

**Attachment 1**

**Florida Power Corporation d/b/a Progress Energy Florida, Inc.**

**Levy Nuclear Plant Project**

**Summary of Spring Federal Listed Plants Survey**

This document summarizes the results of threatened and endangered (listed) plant surveys conducted during spring 2011 within the proposed transmission line rights of way (ROWs) and substations associated with the Levy Nuclear Plant Project. As discussed during the meeting with PEF, Golder, and USFWS on April 6, 2011, species-specific field surveys were conducted between March 22-24, 2011 to locate individuals of Brooksville bellflower (*Campanula robinsiae*) and Britton's beargrass (*Nolina brittoniana*) within all areas of suitable habitat. The following summarizes the habitat preferences, flowering times, and survey periods for federally listed plants potentially occurring within the proposed transmission line ROWs or substations.

**Table 1.** Federally Listed Plants Potentially Within the Preferred Transmission Line Rights of Way and Substations

Species (USFWS Classification)	Suitable Habitat (FLUCFCS Codes) and Counties of Occurrence	Flowering Period (Optimal Survey Season)	Preferred ROWs					Substations				
			BBW	CB	Common	LCFS	LGR	PHP	Citrus	CFS	CREC	Kathleen
<i>Campanula robinsiae</i> Brooksville bellflower (E)	520, 641, 643, 644, 653, 621 (Hernando, Hillsborough)	March-May (Spring)		X				X				
<i>Nolina brittoniana</i> Britton's beargrass (E)	412, 413, 421, 427, 432 (Lake, Hernando, Marion, Polk)	March – May (Spring)		X	X	X		X	X			

Aerial maps of habitat classifications based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) were used to identify the location of suitable habitat within each ROW and substation where the species may occur. Habitat classification maps for each transmission line and substation were provided in the March 2011 Listed Species Assessment reports.

Field teams of 2 to 4 biologists conducted targeted pedestrian (Brooksville bellflower, Britton's beargrass) and vehicular (Britton's beargrass) surveys through all areas of suitable habitat, utilizing both random meander methods focused upon areas that appear likely to support the Brooksville bellflower, as well as systematic transects through broad areas of potential Britton's beargrass habitat.

### **Brooksville Bellflower**

Brooksville bellflower is a federally endangered annual herb native to the Brooksville Ridge in north central Hernando County. It has also been recorded at the Hillsborough River State Park within Hillsborough County. It has four-angled stems 0.4 to 6 inches tall, ovate to elliptic leaves, and solitary flowers with a deep purple, bell-shaped corolla. Flowering occurs in the spring during March and April. Brooksville bellflower occurs in wet prairie habitat and along the edges of ponds and marshes near pastureland. The number of plants seems to vary yearly, perhaps depending on water levels.

Areas of suitable habitat within the Citrus – Brookridge (CB) and Polk-Hillsborough-Pinellas (PHP) preferred transmission line rights of way were surveyed for the Brooksville bellflower. Within the PHP preferred right of way, survey efforts were focused on suitable habitat within Hillsborough County, specifically in the Hillsborough River State Park and vicinity. Survey efforts focused on wet prairies, edges of ponds and marshes, and edges of forested wetlands within cleared transmission line ROWs. No individuals were observed on the CB or PHP preferred ROWs.

**Britton's Beargrass**

Britton's beargrass is a federally endangered perennial herb with long, stiff leaves in a grass-like clump rising from a bulbous stem. Young leaves stand erect, while older leaves are up to 6 feet long, spreading on the ground. The conspicuous flowering stalk is 3 to 6 feet tall, topped by a large, showy cluster of small, white flowers between March and May. It occurs in scrub, sandhill, scrubby flatwoods, and xeric hammock.

Areas of suitable habitat within the CB, PHP, and Levy-Central Florida South preferred rights-of-way were surveyed for Britton's beargrass. Where visibility allowed (cleared ROWs adjacent to areas of upland xeric forest or sandhill), vehicular surveys were appropriate due to the large, highly visible flower stalk of the Britton's beargrass. In forested areas, traditional pedestrian survey methods were used. No individuals were observed within the CB, PHP, or LCFS ROWs during the spring 2011 surveys. An individual of Britton's beargrass was identified within the Common Route preferred ROW during 2009 surveys, as identified in the March 2011 report, *Progress Energy Levy Nuclear Plant Project Listed Species Assessment Common Route Transmission Line*.