

Product solution for: Pacific Gas and Electric Company



Safeguarding California communities

Conducting the mission of Pacific Gas and Electric Company (PG&E) to deliver natural gas to millions of homes and businesses in California carries the enormous responsibility of maintaining and expanding some 6,000 miles of pipeline that runs through the northern part of the state. To provide this essential service to consumers, the team of pipeline experts at PG&E use accurate and timely spatial information provided by DigitalGlobe's ImageConnect online imagery service.

High-resolution imagery required

Overseeing an immense network of gas pipeline requires fast access to detailed information about any part of the system; high-resolution Earth imagery provides the necessary picture of site conditions. Instead of burning through time and money to collect new or piece together existing imagery from disparate sources, PG&E uses DigitalGlobe's ImageConnect to manage the multitude of mapping activities inherent in maintaining and protecting gas transmission pipelines throughout California.

Save resources

Accurate and current information showing physical conditions near the pipeline network is essential to ensure the integrity of PG&E pipelines and the safety of the surrounding communities. Before subscribing to ImageConnect online imagery services, PG&E performed a variety of time-consuming and expensive tasks to acquire imagery and piece together a complete visual overview of pipeline operations. These tasks included developing flight plans, tasking for new imagery, and searching private companies and municipalities along the pipeline for existing data. Then, the lag time and effort expended compiling and distributing the patchwork of imagery from different sources (which often synchronized poorly) delayed PG&E analysis and response time to address site conditions.

To speed results and reduce costs, PG&E equipped technical staff with DigitalGlobe's ImageConnect. These groups instantly placed images from DigitalGlobe's extensive online image library beneath PG&E basemap information. The combination of DigitalGlobe imagery with PG&E's pipeline route maps, street maps, and in-house vector data provided the vital context and realistic visual of the proximity of neighboring structures, roadways, and other infrastructure needed to accurately assess site conditions.

Company information

Pacific Gas and Electric Company (PG&E) is a natural gas and utility provider constructing, maintaining, and protecting natural gas transmission pipelines throughout northern California.



Streamline activities and assess risk factors

For PG&E, ImageConnect proved to be the best tool to streamline activities associated with analyzing pipeline conditions and surrounding areas and for assessing risk factors regarding public safety. Valuable PG&E resources previously applied to collecting data for analysis were reduced or re-applied to core operations ensuring structural integrity of the pipeline and delivering natural gas to the population of California.

- » The GIS department decreased imagery expenses while gaining a consistent and accurate image layer to reference with internal and external vector data layers. GIS professionals could instantly download geo-referenced imagery directly into PG&E mapping software and acquire exact land information.
- » Risk Management reduced overhead to accomplish preventative maintenance along pipelines. Risk Management could make informed decisions about allocating funds for preventative maintenance along the utility corridor.
- » In compliance with Federal regulations, the Integrity Management team streamlined activities and expenses connected with identifying and monitoring “high consequence areas” where a pipeline rupture could affect surrounding communities.

“The high degree of spatial accuracy and resolution quality of DigitalGlobe imagery quickly made it a key tool for our staff. The data we get through ImageConnect has considerably improved personnel efficiency and the map quality of our facilities.”

CHRIS WARNER, SUPERVISING GAS ENGINEER, PG&E

INDUSTRY

- » Utilities

USES

- » Critical infrastructure

MAPPING

- » Public safety
- » Risk mitigation

Challenge

Manage the multitude of mapping activities inherent in maintaining and protecting gas transmission pipelines throughout California.

Solution

PG&E sought out the best satellite imagery tool to manage all of their pipeline activities, create efficiencies, and safeguard the communities they serve.

Results

DigitalGlobe’s ImageConnect allowed PG&E to streamline pipeline activities, reallocate valuable resources, identify high risk areas, and keep their communities safe.

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