

## GridVu™ Mobile Applications

GridVu mobile applications from Advanced Control Systems (ACS) provide DMS and OMS incident summary and location information via the internet to utility personnel and to the public. The presentation of information is optimized for mobile platforms, and is presented as a land-based map overlaid with the electrical network topology to enable viewing of operational objects related to the map. GridVu displays network objects from DMS, OMS and SCADA systems with a geographic reference. GridVu is an important tool for providing key utility information to three primary user types:

1. General public and emergency management users
2. Field-based crews and supervisors
3. Control center operators and engineers

GridVu is a set of three distinct applications, designed to meet different utility functions:

- **GridVu Public™** is a public-facing general outage information map
- **GridVu Network™** is a system and map viewer for utility operational use
- **GridVu Storm™** has two available versions: a public-facing map with critical emergency measures/management information, and a utility crew version for major damage assessment

### GridVu Public

When power goes out and a utility does not have a proactive outage alert system, the public typically has limited ways to gather outage information: by calling the utility directly, and by accessing the utility's outage map via mobile phone. GridVu Public offers the public the engagement they are looking for without feeling the need to call into the call center, which can cost a utility as much as \$5 per call. GridVu Public displays an intuitive and engaging platform allowing:

- Native mobile design for the public and touchscreen capability for news agencies
- Color-coded outage polygons with rich outage statistics and updates
- Images and causes of outages to educate the public
- Specific SMS outage alerts by polygon
- Historical playback mode to show restoration progress
- Public Service Announcements specific to the ETR to help the public plan ahead
- Political boundaries (city, county, etc.)



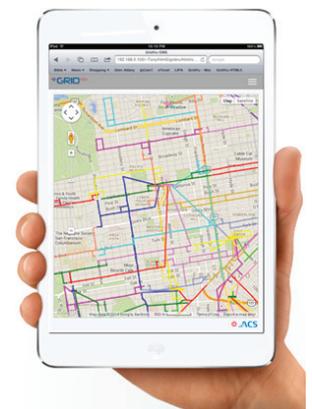
Outage map in GridVu Public

Power outages mean the public is briefly living in the 20th century without access to most of the items that make their lives run. They want answers immediately, and will accept any information that seems legitimate—especially as an outage time progresses. With an intuitively designed interface that portrays the utility as the information expert, providing details they cannot receive anywhere else, the public and news agencies will instinctively remain on the platform for updates until power is restored. And if customers want outage information on-the-go, they simply select the outage polygon hovering over their area of interest and subscribe to any future updates via SMS.

GridVu Public is also capable of displaying weather map information so customers can easily witness storm-related outages.

### GridVu Network

GridVu Network is used by utility field personnel and remotely-located utility management to visualize situational awareness of damage (storm damage), outages (tickets), non-outage (work orders) and planned switching—overlaid on the network topology. This product is tightly integrated with our PRISM™ DMS and OMS



GridVu Network

solutions, but is also available as a standalone solution for those utilities with a third-party OMS or DMS where the objects are available and can be displayed as described.

GridVu Network improves utility situational awareness by enhancing the view of near real-time network topology with additional critical data. It augments our POWR™ tabular-based mobile applications by graphically showing the map-based reference of the outage or non-outage work that is being performed.

Utility crews may selectively request which feeders or substation to display. A “tree” filter is used to display the substations by selecting a substation object. The substations can be expanded in the tree view in order to display the feeders from that substation, displaying only those feeders selected. The selection will be overlaid on the Google map, showing the available network elements from the DMS and OMS, including:

- Substation
- Feeders
- Switches/reclosers
- Fuses
- Capacitors
- Transformers
- Device tags
- Switching procedures

The various map objects support the display of detail information related to the icon type by tapping, clicking or pausing the cursor over the object.

An option to GridVu Network is an OMS-specific tab for use by utilities that have deployed PRISM OMS from ACS. This additional tab provides the user with the ability to view the following information on the map:

- Crews
- Emergency jobs (tickets)
- Non-emergency jobs
- Customer call locations
- Notes (call, crew and dispatcher)

## GridVu Storm

GridVu storm is available for utilities with a strong focus on the customer experience during major events such as tornadoes, hurricanes, earthquakes, or other catastrophes that often result in significant electrical network damage. The type of information that is collected and provided to the public during such events is typically not the same as that provided by GridVu Public during normal storm events. GridVu Storm information is available as a public service, helping to promote security and safety in the community. Together these capabilities transform the standard OMS into a system that behaves differently during these types of major events. The visualization of this information is dependent on the type of data available within the utility, and is typically customized to meet each utility's individual needs.

GridVu Storm is actually available as two distinct modules: one customer-facing, to provide the public with critical emergency management information related to the power system; the other a crew-centric version that provides utility personnel with the tools needed to perform damage assessment in the field and upload the information to the control center.

Utilities interested in the crew version of GridVu Storm should also consider the Storm Damage Assessment application for PRISM OMS, as well as the crew features provided by our POWR mobile applications.