

SMARTER GRID SOLUTION



SATEC offers a unique solution for Smart Grid initiatives on 10-35kV Distribution systems. standard PM174/5 Power Quality & Energy Meter to accept the low level signals provided from the sensors, SATEC has provided the utility Industry with a new powerful system to monitor, coordinate and operate distribution systems in a real-time mode to provide power quality information from remote locations that were previously unobtainable. The Utility can now process this

been deemed insufficient. The need is to increase monitoring to additional points further "downstream" of the regulator to many critical points along the grid.



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SATEC's innovative line insulators with sensors replace the standard insulators and incorporate a built-in CT and PT function. These sensors can easily be installed without having to deenergize or cut and terminate the main line wire. They produce a very small voltage signal instead of the normal 120 Volt and 5 Amp outputs of standard CTs and PTs. Special inputs have been designed into the SATEC Model PM174/5 Power Quality & Energy Meter to fully interface with the low level sensor outputs for line voltage and current. Full measurements and data can be obtained from the PM174/5, including waveforms and harmonics. A custom SATEC enclosure for the PM174/5 input connections and a GPRS modem for real-time data communication direct to a SCADA System, make installation simple. By enhancing the input design of the

information to analyze power flow and determine MW-reduction capabilities. They can use this data to execute commands to operate and control equipment such as voltage regulators, capacitor controls, loading switches and system outage reporting. Today, this information is usually limited to just what the voltage regulators can provide from their single source of regulation, which has

SATEC's approach can control demand reduction during peak load times to deliver the power needed by the system during high demand periods. This can help minimize losses on the distribution system and optimize efficiency as well as the quality of the power.



Live installation of SATEC's Smart Grid