

Table 9-A8.3-1
Features Included on Regional Screening Maps
230-kV PHP Corridor

Feature	Description
Residences	Identification of existing residential areas within the study area based on the FLUCCS 110-139 class definition areas and Land Use/Land Cover maps
Major Developments	Identification of approved Developments of Regional Impact within the study area
Existing PEF Transmission Lines	Identification of existing PEF transmission lines within the study area
Other Existing Linear Facilities	Identification of other existing linear facilities (existing and committed major public roads and existing railroads) within the study area
Conservation Lands and Parks	Identification of conservation lands and parks (using federal, state, and local government data sources and available online data) in the study area
Wetlands	Identification of wetlands within the study area using the FLUCCS Land Use/Land Cover 600-654 class definition areas
National Register of Historic Places	Identification of NRHP sites within the study area
Threatened and Endangered Species	Identification of the location of threatened and endangered species within the study area based on the FNAI database
Airports	Identification of any licensed public or private airports and heliports registered with FAA and/or FDOT within the study area
Agriculture and Rangelands	Identification of agriculture and rangelands within the study area using FLUCCS Land Use/Land Cover 200-330 class definitions

Notes:

PEF	Progress Energy Florida
FLUCCS	Florida Land Use Cover and Forms Classification System
GIS	Geographic Information Systems
FNAI	Florida Natural Areas Inventory
FAA	Federal Aviation Administration
FDOT	Florida Department of Transportation
NRHP	National Register of Historic Places

**Table 9-A8.3-2
Quantitative Evaluation Criteria
230-kV PHP Corridor**

Criterion	Description
Airports	A count of each airport within the corridor segment and within 20,000 feet of the corridor segment centerline ¹ and a count of each heliport within the corridor segment and within 5000 feet of the corridor segment
Archaeological Resources	A count of archaeological resource site locations within or in close proximity to the corridor segment ²
Commercial and Services Land Uses	Commercial and services land uses identified by the 140-149 FLUCCS (except 148 class definition) class definition series from the FLUCCS Land Use/Land Cover maps
Community Facilities	A count of community facilities within the corridor segment ³
Conservation Lands and Parks	Area of conservation lands and parks within the corridor segment
Cost	The U.S. dollar amount estimated to construct the proposed transmission line within the corridor segment
Eagle Nests	A count of eagle nest locations within the corridor segment and within 1500 feet of the corridor segment centerline
Existing PEF Transmission Lines	Length of the corridor segment within or in close proximity to an existing PEF transmission line
Flood Plain	Area of a 100-year flood plain within the corridor segment
Forested Wetlands	Area of forested wetland areas within the corridor segment
Future Residential Land Use	Area of local government comprehensive plan adopted future land use map designated as residential within the corridor segment.
Herbaceous Wetlands	Area of herbaceous wetland areas within the corridor segment
Historic Resources	A count of historic resource site locations within the corridor segment ⁴
Industrial and Extractive Land Uses	Industrial and extractive land uses identified by the 150-166 FLUCCS class definition series from the FLUCCS Land Use/Land Cover maps
Other Existing Linear Facilities	Length of existing and committed major public roads and existing railroads within the corridor segment
Parcels	A count of parcels within the corridor segment
Residences	A count of residences within the corridor segment
Schools	A count of existing and proposed public and existing private schools within the corridor segment ⁵
Threatened and Endangered Species	A count of protected species (flora and fauna) locations within the corridor segment (not including eagle nests)
Upland Forests	Area of upland forested areas within the corridor segment

¹ Airports are measured from the closest runway. Airports and heliports are identified by FAA and/or FDOT.

² Archaeological resource sites were approximated by adding a 500-foot radius to the resource site locations.

³ Community facility sites were approximated by adding a 100-foot radius to each community facility location.

⁴ Historic resource sites were approximated by adding a 500-foot radius to the resource site locations.

⁵ Existing schools were measured from school parcel boundaries; proposed school sites were approximated by adding a 500-foot radius to school locations.

**Table 9-A8.3.-3
Highest-Ranking Candidate Corridors
230-kV PHP Corridor**

Ranking	Corridor	Segment Components	Total Score
1	16695	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	12.0
2	16694	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	12.1
3	16696	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	12.2
4	15261	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	12.8
5	15260	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	12.9
6	15262	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	13.0
7	13888	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	13.1
8	13887	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	13.2
9	13889	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	13.3
10	16680	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S267+S271	13.8
11	16679	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S269+S271	13.9
12	16681	S290+S205+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S268	14.0
13	8427	S206+S244+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	14.3
14	8426	S206+S244+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	14.4
15	8428	S206+S244+S226+S249+S252+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	14.5
16	15246	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S267+S271	14.5
17	15245	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S269+S271	14.6
18	15247	S290+S205+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S268	14.8
19	13873	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S267+S271	14.9
20	13872	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S269+S271	15.0

**Table 9-A8.3.-3
Highest-Ranking Candidate Corridors
230-kV PHP Corridor**

Ranking	Corridor	Segment Components	Total Score
21	6993	S206+S244+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	15.0
22	13874	S290+S205+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S211+S198+S278+S209+S270+S268	15.1
23	6992	S206+S244+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	15.1
24	16634	S290+S205+S226+S249+S221+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	15.2
25	6994	S206+S244+S226+S248+S247+S251+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	15.3
26	16633	S290+S205+S226+S249+S221+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	15.3
27	5620	S206+S244+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S267+S271	15.4
28	16635	S290+S205+S226+S249+S221+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	15.4
29	5619	S206+S244+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S269+S271	15.5
30	5621	S206+S244+S226+S248+S237+S222+S220+S258+S217+S215+S214+S277+S276+S278+S209+S270+S268	15.6

Table 9-A8.3-4
Easement, Title, and Crossing Approvals Anticipated
to Be Required for Transmission Line Construction
230-kV PHPCorridor

ROADS		
Hillsborough County	Affected Agency	Type of Approval
ARA DR	Hillsborough County	Right-of-Way Use
BAILEY RD	Hillsborough County	Right-of-Way Use
BALD EAGLE ST	Hillsborough County	Right-of-Way Use
BEAVER WY	Hillsborough County	Right-of-Way Use
BELLAMY RD	Hillsborough County	Right-of-Way Use
BERGER RD	Hillsborough County	Right-of-Way Use
BLOOMSBURY CT	Hillsborough County	Right-of-Way Use
BRIDGEWATER LN	Hillsborough County	Right-of-Way Use
BUDDY ROGERS WY	Hillsborough County	Right-of-Way Use
CARLSON CR	Hillsborough County	Right-of-Way Use
CARLTON RD N	Hillsborough County	Right-of-Way Use
CARRILLON ESTATES BL	Hillsborough County	Right-of-Way Use
COMPTON DR	City of Tampa	Construction within Public Rights-of-Way
COUNTRY LAKE DR	Hillsborough County	Right-of-Way Use
COUNTRYWAY BL	Hillsborough County	Right-of-Way Use
CR 579 (MORRIS BRIDGE RD)	Hillsborough County	Right-of-Way Use
CR 581 (BRUCE B DOWNS BLVD)	City of Tampa/Hillsborough County	Construction within Public Rights-of-Way/ Right-of-Way Use
CR 587 (GUNN HW)	Hillsborough County	Right-of-Way Use
CRYING WIND DR	Hillsborough County	Right-of-Way Use
DOC PRICHER RD	Hillsborough County	Right-of-Way Use
DEER HERD AV	Hillsborough County	Right-of-Way Use
DILLARD CT	Hillsborough County	Right-of-Way Use
DUCK WALLOW LN	Hillsborough County	Right-of-Way Use
DUQUE RD	Hillsborough County	Right-of-Way Use
EAST COURSE DR	Hillsborough County	Right-of-Way Use
ED DENISON RD	Hillsborough County	Right-of-Way Use
ED RADICE DR	Hillsborough County	Right-of-Way Use
ELOIAN DR	Hillsborough County	Right-of-Way Use
ESTES RD	Hillsborough County	Right-of-Way Use
FAIRCHILD DR	City of Tampa	Construction within Public Rights-of-Way
FIVE ACRE RD	Hillsborough County	Right-of-Way Use
FLINT CREEK RD	Hillsborough County	Right-of-Way Use
GALLAGHER RD	Hillsborough County	Right-of-Way Use
HALSEY RD	City of Tampa	Construction within Public Rights-of-Way
HANNA RD	Hillsborough County	Right-of-Way Use
HEATHRIDGE DR	Hillsborough County	Right-of-Way Use
I-275 (SR 93)	FDOT	Utility
I-75 (SR 93A)	FDOT	Utility
IDLEWOOD DR	Hillsborough County	Right-of-Way Use
KELLY LN	Hillsborough County	Right-of-Way Use
LAKESIDE COVE CT	Hillsborough County	Right-of-Way Use
LANDINGS POINTE LN	Hillsborough County	Right-of-Way Use
LANDINGS WAY DR	Hillsborough County	Right-of-Way Use
LANTAIGNES WY	Hillsborough County	Right-of-Way Use
LAUREL DALE DR	Hillsborough County	Right-of-Way Use
LEM SIMMONS ST	Hillsborough County	Right-of-Way Use
LIVINGSTON AV	Hillsborough County	Right-of-Way Use
LUCKY ME LN	Hillsborough County	Right-of-Way Use
LYNMAR BL	Hillsborough County	Right-of-Way Use
MCCORMICK DR	Hillsborough County	Right-of-Way Use
MCINTOSH RD	Hillsborough County	Right-of-Way Use
MERRIN RD	Hillsborough County	Right-of-Way Use
NEW LOVE PL	Hillsborough County	Right-of-Way Use
NOAHS ARK LN	Hillsborough County	Right-of-Way Use
Hillsborough County	Affected Agency	Type of Approval
NORTH POEL RD	Hillsborough County	Right-of-Way Use

Table 9-A8.3-4
Easement, Title, and Crossing Approvals Anticipated
to Be Required for Transmission Line Construction
230-kV PHPCorridor

ROADS

NORTHDALE BL	Hillsborough County	Right-of-Way Use
ORANGEWOOD DR	Hillsborough County	Right-of-Way Use
PEEPLES RD	Hillsborough County	Right-of-Way Use
PENNSBURY DR	Hillsborough County	Right-of-Way Use
PLESS RD	Hillsborough County	Right-of-Way Use
RACE TRACK RD	Hillsborough County	Right-of-Way Use
RAILS RD	Hillsborough County	Right-of-Way Use
REPTRON BL	Hillsborough County	Right-of-Way Use
ROGERS VISTA CT	Hillsborough County	Right-of-Way Use
SIMMONS RD	Hillsborough County	Right-of-Way Use
SOGGY BOTTOM TL	Hillsborough County	Right-of-Way Use
SOUTH MOBLEY RD	Hillsborough County	Right-of-Way Use
SR 39 (PAUL BUCHMAN HW)	FDOT (District 7)	Utility
SR 45 (NEBRASKA AVE)	FDOT	Utility
SR 589 (VETERANS EXPRESSWAY)	FDOT	Utility
SR 597 (DALE MABRY HW N)	FDOT (District 7)	Utility
STACEY RD	Hillsborough County	Right-of-Way Use
STARLING DR	Hillsborough County	Right-of-Way Use
STEVE REEVES LN	Hillsborough County	Right-of-Way Use
TAMPA PALMS BL	City of Tampa	Construction within Public Rights-of-Way
TAMPA PALMS BL W	City of Tampa	Construction within Public Rights-of-Way
TOM MATHEWS RD	Hillsborough County	Right-of-Way Use
TRASKWOOD CT	Hillsborough County	Right-of-Way Use
TURKEY RIDGE RD	Hillsborough County	Right-of-Way Use
UPPER TAMPA BAY TL	Hillsborough County	Right-of-Way Use
US 301 (SR 41)	FDOT	Utility
VALLEY FIELD PLACE	Hillsborough County	Right-of-Way Use
VARN RD	Hillsborough County	Right-of-Way Use
VAUGHN RD N	Hillsborough County	Right-of-Way Use
WAREHAM DR	City of Tampa	Construction within Public Rights-of-Way
WEBB RANCH LN	Hillsborough County	Right-of-Way Use
WEST COURSE DR	Hillsborough County	Right-of-Way Use
WHIPPOORWILL DR	Hillsborough County	Right-of-Way Use
WHISPER LAKE TL	Hillsborough County	Right-of-Way Use
WHO DAT RD	Hillsborough County	Right-of-Way Use
WILLOWDALE RD	Hillsborough County	Right-of-Way Use
YARDLEY WY	City of Tampa	Construction within Public Rights-of-Way

Table 9-A8.3-4
Easement, Title, and Crossing Approvals Anticipated
to Be Required for Transmission Line Construction
230-kV PHPCorridor

ROADS

Polk County	Affected Agency	Type of Approval
1ST ST NW	Polk County	Utility
ACORN DR N	Polk County	Utility
ACORN DR S	Polk County	Utility
BAILEY RD	Polk County	Utility
CARLTON RD	Polk County	Utility
CLAYTON RD	Polk County	Utility
CREEK MEADOW TRL	Polk County	Utility
DEESON RD	Polk County	Utility
DOVE MEADOW CT	Polk County	Utility
DOVE MEADOW LN	Polk County	Utility
DOVE MEADOW TRL	Polk County	Utility
OLD DADE CITY RD	Polk County	Utility
SHADY OAK DR E	Polk County	Utility
STAGHORN DR	Polk County	Utility
TOM MATTHEWS RD	Polk County	Utility
US 98 (SR 35, MEMORIAL TO PASCO)	FDOT (District 1)	Utility
WALNUT CIR E	Polk County	Utility
WALNUT CIR N	Polk County	Utility
WALNUT CIR S	Polk County	Utility

GOVERNMENTAL JURISDICTIONS

Public Lands	Affected Agency	Type of Approval
Upper Tampa Bay Trail	FDEP	Easement
Upper Hillsborough	SWFWMD	Easement
Lower Hillsborough Wilderness Park	SWFWMD	Easement
Old Fort King Trail	SWFWMD	Easement
Lower Hillsborough Flood Detention Area	SWFWMD	Easement
Morris Bridge Park Trails	SWFWMD	Easement
Trout Creek Park	SWFWMD	Easement
Flatwoods Park	SWFWMD	Easement
Jefferson Road Equestrian Area Trail	SWFWMD	Easement
Hillsborough River	ACOE and FDEP	Section 10 Permit and Consent of Use
Lake Park	Hillsborough County	Easement
Cone Ranch	Hillsborough County	Easement
Channel B Corridor	Hillsborough County	Easement
Rocky and Brushy Creek Greenway	Hillsborough County	Easement
Northwest Preserve	Hillsborough County	Easement
Ed Radice Sports Complex	Hillsborough County	Easement
Northdale Soccer	Hillsborough County	Easement
Bakas Equestrian Center	Hillsborough County	Easement

Table 9-A8.3-5
Land Use and Habitats
230-kV PHP Corridor

FLUCCS Code	Description	Acreage
<u>LAND USE</u>		
110	Residential, Low Density	437.06
120	Residential, Medium Density	199.87
130	Residential, High Density	78.83
140	Commercial and Services	15.14
150	Industrial	35.01
160	Extractive	12.48
170	Institutional	7.19
180	Recreational	15.96
182	Golf Courses	26.16
214	Row Crops	17.43
221	Citrus Groves	78.11
230	Feeding Operations	4.03
240	Nurseries and Vineyards	10.63
250	Specialty Farms	7.67
810/814	Transportation/Roads and Highways	20.79
830	Utilities	268.74
TOTAL ACREAGE		1,235.09
<u>UPLAND HABITATS</u>		
190	Open Land	1.61
211	Improved Pastures	597.66
260	Other Open Lands (Rural)	25.84
320	Shrub and Brushland	81.68
330	Mixed Rangeland	2.83
411	Pine Flatwoods	38.07
421	Xeric Oak	1.21
424	Melaleuca	0.67
427	Live Oak	2.08
434	Hardwood-Conifer Mixed	268.94
441	Coniferous Plantations	21.31
740	Disturbed Lands	1.14
TOTAL ACREAGE		1,043.03
<u>AQUATIC HABITATS</u>		
510	Streams and Waterways	10.00
520	Lakes	7.93
530/534	Reservoirs	66.83
TOTAL ACREAGE		84.76

Table 9-A8.3-5
Land Use and Habitats
230-kV PHPCorridor

FLUCCS Code	Description	Acreage
<u>WETLAND HABITATS</u>		
615	Streams and Lake Swamps (Bottomland)	114.36
621	Cypress	135.28
630	Wetland Forested Mixed	95.61
631	Wetland Scrub	0.55
641	Freshwater Marshes	301.02
643	Wet Prairies	10.58
653	Intermittent Ponds	1.69
	TOTAL ACREAGE	659.10
	TOTAL ACREAGE IN THE 230-kV PHP CORRIDOR	3,021.99

Table 9-A8.3-6
Important Plant Species Reported in Polk, Hillsborough, and Pinellas Counties That Can Reasonably Be Expected to Occur
230-kV PHP Corridor

Scientific Name	Common Name	Status			Probability of Occurrence in 230-kV PHP Corridor and Typical Habitat
		Federal	State		
<i>Acrostichum aureum</i>	Golden Leather Fern	N	T	High	Brackish and freshwater marshes
<i>Andropogon arctatus</i>	Pine-woods Bluestem	N	T	Moderate	Wet pine flatwoods
<i>Asplenium erosum</i>	Auricled Spleenwort	N	E	High	Pinelands
<i>Bigelovia nuttallii</i>	Nuttall's Rayless Goldenrod	N	E	Low	Sand pine scrub in Pinellas County
<i>Bonamia grandiflora</i>	Florida Bonamia	T	E	Low	Openings or disturbed areas in white sand scrub
<i>Calamintha ashei</i>	Ashe's Savory	N	T	Low	Sandhills and scrub
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	N	E	Moderate	Dry to moist flatwoods with longleaf pine, wiregrass, saw palmetto
<i>Campanula robinsiae</i>	Brooksville Bellflower	E	E	Low	Wet, grassy slopes and drying pond edges in vicinity of Chinsegut Hill in Hernando County
<i>Carex chapmanii</i>	Chapman's Sedge	N	E	High	Grasslands, pinelands
<i>Centrosema arenicola</i>	Sand Butterfly Pea	N	E	Low	Sandhill, scrubby flatwoods, dry upland woods
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	N	E	Low	Coastal scrub and stabilized dunes
<i>Chionanthus pygmaeus</i>	Pygmy Fringe Tree	E	E	Low	Scrub, sandhill, and xeric hammock
<i>Chrysopsis floridana</i>	Florida Goldenaster	E	E	Low	Sand pine scrub, sand ridges of excessively well drained, fine sands, railroad and highway rights-of-way
<i>Cladonia perforata</i>	Perforate Reindeer Lichen	E	E	Low	Rosemary scrub
<i>Clitoria fragrans</i>	Scrub Pigeon-wing	T	E	Low	Turkey oak barrens with wire grass, bluejack and turkey oak; also scrub and scrubby high pine
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	N	T	High	Freshwater habitats
<i>Drosera intermedia</i>	Spoon-leaved Sundew	N	T	High	Freshwater habitats
<i>Eragrostis pectinacea</i> var. <i>tracyi</i>	Sanibel Lovegrass	N	E	Moderate	Disturbed beach dunes, maritime hammocks, coastal strands, coastal grasslands, old fields, clearings, and other disturbed sites
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat	T	E	Low	Sandhill, oak-hickory scrub
<i>Glandularia tampensis</i>	Tampa Vervain	N	E	Moderate	Live oak-cabbage palm hammocks and pine-palmetto flatwoods
<i>Gossypium hirsutum</i>	Wild Cotton	N	E	Low	Coastal strands and disturbed areas
<i>Hartwrightia floridana</i>	Hartwrightia	N	T	High	Seepage slopes, edges of baygalls and springheads, wet prairies, flatwoods
<i>Hypericum cumulicola</i>	Highlands Scrub Hypericum	E	E	Low	Scrubs and rosemary, scrubby flatwoods and oak scrubs
<i>Hypericum edisonianum</i>	Edison's Ascyrum	N	E	Moderate	Depressions in scrub, cutthroat seeps, flatwoods ponds, lake margins, wet prairies
<i>Illicium parviflorum</i>	Star Anise	N	E	High	Banks of spring-run or seepage streams, bottomland forest, hydric hammock, and baygall
<i>Lechea cernua</i>	Nodding Pinweed	N	T	Low	Usually ancient dunes with evergreen scrub oaks, mature scattered pine or oak forests
<i>Lechea divaricata</i>	Pine Pinweed	N	E	Low	Scrub and scrubby flatwoods

Table 9-A8.3-6
Important Plant Species Reported in Polk, Hillsborough, and Pinellas Counties That Can Reasonably Be Expected to Occur
230-kV PHP Corridor

Scientific Name	Common Name	Status			Probability of Occurrence in 230-kV PHP Corridor and Typical Habitat
		Federal	State		
<i>Liatis ohlingerae</i>	Florida Blazing Star	E	E	Low	Rosemary balds transitional to oak scrub; scrubby flatwoods and disturbed scrub
<i>Lupinus aridorum</i>	Scrub Lupine	E	E	Low	Sand pine and rosemary scrub
<i>Matelea floridana</i>	Florida Spiny-pod	N	E	High	Pinelands, temperate forests
<i>Nemastylis floridana</i>	Celestial Lily	N	E	High	Freshwater habitats
<i>Nolina brittoniana</i>	Britton's Beargrass	E	E	Low	Scrub, sandhill, scrubby flatwoods, and xeric hammock
<i>Ophioglossum palmatum</i>	Hand Fern	N	E	High	Old leaf bases of cabbage palms in maritime and wet hammocks
<i>Pecluma plumula</i>	Plume Polypody	N	E	High	Tree branches or limestone in hammocks, wet woods, and limesinks
<i>Peperomia humilis</i>	Terrestrial Peperomia	N	E	Moderate	Shell mounds and limestone outcrops in mesic hammocks, coastal berms, cypress swamps
<i>Platanthera integra</i>	Yellow Fringeless Orchid	N	E	High	Wet pine flatwoods, wet prairies, depressions within pinelands
<i>Polygala lewtonii</i>	Lewton's Polygala	E	E	Low	Oak scrub, sandhill
<i>Polygonella myriophylla</i>	Small's Jointweed	E	E	Low	Open, sandy areas within scrub
<i>Prunus geniculata</i>	Scrub Plum	E	E	Low	Sandhill and oak scrub
<i>Pteroglossaspis ecristata</i>	Giant Orchid	N	T	Observed by FNAI	Sandhill, scrub, pine flatwoods, pine rocklands
<i>Salix floridana</i>	Florida Willow	N	E	Moderate	Springheads, edges of spring runs, hydric hammocks, floodplains
<i>Schizachyrium niveum</i>	Scrub Bluestem	N	E	Low	Rosemary, sand pine, and oak scrub
<i>Stylisma abdita</i>	Scrub Stylisma	N	E	Low	Pinelands, sandhills, scrub
<i>Thelypteris serrata</i>	Toothed Maiden Fern	N	E	High	Cypress swamps, sloughs, floodplains
<i>Triphora amazonica</i>	Broad-leaved Nodding-caps	N	E	High	Rich damp hardwood hammocks
<i>Warea amplexifolia</i>	Clasping Warea	E	E	Low	Sandhill with longleaf pine and wiregrass
<i>Warea carteri</i>	Carter's Warea	E	E	Low	Sandhill, scrubby flatwoods, scrub
<i>Ziziphus celata</i>	Scrub Ziziphus	E	E	Low	Oak-hickory scrub, scrubby flatwoods, or sandhills

Notes:

N = Not Listed
T = Threatened
E = Endangered

Source:

FNAI, FNAI Search, 2001
FNAI, FNAI Tracking List, 2008
SERPIN, 2008

Table 9-A8.3-7
Important Wildlife Species Reported in Polk, Hillsborough, and Pinellas Counties That Can Reasonably Be Expected to Occur
230-kV PHP Corridor

230-kV PHP Corridor						
Scientific Name	Common Name	Status				Probability of Occurrence in 230-kV PHP Corridor and Typical Habitat
		Federal	State	F.A.C. Rule 39-1		
FISH						
<i>Acantharchus pomotis</i>	Mud Sunfish	N	N	Game	High	Vegetated sloughs, lakes, and pools and backwaters of creeks and small to medium rivers
<i>Ambloplites ariommus</i>	Shadow Bass	N	N	Game	Medium	Brushy and vegetated, gravel-bottomed, sand-bottomed and mud-bottomed pools of creeks and small to medium rivers
<i>Centrarchus macropterus</i>	Flier	N	N	Game	High	Swamps, vegetated lakes, ponds, sloughs and backwaters and pools of creeks and small rivers
<i>Cichla ocellaris</i>	Peacock Bass	N	N	Game	Low	In rapids and quiet waters with medium depth and rocky substrates
<i>Lepomis auritus</i>	Redbreast Sunfish	N	N	Game	High	Rocky and sandy pools of creeks and small to medium rivers; rocky and vegetated lake margins
<i>Lepomis gulosus</i>	Warmouth	N	N	Game	High	Vegetated lakes, ponds, swamps, quiet water areas of streams
<i>Lepomis macrochirus</i>	Bluegill	N	N	Game	High	Lakes, ponds, reservoirs and sluggish streams
<i>Lepomis megalotis</i>	Longear Sunfish	N	N	Game	High	Dense vegetation in small lakes, ponds and slow moving rivers and streams
<i>Lepomis microlophus</i>	Redear Sunfish	N	N	Game	High	Ponds, swamps, lakes, small to medium rivers
<i>Lepomis punctatus</i>	Spotted Sunfish	N	N	Game	High	Heavily vegetated ponds, lakes, pools of creeks and small to medium rivers, and swamps
<i>Micropterus salmoides floridanus</i>	Black Bass	N	N	Game	High	Clear non-flowing waters of upper estuaries, rivers, lakes, reservoirs, and ponds
<i>Morone chrysops</i>	White Bass	N	N	Game	High	Lakes, ponds and pools of small to large rivers
<i>Morone chrysops</i> x <i>Morone saxatilis</i>	Sunshine Bass	N	N	Game	High	Lakes, ponds and pools of small to large rivers
<i>Morone saxatilis</i>	Striped Bass	N	N	Game	High	Rivers
<i>Pomoxis nigromaculatus</i>	Black Crappie	N	N	Game	High	Lakes, ponds, sloughs, and backwaters and pools of streams
AMPHIBIANS						
<i>Rana capito</i>	Gopher Frog	N	SSC	N	High	Sandhill and scrub with isolated wetlands or large ponds; commensal with gopher tortoises
REPTILES						
<i>Alligator mississippiensis</i>	American Alligator	T (SA)	SSC	N	High	Most permanent bodies of fresh water, including marshes, swamps, lakes, and rivers
<i>Drymarchon couperi</i>	Eastern Indigo Snake	T	T	N	High	Broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps; often commensal with gopher tortoises
<i>Gopherus polyphemus</i>	Gopher Tortoise	N	T	N	Observed by Golder	Dry upland habitats, including sandhills, scrub, xeric oak hammock, and dry pine flatwoods; also pastures, old fields
<i>Neoseps reynoldsi</i>	Sand Skink	T	T	N		Moderate
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	N	SSC	N	High	Sandhill, old fields and pastures, sand pine scrub, scrubby flatwoods; often commensal with gopher tortoises and pocket gophers
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	N	SSC	N	High	Rivers, large streams
<i>Stilosoma extenuatum</i>	Short-tailed Snake	N	T	N	Low	Sandhill, xeric hammock, sand pine scrub
BIRDS						
<i>Anatidae</i> (family)	Geese, Ducks	N	N	Game	High	Freshwater marshes, lake margins, wet prairies
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	T	T	N	Low	Low-growing oak scrub habitat
<i>Aramus guarauna</i>	Limpkin	N	SSC	N	High	Freshwater marshes, swamps, springs, spring runs, pond, river, and lake margins
<i>Athene cucularia floridana</i>	Florida Burrowing Owl	N	SSC	N	Moderate	Dry prairie, sandhill, pastures
<i>Caracara cheriway</i>	Crested Caracara	T	T	N	Moderate	Open country, dry prairie, pasture lands with cabbage palm, cabbage palm/live oak hammocks
<i>Colinus virginianus</i>	Northern Bobwhite	N	N	Game	High	Brushy pastures, open woodlands
<i>Corvus spp.</i>	Crows	N	N	Game	High	Forested areas, pastures, suburban areas
<i>Egretta caerulea</i>	Little Blue Heron	N	SSC	N	High	Freshwater lakes, marshes, swamps, and streams, cypress
<i>Egretta thula</i>	Snowy Egret	N	SSC	N	High	Wetlands, streams, lakes, and swamps, manmade impoundments, ditches
<i>Egretta tricolor</i>	Tricolored Heron	N	SSC	N	High	Wetlands, ditches, pond and lake edges, coastal areas
<i>Eudocimus albus</i>	White Ibis	N	SSC	N	High	Freshwater and brackish marshes, salt flats, forested wetlands, wet prairies, swales, man-made ditches

Table 9-A8.3-7
Important Wildlife Species Reported in Polk, Hillsborough, and Pinellas Counties That Can Reasonably Be Expected to Occur
230-kV PHP Corridor

Scientific Name	Common Name	Status				Probability of Occurrence in 230-kV PHP Corridor and Typical Habitat
		Federal	State	F.A.C. Rule 39-1		
<i>Falco peregrinus</i>	Peregrine Falcon	N	E	N	High	Open land near rivers and lakes, suburban areas
<i>Falco sparverius paulus</i>	Southeastern American	N	T	N	High	Open pine habitats, woodland edges, prairies, pastures
<i>Fulica americana</i>	American Coot	N	N	Game	High	Open ponds, marshes, coastal inlets, bays
<i>Gallinago gallinago</i>	Common Snipe	N	N	Game	High	Freshwater marshes, ponds, fields
<i>Gallinula chloropus</i>	Common Moorhen	N	N	Game	High	Freshwater marshes, ponds
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	N	T	N	Observed by Golder	Prairies, freshwater marshes, and pastures
<i>Haliaeetus leucocephalus</i>	Bald Eagle	N	T	N	Potentially observed by Golder	Coastal areas, bays, rivers, lakes, or other bodies of water
<i>Meleagris gallopavo osceola</i>	Florida Wild Turkey	N	N	Game	High	Oak woodlands, pine-oak forests
<i>Mycteria americana</i>	Wood Stork	E	E	N	High	Cypress strands and domes, mixed hardwood swamps
<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	SSC	N	Low	Mature pine woodlands; present in Withlacoochee State Forest
<i>Platalea ajaja</i>	Roseate Spoonbill	N	SSC	N	High	Tidal flats, coastal and freshwater marshes
<i>Rallidae (family)</i>	Rails	N	N	Game	High	Freshwater marshes, coastal salt marshes, ditches
<i>Scolopax minor</i>	American Woodcock	N	N	Game	Moderate	Moist woodlands, thickets near open fields
<i>Zenaida asiatica</i>	White-winged Dove	N	N	Game	High	Open fields, shrubland, residential areas
<i>Zenaida macroura</i>	Mourning Dove	N	N	Game	High	Open fields, residential areas
MAMMALS						
<i>Canis latrans</i>	Coyote	N	N	Furbearer	High	Forested areas, pastures
<i>Didelphis virginiana</i>	Virginia Opossum	N	N	Furbearer	High	Forested uplands, forested wetlands, residential areas
<i>Lynx rufus</i>	Bobcat	N	N	Furbearer	High	Large forests, swamps, hammocks
<i>Lutra canadensis</i>	River Otter	N	N	Furbearer	High	Rivers, creeks, lakes, ponds, swamps
<i>Mephitis mephitis</i>	Striped Skunk	N	N	Furbearer	High	Brushy fields, weedy pastures, disturbed areas, residential areas
<i>Odocoileus virginianus</i>	White-tailed Deer	N	N	Game	High	Pine flatwoods, pine-oak forests, hammocks
<i>Podomys floridanus</i>	Florida Mouse	N	SSC	N	High	Xeric upland communities with sandy soils, including scrub, sandhill, and ruderal sites
<i>Procyon lotor</i>	Raccoon	N	N	Furbearer	High	Forested uplands, forested wetlands
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	N	N	Game	High	Forested uplands, urban areas
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	N	SSC	N	High	Sandhills, pine flatwoods, pastures and other open, ruderal habitats with scattered pines and oaks
<i>Spilogale putorius</i>	Eastern Spotted Skunk	N	N	Furbearer	High	Brushy fields, weedy pastures, disturbed areas, residential areas
<i>Sylvilagus floridanus</i>	Eastern Cottontail	N	N	Game	High	Brushland, weed and briar patches, abandoned fields, areas fringing cultivated fields
<i>Sylvilagus palustris</i>	Marsh Rabbit	N	N	Game	High	Wet bottomlands, swamps, marshes, hammocks
<i>Trichechus manatus</i>	Manatee	E	E	N	High	Bays, rivers
<i>Ursus americanus floridanus</i>	Florida Black Bear	N	T	N	Low	Large areas of forested uplands, forested wetlands

Notes: Source:
N = Not Listed FNAI, FNAI Search, 2001
T = Threatened FNAI, FNAI Tracking List, 2008
E = Endangered
SSC = Species of Special Concern
T(SA) = Threatened due to similarity in appearance to a federally listed species
F.A.C. = Florida Administrative Code

Table 9-A8.5-1
Maximum Calculated EMF
230-kV PHP Transmission Line ¹

Right-of-Way (ROW) Configuration	ROW Width (ft)	Electric Field (kV/m)			Magnetic Field (mG)	
		Within ROW	Left Edge ² of ROW	Right Edge ² of ROW	Left Edge ² of ROW	Right Edge ² of ROW
Typical tangent monopole with vertical configuration on 100-ft right-of-way	100	3.7	0.07	0.4	83.83	147.11
Typical tangent monopole with vertical configuration on 155-ft right-of-way parallel to, and including, PEF existing 230-kV 100-ft right-of-way	155	3.4	0.35	1.44	117.24	138.73
Typical tangent V-string monopole with vertical configuration on 185-ft right-of-way parallel to, and including, PEF existing 230-kV 100-ft right-of-way	185	4.0	0.30	1.43	142.76	137.74
Florida EMF Rule limit for new 230-kV transmission line		8	2.00	2.00	150	150

¹ The Maximum Current Rating of the proposed 230-kV line is 3000 amperes per phase.

² Structure cross-sections are not symmetrical which produce different values at each edge of the ROW PHP.

Table 9-A8.5-2
Maximum Calculated Audible Noise
230-kV PHP Transmission Line

Right-Of-Way Configuration	L₅₀*
	(dBA)
Typical tangent monopole with vertical configuration on 100-ft right-of-way	39
Typical tangent monopole with vertical configuration on 155-ft right-of-way parallel to, and including, PEF existing 230-kV 100-ft right-of-way	43
Typical tangent V-string monopole with vertical configuration on 185-ft right-of-way parallel to, and including, PEF existing 230-kV 100-ft right-of-way	40

*Maximum audible noise occurs during rain or other wet weather conditions.
Noise levels will be lower during dry weather conditions.
All calculated values are rounded up to the nearest whole number.