Customer Success Story

RedSky

The Leader in E911 Solutions

LARGEST ELECTRICAL COOPERATIVE IN THE UNITED STATES

Utility Saves Money Without Compromising Safety and Efficiency

Pedernales Electric Cooperative, Inc., aka PEC, is the largest customer-owned electrical cooperative in the nation, with over 230,000 meters, 76 substations and 8,000 square miles of coverage across extremely rural areas in the Texas Hill Country. PEC currently has a CS1000e 7.5 at the Johnson City headquarters, 8 Survivable Media Gateways, 9 Survivable Remote Gateways, which are all interconnected, and is in the process of creating a redundant environment for disaster recovery.

IP PHONE CHALLENGES

Like most utilities today, PEC wanted to maintain efficiency but reduce overall operational costs. Initially, PEC began to install IP phones in substations that currently had fiber, which allowed them to disconnect the POTs line installed for 9-1-1 at each substation. However, by doing so, a 9-1-1 call over IP would show the caller as being at the Johnson City HQ, not the substation. Additionally, NERC (North American Electric Reliability Corporation) oversees standards for bulk power operators in North America on behalf of the Federal Energy Regulatory Commission. Not providing accurate location information for emergency response would be in direct violation of NERC standards.

SOLUTION: CLOUD-BASED E911

Chris Varela, Senior Telecom Analyst for PEC wrote and sent out an RFP, requiring vendors to provide a detailed description of their E911 solution for the Pedernales voice network. Several companies responded and Pedernales selected RedSky's cloud-based national 9-1-1 call routing solution, E911 Anywhere®, as the winning solution. E911 Anywhere® routes 9-1-1 calls from any PBX or call server to the right Public Safety Answering Point (PSAP) anywhere in the USA and Canada, based on the location of the caller. E911 Anywhere® also validates all locations added to the service against a Master Street Address guide and provides screen pop, SMS and email notifications to anyone in the enterprise when a 9-1-1 call is made. According to Chris Varela, several factors gave RedSky the edge. First, RedSky is laser-focused on E911 and puts all its efforts into E911 solutions for the enterprise. Second, PEC really liked the administration portal, which allowed them to make location changes for IP phones at any time. Some of the

competitors who responded to the RFP required a Move, Add, Change request for every phone location change. And third, RedSky was able to MSAG (Master Street Address Guide) validate ALL locations, many of which were incredibly rural and often did not have "common street addresses".

COST SAVINGS

E911 Anywhere® also delivered a substantial "cost savings" bonus to PEC. Because PEC can now use the cloud to route all their 9-1-1 calls, PEC no longer needs to support local POTs lines at each of their remote sites. PEC has been able to eliminate over 45 POTs lines with an estimated savings of over $24,000 per year.

Now PEC has a scalable, cost effective E911 solution which complies with both state E911 legislation and NERC standards. In the future, PEC will evaluate RedSky's E911 Manager®, which integrates with the CS1000 and can automate the process of updating phone location information to E911 Anywhere®.

For more information or to discuss your E911 needs, contact RedSky at 312-432-4300 or sales@redskytech.com.
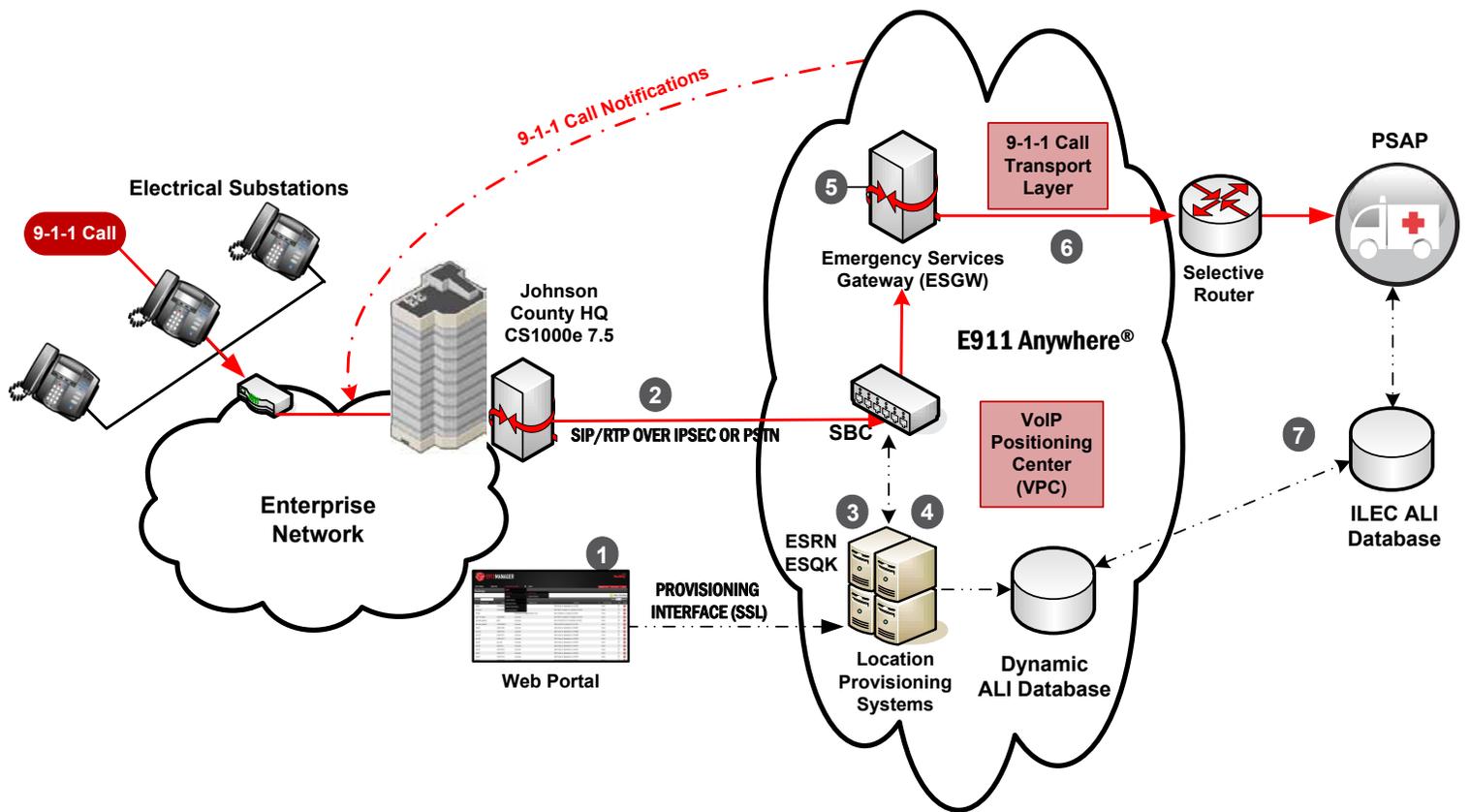
How It Works

1. An administrator logs into the E911 Anywhere® Web portal and establishes all the locations, buildings and other physical locations. Location records are MSAG (Master Street Address Guide) validated and stored in a Dynamic ALI database at the VoIP Positioning Center (VPC).

2. Then the administrator associates Emergency Location Identification Numbers (ELINs) to all the locations. The administrator programs the PBX to send all 9-1-1 calls to the E911 Anywhere® service, exposing the ELIN as the Calling Party Number.

3. When a 9-1-1 call is made, the call server/PBX routes the 9-1-1 call to E911 Anywhere® via an IP connection or the PSTN.

4. The E911 Anywhere® Service retrieves the location record of the calling ELIN or DID number, determines the correct PSAP and assigns both an Emergency Services Routing Number (ESRN) and an Emergency Services Query Key (ESQK).

5. E911 Anywhere® forwards the call to the Emergency Services Gateway (ESGW) and sends emergency notifications (SMS or email) to the enterprise.

6. The Emergency Services Gateway sends the call to the appropriate Selective Router and on to the PSAP.

7. The E911 Anywhere® service dynamically populates a shell record in the LEC PS-ALI database with the emergency caller's location and callback number. The PSAP retrieves this information with a data query to the LEC ALI database.