    |                                                                  | R9-1   |
| R9.3 | Corridors .....                                             |                                                                  | R9-3   |
|      | R9.3.1                                                      | Corridor Selection .....                                         | R9-3   |
|      | R9.3.2                                                      | Corridor Descriptions.....                                       | R9-3   |

## TABLE OF CONTENTS (Cont'd)

|      |        |                                                                   |       |
|------|--------|-------------------------------------------------------------------|-------|
|      | R9.3.3 | Alternate Corridors.....                                          | R9-5  |
|      | R9.3.4 | Access Roads .....                                                | R9-5  |
|      | R9.3.5 | Cost Projections .....                                            | R9-5  |
|      | R9.3.6 | Social and Political Environment of the Corridor Areas.....       | R9-5  |
|      | R9.3.7 | Biological and Physical Environment of the Roadway Corridor ..... | R9-8  |
| R9.4 |        | Effects of Rights-of-Way Preparation and Construction .....       | R9-15 |
|      | R9.4.1 | Construction Techniques.....                                      | R9-15 |
|      | R9.4.2 | Environmental Resource Permit (ERP).....                          | R9-16 |
|      | R9.4.3 | Solid Wastes.....                                                 | R9-16 |
|      | R9.4.4 | Changes to Vegetation, Wildlife, and Aquatic Life .....           | R9-17 |
|      | R9.4.5 | Impacts to Human Populations .....                                | R9-18 |
|      | R9.4.6 | Impact on Regional Scenic, Cultural, and Natural Landmarks .....  | R9-18 |
|      | R9.4.7 | Impact of Archaeological and Historical Sites.....                | R9-18 |
| R9.5 |        | Postconstruction Impacts and Effects of Maintenance .....         | R9-19 |
|      | R9.5.1 | Maintenance Techniques.....                                       | R9-19 |
|      | R9.5.2 | Multiple Uses .....                                               | R9-19 |
|      | R9.5.3 | Changes in Species Populations.....                               | R9-19 |
|      | R9.5.4 | Effects of Public Access.....                                     | R9-19 |
|      | R9.5.5 | Other Postconstruction Effects.....                               | R9-19 |
| D9.0 |        | POTABLE WATER PIPELINES .....                                     | D9-1  |
| D9.1 |        | Maps.....                                                         | D9-1  |
| D9.2 |        | Project Description.....                                          | D9-1  |
| D9.3 |        | Corridor .....                                                    | D9-2  |
|      | D9.3.1 | Corridor Selection .....                                          | D9-2  |
|      | D9.3.2 | Corridor Description .....                                        | D9-2  |
|      | D9.3.3 | Alternate Corridors.....                                          | D9-2  |
|      | D9.3.4 | Access Roads .....                                                | D9-3  |
|      | D9.3.5 | Cost Projections .....                                            | D9-3  |
|      | D9.3.6 | Social and Political Environment of the Corridor Area .....       | D9-3  |
|      | D9.3.7 | Biological and Physical Environment of the Corridor Area .....    | D9-7  |
| D9.4 |        | Effects of Rights-of-Way Preparation and Construction .....       | D9-15 |
|      | D9.4.1 | Construction Techniques.....                                      | D9-15 |
|      | D9.4.2 | Environmental Resource Permit (ERP).....                          | D9-16 |
|      | D9.4.3 | Solid Wastes.....                                                 | D9-16 |

## TABLE OF CONTENTS (Cont'd)

|                 |                                                                  |       |
|-----------------|------------------------------------------------------------------|-------|
| D9.4.4          | Changes to Vegetation, Wildlife, and Aquatic Life .....          | D9-16 |
| D9.4.5          | Impacts to Human Populations .....                               | D9-17 |
| D9.4.6          | Impact on Regional Scenic, Cultural, and Natural Landmarks ..... | D9-17 |
| D9.4.7          | Impact of Archaeological and Historical Sites.....               | D9-18 |
| D9.5            | Postconstruction Impacts and Effects of Maintenance .....        | D9-18 |
| D9.5.1          | Maintenance Techniques.....                                      | D9-18 |
| D9.5.2          | Multiple Uses .....                                              | D9-18 |
| D9.5.3          | Changes in Species Populations.....                              | D9-18 |
| D9.5.4          | Effects of Public Access.....                                    | D9-18 |
| D9.5.5          | Other Postconstruction Effects.....                              | D9-18 |
| REFERENCES..... |                                                                  | REF-1 |

## VOLUME III

|      |                                          |
|------|------------------------------------------|
| 10.0 | APPENDICES                               |
| 10.1 | COORDINATION                             |
| 10.2 | FEDERAL PERMIT APPLICATIONS OR APPROVALS |
| 10.3 | ZONING DESCRIPTIONS                      |
| 10.4 | ENVIRONMENTAL RESOURCES PERMIT           |

## VOLUME IV

|      |                                            |
|------|--------------------------------------------|
| 10.4 | ENVIRONMENTAL RESOURCES PERMIT (CONTINUED) |
|------|--------------------------------------------|

## VOLUME V

|      |                                            |
|------|--------------------------------------------|
| 10.4 | ENVIRONMENTAL RESOURCES PERMIT (CONTINUED) |
|------|--------------------------------------------|

## VOLUME VI

|       |                                                                |
|-------|----------------------------------------------------------------|
| 10.5  | LAND USE PLAN DESCRIPTIONS                                     |
| 10.6  | EXISTING STATE PERMITS                                         |
| 10.7  | MONITORING PROGRAMS                                            |
| 10.8  | STORMWATER MANAGEMENT PLAN AND GROUNDWATER CALCULATIONS        |
| 10.9  | WATER SUPPLY ALTERNATIVES ANALYSIS AND WATER CONSERVATION PLAN |
| 10.10 | CLIMATE CHANGE AND FPL'S GREENHOUSE GAS STRATEGY               |

## TABLE OF CONTENTS

### (Cont'd)

#### LIST OF TABLES

|               |                                                                                                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table 3.2.7-1 | Employment Trends by Industry for State of Florida and Miami-Dade County                                                                                                                                          |
| Table 3.2.8-1 | Traffic Reserve Capacity for Roads in the Vicinity of the Turkey Point Plant                                                                                                                                      |
| Table 3.3.1-1 | Average Grain Size of the Lithology at the Turkey Point Units 6 & 7 Site                                                                                                                                          |
| Table 3.3.1-2 | Representative Hydrogeologic Properties in Miami-Dade County                                                                                                                                                      |
| Table 3.3.3-1 | Monthly and Annual Average Temperatures Measured at Miami International Airport                                                                                                                                   |
| Table 3.3.3-2 | Monthly and Annual Average Precipitation and Relative Humidity Measured at Miami International Airport                                                                                                            |
| Table 3.3.3-3 | South Florida Water Management District Water Use Permits within 5-Mile Radius of Site                                                                                                                            |
| Table 3.3.4-1 | Biscayne Bay Water Quality                                                                                                                                                                                        |
| Table 3.3.4-2 | Water Quality Data for the Turkey Point Industrial Wastewater Facility                                                                                                                                            |
| Table 3.3.6-1 | Species Observed During Turkey Point Units 6 & 7 Wildlife Surveys (November 2007, June 2008, April 2009)                                                                                                          |
| Table 3.3.6-2 | Threatened, Endangered, and Species of Special Concern Known to Occur in Miami-Dade County, Florida                                                                                                               |
| Table 3.3.6-3 | Furbearer and Game Species Reasonably Expected to Occur in Miami-Dade County, Florida                                                                                                                             |
| Table 3.3.7-1 | Seasonal and Annual Average Wind Speeds at Miami International Airport                                                                                                                                            |
| Table 3.3.7-2 | Seasonal and Annual Average Atmospheric Stability Classes at Miami International Airport                                                                                                                          |
| Table 3.3.7-3 | Seasonal and Annual Average Morning and Afternoon Mixing Heights at Miami International Airport                                                                                                                   |
| Table 3.3.7-4 | National and State AAQS, Allowable PSD Increments and Significant Impact Levels                                                                                                                                   |
| Table 3.3.7-5 | Summary of Maximum Measured SO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub> , NO <sub>2</sub> , and CO Concentrations Observed from Representative Monitoring Stations, 2005 through 2007 |
| Table 3.3.8-1 | Baseline Ambient Noise Level Data Obtained in 2008 for the FPL Turkey Point Units 6 & 7                                                                                                                           |
| Table 3.3.9-1 | Examples of Typical Illuminance                                                                                                                                                                                   |
| Table 3.3.9-2 | Baseline Illuminance in the Vicinity of the FPL Turkey Point Plant, June 2008                                                                                                                                     |
| Table 3.3.9-3 | Baseline Illuminance in the Vicinity of the FPL Turkey Point Plant, July 2008                                                                                                                                     |
| Table 3.3.9-4 | Baseline Illuminance in the Vicinity of the FPL Turkey Point Plant, August 2008                                                                                                                                   |
| Table 4.4-1   | Estimated Physical, Performance, and Emissions Data for the Circulating Water Cooling Towers for Turkey Point Units 6 & 7                                                                                         |

## TABLE OF CONTENTS (Cont'd)

|               |                                                                                                                                                         |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table 4.4-2   | Estimated Physical, Performance, and Emissions Data for the Service Water System Cooling Towers for Turkey Point Units 6 & 7                            |
| Table 4.4-3   | Estimated Performance and Emission Data for Diesel Generators and General Purpose Diesel Engines Associated with Turkey Point Units 6 & 7 Project       |
| Table 4.4-4   | Maximum Potential Annual Emissions Associated with Turkey Point Units 6 & 7                                                                             |
| Table 4.5-1   | Plant Water Use 100% Reclaimed Water                                                                                                                    |
| Table 4.5-2   | Plant Water Use 100% Saltwater                                                                                                                          |
| Table 4.5-3   | Water Quality Data for Sources of Cooling Water                                                                                                         |
| Table 4.6-1   | Unit 6 & 7 Wastestreams, Characterization and Disposal Method                                                                                           |
| Table 4.6-2   | Reclaimed Water Estimated Constituents and Concentrations Discharged to Injection Wells                                                                 |
| Table 4.6-3   | Saltwater Estimated Constituents and Concentrations Discharged to Injection Wells                                                                       |
| Table 4.6-4   | Examples of Chemicals Added to Liquid Effluent Streams                                                                                                  |
| Table 4.7-1   | FPL General Waste Handling Guidelines                                                                                                                   |
| Table 5.4-1   | UMAM Functional Assessment Summary                                                                                                                      |
| Table 5.4-2   | W.A.T.E.R. Functional Assessment Summary                                                                                                                |
| Table 5.5.1-1 | Estimated Air Emissions During Site Preparation and Construction of Turkey Point Units 6 & 7                                                            |
| Table 5.7.1-1 | Anticipated Labor Category of Construction Workforce                                                                                                    |
| Table 5.7.2-1 | Traffic Generation Future Conditions (During Peak Construction Period of Turkey Point Units 6 & 7 Project)                                              |
| Table 5.7.2-2 | Intersection Analysis - Future Conditions - Level of Service (During Peak Construction Period of Turkey Point Units 6 & 7 Project)                      |
| Table 5.7.4-1 | Sound Power Levels for Noise Sources Associated with Site Preparation Turkey Point Units 6 & 7                                                          |
| Table 5.7.4-2 | Sound Power Levels for Noise Sources Associated With Construction of Permanent Features for Turkey Point Units 6 & 7                                    |
| Table 5.7.4-3 | Predicted Sound Pressure Levels (SPLs) for Site Preparation and Background SPLs from Monitoring for Turkey Point Units 6 & 7                            |
| Table 5.7.4-4 | Predicted Sound Pressure Levels (SPLs) for Site Preparation Including Background SPLs and Predicted SPLs for Turkey Point Units 6 & 7                   |
| Table 5.7.4-5 | Predicted Sound Pressure Levels (SPLs) for Construction of Permanent Features and Background SPLs from Monitoring at Turkey Point Units 6 & 7           |
| Table 5.7.4-6 | Predicted Sound Pressure Levels (SPLs) for Construction of Permanent Features Including Background SPLs and Predicted SPLs for Turkey Point Units 6 & 7 |

## TABLE OF CONTENTS (Cont'd)

|                |                                                                                                                                                                                    |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table 6.1.4-1  | Predicted Visible Water Vapor Plume Height and Length for Units 6 & 7 Circulating Water Cooling Towers                                                                             |
| Table 6.1.4-2  | Estimated Drift Emission Spectrum for Turkey Point Units 6 & 7 Circulating Water Cooling Towers                                                                                    |
| Table 6.1.4-3  | Monthly Mineral Circulating Water Deposition Predicted for Turkey Point Units 6 & 7 Cooling Towers                                                                                 |
| Table 6.6.1-1  | Maximum Predicted Concentrations of Turkey Point Units 6 & 7 Project Compared to AAQS, PSD Class II Increments, and PSD Class II Significant Impact Levels                         |
| Table 6.6.1-2  | Maximum Predicted Concentrations of Turkey Point Units 6 & 7 Project Compared to PSD Increments in Significant Impact Levels in ENP                                                |
| Table 6.7.0-1  | Sound Power Levels for Noise Sources Associated with Turkey Point Units 6 & 7                                                                                                      |
| Table 6.7.0-2  | Predicted Sound Pressure Levels (SPLs) for the Operation of Units 6 & 7 and Observed Background SPLs                                                                               |
| Table 6.7.0-3  | Predicted Sound Pressure Levels for the Operation of Units 6 & 7 Combined with Observed Background SPLs and Predicted Difference                                                   |
| Table 7.1.1-1  | Construction Workers Anticipated Over 10-year Period (by Category)                                                                                                                 |
| Table W9.3.1-1 | Study Area Resources Mapped                                                                                                                                                        |
| Table W9.3.1-2 | Alternative Route Identification Guidelines                                                                                                                                        |
| Table W9.3.1-3 | Alternative Route Quantitative Evaluation Criteria—West Routes                                                                                                                     |
| Table W9.3.1-4 | Alternative Route Qualitative Evaluation Criteria—West Routes                                                                                                                      |
| Table W9.3.6-1 | Governmental Jurisdictions within 0.5 Mile of the West Preferred/Secondary Corridors                                                                                               |
| Table W9.3.6-2 | Easements, Title, or Agency Works or Crossings Potentially Required for the West Preferred, West Secondary, or Access Corridors                                                    |
| Table W9.3.6-3 | Cultural Resources within or Adjacent to the West Preferred/Secondary Corridors                                                                                                    |
| Table W9.3.7-1 | Land Use and Vegetation Classifications Occurring Within the West Preferred/Secondary Corridors                                                                                    |
| Table W9.3.7-2 | Water Bodies Crossed by the West Preferred Corridor between Clear Sky and Levee Substations                                                                                        |
| Table W9.3.7-3 | Water Bodies Crossed by the West Secondary Corridor                                                                                                                                |
| Table W9.3.7-4 | Water Bodies Crossed by the West Preferred Corridor between Levee and Pennsuco Substations                                                                                         |
| Table W9.3.7-5 | Comprehensive List of Rare, Threatened, or Endangered Plant Taxa Found in Miami-Dade County and their Potential to Occur Within 1,500 ft of the West Preferred/Secondary Corridors |

## TABLE OF CONTENTS (Cont'd)

|                |                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table W9.3.7-6 | State or Federally Listed Wildlife Species Potentially Occurring within the West Corridors                                                                              |
| Table W9.5.5-1 | Maximum EMF Capable of Being Produced by the Transmission Lines for the West Preferred/Secondary Corridors                                                              |
| Table W9.5.5-2 | Calculated Maximum L50 Audible Noise Levels at Edge of Right-of-Way for 14 Representative Cross-Sections Modeled along the West Preferred/Secondary Corridors           |
| Table W9.5.5-3 | Distance from Edge of Right-of-Way Where RI Is possible—Fair Weather*                                                                                                   |
| Table W9.5.5-4 | Distance from Edge of Right-of-Way Where RI Is possible—Rainy Weather*                                                                                                  |
| Table W9.5.5-5 | Distances from Edge of Right-of-Way Where TVI Is Possible*                                                                                                              |
| Table E9.3.1-1 | Study Area Resources Mapped                                                                                                                                             |
| Table E9.3.1-2 | Alternative Route Identification Guidelines                                                                                                                             |
| Table E9.3.1-3 | Alternative Route Quantitative Evaluation Criteria—East Routes                                                                                                          |
| Table E9.3.1-4 | Qualitative Criteria Used to Evaluate Alternative Routes                                                                                                                |
| Table E9.3.6-1 | Governmental Jurisdictions within 0.5 Mile of the East Preferred Corridor                                                                                               |
| Table E9.3.6-2 | Easements, Title, Agency Works, or Crossings Potentially Required for the East Preferred Corridor                                                                       |
| Table E9.3.6-3 | Scenic, Cultural, and Natural Landmarks in the Vicinity of the East Preferred Corridor                                                                                  |
| Table E9.3.6-4 | Cultural Resources Within or Adjacent to the East Preferred Corridor                                                                                                    |
| Table E9.3.7-1 | Land Use and Vegetation Classifications Occurring within East Preferred Corridor                                                                                        |
| Table E9.3.7-2 | Water Bodies Crossed by the East Preferred Corridor Between Clear Sky and Davis Substations                                                                             |
| Table E9.3.7-3 | Water Bodies Crossed by the East Preferred Corridor between Davis and Miami Substations                                                                                 |
| Table E9.3.7-4 | Comprehensive List of Rare, Threatened, or Endangered Plant Taxa Found in Miami-Dade County and their Potential to Occur within 1,500 ft of the East Preferred Corridor |
| Table E9.3.7-5 | State or Federally Listed Wildlife Species Potentially Occurring within the East Preferred Corridor                                                                     |
| Table E9.5.5-1 | Maximum EMF Capable of Being Produced by the Transmission Lines for the East Preferred Corridor                                                                         |
| Table E9.5.5-2 | Calculated Maximum L50 Audible Noise Levels at the Edge of Right-of-Way for 12 Representative Cross-Sections Modeled along the East Preferred Corridor                  |
| Table E9.5.5-3 | Distance from Edge of Right-of-Way Where RI Is possible—Fair Weather*                                                                                                   |
| Table E9.5.5-4 | Distance from Edge of Right-of-Way Where RI Is Possible—Rainy Weather*                                                                                                  |

**TABLE OF CONTENTS**  
**(Cont'd)**

|                  |                                                                                                                                                                        |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Table E9.5.5-5   | Distances from edge of Right-of-Way Where TVI is Possible*                                                                                                             |
| Table P9.3.7-1   | Threatened, Endangered, and Species of Special Concern Known to Occur in Miami-Dade County, FL, and Probability of Occurrence within Reclaimed Water Pipeline Corridor |
| Table P9.3.7.4-1 | Summary of Surface Water Detections – Station BL03, C-1 Black Creek, Biscayne Bay, Miami-Dade County, Florida                                                          |
| Table P9.3.7.4-2 | Summary of Surface Water Detections – Station PR03, C-102 Basin, Biscayne Bay, Miami-Dade County, Florida                                                              |
| Table P9.3.7.4-3 | Summary of Surface Water Detections – Station PR04A, C-102 Basin, Biscayne Bay, Miami-Dade County, Florida                                                             |
| Table P9.3.7.4-4 | Summary of Surface Water Detections – Station MW-4, C-103 Basin, Biscayne Bay, Miami-Dade County, Florida                                                              |
| Table P9.3.7.4-5 | Summary of Surface Water Detections – Station NO03, North Basin, Biscayne Bay, Miami-Dade County, Florida                                                              |
| Table P9.3.7.4-6 | Summary of Surface Water Detections – Station NO07, North Basin, Biscayne Bay, Miami-Dade County, Florida                                                              |
| Table R9.3.7-1   | Threatened, Endangered, and Species of Special Concern Known to Occur in Miami-Dade County, FL, and Probability of Occurrence in the Vicinity of the Roadway Corridors |

## TABLE OF CONTENTS (Cont'd)

### LIST OF FIGURES

|                           |                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|
| Figure 1.1-1              | Location of the Turkey Point Plant                                                                         |
| Figure 1.1-2              | Conceptual Illustration of Units 6 & 7 Site                                                                |
| Figure 1.2-1              | FPL Service Territory                                                                                      |
| Figure 1.4-1              | Site and Associated Non-Linear Facilities on Turkey Point Plant Property                                   |
| <del>Figure 1.4-2</del>   | <del>Associated Linear Facilities – FPL Owned Fill Source</del>                                            |
| Figure 1.4-3              | Associated Linear Facilities – Transmission                                                                |
| Figure 1.4-4              | Associated Linear Facilities – Reclaimed Water Pipelines, Roadway Improvements and Potable Water Pipelines |
| Figure 3.1.1-1            | Location Map                                                                                               |
| Figure 3.1.1-2            | Site to be Certified and Plant Area                                                                        |
| Figure 3.1.2-1            | Associated Non-Linear Facilities                                                                           |
| Figure 3.1.3-1            | Existing and Proposed Uses – FPL Plant Property                                                            |
| Figure 3.1.3-2            | Certified Sites                                                                                            |
| <del>Figure 3.1.3-3</del> | <del>Existing and Proposed Uses – FPL Owned Fill Source</del>                                              |
| Figure 3.1.5-1            | Plot Plan                                                                                                  |
| Figure 3.1.6-1            | 100-Year Flood Zone                                                                                        |
| Figure 3.2.1-1            | Governmental Jurisdictions; 1, 2, 3, 4, and 5-Mile Radius from Plant Area                                  |
| Figure 3.2.1-2            | Governmental Jurisdictions; 1-Mile Radius from from Plant Area                                             |
| <del>Figure 3.2.1-3</del> | <del>Governmental Jurisdictions; 1, 2, 3, 4, and 5-Mile Radius from FPL Owned Fill Source</del>            |
| <del>Figure 3.2.1-4</del> | <del>Governmental Jurisdictions; 1-Mile Radius from FPL Owned Fill Source</del>                            |
| Figure 3.2.2-1            | Future Land Use                                                                                            |
| Figure 3.2.2-2            | Zoning Map                                                                                                 |
| Figure 3.2.3-1            | Existing Land Use – FLUCFCS                                                                                |
| Figure 3.2.8-1            | Major Roads                                                                                                |
| Figure 3.3.1-1            | Physiographic Features (modified from Randazzo and Jones 1997 and White 1970)                              |
| Figure 3.3.1-2            | Paleozoic-Mesozoic Stratigraphic Column                                                                    |
| Figure 3.3.1-3            | Generalized Cenozoic Stratigraphic Column                                                                  |
| Figure 3.3.1-4            | Bore Hole and Cross Section Locations at the Turkey Point Units 6 & 7 Site                                 |
| Figure 3.3.1-5            | Geologic Cross Section A-A'                                                                                |
| Figure 3.3.1-6            | Geologic Cross Section B-B'                                                                                |
| Figure 3.3.1-7            | Soil Types at the Turkey Point Units 6 & 7 Plant Area                                                      |

## TABLE OF CONTENTS (Cont'd)

|                           |                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------|
| Figure 3.3.2-1            | Regional Generalized Hydrostratigraphic Column                                                   |
| Figure 3.3.2-2            | Site Hydrostratigraphic Column                                                                   |
| Figure 3.3.3-1            | Permitted Water Uses Within 5-Mile Radius                                                        |
| Figure 3.3.4-1            | Major Tributaries                                                                                |
| Figure 3.3.4-2            | Biscayne Bay Sampling Location                                                                   |
| Figure 3.3.4-3            | Turkey Point Cooling Canals System/Industrial Wastewater Facility                                |
| Figure 3.3.5-1            | Vegetative Communities & Land Use Map – Site & Adjacent Areas                                    |
| Figure 3.3.5-2            | Vegetative Communities & Land Use Map – Associated Non-Linear Facilities                         |
| <del>Figure 3.3.5-3</del> | <del>Vegetative Communities &amp; Land Use Map – FPL Owned Fill Source</del>                     |
| Figure 3.3.6-1            | Crocodile Nest Locations, 1978 Through 2007                                                      |
| Figure 3.3.6-2            | Crocodile Nest Locations, 2008                                                                   |
| Figure 3.3.7-1            | Annual Wind Rose for Miami International Airport, Florida                                        |
| Figure 3.3.7-2a           | Winter Wind Rose for Miami International Airport, Florida                                        |
| Figure 3.3.7-2b           | Spring Wind Rose for Miami International Airport, Florida                                        |
| Figure 3.3.7-2c           | Summer Wind Rose for Miami International Airport, Florida                                        |
| Figure 3.3.7-2d           | Autumn Wind Rose for Miami International Airport, Florida                                        |
| Figure 3.3.8-1            | Noise Monitoring Locations                                                                       |
| Figure 3.3.9-1            | SQM Readings of Estimated Sky Glow                                                               |
| Figure 3.3.9-2            | Light Monitoring Locations                                                                       |
| Figure 4.2-1              | Conceptual Illustration of Turkey Point Units 6 & 7 Site                                         |
| Figure 4.2-2              | Plot Plan                                                                                        |
| Figure 4.2-3              | Conceptual Illustration of Turkey Point Units 6 & 7 and Existing Units 1 through 5               |
| Figure 4.2-4              | Conceptual Illustration of Plant Profile With Units 6 & 7                                        |
| Figure 4.2-5              | Conceptual Illustration of Profile of Turkey Point Units 6 & 7 and Existing Units                |
| Figure 4.2-6              | Plot Plan of FPL Reclaimed Water Treatment Facility                                              |
| Figure 4.5-1              | Water Balance Diagram                                                                            |
| Figure 4.5-2              | Typical Radial Collector Well Conceptual Design                                                  |
| Figure 4.5-3              | Potential Area of Radial Collector Well Laterals                                                 |
| Figure 4.5-4              | Typical Injection Well Design                                                                    |
| Figure 5.1-1              | Associated Non-Linear Facilities, Construction Areas, Spoil Areas, Site, and Adjacent Properties |
| Figure 5.1-2              | Equipment Barge Unloading Area                                                                   |
| Figure 5.7.4-1            | Site Preparation: Noise Contours in the Vicinity of the Site                                     |

## TABLE OF CONTENTS (Cont'd)

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| Figure 5.7.4-2   | Site Preparation: Noise Contours and Noise Monitoring Locations                  |
| Figure 5.7.4-3   | Construction (Permanent Features): Noise Contours in the Vicinity of the Site    |
| Figure 5.7.4-4   | Construction (Permanent Features): Noise Contours and Noise Monitoring Locations |
| Figure 6.1.3-1   | Control Volumes for Salinity Analysis                                            |
| Figure 6.1.3-2   | Time History of Salinity in Biscayne Bay With and Without Radial Collector Wells |
| Figure 6.1.3-3   | Salinity Distribution in Biscayne Bay With and Without Radial Collector Wells    |
| Figure 6.1.4-1   | Average Monthly Salt Deposition from Circulating Water Cooling Towers            |
| Figure 6.7.0-1   | Noise Contours in the Vicinity of the Site                                       |
| Figure 6.7.0-2   | Noise Contours and Noise Monitoring Locations                                    |
| Figure 9.0.0-1   | Linear Facilities Proposed for Certification                                     |
| Figure W9.1.0-1  | Aerial Photographs                                                               |
| Figure W9.1.0-2  | Future Land Use Maps                                                             |
| Figure W9.1.0-3  | Zoning Maps                                                                      |
| Figure W9.1.0-4  | Vegetation/Land Cover Maps                                                       |
| Figure W9.2.0-1  | West Preferred and Secondary Corridor Alignments                                 |
| Figure W9.2.0-2  | Typical Single-Pole Guyed 500-kV Structure                                       |
| Figure W9.2.0-3  | Typical Single-Circuit Guyed 230-kV Structure                                    |
| Figure W9.2.0-4  | Typical Single-Circuit 230-kV Structure with Underbuilt Facilities               |
| Figure W9.2.0-5  | Typical Double-Circuit Guyed 230-kV Structure                                    |
| Figure W9.2.0-6  | Typical Double-Circuit 230-kV Structure with Underbuilt Facilities               |
| Figure W9.2.0-7  | Conductor Profile: 230-kV Typical 500-ft Span                                    |
| Figure W9.2.0-8  | Conductor Profile: 500-kV Typical 1,000-ft Span                                  |
| Figure W9.2.0-9  | Locations of Cross-Sections                                                      |
| Figure W9.2.0-10 | (W1) Transition to Plant Property                                                |
| Figure W9.2.0-11 | (W2) SW 117 <sup>th</sup> Avenue to SW 162 <sup>nd</sup> Avenue                  |
| Figure W9.2.0-12 | (W3) SW 162 <sup>nd</sup> Avenue to SW 136 <sup>th</sup> Street                  |
| Figure W9.2.0-13 | (W4) Along SFWMD Levees                                                          |
| Figure W9.2.0-14 | (W5) Along SFWMD Levees (Alternative Configuration)                              |
| Figure W9.2.0-15 | (W6) Krome Avenue East to Levee Substation                                       |
| Figure W9.2.0-16 | (W7) Krome Avenue East to Levee Substation (Alternative Configuration)           |
| Figure W9.2.0-17 | (W8) Levee Substation Boundary                                                   |
| Figure W9.2.0-18 | (W9) East of Levee Substation                                                    |

## TABLE OF CONTENTS (Cont'd)

|                  |                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------|
| Figure W9.2.0-19 | (W10) West of Florida's Turnpike                                                                               |
| Figure W9.2.0-20 | (W11) South End of NW 107 <sup>th</sup> Avenue                                                                 |
| Figure W9.2.0-21 | (W12) North End of NW 107 <sup>th</sup> Avenue                                                                 |
| Figure W9.2.0-22 | (W13) West Secondary Corridor                                                                                  |
| Figure W9.2.0-23 | (W14) West Secondary Corridor (Alternative Configuration)                                                      |
| Figure W9.3.1-1  | West Study Area Regional Screening Map, and Alternative Routes Considered Miami-Dade County, Florida           |
| Figure W9.3.1-2  | West Alternative Routes and Preferred Routes                                                                   |
| Figure W9.3.2-1  | West Preferred Corridor and All Existing Transmission Lines 115 kV or Greater within 5 Miles                   |
| Figure W9.3.2-2  | Location of FPL Levee Substation Expansion                                                                     |
| Figure W9.3.4-1  | Typical Access Road/Pad Cross-Section                                                                          |
| Figure W9.3.6-1  | Governmental Jurisdictions                                                                                     |
| Figure W9.4.1-1  | Locations of Typical or Conceptual Structure Pad Plan View Depictions                                          |
| Figure W9.4.1-2  | (Pad 1) Typical Plan View of Structure Pads East of SW 117 <sup>th</sup> Avenue                                |
| Figure W9.4.1-3  | (Pad 2) Typical Plan View of Structure Pads West of SW 117 <sup>th</sup> Avenue to SW 137 <sup>th</sup> Avenue |
| Figure W9.4.1-4  | (Pad 3) Typical Plan View of Structure Pads West of SW 137 <sup>th</sup> Avenue to SW 120 <sup>th</sup> Street |
| Figure W9.4.1-5  | (Pad 4) Conceptual Plan View of Structure Pads SW 120 <sup>th</sup> Street to Krome Avenue                     |
| Figure W9.4.1-6  | (Pad 5) Typical Plan View of Mid-Span 230-kV Structure Pads SW 120 <sup>th</sup> Street to Krome Avenue        |
| Figure W9.4.1-7  | (Pad 6) Conceptual Plan View of Structure Pads East of Krome Avenue (and/or West Secondary Corridor)           |
| Figure E9.1.0-1  | Aerial Photographs                                                                                             |
| Figure E9.1.0-2  | Future Land Use Maps                                                                                           |
| Figure E9.1.0-3  | Zoning Maps                                                                                                    |
| Figure E9.1.0-4  | Land Cover/Vegetation/ Legend                                                                                  |
| Figure E9.2.0-1  | East Preferred Corridor Alignment                                                                              |
| Figure E9.2.0-2  | Typical Single-Circuit Guyed 230-kV Structure                                                                  |
| Figure E9.2.0-3  | Typical Single-Circuit 230-kV Structure with Underbuilt Facilities                                             |
| Figure E9.2.0-4  | Typical Double-Circuit Guyed 230-kV Structure                                                                  |
| Figure E9.2.0-5  | Typical Double-Circuit 230-kV Structure with Underbuilt Facilities                                             |
| Figure E9.2.0-6  | Conductor Profile: 230-kV Single-Pole 650-ft Span                                                              |

## TABLE OF CONTENTS (Cont'd)

|                   |                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------|
| Figure E9.2.0-7   | Conductor Profile: 230-kV Single-Pole 300-ft Span                                                        |
| Figure E9.2.0-8   | Locations of Cross-Sections                                                                              |
| Figure E9.2.0-9   | (E1) At Turkey Point Plant Property Boundary                                                             |
| Figure E9.2.0-10  | (E2) South of SW 248 <sup>th</sup> Street                                                                |
| Figure E9.2.0-11  | (E3) North of SW 248 <sup>th</sup> Street                                                                |
| Figure E9.2.0-12  | (E4) South of Davis Substation                                                                           |
| Figure E9.2.0-13  | (E5) North of Davis Substation                                                                           |
| Figure E9.2.0-14  | (E6) West of SW 117 <sup>th</sup> Avenue                                                                 |
| Figure E9.2.0-15  | (E7) West of SW 107 <sup>th</sup> Avenue                                                                 |
| Figure E9.2.0-16  | (E8) East of SW 97 <sup>th</sup> Avenue                                                                  |
| Figure E9.2.0-17  | (E9) U.S. 1 and Busway                                                                                   |
| Figure E9.2.0-18  | (E10) U.S. 1 and Metrorail                                                                               |
| Figure E9.2.0-19  | (E11) Ponce de Leon Boulevard                                                                            |
| Figure E9.2.0-20  | (E12) Private Property Adjacent to Road Right-of-Way                                                     |
| Figure E9.3.1-1   | East Study Area Regional Screening Map, and Alternative Routes Considered Miami-Dade County, Florida     |
| Figure E9.3.1-2   | East Alternative Routes and Preferred Route                                                              |
| Figure E9.3.2-1   | East Preferred Corridor and All Existing Transmission Lines 115 kV or Greater within 5 Miles             |
| Figure E9.3.4-1   | Typical Access Road/Pad Cross-Section                                                                    |
| Figure E9.3.6-1   | Governmental Jurisdictions                                                                               |
| Figure E9.4.1-1   | Typical HDD Conduit Bundle Cross-Section                                                                 |
| Figure E9.4.1-2   | Typical Duct Bank Configuration                                                                          |
| Figure P9.0.0-1   | Reclaimed Water Pipelines Location Map                                                                   |
| Figure P9.0.0-2   | Reclaimed Water Pipelines Aerial Location Map                                                            |
| Figure P9.0.0-3   | Preliminary Routes Reclaimed Water Pipelines - South District Wastewater Treatment Plant to FPL Easement |
| Figure P9.3.2-1   | Typical Paved Roads Restoration Details for Reclaimed Water Pipelines                                    |
| Figure P9.3.2-2   | Typical Unpaved Roads Restoration Details for Reclaimed Water Pipelines                                  |
| Figure P9.3.2-3   | Typical Cross Section of Reclaimed Water Pipelines in Transmission Right-Of-Way                          |
| Figure P9.3.2-4   | Typical Canal Crossing for Reclaimed Water Pipelines                                                     |
| Figure P9.3.2-5   | Typical Access Manhole Detail                                                                            |
| Figure P9.3.6.1-1 | Reclaimed Water Pipeline Corridor Governmental Jurisdictions                                             |

## TABLE OF CONTENTS (Cont'd)

|                   |                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------|
| Figure P9.3.6.2-1 | Reclaimed Water Pipeline Corridor Future Land Use                                                                        |
| Figure P9.3.6.2-2 | Reclaimed Water Pipeline Corridor Zoning                                                                                 |
| Figure P9.3.7.1-1 | Reclaimed Water Pipeline Corridor Land Use / Vegetation                                                                  |
| Figure P9.3.7.1-2 | Reclaimed Water Pipeline Corridor FNAI Species Occurrences                                                               |
| Figure P9.3.7.4-1 | Water Quality Monitoring Stations for Black Creek (C-1), Princeton (C-102), Mowery (C-103), and Homestead (North) Canals |
| Figure R9.0.0-1   | Roadway Improvement Corridor Location Map                                                                                |
| Figure R9.0.0-2   | Roadway Improvement Corridor Aerial Location Map                                                                         |
| Figure R9.3.2-1   | Typical Section SW 328th Street (North Canal Drive)                                                                      |
| Figure R9.3.2-2   | Typical Section SW 344th Street (Palm Drive)                                                                             |
| Figure R9.3.2-3   | Typical Section SW 359th Street (From SW 137th Avenue to SW 117th Avenue)                                                |
| Figure R9.3.2-4   | Typical Section SW 359th Street (From SW 117th Avenue to Site)                                                           |
| Figure R9.3.2-5   | Typical Section SW 137th Avenue (Tallahassee Road)                                                                       |
| Figure R9.3.2-6   | Typical Section SW 117th Avenue (Six Mile Road)                                                                          |
| Figure R9.3.2-7   | Typical Section Bridge Over L-31E Canal                                                                                  |
| Figure R9.3.2-8   | Typical Section SW 117th Avenue (Six Mile Road; Bridge Culvert Over Florida City Canal)                                  |
| Figure R9.3.2-9   | Typical Bridge Section SW 117th Avenue (Six Mile Road; Bridge Over North Canal)                                          |
| Figure R9.3.2-10  | Conceptual Intersection Plan for SW 328th Street and SW 117th Avenue                                                     |
| Figure R9.3.2-11  | Conceptual Intersection Plan for SW 328th Street and SW 137th Avenue                                                     |
| Figure R9.3.2-12  | Conceptual Intersection Plan for SW 344th Street and SW 137th Avenue (West)                                              |
| Figure R9.3.2-13  | Conceptual Intersection Plan for SW 344th Street and SW 137th Avenue (East)                                              |
| Figure R9.3.2-14  | Conceptual Intersection Plan for SW 344th Street and SW 117th Avenue                                                     |
| Figure R9.3.2-15  | Conceptual Intersection Plan for SW 359th Street and SW 117th Avenue                                                     |
| Figure R9.3.6-1   | Roadway Improvement Corridor – Governmental Jurisdictions                                                                |
| Figure R9.3.6-2   | Roadway Improvement Corridor – Future Land Use                                                                           |
| Figure R9.3.6-3   | Roadway Improvement Corridor– Zoning                                                                                     |
| Figure R9.3.7-1   | Roadway Improvement Corridor – Land Use/Vegetation                                                                       |
| Figure R9.3.7-2   | Roadway Improvement Corridor FNAI Species Occurrences                                                                    |
| Figure R9.4.4-1   | Conceptual Crocodile Access Road Underpass Locations                                                                     |
| Figure R9.4.4-2   | Conceptual Crocodile Access Road Underpass                                                                               |
| Figure D9.0.0-1   | Potable Water Pipeline Corridor Location Map                                                                             |
| Figure D9.0.0-2   | Potable Water Pipeline Corridor Aerial Location Map                                                                      |

**TABLE OF CONTENTS**  
**(Cont'd)**

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Figure D9.3.6-1 | Potable Water Pipeline Corridor Governmental Jurisdictions |
| Figure D9.3.6-2 | Potable Water Pipeline Corridor Future Land Use            |
| Figure D9.3.6-3 | Potable Water Pipeline Corridor Zoning                     |
| Figure D9.3.7-1 | Potable Water Pipeline Corridor Land Use / Vegetation      |
| Figure D9.3.7-2 | Potable Water Pipeline Corridor FNAI Species Occurrences   |

**LIST OF ABBREVIATIONS AND ACRONYMS**

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| °C                | degrees Celcius                                                                    |
| °F                | degrees Fahrenheit                                                                 |
| µg/gdw            | micrograms per dray weight                                                         |
| µg/m <sup>3</sup> | 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 <sup>2</sup> | 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 <sub>2</sub>   | 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 <sup>2</sup>      | square feet                                            |
| ft <sup>2</sup> /d   | square feet per day                                    |
| ft <sup>3</sup>      | cubic feet                                             |
| g/bhp-hr             | gram per brake horsepower-hour                         |
| g/m <sup>2</sup> /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 <sub>90</sub>         | 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 <sub>eq</sub>         | equivalent steady-state SPL                       |
| L <sub>max</sub>        | maximum SPL                                       |
| L <sub>min</sub>        | 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 <sup>2</sup> | 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 <sup>2</sup>               | square miles                                             |
| MIA                           | Miami International Airport                              |
| MLW                           | Mean Low Water                                           |
| Mm <sup>-1</sup>              | 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 <sub>2</sub> H <sub>4</sub> | 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 <sub>4</sub> OH            | Ammonium Hydroxide                                       |
| NHPA                          | National Historic Preservation Act                       |
| NMHC                          | non-methane hydrocarbon                                  |
| NO <sub>2</sub>               | nitrogen dioxide                                         |
| NOAA                          | National Oceanic and Atmospheric Administration          |
| none                          | none are defined herein                                  |

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| NO <sub>x</sub>   | 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 <sub>3</sub>    | 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 <sub>10</sub>  | particulate matter with an aerodynamic particle size of 10 µm or less  |
| PM <sub>2.5</sub> | 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 <sub>2</sub> | sulfur dioxide                                              |
| SO <sub>4</sub> | 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                             |