

CONFIDENTIAL

Docket No. 2020001-EI  
Cross-Examination  
Hearing Exhibit

Exhibit No.: 6C

Proffered by: Public Counsel

Short title: Ground Fault Root Cause Statement

Witness(s): FPL-Coffey

July 24, 2019

Subject: St. Lucie Unit 1 Stator Ground Fault Root Cause Statement

Please find below the statement discussed in today's conference call between the Siemens and Florida Power & Light root cause teams for the St. Lucie Unit 1 stator ground fault.

### **Root Cause Statement**

The stator ground fault at St. Lucie Unit 1 was the result of an insulation fault at bottom coil 17. The fault was located at the top surface of bottom coil 17, underneath banding that was found intact. A definitive root cause of the fault mechanism could not be determined. At the conclusion of the root cause analysis, the following hypothesized potential initiation mechanisms were neither concluded to be causes or ruled out as potential causes:

- Magnetic particles
- Groundwall insulation abrasion due to foreign object
- Impact damage of the main groundwall insulation

A secondary propagation mechanism is considered a likely contributor. There were no signs of potential contributors such as OCP erosion, which is associated with partial discharge, or relative motion, which is associated with mechanical vibration.

Best Regards,

Michael Garmon  
Generator Service Engineering  
Root Cause Lead for St. Lucie Unit 1 Stator Ground Fault

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Root Cause Statement – St. Lucie U1

FCR-19-035625