



MEMORANDUM

AGENDA ITEM #III. J

DATE: MAY 3, 2011
TO: COUNCIL MEMBERS
FROM: STAFF
SUBJECT: REPORT ON TRANSMISSION LINES

Please find attached the agency report regarding FPL transmission lines.

A draft report was presented at the July 12, 2010 Council Meeting. Council member comments and suggestions were incorporated as applicable. The final report is due to the Florida Department of Environmental Protection, on June 1, 2011.

Recommendation

Please approve staff recommendations.

South
Florida
Regional
Planning
Council



May 2, 2011

Mr. Michael P. Halpin
Program Administrator
Office of Siting Coordination
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Agency Report for the Turkey Point Nuclear Power Plant Expansion – Transmission Lines
Component of the Project Site Certification Application

Dear Mr. Halpin:

Pursuant to Section 403.526, Florida Statute, the South Florida Regional Planning Council (SFRPC) staff has prepared a final agency report pertaining to the Turkey Point Transmission Lines.

INTRODUCTION

Florida Power and Light (FPL) submitted a Site Certification Application to the Florida Department of Environmental Protection (DEP) on June 30, 2009. If approved, the application would allow FPL to expand nuclear energy production at its Turkey Point facility in Miami-Dade County. The proposed project consists of the construction of two new 1,100 megawatt (mW) nuclear reactors, 6 and 7, and supporting facilities, as well as the placement of new transmission lines. Although power plant siting and transmission lines are treated as separate processes in Chapter 403, F.S., they have been combined into one application by the Applicant. The review process will be conducted on separate but parallel tracks. The transmission lines are being reviewed in an earlier timeframe than the power plant, although the transmission lines will only be necessary if the unit 6 and unit 7 installations are approved.

Siting approval is generally made through a Final Order of Certification signed by the Secretary (agency head) of DEP. If the application is contested, Certification Hearings will be held. The presiding Administrative Law Judge (ALJ) issues a Recommended Order that contains findings of fact and conclusion of law about the matters raised at the hearing or in the application, along with the proposed Conditions of Certification, if certification is recommended. The Recommended Order is submitted to DEP for presentation to the Siting Board (Governor and Cabinet). The Board will decide whether to license both the transmission lines and new electrical power plants in one proceeding, pursuant to the State Power Plant Siting Act (PPSA), Chapter 403, Part II, Florida Statutes (F.S.).

Some of the municipalities affected by the proposed application have explored potential alternate locations for transmission line placement. Section 403.5271, F.S., allows any party the opportunity to propose alternate transmission line corridor routes. May 2, 2011 is the deadline to file notice of proposed alternate corridors for transmission lines. The necessary data supporting an alternate route proposal and the appropriate application fee must be submitted by May 31, 2011. The alternate route application fee is \$750 per mile for each mile of the alternate corridor located in an existing right-of-way and \$1,000 per

mile if located outside of the existing right-of-way. Final transmission line corridor route approval would be determined by the ALJ during the certification hearing. The Council's review addresses only the transmission corridors proposed by FPL.

The South Florida Regional Planning Council is one of several affected agencies actively involved in the review and comment of the application, as identified in §403.507(2)(a) and §403.526 F.S. This process provides the Council the opportunity to assess the project's consistency with the *Strategic Regional Policy Plan for South Florida (SRPP)*. The Council's report contains recommendations to address impacts of the proposed project.

PROJECT DESCRIPTION

The two nuclear generating units with supporting buildings, facilities and equipment are proposed to be located due south of the existing Turkey Point units, on a parcel currently within the industrial wastewater /cooling canal system. Associated facilities proposed in or around the new or existing plant units include parking areas; a nuclear administration and training building; a reclaimed water treatment facility and treated reclaimed water delivery pipelines; radial collector wells and delivery pipelines for cooling water backup; and an equipment barge unloading area. A new electrical substation (Clear Sky) will be constructed on the Turkey Point site. A 230-kilovolt (kV) transmission line also will be needed to connect the new substation to the existing substation on the plant property.

The application requests transmission corridors within the following communities: unincorporated Miami-Dade County, Miami, Coral Gables, Doral, Florida City, Medley, Palmetto Bay, Pinecrest, and South Miami. FPL may allocate rights-of-way for transmission corridors up to 6.5 miles in width, to accommodate associated facilities. This approach provides broad latitude for the placement of the transmission lines and other system improvements; within a corridor. Upon completion of the project, the transmission corridors would retain no more than one mile of right-of-way width. The application also requests the creation or expansion of access roads and bridges (between SW 328 Street and SW 359 Street and east of SW 137 Avenue). The Miami-Dade County Comprehensive Development Master Plan Amendments for these proposed access roadway activities were adopted by the County on April 28, 2010.

FPL has indicated that the existing transmission line infrastructure is insufficient to carry the load that will be generated by the new reactors. New 500 and 230 kV electric transmission lines are needed to connect the proposed Clear Sky and existing Turkey Point substations to other existing FPL substations in Miami-Dade County. Because of the load requirements, two separate transmission line corridors have been proposed, totaling approximately 88.7 miles. The East Preferred Corridor is a 36.7 mile long area proposed by FPL to connect the existing Turkey Point substation to the new Clear Sky and existing Davis and Miami substations. The Davis to Miami portion would run through more urbanized sections of U.S. 1 from Palmetto Bay through Downtown Miami; one 230-kV line would be constructed along this 17.7 mile section of the corridor. The West Preferred Corridor would connect the new Clear Sky substation to the existing Levee substation, with two 500-kV lines; the West Preferred Corridor would also connect the new Clear Sky substation to the existing Pennsuco substation, with one 230-kV line. The Levee to Pennsuco portion would run through Doral and Medley. The full West Preferred Corridor is 52 miles in length; it is 43.6 miles from Clear Sky to Levee and 8.4 miles from Levee to Pennsuco. Three transmission lines are proposed to be constructed within a single right-of-way up to the existing Levee substation.

FPL has sufficient right-of-way in the West Secondary Corridor, which traverses the Everglades National Park (ENP). FPL has been working with federal and state agencies on a right-of-way exchange. This exchange (land swap) would relocate the 7.4 mile long section of right-of-way within the ENP to the eastern border of the Park. The West Preferred Corridor assumes the alignment of the exchange.

SFRPC REVIEW AND EVALUATION

Council staff requested additional information regarding the proposed transmission line siting in terms of alternate routes, rights-of-way, cost, construction and quality of life issues during the completeness review. Florida Power and Light (FPL) representatives met with Council staff to address initial agency questions. More specific concerns related to Council staff's original issue areas were raised during the September 2, 2009 Informational Public Meeting, hosted by the SFRPC and Miami-Dade County, at which the applicant was present. Additional public comments were given at the June 7, 2010 SFRPC Council meeting.

The feasibility of the ENP "land swap" is still being evaluated. Although the exchange would relocate the transmission lines to the eastern border of the ENP, concerns about environmental impacts still remain. The process for vetting environmental issues is not within the timeframe of the transmission line application review process.

Council staff has identified issues that merit additional attention because of their potential impacts to the Region, in accordance with Sections 403.5252 and 403.526, F.S., and public comments. After a careful review of the transmission line portion of the site certification application and FPL responses within the scope of completeness requests for additional information, Council staff reviewed how the proposed project would affect the 22 priority issues of the Region that form the *Strategic Regional Policy Plan for South Florida*. The relevant priority areas that may be affected by the proposed project are: **Infrastructure; Natural Resources; Public Health, Safety, and Quality of Life; and Redevelopment and Transportation.**

ISSUE AND IMPACT ANALYSIS

Infrastructure

The *Strategic Regional Policy Plan (SRPP)* was adopted (as Rule 29J-2.009 Florida Administrative Code) through a consensus process and represents a vision for the Southeast. The *SRPP* complements and furthers the Florida's State Comprehensive Plan (Chapter 187, F.S). Local comprehensive plans are consistent with the *SRPP* and provide the blueprint for how communities will grow. While transmission lines are not defined as development, the placement of transmission lines should be compatible with allowed densities, intensities and adjacent uses. Transmission line placement will impact surrounding communities' ability to achieve their comprehensive plan goals. The proposed locations and the scale of transmission poles should be respectful of those visions.

Although the application proposes siting overhead transmission lines, the alternatives of undergrounding and co-locating transmission lines with Metrorail are also being examined. Public investment costs should be equitably shared by all FPL rate holders, no matter what delivery system is ultimately constructed. Proposed transmission lines should be compatible with existing and future land uses in terms of mass, scale and height. The ability to provide services should not hinder the prospect of future economic development. The applicant should consider both monetary and societal costs when making decisions about infrastructure location and technology. Special attention should be given to limiting environmental, health, economic and social impacts to the surrounding communities.

The following Goals and Policies of the *SRPP* should be addressed as part of the application approval process.

- Goal 4** **Enhance the economic and environmental sustainability of the Region by ensuring the adequacy of its public facilities and services.**
- Policy 4.1 Public facility and service providers should give priority to the construction, maintenance, or reconstruction of public facilities need to so serve existing development most effectively and to the elimination of any infrastructure deficiencies which would impeded redevelopment.
- Policy 4.2 Optimize the service area and facility size of public facilities in the Region and direct future development and redevelopment first to areas served by existing infrastructure.
- Policy 4.3 Utilize the existing infrastructure capacity of regional facilities to the maximum extent consistent with applicable level of service standards before encouraging the expansion of facilities or the development of new capacity.
- Policy 4.9 Ensure that local governments establish as wide a range of financing methods for the provision of public facilities as possible. Where impact fees are assessed, procedures, schedules, and programs for the expenditure of these fees in a timely and equitable manner shall be developed.
- Policy 4.10 Encourage the application of resource recovery, recycling, cogeneration, district cooling, water re-use systems, and other appropriate mechanisms where they are cost-effective and environmentally sound as a means of reducing the impacts of new development on existing public facilities and services and decreasing the costs of providing new public facilities and services.
- Goal 9** **Develop clean, sustainable, and energy-efficient power generation and transportation systems.**
- Policy 9.2 Encourage the development of renewable, clean fuels and energy-efficient enterprises to serve our communities and national markets.
- Policy 9.7 Assess the impacts of global climate change and sea-level rise on South Florida's resources and land uses.
- Goal 21** **Assume a leadership role to enhance regional cooperation, multi-jurisdictional coordination, and multi-issue regional planning to ensure the balancing of competing needs and long-term sustainability of our natural, developed and human resources.**
- Policy 21.1 Implement better coordination of land use, natural resource, and infrastructure planning, with special attention to regional ecosystem management approaches.

Natural Resources, Public Health, Safety, and Quality of Life

This application seeks to place transmission lines and associated access roads in some areas that have high densities and intensities as well as environmentally sensitive areas of regional significance. There is concern about the effects of the transmission lines, access roads, and related expansion activity on salinity, vegetation, wildlife, wetlands, and Environmentally Endangered Lands (EEL). Potential impacts include removal of vegetation, loss of native plants and species, Comprehensive Everglades Restoration

Plan (CERP) and EEL lands; and impacts to systems of regional significance such as the Everglades and Biscayne National Parks.

Some municipalities along the urbanized portions of the proposed transmission corridors are concerned about the impacts of electromagnetic field (EMF) and radiofrequency exposure; noise levels; transmission line signal interference with emergency communication systems and radio and television communications; and health, safety and overall quality of life. Transmission line signals and pole heights have the potential to interfere with 911 emergency services communications and impede the safety operations of communities along U.S. 1. Special attention must be paid to the location and installation of transmission lines to prevent interference with microwave paths and radio frequency.

The following Goals and Polices of the *SRPP* should be addressed as part of the application approval process.

Goal 3 Promote the health, safety, and welfare of South Florida's residents.

Policy 3.7 Reduce exposure to environmental contaminants and hazards in the Region's ground, air, and water.

Goal 14 Preserve, protect, and restore Natural Resources of Regional Significance.

Policy 14.1 Address environmental issues, including the health of our air, water, habitats, and other natural resources, that affect quality of life and sustainability of our Region.

Policy 14.3 Protect native habitat by first avoiding impacts to wetlands before minimizing or mitigating those impacts. Development proposals should demonstrate how wetland impacts are being avoided and what alternative plans have been considered to achieve that objective.

Goal 15 Restore and protect the ecological values and functions of the Everglades Ecosystem by increasing habitat area, increasing regional water storage, and restoring water quality.

Policy 15.1 Encourage land uses and development patterns those are consistent with Everglades Ecosystem restoration and with the protection of Natural Resources of Regional Significance.

Redevelopment and Transportation

The placement of transmission lines along the more urbanized areas of the two proposed corridors will affect future opportunities to provide new transit features, the South Miami-Dade Busway or Metrorail expansion, greenways and pedestrian features, redevelopment projects, and scheduled roadway improvements. Related construction activities and traffic will also negatively impact the surrounding communities.

The associated risks of overhead transmission lines, whether real or perceived, are expected to alter real estate and economic development decisions. The affected municipalities believe businesses and their employees will be less likely to locate near overhead transmission lines. South Florida municipalities will be conducting the Evaluation and Appraisal Report process (pursuant to Chapter 163, Part II, F.S.) between 2010 and 2013. Future opportunities for redevelopment and growth will be identified as they review and analyze their respective Comprehensive Plans. Transmission lines and access road rights-of-

way will affect options for future development activities. The transmission lines as proposed will also impede pedestrian access, alter bus stop locations, and limit development.

The following Goals and Policies of the *SRPP* should be addressed as part of the application approval process.

Goal 8 Enhance the Region's mobility, efficiency, safety, quality of life, and economic health through improvements to road, port and public transportation infrastructure.

Policy 8.1 Maintain the Florida Intrastate Highway System, other state roads, local roadways, and public transportation systems to preserve the Region's investment in infrastructure; support daily use and needs; enhance the Region's global competitiveness and economic health; increase safety; ensure emergency access and response; and provide for evacuation purposes.

Goal 11 Encourage and support the implementation of development proposals that conserve the Region's natural resources, rural and agricultural lands, green infrastructure and:

- Utilize existing and planned infrastructure where most appropriate in urban areas;
- Enhance the utilization of regional transportation systems;
- Incorporate mixed-land-use developments;
- Recycle existing developed sites; and
- Provide for the preservation of historic sites.

Goals 20 Achieve long-term efficient and sustainable development patterns that protect natural resources and connect diverse housing, transportation, education, and employment opportunities.

Policy 20.1 Provide for the compatibility of adjacent land uses and assess the impacts of land uses on the surrounding environment in comprehensive plans and development regulations.

CONDITIONS

Approval of the transmission lines is contingent on the approval of the Turkey Point Plant expansion component. If the construction of new units 6 and 7 and associated facilities is approved, the following conditions related to the transmission lines must also be satisfied:

- Use of existing infrastructure right-of-ways whenever possible and feasible.
- Consider placing transmission lines underground or co-locate with Metrorail.
- Identify and consider innovative funding initiatives for undergrounding or co-location of transmission lines.
- Coordinate with affected municipalities to ensure the establishment of rights-of-way and the actual placement of transmission lines does not constrain, impede or otherwise limit future development or expansion as outlined in affected communities' comprehensive plans.
- Coordinate construction, improvement and maintenance activities amongst the applicable agencies and municipalities to minimize bicycle/pedestrian, transit and roadway.
- Coordinate final transmission plans with the affected municipalities, Miami-Dade County, the Miami-Dade Metropolitan Planning Organization and Florida Department of Transportation to ensure transmission line locations will not hinder future transportation planning efforts.

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- Impacts of proposed transmission corridors, including alternate routes, should be evaluated and vetted through an Environmental Impact Statement (E.I.S.) and allow for public participation, to the maximum extent feasible.

FINAL RECOMMENDATION

Staff has identified the priority issue areas and analyzed the impacts of the proposed project. Staff is also aware of several affected parties that are engaged in alternative route alignment studies and have sought legal challenges to the proposed U.S. Nuclear Regulatory Commission application. Council staff recognizes that the transmission line facilities are contingent on approval of the proposed power plant in order to be constructed. Staff recommends that, if the application is approved, the applicant: 1) consider the full impacts of transmission lines and access roads as they relate to rights-of way issues, relocation of facilities and infrastructure, and noise and light pollution concerns, and provide the appropriate mitigation; 2) work closely with affected municipalities and their residents to address impacts and mitigation strategies; 3) minimize the impacts to the natural systems to the greatest extent feasible; and 4) determine the extent of sensitive wildlife and vegetative communities in the vicinity of the project and protect and/or mitigate for disturbed habitat. This will assist in reducing the cumulative impacts to infrastructure, implementation of local comprehensive plans, people, animals, native plants and wetlands that the Goals and Policies of the *Strategic Regional Policy Plan for South Florida (SRPP)* seek to protect.

If you require further information, please contact me or Karen Hamilton at 954-985-4416.

Sincerely,

B. Jack Osterholt
Interim Executive Director

BJO/kal

cc: Sam Goren, Goren, Cherof, Doody & Ezrol, P.A
Michael Cirullo, Goren, Cherof, Doody & Ezrol, P.A
Distribution List (attached)