awesense

GIS, Connectivity & Topology Correction

Awesense's True Grid Intelligence® Engine's (TGI) data validation and correction algorithms provide a quick and easy method to drastically improve a utilities connectivity, topology and overall GIS accuracy.

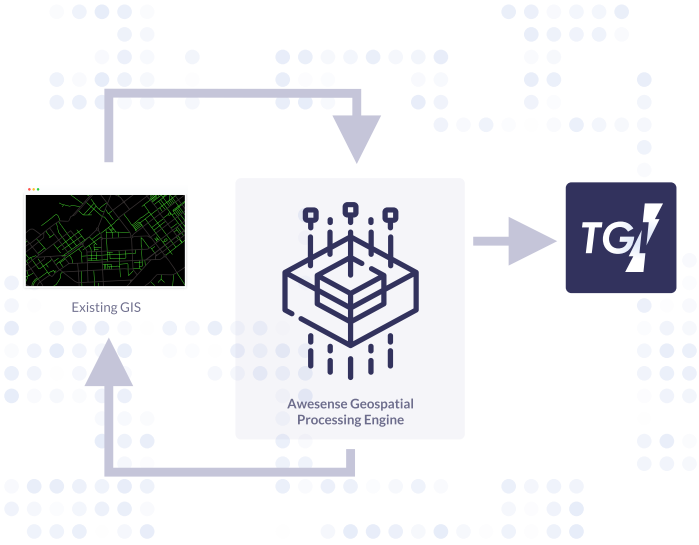
SITUATION

» Everything in the electrical grid is connected, however, often a utility's data will say otherwise. This results from years of under-performed documentation and a lack of consistency when making changes in the network. Without accurate data, many of the new technologies being implemented in the grid today will not function optimally.

» Achieving an accurate digital representation of the grid can be extremely painstaking and laborious for utilities, until now.

SOLUTION OVERVIEW

» TGI's GIS, Connectivity and Topology correction algorithms were designed to drastically improve a utility's data accuracy. TGI ingests all existing GIS & Connectivity data, identifies issues and inconsistencies, and produces a scrubbed, accurate version of the model.



PROBLEMS FACING UTILITIES

» The majority of North American utilities estimate their GIS and connectivity accuracy is no higher than 80%.

» Without accurate GIS & Connectivity data, solutions like DERMS (Distributed Energy Resource Management Systems) and ADMS (Advanced Distribution Management Systems) will not function correctly

» Current manual correction efforts are tremendously time consuming and inefficient

WHAT TGI OFFERS

» Ingest GIS, Connectivity, AMI, CIS and other data and identify what is and isn't connected

» Associates and connects disconnected elements to the correct grid elements (customer meter to transformer, transformer to feeder, feeder to substation, etc.)

» Validate association values/attributes against real electrical connectivity information and recommend/perform corrections

» Can process CIM, Multi-speak and ESRI formats

» Can work with a number of GIS systems

RESULTS

Utilities can expect a number of key results.

» Highly improved GIS & topology accuracy

» Grid-wide element connectivity

» Digital Twin model and accuracy improvements

» Optimally functioning DERMS and ADMS systems

» Accurate Distributed Energy Flow Intelligence (DEFI)

» First step in forecasting

» Knowledge on asset health

» Exceptional situational awareness and improved outage detection

» Complete storage of all GIS historical records and updates; operators can scroll back to view any previous versions

If you would like to learn more about how we provide quick and effective GIS, Connectivity and Topology Correction, contact us at **sales@awesense.com**.

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