

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



Staff Analysis Report

**Levy Nuclear Power Plant Units 1 and 2
Site Certification**

Transmission Line Portion

Progress Energy Florida

**PA51-08
DEP OGC Case No. 08-1621
DOAH Case No. 08-2727EPP**

September 25, 2008

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I. INTRODUCTION

The Florida Power Corporation doing business as Progress Energy Florida, Inc. (PEF) Levy Nuclear Power Plant Units 1 & 2 project (LNP) is being reviewed for licensing under the provisions of the Power Plant Siting Act including portions of the Transmission Line Siting Act (the Acts) as outlined in Sections 403.501 through 403.539, Florida Statutes (F.S.), and Chapter 62-17, F.A.C. The Acts provide a centralized and coordinated environmental licensing process which results in the certification of a power plant with associated facilities and corridors for new transmission lines that cross or affect multiple government jurisdictions.

For linear facilities associated with an electrical power plant, such as the proposed transmission lines, the Acts provide for the certification of “corridors”, the area within which the associated linear facilities’ rights-of-way must be located. Once the rights-of-way for the new transmission lines have been acquired, the boundaries of the corridors will be revised to those of the acquired rights-of-way. The remainder of the corridors will then have no further legal significance with relation to this project.

Pursuant to 2008 Florida House of Representatives’ Bill 7135, Section 70 (Enrolled 2008), PEF may allow consideration of alternate corridors (and has chosen to do so) that may be proposed by other parties for all or portions of this corridor, including alternate substation sites for the two proposed substations. The application processing schedule set forth in Sections 403.521 – 403.526, 403.527(4), and 403.5271 is used for these corridors, including the opportunity for the filing and review of alternate corridors or substation sites, if a party timely proposes an alternate transmission line corridor route or substation site for consideration.

This Staff Analysis Report will analyze only those portions of the application related to the transmission lines which are being processed under different statutory timelines than the plant and other associated facilities. Proposed Conditions of Certification included in this report are applicable only to the transmission line portion of the LNP. Pursuant to the statute, a set of proposed Conditions of Certification will be filed with the Staff Analysis Report for the Levy Nuclear Plant and other associated facilities which will incorporate the transmission line Conditions of Certification proposed here.

The Florida Cabinet sitting as the Siting Board ultimately makes the final approval on the power plant and associated facilities as well as transmission line corridors and included transmission line facilities. The Siting Board’s decision will be based on the recommendations of an Administrative Law Judge who has evaluated the testimony and evidence of reviewing agencies, intervening parties and the public.

A. Project Description

On June 9, 2008, PEF submitted to the Department of Environmental Protection (DEP) an application for certification of their proposed nuclear power plant consisting of Units 1 and 2; associated facilities consisting of a railroad spur, a barge canal, water

pipeline, and access roads; and transmission line corridors (Figure 1). The LNP will require new transmission lines in order to incorporate the additional power into the Florida electrical grid system.

Figure 1- Site Map



Although the vertical clearance of the transmission lines will vary along the right-of-way in all instances the transmission lines will meet the requirements of the National Electrical Safety Code (NESC) (Institute of Electrical and Electronics Engineering, Inc., approved April 2007) and will have a typical minimum clearance above the ground of 35 feet. Existing roadways, access roads, and structure pads will be used for construction and maintenance access to the transmission lines, wherever practicable. Where the new transmission lines will be constructed adjacent to existing transmission right-of-way, improvements to the associated access roads and/or pads may be made depending on the status of the existing conditions. Where adequate access roads or structure pads do not exist, new roads and pads may be constructed. These roads will be unpaved with a top elevation up to 2 feet above expected seasonal high water and a typical road surface width of 18 feet.

PEF developed criteria for identifying corridor segments based on PEF's experience in this part of the State of Florida, experience in previous transmission line studies, and input from the public involvement process. Those criteria required corridor segments, to the extent practicable, to:

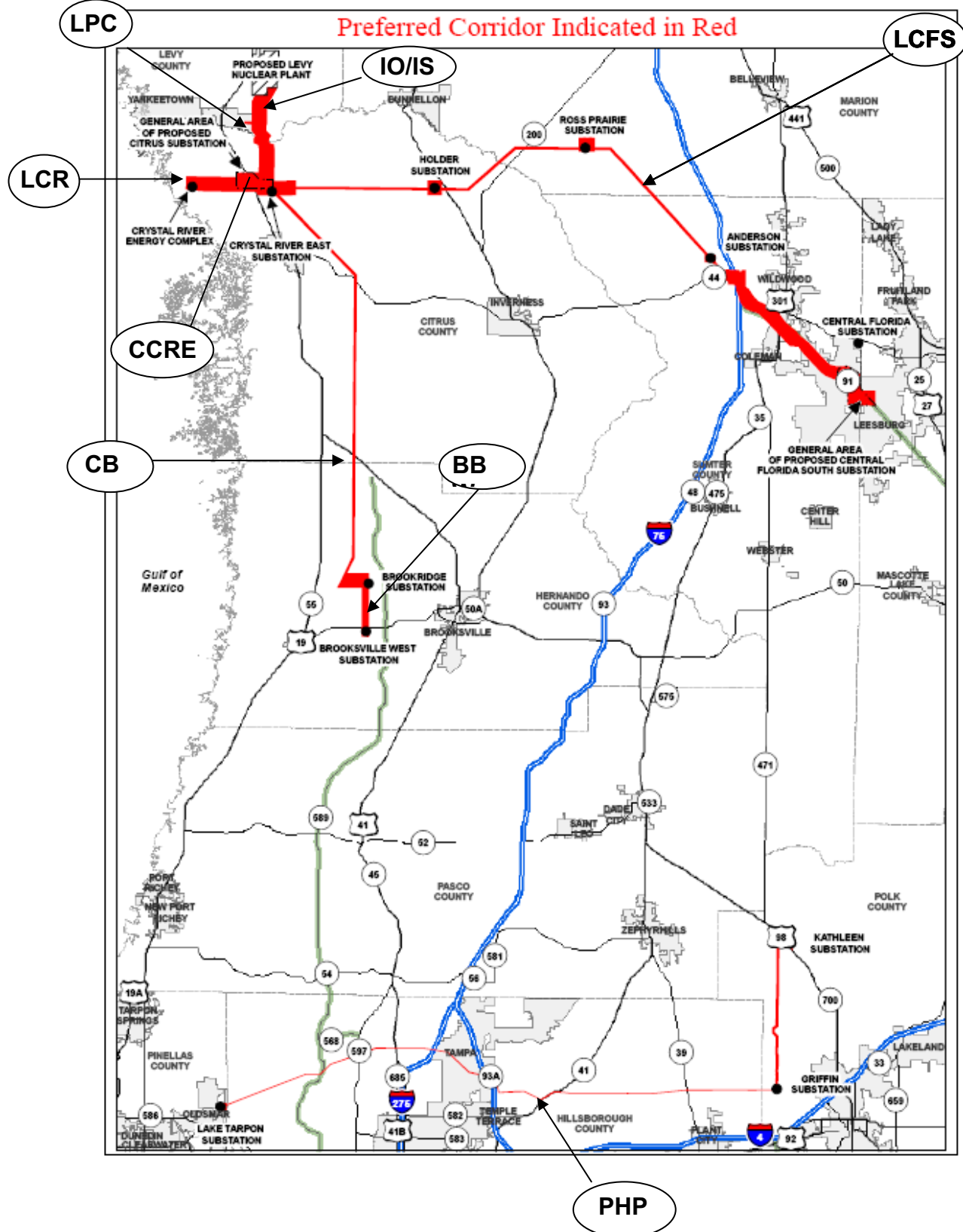
- Maximize co-location with existing PEF transmission lines;

- Maximize co-location with other linear features including arterial and collector roads, major canals, and railroads;
- Minimize locating corridor segments adjacent to existing residential development where no transmission line already exists;
- Minimize the severance of land under common ownership;
- Maximize following previously disturbed alignments (roads, trails, canals, ditches, etc.) through Florida Managed Areas (FMA), wetlands and upland forested areas;
- Minimize river and canal crossings where no crossing (road, railroad, transmission or other utility crossing) already exists;
- Minimize locating corridor segments abutting schools;
- Minimize locating corridor segments abutting community facilities;
- Encourage location close to existing industrial and extractive land uses;
- Minimize location within traditional business districts with concentrations of older or historic buildings; and
- Maintain distance from registered public and private airports consistent with Federal Aviation Administration (FAA) and other applicable state and county regulations.

The following is a list of the electrical transmission lines that PEF is seeking certification for and Figure 2 shows a map of all the corridors;

1. Levy Nuclear Plant to Proposed Citrus Substation, two 500-kV Transmission Lines (Levy and Citrus Counties), also known as the Citrus 1 and Citrus 2 or the LPC transmission lines (Figure 4).
2. Levy Nuclear Plant to Crystal River Energy Complex Switchyard, 500-kV Transmission Line (Levy and Citrus Counties), also known as the Crystal River or LCR (Levy Crystal River) transmission line (Figure 5).
3. Levy Nuclear Plant to Proposed Central Florida South Substation, 500-kV Transmission Line (Levy, Citrus, Marion, Sumter and Lake Counties and Municipalities of Wildwood and Leesburg), also known as the Sumter or the LCFS (Levy Central Florida South) transmission line (Figure 6).
4. Levy Nuclear Plant North and South Construction/Administration, 69-kV Transmission Lines (Levy County), also known as the Levy North and Levy South or IO and IS transmission lines (Figure 8).
5. Crystal River Energy Complex Switchyard to Brookridge Substation, 230-kV Transmission Line (Citrus and Hernando Counties), also known as the Brookridge or CB transmission line (Figure 9).
6. Brookridge Substation to Brooksville West Substation, 230-kV Transmission Line (Hernando County), also known as the Brooksville West or BBW transmission line (Figure 10).
7. Proposed Citrus Substation to Crystal River East Substation, 230-kV Transmission Line (Citrus County), also known as the Crystal River East or CCRE transmission line (Figure 11).
8. Polk-Hillsborough-Pinellas, 230-kV Transmission Line (Polk, Hillsborough and Pinellas Counties and Municipalities of Tampa, Plant City and Oldsmar), also known as the Kathleen or PHP transmission line (Figure 12).

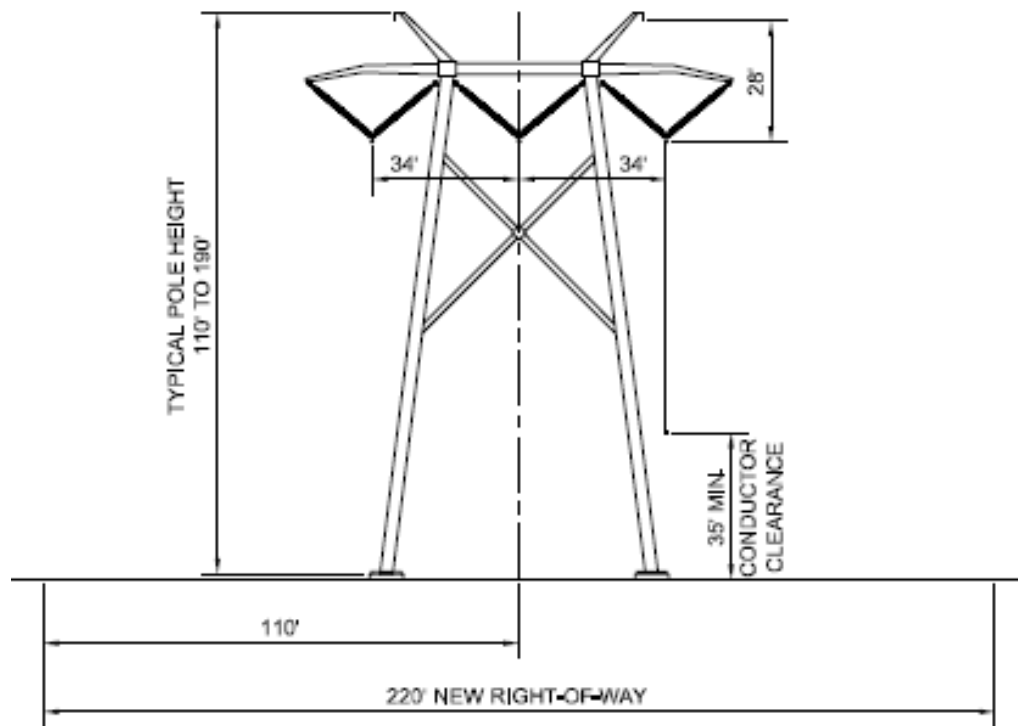
Figure 2 – Preferred Corridors



The proposed corridors for four new 500-kV transmission lines, where practicable, encompass available PEF existing right-of-ways (ROWs). The corridor lengths range from approximately 7 to 59 mi., and range in width from approximately 1000 ft. to 0.5 mi. to allow for maximum flexibility when determining the ROW and for entering or exiting substations. Approximately 91 mi. of transmission lines will need to be constructed to the first substations in order to incorporate the power generated by LNP into the Florida electrical grid system.

Figure 3 shows a typical tangent steel H frame structure with 5' to 8' diameter pier foundation.

Figure 3 – H Frame Transmission line structure



The 500-kV LPC Corridor is approximately 7 miles in length and is a mile wide. The typical right-of-way width is 220 feet for a new 500-kV transmission line constructed with H-frames and 200 feet when constructed with monopoles, with the structures located in the center of the right-of-way. Two new 500-kV transmission lines are proposed for the 500-kV LPC Corridor. The proposed collocation with other proposed 500-kV transmission lines may allow a reduction in the typical right-of-way width.

Figure 4 - LPC

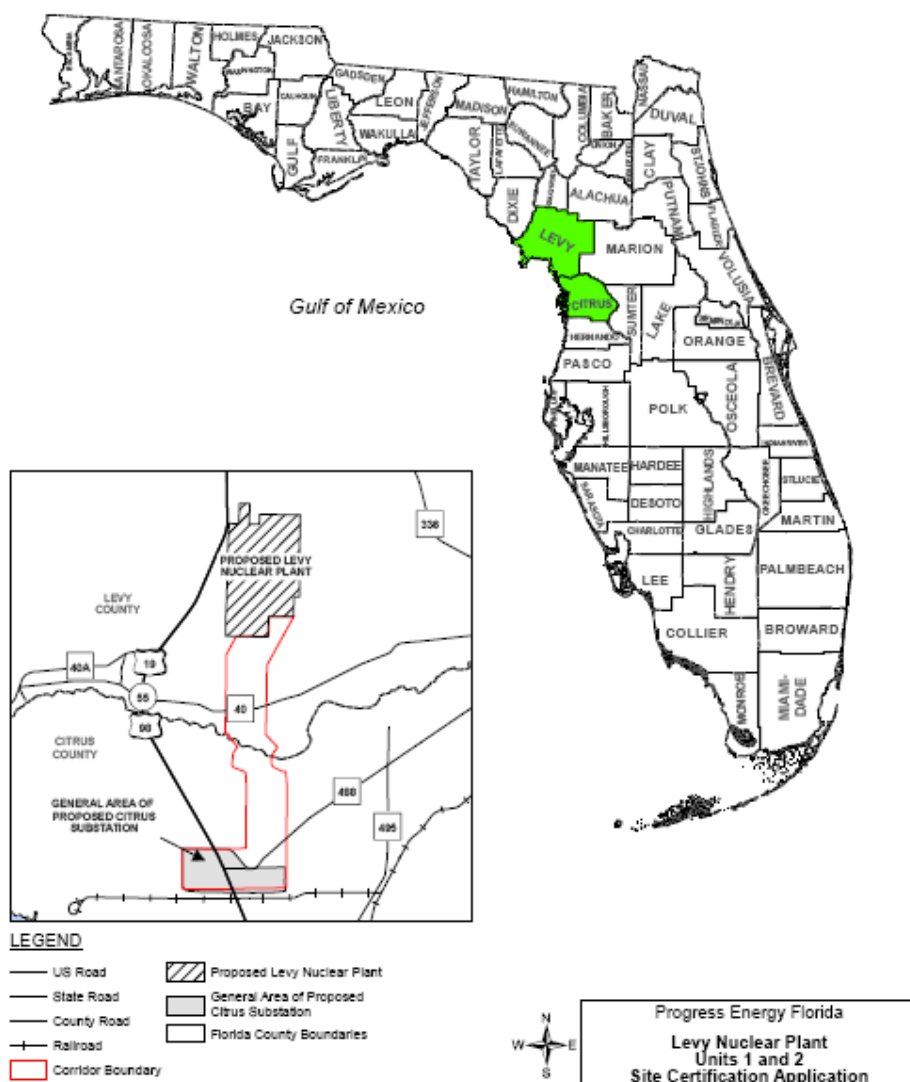


Figure 5 - LCR

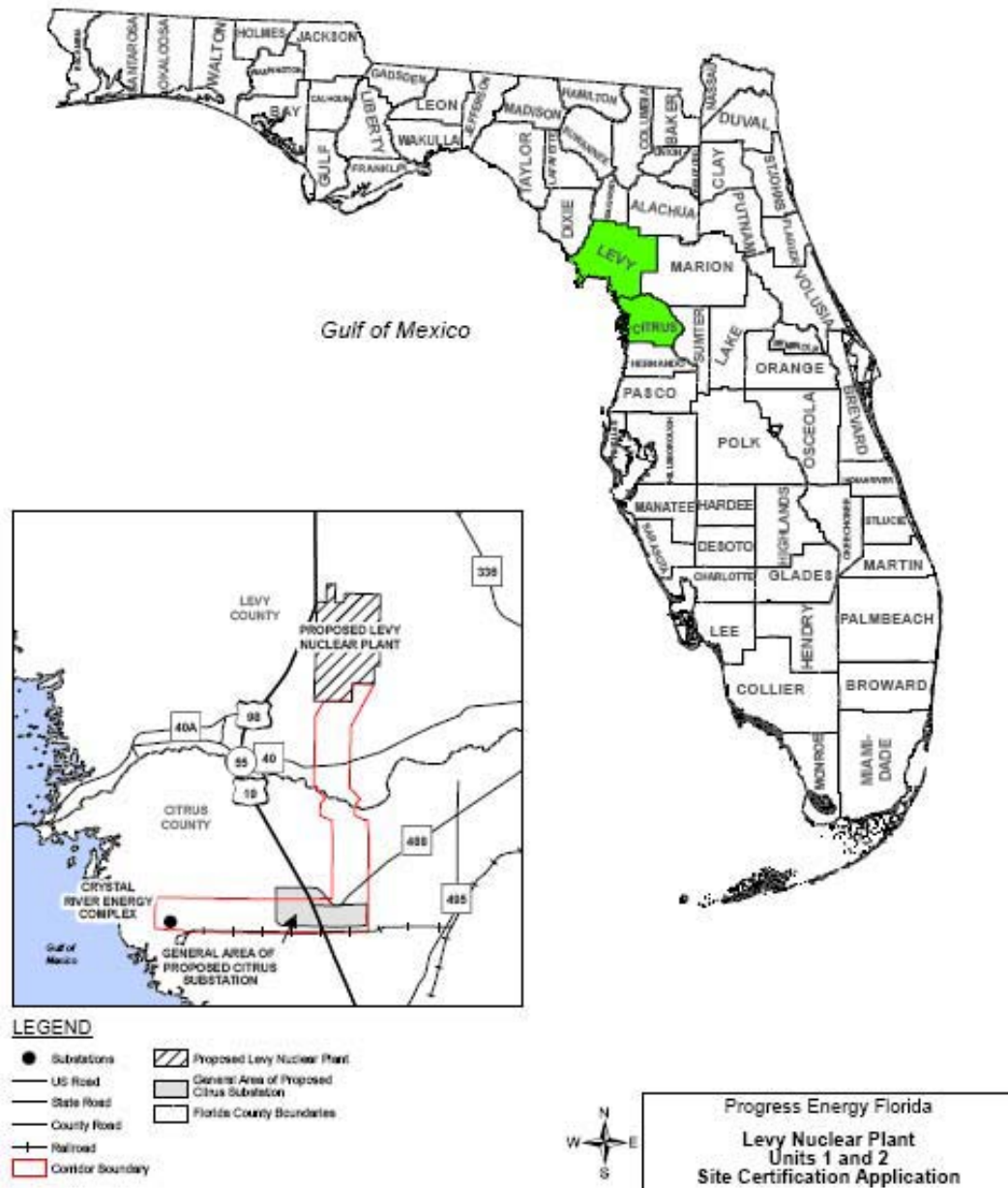
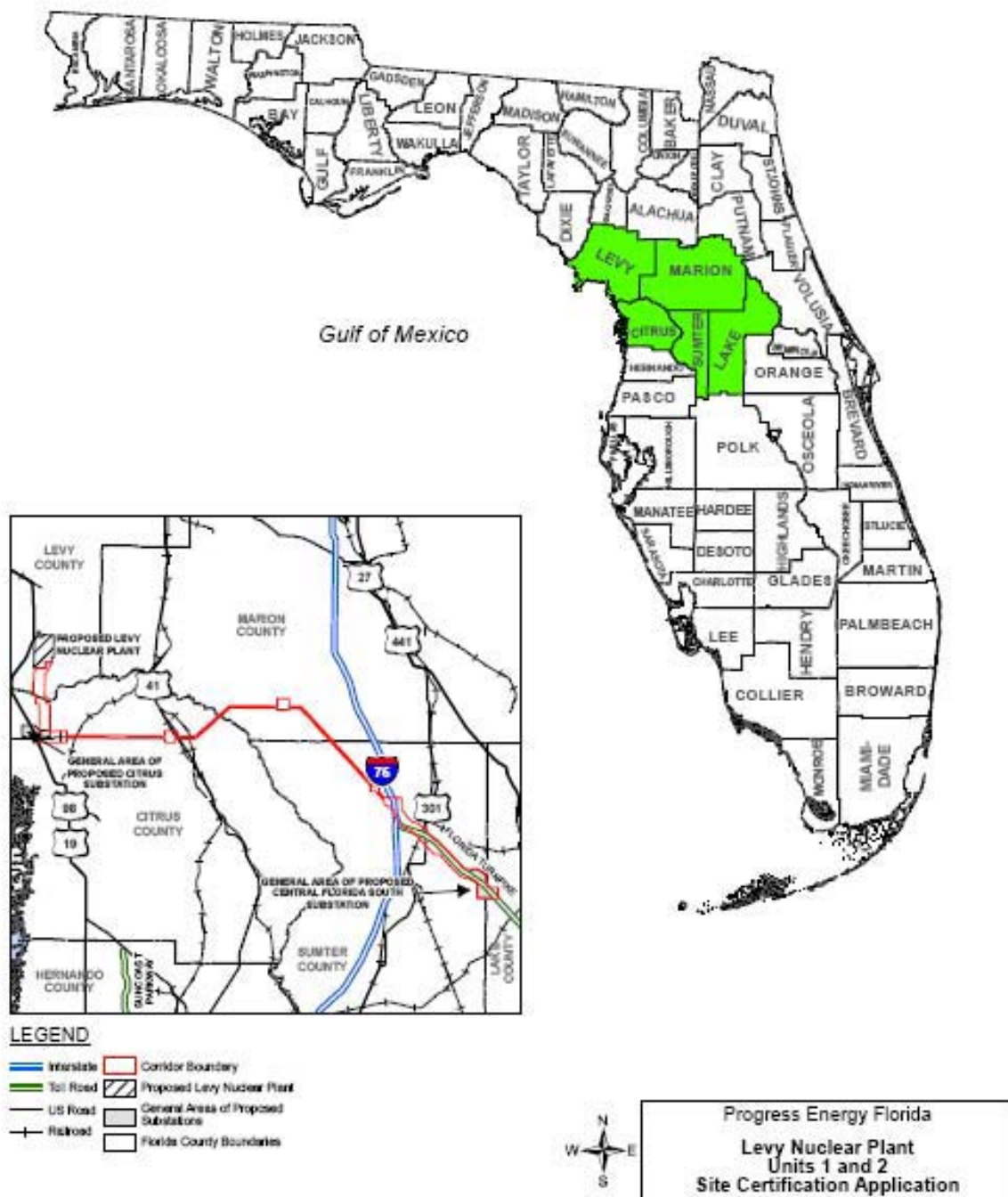


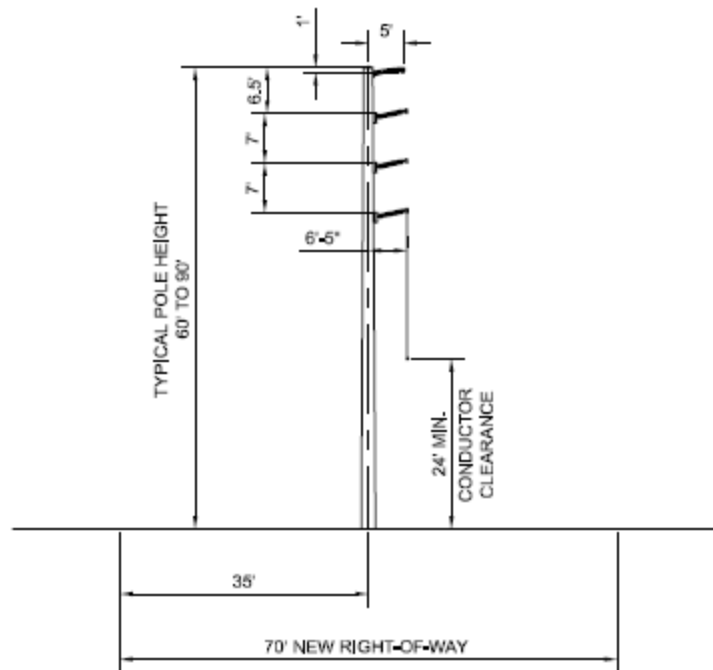
Figure 6 - LCFS



The 69-kV IS Corridor is located between the LNP and US 19, and is located entirely on PEF owned property. The 69-kV IO Corridor is located between the LNP and County Road (CR) 40. A majority of the 69-kV IO Corridor is located on PEF owned property.

Figure 7 shows a monopole structure with a 4' to 6' diameter pier foundation which is a typical structure configuration for this type of line.

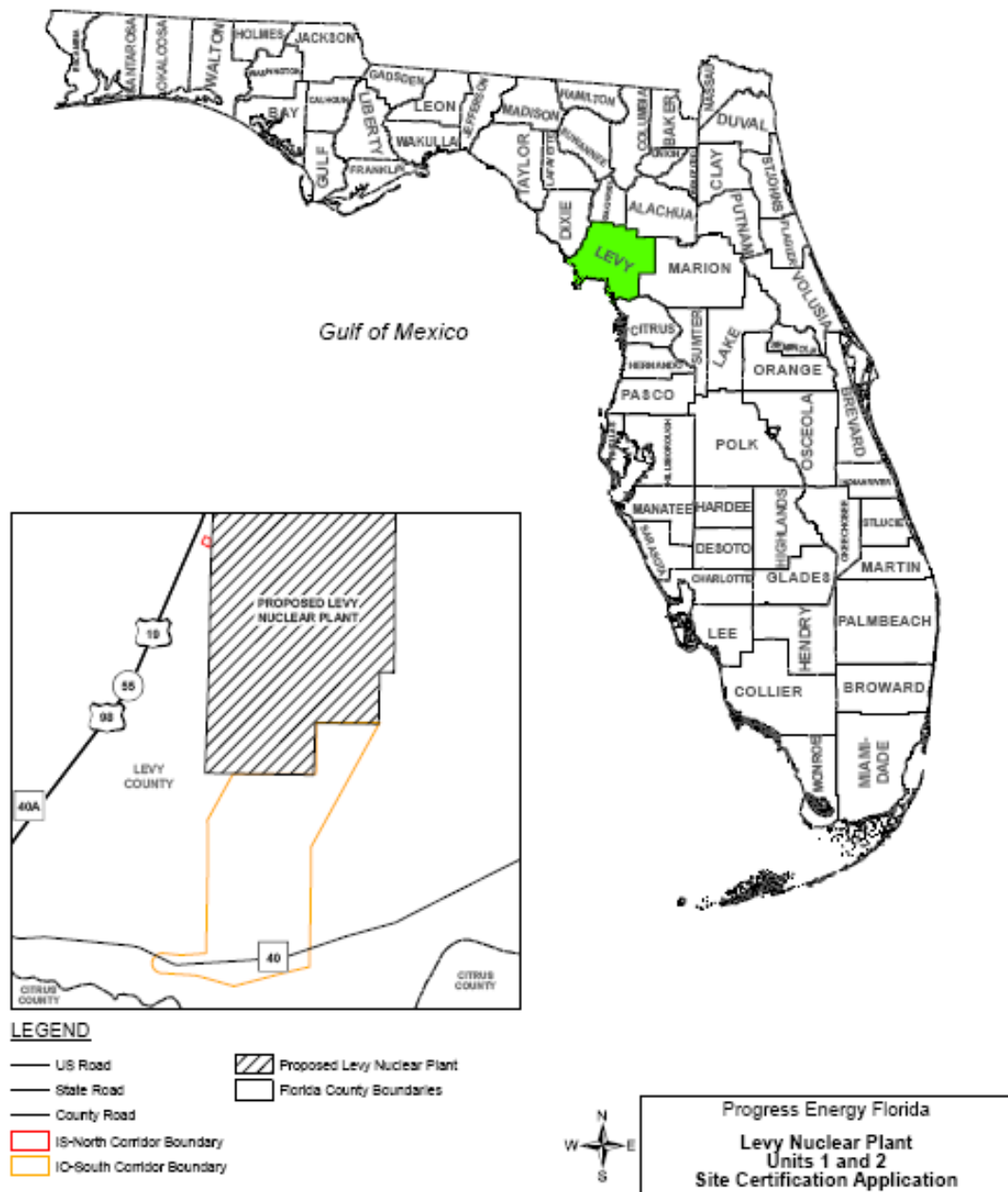
Figure 7 – Monopole Structure



The 69-kV IO Corridor is approximately 4.5 miles in length and is a mile wide for most of its length. This corridor width provides PEF with an appropriate amount of flexibility in avoiding site-specific constraints or accommodating co-location opportunities when selecting the final transmission line right-of-way within the 69-kV IO Corridor. A right-of-way of up to 70 feet is anticipated which will be reduced within the Levy/Citrus Common Corridor and wherever the right-of-way is adjacent to an existing road right-of-way.

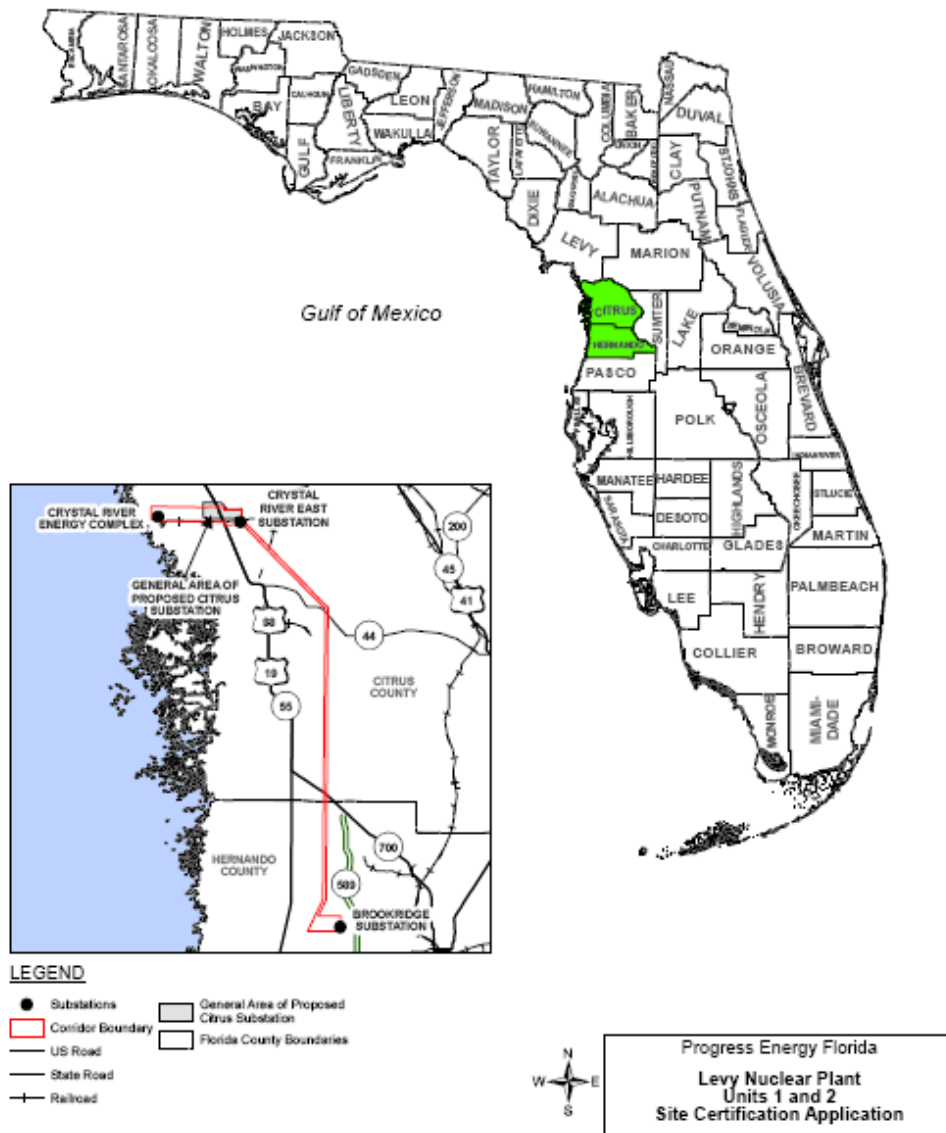
The 69-kV IS Corridor, an approximately 375-foot long corridor with a width of approximately 400 feet, will extend from the LNP westerly site boundary to allow connection to an existing 69-kV transmission line east of US 19. The corridor width provides PEF with flexibility in co-locating this proposed transmission line to the north or south of its construction access road.

Figure 8 – IO and IS



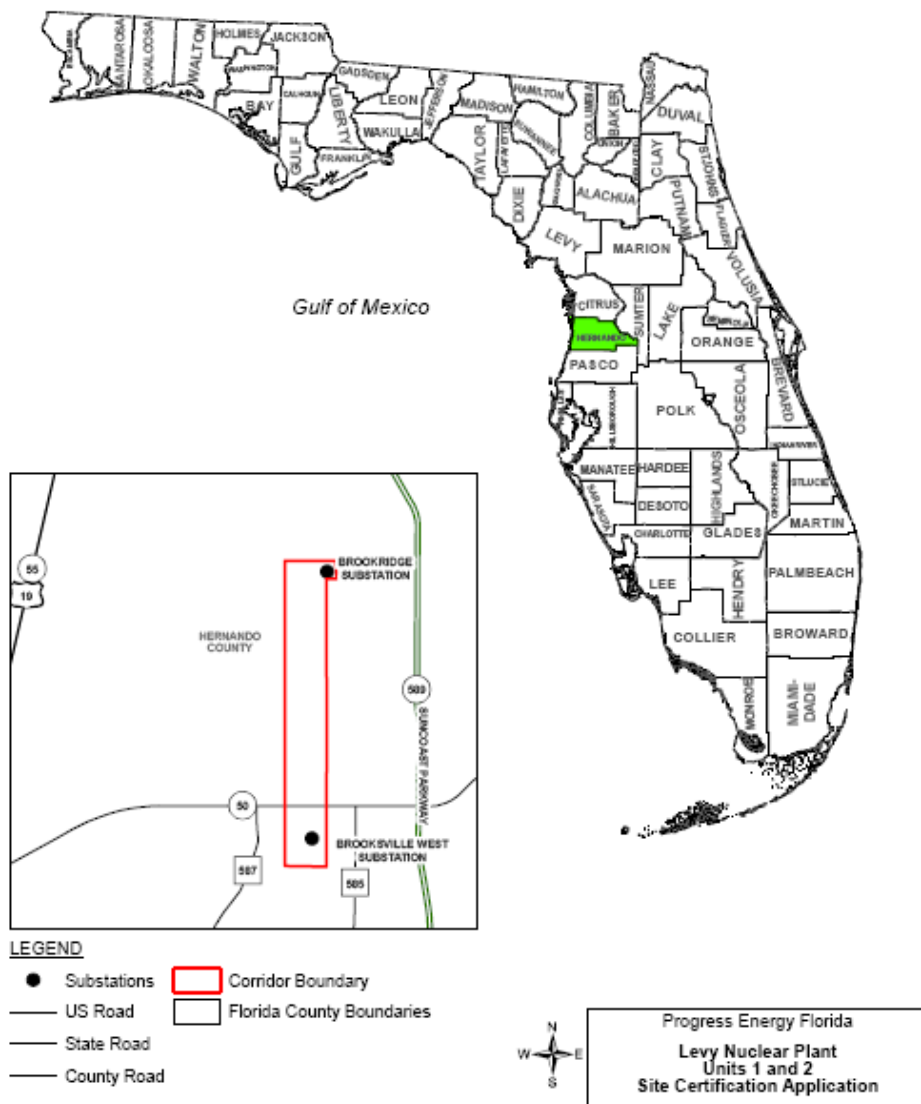
The 230-kV CB Corridor originates at the CREC switchyard in Citrus County and terminates at the existing Brookridge substation in Hernando County. The overall length of the 230-kV CB Corridor is approximately 38 miles. The 230-kV CB Corridor is co-located with PEF's existing transmission line rights-of-way for most of its length; its width ranges from approximately 1000 feet to a mile.

Figure 9 - CB



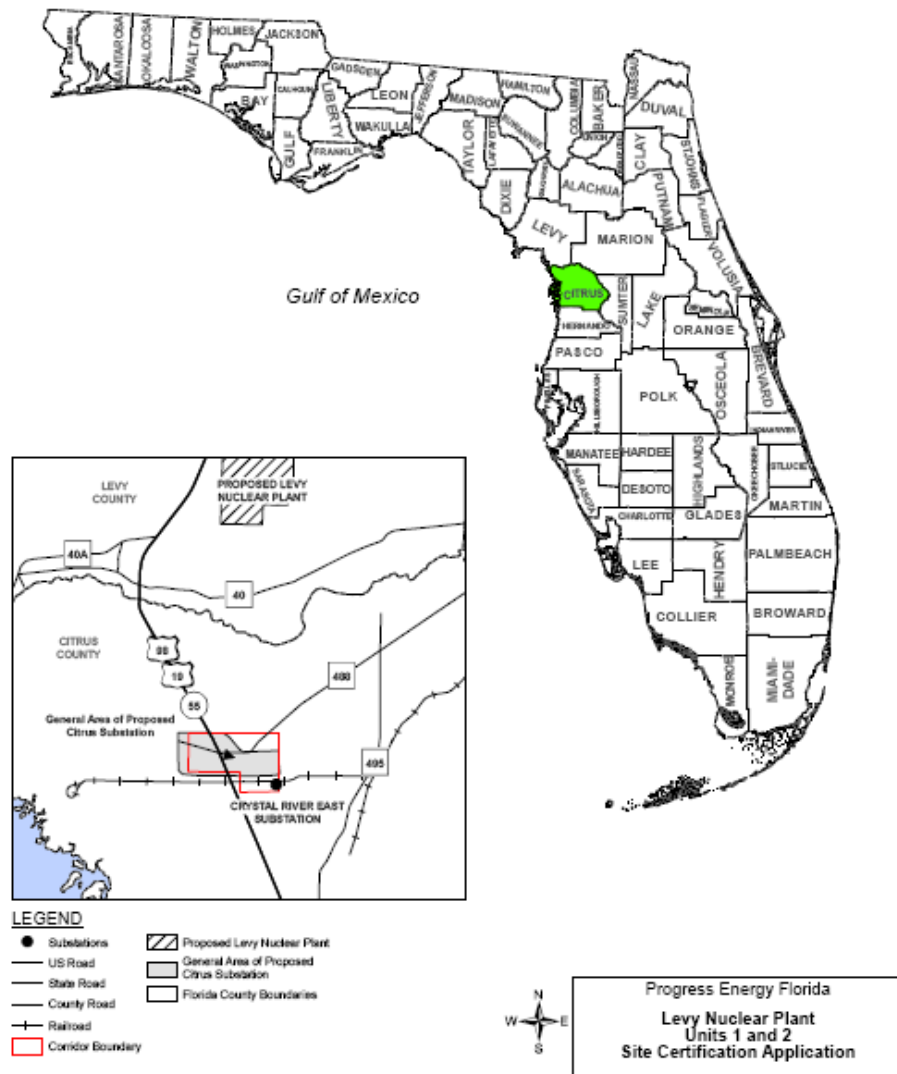
The 230-kV BBW Corridor originates at the existing Brookridge substation traverses south and terminates at the existing Brooksville West substation. The overall length of the 230-kV BBW Corridor is approximately 3 miles. The 230-kV BBW Corridor is approximately 0.5 mile wide and is co-located with the existing PEF 500/230/115-kV transmission line right-of-way. The 0.5 mile wide 230-kV BBW Corridor allows flexibility when entering/existing the substations. The predominant land use within the 230-kV BBW Corridor is residential. It is anticipated that the right-of-way needed for the 230-kV BBW transmission line is 100 feet.

Figure 10 - BBW



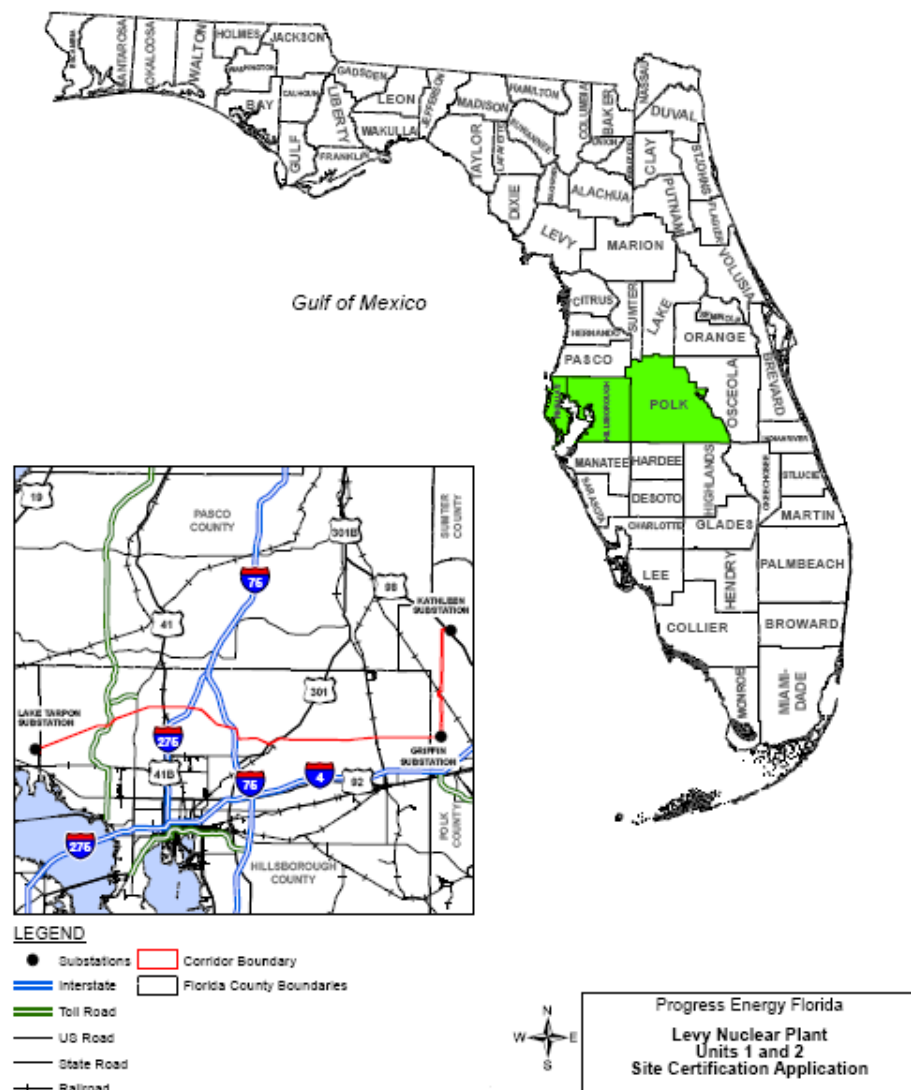
The proposed Citrus substation and the existing Crystal River East substation are separated by less than a mile. The specific location of the proposed Citrus substation, an endpoint for the 230-kV CCRE Corridor, has not been determined. The length of the 230-kV CCRE Corridor is approximately 2.7 miles and the corridor is a mile wide. The 230-kV CCRE Corridor's mile width allows the desired flexibility for future routing of the two transmission lines. The anticipated right-of-way needed for the 230-kV CCRE transmission lines is 100 feet.

Figure 11 - CCRE



The 230-kV PHP Corridor originates at the existing Kathleen substation in Polk County and terminates at the existing Lake Tarpon substation in Pinellas County. The overall length of the 230-kV PHP Corridor is approximately 50 miles. The 230-kV PHP Corridor co-locates with PEF's existing 230-kV transmission line right-of-way from the Kathleen substation to the Griffin substation. The 230-kV transmission line will be located within the existing 115-kV transmission line right-of-way from the existing Griffin substation to the existing Lake Tarpon substation.

Figure 12 - PHP



B. Transmission Line Certification Process

The filing of a complete application triggers an assessment process of environmental, socioeconomic, cultural and land-use impacts resulting from the location of the proposed corridor, construction of the transmission line and maintenance of the transmission line and its associated right-of-way (ROW). The transmission line certification process does not assess impact on private property rights nor issues related to the possible condemnation or other takings of private lands.

The transmission line process includes the reviews and recommendations of the reviewing agencies whose jurisdiction are impacted by the proposed corridor. The reviewing agencies submit to the DEP assessment reports including recommendations and potential conditions of certification based on their areas of jurisdiction. DEP incorporates these agency reports into a compilation as part of its report. The DEP report is guided by Rule 62-17 Part II Transmission Line Siting. The analysis performed by DEP may include the consideration of the following criteria in regards to corridor location impacts: transmission line construction impacts; electric and magnetic field effects; right-of-way and access road maintenance impacts; mitigation measures; potential impacts of transmission line crossings on navigable waters, and submerged lands or wetlands; potential impact on water quality and quantity, including hydrology and surface drainage resulting from construction, clearing, and maintenance; potential impact on terrestrial and aquatic plant and animal life, including endangered or threatened species; commensurate with the level of detail of information provided in the application, a final or preliminary identification of those areas where the Department has environmental resource permit jurisdiction [specific identification and the location of the landward extent of jurisdiction may not occur until after the right-of-way has been defined]. If site specific dredging and filling information has not been provided for all locations in the corridor at the time of application filing the DEP may require an analysis of areas in which the right-of-way, if located, would cause the transmission line not to be certifiable. DEP's designation of such areas may be premised on the following:

- there are no construction techniques which can reasonably be used in that area to mitigate adverse construction impacts to the extent that permitting requirements can be met, including considerations of cumulative impact as provided for in s.403.919, F.S.
- it would be appropriate for this particular location to be excluded from the certified corridor; and other matters relating to dredging and filling which fail to comply with all non-procedural requirements of an agency or fail to comply with the standards set forth in section § 403.529, F.S., e.g., endangered species habitat.

DEP's analysis may include a review of areas where construction techniques and potential right-of-way locations may exist which will comply with departmental permitting requirements, but the department does not possess sufficient information to make such determination. For example, such an instance might occur when neither the applicant nor the department has permission to enter property to verify conditions deduced from aerial photography or other remote means.

A recommendation for certification may be made conditional as to location or as to specific construction techniques or as to provision of additional information to be submitted after certification. Post Certification Review (PCR) of a certified corridor can be a direct result of the uncertainty produced by not knowing the exact location of the final right-of-way within a 2600-foot wide corridor. Many site-specific details and site-specific construction and maintenance impacts can not be known until the ROW is selected by the Licensee. In PCR, verification occurs that allows sensitive areas to be avoided, that location and construction of the ROW and the transmission line will have minimal adverse impacts, and that substantive agency regulations are complied with. PCR can apply to endangered species monitoring, wetland impact minimization, wetland mitigation requirements, archaeological assessments, road-crossing limitations, and so on. The procedures and timeframes for PCR conditions of certification are formalized in Florida Administrative Code Rule 62-17.665. DEP or other agencies may request the Siting Board to approve such PCR conditions with respect to the LNP transmission line portion of the application.

The Conditions of Certification can be found in Appendix I.

II. AGENCY REPORTS

The complete text of following agency reports can be found in Appendix II.

A. Public Service Commission

A Determination of Need for the LNP was issued by the Florida Public Service Commission (PSC) pursuant to §403.519, F.S., on August 12, 2008. More detail concerning this determination of need will be discussed in the Power Plant Staff Analysis Report.

B. Department of Environmental Protection

The Department has concluded that the proposed corridors can be certified as long as PEF complies with the Conditions of Certification and, once the ROW's are determined, PEF supplies the information necessary to meet the informational requirements for an ERP permit as part of post-certification review. An Electric Magnetic Field (EMF) report was submitted with the application and found to be in compliance with DEP Rule 62.814 (Table 1). Six sections where the maximum field levels at the edge of right-of-way (ROW) for the new transmission lines appear to exceed the applicable electric or magnetic field limit have been highlighted. However, the maximum is equivalent to or below the existing maximum field level associated with the existing transmission line(s) that were constructed prior to adoption of the standards in Chapter 62-814, F.A.C. and with which the new transmission lines will be co-located. Since addition of the new transmission lines to the existing ROWs does not increase the electric

or magnetic fields at edge of ROW above the maximum field values created by the existing line(s), no violation of the standards of Chapter 62-814, F.A.C. will occur. Rule 62-814.470(1)(c), F.A.C. states; *“Where calculations under this section indicate that operation of existing electrical facilities on an existing ROW produces electric or magnetic fields at levels higher than the limits specified for new facilities in Rule 62-814.450, F.A.C., a new electrical facility may be constructed and operated on that existing ROW provided that the new facility does not increase the electric or magnetic fields above the maximum field values created by the existing line. Where calculations under this section indicate that the existing electrical facility produces field strengths less than the limits in Rule 62-814.450, F.A.C., then the limits in Rule 62-814.450, F.A.C., shall apply.”*

Table 1 - Report on Compliance of transmission line EMF associated with Progress Energy Levy County Plant

500KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
1.2-1	9.0 kv/m	10 kv/m	1.3 kv/m	2.00 kv/m	96.73 mG	200 mG
1.2-2	8.3 kv/m	10 kv/m	1.13 kv/m	2.00 kv/m	63.29 mG	200 mG
1.2-3	9.0 kv/m	10 kv/m	0.62 kv/m	2.00 kv/m	77.52 mG	200 mG
1.2-4	9.0 kv/m	10 kv/m	0.39 kv/m	2.00 kv/m	81.69 mG	200 mG
1.2-5	8.3 kv/m	10 kv/m	0.53 kv/m	2.00 kv/m	42.54 mG	200 mG
1.2-6	8.2 kv/m	10 kv/m	0.48 kv/m	2.00 kv/m	92.47 mG	200 mG
1.2-7	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.68 mG	200 mG
1.2-8	8.3 kv/m	10 kv/m	0.84 kv/m	2.00 kv/m	98.73 mG	200 mG
1.2-9	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.6 mG	200 mG
1.2-10	8.3 kv/m	10 kv/m	0.98 kv/m	2.00 kv/m	66.44 mG	200 mG

500KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
1.2-7	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.68 mG	200 mG
2.2-1	9.0 kv/m	10 kv/m	1.3 kv/m	2.00 kv/m	96.73 mG	200 mG
2.2-2	8.3 kv/m	10 kv/m	1.13 kv/m	2.00 kv/m	63.29 mG	200 mG
2.2-3	9.0 kv/m	10 kv/m	0.62 kv/m	2.00 kv/m	77.52 mG	200 mG
2.2-4	9.0 kv/m	10 kv/m	0.39 kv/m	2.00 kv/m	81.69 mG	200 mG
2.2-5	8.3 kv/m	10 kv/m	0.53 kv/m	2.00 kv/m	42.54 mG	200 mG
2.2-6	8.2 kv/m	10 kv/m	0.48 kv/m	2.00 kv/m	92.47 mG	200 mG
2.2-7	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.68 mG	200 mG
2.2-8	8.3 kv/m	10 kv/m	0.84 kv/m	2.00 kv/m	98.73 mG	200 mG
2.2-9	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.6 mG	200 mG
2.2-10	8.3 kv/m	10 kv/m	0.98 kv/m	2.00 kv/m	66.44 mG	200 mG
2.2-11	9.0 kv/m	10 kv/m	0.15 kv/m	2.00 kv/m	48.11 mG	200 mG
2.2-12	8.8 kv/m	10 kv/m	0.13 kv/m	2.00 kv/m	46.04 mG	200 mG
3.2-1	9.0 kv/m	10 kv/m	1.3 kv/m	2.00 kv/m	96.73 mG	200 mG
3.2-1	8.3 kv/m	10 kv/m	1.13 kv/m	2.00 kv/m	63.29 mG	200 mG
3.2-3	9.0 kv/m	10 kv/m	0.62 kv/m	2.00 kv/m	77.52 mG	200 mG
3.2-4	9.0 kv/m	10 kv/m	0.39 kv/m	2.00 kv/m	81.69 mG	200 mG

500KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
3.2-5	8.3 kv/m	10 kv/m	0.53 kv/m	2.00 kv/m	42.54 mG	200 mG
3.2-6	8.2 kv/m	10 kv/m	0.48 kv/m	2.00 kv/m	92.47 mG	200 mG
3.2-7	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.68 mG	200 mG
3.2-8	8.3 kv/m	10 kv/m	0.84 kv/m	2.00 kv/m	98.73 mG	200 mG
3.2-9	9.0 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	122.6 mG	200 mG
3.2-10	8.3 kv/m	10 kv/m	0.98 kv/m	2.00 kv/m	66.44 mG	200 mG
3.2-11	9.0 kv/m	10 kv/m	3.71 kv/m	3.71 kv/m	343.94 mG	351.22 mG
3.2-12	9.1 kv/m	10 kv/m	1.36 kv/m	2.00 kv/m	137.75 mG	200 mG
3.2-13	8.9 kv/m	10 kv/m	3.68 kv/m	3.71 kv/m	346.37 mG	351.22 mG
3.2-14	8.7 kv/m	10 kv/m	0.91 kv/m	2.00 kv/m	115.76 mG	200 mG
5.2-3	8.8 kv/m	10 kv/m	3.64 kv/m	3.65 kv/m	333.09 mG	335.61 mG
5.2-4	8.7 kv/m	10 kv/m	0.53 kv/m	2.00 kv/m	143.47 mG	200 mG
5.2-5	8.8 kv/m	10 kv/m	3.63 kv/m	3.65 kv/m	331.73 mG	335.61 mG
5.2-6	8.8 kv/m	10 kv/m	0.54 kv/m	2.00 kv/m	118.47 mG	200 mG
5.2-7	9.1 kv/m	10 kv/m	0.15 kv/m	2.00 kv/m	48.11 mG	200 mG
5.2-8	9.0 kv/m	10 kv/m	0.14 kv/m	2.00 kv/m	48.2 mG	200 mG
5.2-9	1.0 kv/m	10 kv/m	0.33 kv/m	2.00 kv/m	74.02 mG	200 mG

500KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
6.2-3	8.8 kv/m	10 kv/m	3.64 kv/m	3.65 kv/m	333.09 mG	335.61 mG
6.2-4	8.7 kv/m	10 kv/m	0.48 kv/m	2.00 kv/m	139.4 mG	200 mG
6.2-5	8.8 kv/m	10 kv/m	3.63 kv/m	3.65 kv/m	331.73 mG	335.61 mG
6.2-6	8.7 kv/m	10 kv/m	0.48 kv/m	2.00 kv/m	99.06 mG	200 mG
6.2-7	1.0 kv/m	10 kv/m	0.33 kv/m	2.00 kv/m	74.02 mG	200 mG
7.2-2	9.0 kv/m	10 kv/m	0.66 kv/m	2.00 kv/m	118.45 mG	200 mG

69KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
4.2-1	0.8 kv/m	8 kv/m	0.12 kv/m	2.00 kv/m	65 mG	150 mG
4.2-2	0.8 kv/m	8 kv/m	0.02 kv/m	2.00 kv/m	41.22 mG	150 mG

230KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
5.2-1	3.7 kv/m	8 kv/m	0.4 kv/m	2.00 kv/m	147.11 mG	150 mG
5.2-2	3.7 kv/m	8 kv/m	0.14 kv/m	2.00 kv/m	83.83 mG	150 mG
6.2-1	3.7 kv/m	8 kv/m	0.4 kv/m	2.00 kv/m	147.11 mG	150 mG
6.2-2	3.7 kv/m	8 kv/m	0.14 kv/m	2.00 kv/m	83.83 mG	150 mG

230KV Cross Section	Max EMF within ROW	RULE MAX	Max EMF Edge ROW	RULE MAX	Max MAG Edge ROW	RULE MAX
7.2-1	2.7 kv/m	8 kv/m	0.44 kv/m	2.00 kv/m	77.09 mG	150 mG
8.2-1	3.7 kv/m	8 kv/m	0.4 kv/m	2.00 kv/m	147.11 mG	150 mG
8.2-2	3.4 kv/m	8 kv/m	1.44 kv/m	2.00 kv/m	138.73 mG	150 mG
8.2-3	4.0 kv/m	8 kv/m	1.43 kv/m	2.00 kv/m	142.76 mG	150 mG

The Departments' agency comments from the Central and Southwest Districts are included in Appendix II-A. DEP's recommended conditions are included in Appendix I.

C. Department of Transportation

The Department of Transportation recommended certification of the proposed transmission line contingent upon PEF complying with the DOT's recommended conditions of certification contained in Section VI of their report (see Appendix II-B). DOT's recommended conditions are included in Appendix I.

D. Department of Community Affairs

The Department of Community Affairs (DCA) reviewed the completed corridor certification application and, as proposed, did not identify any issues of concern. DCA does not require the applicant to seek any variations, exceptions, forms of relief, or to satisfy other requirements with respect to conditions of certification. It is the DCA's recommendation that the proposed transmission line corridors be approved. The DCA's agency report is included in Appendix II-C.

E. Florida Fish and Wildlife Commission

The applicant will need to comply with the FWC listed species requirements prior to construction of the transmission lines. This may also include monetary requirements as specified in the Gopher Tortoise Management Plan and Gopher Tortoise Permitting Guidelines (Chapter 68-27, Florida Administrative Code (F.A.C.)).

The Florida Fish and Wildlife Commission (FWCC) recommends approval of the

transmission line portion of this application contingent upon compliance with their conditions. Proposed conditions of certification addressing their concerns are included in Appendix I. Their Agency report is included in Appendix II-D.

F. South West Florida Water Management District

Under the current operating agreement between the South West Florida Water Management District (SWFWMD) and DEP, DEP is responsible for conducting the Environmental Resource Permitting-related review of the project area, employing SWFWMD substantive ERP rules as adopted by DEP. Due to the fact that the actual right-of-way location for the proposed transmission line will not be determined until after a corridor is certified, additional detailed information and review procedures are proposed as post-certification submittals once the acquired right of way is determined. This allows for the SWFWMD to consult with DEP on the project's compliance with the conditions of certification related to ERP criteria as set forth in Chapter 40D-4, F.A.C., Part B, Basis of Review of the SWFWMD's Environmental Resource Permitting Information Manual, and applicable provisions of 40D-9, F.A.C., relating to SWFWMD lands.

Staff recommends approval of the proposed transmission line, subject to the proposed conditions of certification, and recommends forwarding of this Agency Report (see Appendix II-E) to the DEP for inclusion in its project analysis and proposed conditions of certification.

The SWFWMD proposed conditions of certification are included in Appendix I.

G. St. Johns River Water Management District

The St. Johns River Water Management District (SJRWMD) reviewed the LNP application and indicated that none of the proposed electrical transmission corridors within the jurisdictional boundary of the District crosses District lands, however, there is a potential impact to a District owned parcel that abuts one of the proposed transmission corridors and is near the proposed Levy Central Florida South Substation. However, the specific location of this substation is unknown at this time.

The Welling Parcel is a 75-acre parcel located in Lake County that was donated to the District in 1993 for mitigation. The southwestern boundary of the parcel abuts the proposed LNP to the proposed Central Florida South Substation transmission line corridor (LCFS corridor). The SJRWMD included a map labeled 'Exhibit B' which is included in their agency report in Appendix II-F. The proposed LCFS corridor is 59 miles long and ranges from 1000 feet to a mile wide.

Although the proposed corridor and substation are not proposed to be located on District lands, their proximity presents a potential for impacts to District lands. The actual transmission corridors and associated rights-of-way locations will not be determined until after the corridors are certified. Proposed conditions have been included in Appendix I.

The District staff recommends approval of the proposed transmission line corridor portion of the power plant certification application with the inclusion of the proposed conditions.

H. Department of Agriculture and Consumer Services – Division of Forestry

The Division of Forestry (DOF) manages lands that are subject to be impacted by this project. Based on the general corridor maps reviewed to date, these lands include Goethe State Forest; the Two mile Prairie, Annuteliga Hammock and Lecanto Tracts of Withlacoochee State Forest; and, Ross Prairie State Forest. The DOF is not clear whether or not the Board of Trustees' Linear Facilities Policy test of avoidance has been addressed. This component of the process should be documented and included in a formal easement proposal at the time of actual submittal of associated documents. If this project is approved and moves forward, the DOF would like Progress Energy to consult with them on all details of design and location, and discuss probable impacts to state forests that will arise from the construction of these facilities. A Condition to that effect has been included in Appendix I. The letter from DOF is included in Appendix II-G.

I. Department of State

An agency report was not received from the Department of State however a Condition to ensure compliance with cultural and historical resources has been included in Appendix I.

J. East Central Florida Regional Planning Council

The East Central Florida Regional Planning Council (ECFRPC) reviewed the information concerning the Sumter Line corridor into Lake County and Leesburg. This is a 500 kV transmission line corridor connecting the Levy Nuclear Power Plant and the proposed Central Florida South Substation in Sumter or Lake County.

The Council staff's concerns regard the Development of Regional Impact (DRI) Secret Promise along the southern boundary of the corridor in Lake County. According to Map H of Secret Promise DRI, "Retail and Service" is planned along the southern boundary of CR 470. Progress Energy should work closely with the Secret Promise DRI to ensure the aesthetics of the transmission line and the ROW are consistent with the development occurring south of CR 470.

The proposed transmission line corridor also crosses some areas shown to be high in biodiversity, according to the ECFRPC Natural Areas of Regional Significance datasets. Council recommends that on-site verification of the actual extent of such natural

resources be conducted as part of the corridor selection. Pursuant to ECFRPC Strategic Regional Policy Plan Policy 4.31 *Planning and development approval shall avoid adverse impacts to listed species. Where suitable habitat on a project site is used by a listed species, a site plan and a management plan to minimize harm to the species and to maintain sufficient habitat to support a viable population of the species on-site should be required as a condition of development approval and Policy 4.32 All levels of government shall protect critical habitat for listed species, appropriate avoidance or mitigation should be part of the corridor plan.*

With consideration of the above conditions, the Council recommends approval of certification (see Appendix II-H). East Central Regional Planning Council conditions are included in Appendix I.

K. Withlacoochee Regional Planning Council

The Withlacoochee Regional Planning Council (WRPC) reviewed the LNP application based on the goals and policies of the *Strategic Regional Policy Plan for the Withlacoochee Region*. The WRPC notes that although there are areas of prospective adverse impact and these impacts are potentially balanced with the economic benefit of transmission line construction. WRPC Staff feels that proposed transmission line facilities are a necessary but accessory condition for the proper function of the proposed nuclear power plant.

Provided that the applicant satisfies or exceeds the conditions recommended by WRPC, WRPC staff does not object to approval to locate electrical transmission line facilities and appurtenant uses within rights-of-way located in corridors established through promulgation of the Florida Electrical Transmission Line Siting Act (see Appendix II-I).

L. Tampa Bay Regional Planning Council

Within the Tampa Bay region, the project (PHP) is limited to corridor certification for a 230 kilovolt electric transmission line to connect the existing Griffin and Lake Tarpon substations in westernmost Polk and easternmost Pinellas counties, respectively, within Pinellas and Hillsborough counties and the cities of Tampa, Plant City and Oldsmar. The TBRPC review was restricted to the portion of the project within the Tampa Bay region and those jurisdictions. The length of the corridor under consideration within the Tampa Bay region is approximately 39 miles, and the width of the proposed corridor varies from approximately 300 feet to 1,000 feet wide, centered on the existing transmission line rights of way.

Progress Energy Florida has stated that "PEF proposes to construct the PHP transmission line entirely within an existing transmission line right of way, replacing the existing Higgins-Griffin 115 kV transmission line, which has been in place for over 50 years. The only exceptions to placing the new line in the existing ROW would be in locations where physical or legal considerations required the use of additional ROW,

none of which are known at this time." Within this length it is likely that the existing lattice structures will be replaced by monopole structures 80 - 145-feet tall and 500 to 1,400 feet apart.

The project was reviewed for consistency with the Council's adopted Future of *The Region - A Strategic Regional Policy Plan for the Tampa Bay Region*. If the transmission line is constructed within existing, maintained transmission line rights-of-way as planned, impact to regionally significant natural resources will be prevented to the greatest degree possible.

TBRPC recommended that the application for certification of the 230 kV transmission line through Hillsborough and Pinellas counties, including the cities of Plant City, Tampa and Oldsmar, be approved, subject to the recommended conditions set forth in Appendix I. See Appendix II-J for TBRPC agency report.

M. Citrus County

Citrus County submitted its determination that the PEF Levy Nuclear Project's transmission line expansion and additions as proposed to be located in Citrus County, Florida are consistent with the County Land Development Code and recommends approval of the application as submitted. Citrus County's agency report is included in Appendix II-K. Their proposed Conditions are included in Appendix I.

N. Hernando County

Hernando County reviewed the application for the portion of the transmission lines that will affect their county. Preliminarily, Hernando County feels that the proposed PEF corridors will have a substantial impact on a number of county residents, citizens and businesses. The expansion of existing corridors and the addition of a new corridor in one part of the county may affect property values, add to existing aesthetic concerns, and raise numerous issues about safety, health, and welfare of those who have chosen to reside or operate a business in proximity to such corridors.

Hernando County recommends that the proposed PEF transmission line corridors through its jurisdiction be approved, provided that such approval includes the Conditions of Certification set forth in Appendix I to minimize the impacts referenced above.

Their agency report is included in Appendix II-L.

O. Hillsborough County

Hillsborough County recommends the approval of the proposed transmission line corridor for Progress Energy Florida, Inc.'s Polk-Hillsborough-Pinellas transmission line

as well as its subsequent construction subject to the conditions set forth in Appendix I being addressed and/or met. Their agency report is included in Appendix II-M.

P. Levy County

Levy County represents that there are no County nonprocedural requirements not specifically listed in the Application from which a variance, exemption, exception, or other relief is necessary in order for the proposed transmission line corridor to be certified. The County recommends the approval of the certification of the transmission line corridor proposed to be located in Levy County, subject to the conditions set forth in Appendix I being addressed and/or met. Their agency report is included in Appendix II-N.

Q. Pinellas County

Pinellas County indicated that impacts to Pinellas County are expected to be associated with the alignment from the Kathleen Substation in Polk County that terminates at the Lake Tarpon Substation in Pinellas County, located at the southeastern border of the Brooker Creek Preserve. Pinellas County's primary concerns are the need for coordination prior and during site development, adherence to Pinellas County Comprehensive Plan and land development regulation requirements, and compatibility with the Brooker Creek Preserve Management Plan.

The agency report for Pinellas County is included in Appendix II-O. Their proposed Conditions are included in Appendix I. Pinellas County did not recommend approval or denial of certification for this project.

R. Polk County

The Polk County Growth Management Department reviewed the Progress Energy Florida, Inc. (PEF) Transmission Line proposal as it relates to Polk County. According to the application, the proposed transmission line corridor within Polk County will be collocated with Progress Energy's existing transmission line rights-of-way. Transmission lines are considered *Utilities, Class I* per the Polk County Land Development Code. Since there are no proposed expansions to the existing PEF transmission line rights-of-way in Polk County (per page 9-A8-11 of the application), the referenced proposal will not be subject to review under the Land Development Code for the purpose of obtaining a permit.

Polk County recommends approval of the referenced transmission lines as consistent with the Polk County Land Development Code (see Appendix II-P).

S. Sumter County

Sumter County feels that the proposed PEF corridor will have an impact on numerous county residents, citizens, and property owners. The expansion of the existing corridors and addition of new corridors may affect property values, result in aesthetic concerns, impact development potential of some properties, and may result in concerns regarding the health, safety, and welfare of those who reside or own property within or adjacent to the PEF corridors.

Notwithstanding the foregoing concerns, Sumter County recommends the proposed transmission line corridors and proposed substation location within the County be approved subject to the conditions found in Appendix I to minimize impacts referenced above. Sumter County's agency report is found in Appendix II-Q.

T. Hillsborough County Environmental Protection Commission

The staff of the Environmental Protection Commission (EPC) of Hillsborough County completed its review of information submitted in support of the transmission lines portion of the Progress Energy Florida Levy Nuclear Project Site Certification Application. The EPC recommends approval contingent upon the Conditions set forth in Appendix I being complied with. Their agency report is included in Appendix II-R.

U. Public Comments

The Siting Coordination Office received five (5) letters and four (4) emails from the general public with concerns of the transmission line corridors in Hillsborough County and Pasco County. These were received after the application was filed. Responses to the letters are attached as Appendix II-S.

III. CONCLUSIONS AND RECOMMENDATIONS

Based on the recommendations of the agencies with jurisdiction over the Levy Nuclear transmission line portion of the Power Plant application, the Department of Environmental Protection concludes that the transmission line corridors filed by PEF are proper for certification and can be constructed and operated in compliance with the nonprocedural requirements of the reviewing agencies. The Department recommends that the Levy Nuclear Plant electrical transmission lines be certified subject to the Power Plant Siting Act and the conditions listed in Appendix I.

AGENCY	APPROVAL	DENIAL
DEP	√	
DOT	√	

FWCC	√	
DCA	√	
SWFWMD	√	
SJRWMD	√	
DACS – Division of Forestry	----	----
DOS – Historical Resources	----	----
ECFRPC	√	
TBRPC	√	
WRPC	√	
Citrus County		
Hernando County	√	
Hillsborough County	√	
Levy County	√	
Pinellas County	----	----
Polk County	√	
Sumter County	√	
Hillsborough County EPC	√	

DONE AND ISSUED this 25th day of September 2008 at Tallahassee

Michael P. Halpin, P.E.

Michael P. Halpin, P.E.
Administrator, Siting Coordination