

20 October 2022

Pointerra3D instrumental in supporting Hurricane Ian Emergency Response

Highlights:

- **Florida Power and Light (FPL) operationalised Pointerra3D Analytics and Answers to support Hurricane Ian emergency storm response**
- **Pointerra3D platform and analysts mobilised prior to and during event to identify areas impacted by the storm event**
- **Pointerra's scalable platform and analytics delivered critical insight to the operations centre at unprecedented speed proving the operational value of the solution in emergency response scenarios**

Background

In June 2022 Pointerra signed a contract with FPL to provide emergency response support in the event of a natural disaster impacting FPL's network - refer ASX announcement 23 June 2022. The contract was the culmination of an earlier Proof of Concept program to adapt Pointerra3D Analytics and Answers to deliver rapid response change detection following a storm event.

US electric utilities that suffer frequent storm event damage spend hundreds of millions and even billions (USD) preparing for and responding to storm events, with the objective of safely restoring power to customers being the utility's primary objective.

Pre-storm staging of crews and equipment is a significant logistical exercise and the efficient post-storm dispatch and prioritisation of these crews has traditionally been hampered by lack of access to timely and accurate information on the network assets (poles and wires) that require immediate attention.

The successful Proof of Concept program with FPL demonstrated that Pointerra3D was able to deliver this timely and accurate network condition information with unprecedented speed and accuracy, allowing a utility to respond to the impact of a storm event more effectively, saving time and money as well as delivering enhanced safety and network reliability outcomes.

Hurricane Ian

Responding to instructions from FPL storm response teams, Pointerra mobilised to Florida on 26 September to be based at FPL's emergency response situation rooms and Hurricane Ian crossed the coast of Florida near Fort Myers and Cape Coral as a Category 4 storm at 3:05 pm ET on 28 September.

In preparation for the storm event Pointerra3D ingested existing FPL data from multiple remote sensing platforms including fixed wing aircraft, mobile LiDAR systems and drones for FPL service areas in the storm's forecast trajectory, building a Digital Twin of the network assets likely to be impacted by the passage of the storm.

In the hours following the storm's passage Pointerra3D ingested newly acquired aerial LiDAR data captured by FPL contractors and, using the pre-storm Digital Twin as a baseline, a post event model was built to identify network assets impacted by the storm event, including leaning and downed poles. FPL used the change detection analytics, cross referenced with network outage information, to plan and schedule more efficient and accurate restoration efforts

Pointerra3D provided round the clock support to turn raw sensor data into insightful information at unprecedented speed and scale. Within 3 hours of post-storm data acquisition, Pointerra3D Analytics was able to identify and present areas of obvious inundation. After 6 hours Pointerra3D Analytics delivered automated extraction of all poles and an initial assessment of damage primarily based on pole lean.

Within 24 hours of post-storm data acquisition, Pointerra3D change detection analytics of the impacted network across large areas had been cross referenced with weather, imagery, and other supplementary data sources to support accelerated assessment and decision making by FPL storm response teams.

Key statistics of the storm response effort included:

- 6 missions flown by FPL aerial LiDAR contractors
- 15Tb of data ingested and analysed by Pointerra3D
- 1,500 AWS cloud machines running in parallel over 5 days
- 18,500 poles modelled
- 1,100 poles identified as requiring remediation and/or replacement

In addition to the analysis and intelligence provided, the fusion and delivery of a variety of 2D and 3D information sources in a common data environment (Pointerra3D Core) was deemed invaluable by FPL management.

Pointerra3D's role in the initial storm response effort demonstrated the successful transition from proof of concept to operationalisation under high stress circumstances, where rapid

interpretation and analysis of raw data was required to deliver improvements in storm response activities by FPL.

Pointerra will continue to support FPL in the ongoing recovery effort through the delivery of change detection and targeted analytics to support network wide restoration.

Lessons learned from the Hurricane Ian response will be used to further refine the application of the platform to assist in emergency response situations. What is clear is that the unparalleled speed, scale and accuracy Pointerra3D Analytics and Answers using 3D LiDAR data provided critical situational intelligence to FPL at unprecedented pace, delivering accurate eyes-on information that 2D imagery alone could not provide.

Continued expansion of the adoption and use of Pointerra3D by FPL is expected to occur in the coming months and quarters as the platform is further deployed as a critical business application across the wider enterprise.

This announcement has been authorised and approved for release to the ASX by the Board of Pointerra Limited.

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