Tampa Electric Company
2011 Hurricane Season Preparation

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Hurricane Preparedness Briefing

- System Infrastructure
- Restoration & Coordination
- Areas of Concern
- Improvements to Overall System
System Infrastructure

- Transmission
  - Inspections conducted on one, six and eight year cycles
  - Standard is non-wood construction
  - Extreme wind for all transmission circuits
  - Stronger wind standard for all 230 kV circuits
    - 133 mph design
System Infrastructure

- Distribution
  - NESC Grade B construction
  - Underground: Stainless steel
  - Comprehensive joint use pole attachment strategy
    - Loading analysis
    - Make-ready
System Infrastructure

- Substation
  - Modifications to control cabinets (elevation)
  - Identifying alternate sources within flood prone areas
  - Upgrade from mechanical control equipment to digital control equipment
  - Install new fences to limit debris impact
System Infrastructure

- Vegetation Management
  - Three-Year Plan
    - 2011: One-third of system – feeders and laterals
  - Reactive trimming
  - Over 225 tree trimmers
  - Work with local governments to maintain clearance standards
## System Infrastructure

- **Storm Hardening Plans**

<table>
<thead>
<tr>
<th>2010-2012 Plan Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twelve Interstate Crossings Converted to UG</td>
<td>Complete</td>
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<tr>
<td>Conversion of 4 kV System</td>
<td>Complete</td>
</tr>
<tr>
<td>St. Joseph Hospital Source Hardening</td>
<td>Complete</td>
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<tr>
<td>Port of Tampa Phase I Hardening</td>
<td>Complete</td>
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<tr>
<td>Port of Tampa Phase II Hardening</td>
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<tr>
<td>Port of Tampa Phase III Hardening</td>
<td>Complete</td>
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<tr>
<td>Breakaway Service Connector Test Installation</td>
<td>Complete</td>
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<tr>
<td>Tampa International Airport</td>
<td>Complete</td>
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## System Infrastructure

- **Storm Hardening Plans**

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<td>Grade B Construction Standard</td>
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<tr>
<td>Extreme Wind for Transmission</td>
<td>Continue</td>
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<tr>
<td>Extreme Wind + for 230 kV</td>
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<tr>
<td>Non-Wood Construction for Transmission</td>
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<tr>
<td>Inspection and Maintenance</td>
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<tr>
<td>Vegetation Management</td>
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<tr>
<td>Attachment Standards/Procedures</td>
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Restoration & Coordination

- Company Storm Restoration Plan reviewed
- Representatives for each city and county Emergency Operations Centers
- Personal preparation for all team members communicated
- Team member storm assignment reviewed and communicated
- Mock storm scheduled for May 17
Restoration & Coordination

- Forensics team/contract in place
- Incident bases reviewed and secured
- Material inventory and initial storm material list reviewed
- Southeastern Electric Exchange contact in place for mutual assistance
- Communication to public is prepared and ready
Areas of Concern

- Multiple storms within a season
- Resource availability
- Catastrophic storm
Improvements to Overall System

- Stronger transmission and distribution system
- Substation improvements in flood prone areas
- Hardened sources to critical facilities
- Vegetation management practices - system trimmed
In Summary

- Tampa Electric is ready for the 2011 storm season
  - Our system is ready
  - Our people are ready
  - All external relationships and contracts have been established and are ready
Questions?