



# **Smart Grid: Distribution Automation**

# Reliable Connectivity with NavigateWorx 3G/4G Router

Navigateworx NR300 router
provides the best industrial
networking solution for different
kinds of field devices with full
Electrical standards compliance.
Also offer seamless 3G/4G
communication for SCADA
management center to collect and
analyze statistical data. It is perfect
for our entire business system.



PROVINCIAL ELECTRICITY AUTHORITY

## Summary

A smart grid is an energy generation, transmission, and distribution system equipped with a real-time two-way communications system that allows for greater visibility, control, and automation over the system for the utility operator.

Distribution Automation is a family of technologies including field devices, sensors, processors, communication networks. More recently, Distribution Automation is being applied to perform automatic switching, reactive power compensation coordination, or other feeder operations/control.

Distribution Automation Ensures that the service is delivered efficiently and reliably.



### **Customer Needs**

### **Lower Cost**

The power or utility company need to read all of the remote devices in a community every day, or more frequently as appropriate. It is not necessary to send a service person to visit every customer location once a month:

#### Thief Detection and Prevention

Various parameters are detected instantly through the wireless network, making it much more difficult for someone to steal the service:



#### **Great Communication**

Working as a two-way communication with each intelligent field devices—with two-way communications, the power company can manage their peak loads better and offer incentives for customers to shift their power usage to off-peak times;

#### **Intelligent Management**

An area of overlap between intelligent SCADA and the Distribution Automation system is customer information coupled with the variable rate structures. The SCADA system can act as a specialized interface between the central center and the outside world. Information regarding operations, prevailing rates, customer usage, etc., would be instrumental to intelligent owners and operators.

### **Solutions**

Navigateworx LTE VPN routers provide a stable, reliable and secure APN/VPN wireless network transmission channel for the field devices to facilitate such as Remote Controlled Switches (RCS), reclosers, etc under the premise of ensuring communication security.





### **Benefits**

### **Real Time Connectivity**

Wireless data transmission equipment has the characteristics of real time online, no time delay, and the data of multiple components can be received and processed simultaneously without the need of inspection. It can be very good to meet the requirements of real-time data acquisition and transmission system.



various places, monitors the online status of each field device in real time, obtains smooth information and connectivity, and processes requests and reports from terminals.

#### Add Value

At the same time, it can also provide data evaluation and other value-added services on the advertising screen.

### **Reliable Connection**

NR300 VPN Router build in watch dog and keepalive policy run inside. The multiple links back to make sure the connection between platform and terminal is always online. Ensure the normal operation of the entire business system.

#### **Low Construction Costs**

Due to the use of public network platform, without the construction of the network, only need to install the equipment can be good, low cost of construction and easy to deploy in multiple area.

### **Easy Platform Monitoring**

It mainly realizes communication with many intelligent Distribution Automation systems in

## **About NavigateWorx**

NavigateWorx Technologies provides
Products, Services, Solutions and Support to
the emerging Machine-to-Machine Industry.
Our goal is to assist in your efforts to bring
Industrial Projects to life, implement Wireline
& Wireless Technology Solutions in your
Business to simply keep your Devices,
Employees and Business connected. That is
NavigateWorx.