Informal Meeting with FPSC Staff
2016 Hurricane Season Preparation

March 30, 2016
Preparations

FPL’s Hurricane Preparedness Plan

- Continue to strengthen the infrastructure
- Prepare the storm organization
- Refine the restoration plan
- Communicate Communicate
Continue to Strengthen the Infrastructure

Distribution Hardening

• Complete CIF/Community Projects

• Initiate “Wind Zone” and “Geographic” hardening

• Initiate lateral hardening
Continue to Strengthen the Infrastructure

Transmission Hardening

- CPOC replacement and storm surge/flood initiatives complete
- Continue to replace all wood structures
Continue to Strengthen the Infrastructure

Distribution Pole Inspections

• 1.2 million FPL poles
• Inspect 150,000 poles annually
• Complete follow-up work
Continue to Strengthen the Infrastructure

Transmission Pole Inspections

• 65,000 structures

• Visually inspect 100% annually; complete climbing/bucket truck cycle inspections and follow-up work

• Inspect key facilities (500kV/CIF) before storm season
Continue to Strengthen the Infrastructure

Distribution Vegetation Management

• Trim 15,000 miles annually
  ➢ Feeders (3-year average cycle)
  ➢ Laterals (6-year average cycle)
  ➢ Mid-cycle trimming

• Trim CIF before storm season

• Encourage “Right Tree - Right Place”
Continue to Strengthen the Infrastructure

Transmission Vegetation Management

- Inspect / clear 100% of ROW annually
Prepare the Storm Organization

Annual Preparations

• Identify/staff storm roles

• Train
  ➢ 4 regional staging site exercises
  ➢ Annual company-wide “dry run” event

• Forensic teams ready
Refine the Restoration Plan

• Safely restore in shortest time
  ➢ How we restore and prioritize restoration
Guiding principle – Safely restore power to the largest number of customers as quickly as possible.

- First – Repair damaged power plants, transmission lines and substations;
- Simultaneously, restore power to CIF (e.g., hospitals, police/fire stations);
- Also, restore service to the largest number of customers in the shortest amount of time, including key community needs (e.g., grocery stores, pharmacies, gas stations); and
- Once larger/key repairs have been made, restore service to smaller groups/neighborhoods, converging on the hardest hit area(s), until all customers are restored.
Refine the Restoration Plan

- Resource plans in place
  - Logistics
  - Mutual assistance/contract crews
  - Increased inventory levels
  - Increased use of new technologies for mobile damage assessment and situational awareness.
Enhance Communications

- Annual FPL / County EOC meetings
- Governmental & community communications
Assistance Provided to Other Utilities

• None in 2015
Potential Issues with a 2016 Storm

- Facilities impacted not yet storm-hardened
- Multiple storms
- Catastrophic storms
- Resources unavailable
Summary

- Infrastructure strengthened
  - Hardening; Pole inspections; Vegetation management

- Organization prepared
  - Trained / ready

- Restoration plan tested & refined
  - Lessons learned; Technology; Forensics

- Communications improved/ready
## Hardening and Storm Preparedness Progress / Plans

### DISTRIBUTION POLE INSPECTIONS

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014-2015(1)</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># poles on system beginning of period</td>
<td>1,163,099</td>
<td>1,160,848(2)</td>
<td>1,168,532</td>
</tr>
<tr>
<td># wood inspected</td>
<td>133,243</td>
<td>266,815</td>
<td>133,363</td>
</tr>
<tr>
<td># non-wood inspected</td>
<td>18,436</td>
<td>31,189</td>
<td>11,887</td>
</tr>
<tr>
<td>Total # inspected - all pole types</td>
<td>151,679</td>
<td>298,004</td>
<td>145,250</td>
</tr>
<tr>
<td># replaced</td>
<td>9,116</td>
<td>18,788</td>
<td>TBD</td>
</tr>
</tbody>
</table>

(1) Current 8-year inspection cycle began 2014, (2) Current 8-year inspection cycle target

### TRANSMISSION POLE/STRUCTURE INSPECTIONS (SPI#3)

#### Wood Poles/Structures

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2012-2015</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># poles/structures on system beginning of period</td>
<td>11,550</td>
<td>15,542(3)</td>
<td>9,662</td>
</tr>
<tr>
<td># ground level visual inspections</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td># detailed climbing/bucket inspections</td>
<td>2,294</td>
<td>10,294</td>
<td>1/6</td>
</tr>
<tr>
<td># replaced</td>
<td>1,888</td>
<td>16,665</td>
<td>TBD</td>
</tr>
</tbody>
</table>

#### Concrete and Steel Poles/Structures

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2012-2015</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># poles/structures on system beginning of period</td>
<td>53,005</td>
<td>49,667</td>
<td>55,697</td>
</tr>
<tr>
<td># ground level visual inspections</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

(3) 2nd 6-year cycle began 2012

### DISTRIBUTION SYSTEM HARDENING

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2006-2015</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># CIF projects (EWL)</td>
<td>43</td>
<td>421</td>
<td>91</td>
</tr>
<tr>
<td># Community Projects</td>
<td>16</td>
<td>126</td>
<td>17</td>
</tr>
<tr>
<td># Geographic/Windzone Feeder Projects(4)</td>
<td>5</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td># '01' switches</td>
<td>16</td>
<td>270</td>
<td>16</td>
</tr>
<tr>
<td>Flood/Surge mitigation (# vaults)(5)</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

(4) Projects began 2015, (5) Downtown Miami Network vaults completed in 2015

### TRANSMISSION HARDENING (SPI#4)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2006-2015</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># wood poles/structures on system beginning of period</td>
<td>11,550</td>
<td>26,147</td>
<td>9,662</td>
</tr>
<tr>
<td># wood poles/structures replaced</td>
<td>1,888</td>
<td>16,665</td>
<td>1,400-1,800</td>
</tr>
<tr>
<td>Ceramic Post Insulators replaced (# structures)(6)</td>
<td>0</td>
<td>5,621</td>
<td>0</td>
</tr>
<tr>
<td>Flood/Surge Monitors (# substations)(6)</td>
<td>0</td>
<td>222</td>
<td>0</td>
</tr>
</tbody>
</table>

(6) Completed in 2015

### VEGETATION MANAGEMENT (SPI #1)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>Current Cycle</th>
<th>2016 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td># system feeder miles to clear in current 3-yr cycle</td>
<td>13,554(7)</td>
<td>13,554(7)</td>
<td>13,417(8)</td>
</tr>
<tr>
<td># feeder miles cleared</td>
<td>4,209</td>
<td>13,095</td>
<td>4,427</td>
</tr>
<tr>
<td># mid-cycle feeder miles cleared</td>
<td>7,218</td>
<td>21,562</td>
<td>7,100</td>
</tr>
<tr>
<td># system lateral miles to clear in current 6-yr cycle(9)</td>
<td>22,722</td>
<td>22,722</td>
<td>22,722</td>
</tr>
<tr>
<td># lateral miles cleared</td>
<td>3,817</td>
<td>11,626</td>
<td>3,800</td>
</tr>
<tr>
<td>Total # miles cleared</td>
<td>15,244</td>
<td>136,695(10)</td>
<td>15,327</td>
</tr>
<tr>
<td># trees removed</td>
<td>20,000</td>
<td>105,000(11)</td>
<td>TBD</td>
</tr>
</tbody>
</table>


Storm Preparedness initiative (SPI)