Meralco responds to Tropical Storm Trami with Mobile Outage Management

**Background**
Manila Electric Co. (Meralco) was established in 1903 to provide electric light and power as well as an electric street railway system for Manila and its suburbs. Today, Meralco is the largest electric power distributor in the Philippines, serving 25 percent of the country’s population and powering 5.2 million customers. The company’s 9,337 square kilometre franchise area covers 31 cities and 80 municipalities and its service area accounts for 50 percent of the nation’s gross domestic product (GDP).

**The Storm Hits**
On August 19, 2013, Tropical Storm Trami hit the northern Philippines and enhanced the monsoon rains that were already pounding the region. The result was massive flooding that included major portions of the capital city, Manila, where waters forced thousands from their homes. These flood waters also made many roadways impassable and caused a general public shutdown, including the cancellation of flights, schools, businesses and official government offices.

In the midst of Manila’s red alert and the declaration of a “state of calamity”, Meralco’s outage team were already equipped with a new mobile mapping and outage solution to help them weather the storm.
**Meralco Responds**

In early 2013, Meralco, the largest distributor of electricity in the Philippines had embarked on mobilizing its Outage Management system using a solution developed by Navagis. Meralco wanted to deploy a solution that leveraged the map visualization of the Google Geo platform combined with ruggedized off-the-shelf hardware and open source software. “Meralco continuously seeks to improve the way we operate and deliver our services. In all these pursuits, we keep in mind that the customer is at the heart of everything we do,” said Marthyn Cuan, Vice President & Chief Information Officer. Meralco turned to Navagis because they had years of experience working with Google and had already developed solutions that could be tuned to meet Meralco’s application requirements.

The flooding conditions from Trami meant challenges to the Meralco responders, including decreased situational awareness, increased electrocution hazards, and unpredictable impediments. Clear communication and coordination efforts would be needed in order to prevent serious injury to personnel and citizens as well as limit repair times to vital infrastructure.

Meralco’s newly enhanced Trouble Order Management (TOM) system, which was created by Navagis, allowed Meralco stakeholders to leverage the extensive coverage of their Google Enterprise Geo platform. This solution tied into Meralco’s existing systems to create a common operating picture with controlled, yet streamlined, access to vital data.

The Navagis dispatch application enabled stakeholders in the control center to track all field crews in real-time, push out work orders to active crews and visualize new data retrieved by crews in the field.

Simultaneously, Navagis software loaded onto ruggedized, off-the-shelf tablets enabled the field crews to maintain effective two-way communication to collect ad-hoc data, fill-out customizable forms and receive work orders and route directions.

According to Cuan, this innovation falls in line with Meralco’s commitment of “empowering our people with the right tools to ensure that they are able to effectively support the company’s business goals.”

**Results**

During Tropical Storm Trami, the number of outages tripled. Meralco was able to respond to the increased volume of outages while maintaining a consistent average outage time, which had been reduced by 50% since the introduction of TOM. The workflow of every outage team member was streamlined at every step, from receiving dispatch information to in-the-field data collection to routing and transmission of site data. Most notable was the Mobile Outage Solution’s ability to cut standard outage resolution time by 50%; cut hazardous outage resolution time by 24%; augment existing outage management system (Mapguide, OTMS) and provide real-time tracking of crews and outages on the map.

“At Meralco, we believe in empowering our people with the right tools to ensure that they are able to effectively support the company’s business goals.”

-Marthyn Cuan
VP & CIO, Meralco