In today's world, the need for effective asset management has become a necessity for the electric utility industry. Geographic Information Systems (GIS) have demonstrated themselves as a means of meeting this need and are now implemented as a key component within numerous enterprise-wide information systems. These GIS systems provide not only geographical information, but can also provide electrical network connectivity. To this end, many utilities consider the GIS system as the “ultimate” source database, acting as a common repository for all enterprise applications.

The OpenGIS™ product provides an interface between the utility’s GIS system and the OSI Distribution Management System. The OpenGIS product uses available GIS APIs to retrieve system maps (electrical, geographical, other information) from the GIS. The GIS maps are converted to OSI standard display format.

Electrical objects on the maps represent power system devices. The device definitions are also retrieved from the GIS and used to build the electrical Network Operating Model (NOM) (connectivity, device parameters, etc.). The NOM contains the distribution network model used by the DMS applications on the SCADA/DMS system. Finally, objects on the GIS maps are linked to SCADA telemetry or to NOM.

Thus the static GIS maps are transformed into live operational maps (one-lines) that can be used to better manage and operate the distribution system.

The OpenGIS APIs are designed to allow interfacing to popular GIS products and may be tailored to the specific needs of the user.