NOJA Power®

News Edition 23

MISSION STATEMENT

We offer our customers integrated solutions using innovative products, combined with unrivalled service and reliability worldwide.

WORLD RELEASE OF NOJA POWER RECLOSER APP FOR IPAD AND IPHONE

NOJA Power is pleased to announce the release of the Recloser App for iPhone and iPad.

The NOJA Power Recloser App is designed to interface to NOJA Power RC10 Recloser control and communications cubicles via the optional WiFi router accessory. When the USB - WiFi router accessory is fitted to enable WiFi capability, the Recloser App will connect to the control to provide remote control and interrogation capability.

This is a useful tool for Electricity Utility Linesman to control and interrogate their NOJA Power Switchgear products from the ground within the WiFi range of the device which is normally 50M. Climbing poles to interrogate reclosers is a thing of the past.

The following functionality is supported when the control is in Local mode.

Controls

- Trip / close
- Local / Remote
- Active Protection Group
- Protection On/Off
- Auto Reclose On/Off
- Live Line On/Off
- Earth Fault On/Off
- Sensitive Earth Fault On/Off
- Under Voltage On/Off
- Over Voltage On/Off
- Automatic Backfeed Restoration On/Off
- Cold Load Pickup On/Off
- Hot Line Tag On/Off

Measurements

- 3 phase current
- 3 phase voltage (all six bushings)
- Frequency
- Power
- Power Factor
- Power flow direction
- Energy

IN THIS EDITION

NOJA POWER NEW BRAZILIAN OFFICE FACTORY EMPOWERING LATIN AMERICAN UTILITIES

"To be world leader in medium voltage pole mounted switchgear". This is the NOJA Power Group corporate vision statement and another step towards achieving it has been taken with the establishment of NOJA Power Switchgear Do Brasil, in the city of São Paulo.

The new NOJA Power subsidiary in Latin America will include office and

Bruno Kimura (Managing Director NOJA Power Brazil) with RC10

factory facilities to allow for all business activities to evolve further including sales, marketing, manufacturing and service of the NOJA Power´s OSM Automatic Circuit Reclosers and RC10 microprocessor based controllers.

NOJA Power has nearly a decade of history in Brazil where the OSM product is in reliable operation in the network of all major power utilities today. Design features such as reduced size and weight, solid dielectric insulation, arc fault containment and venting in a stainless steel tank, voltage measurement on all six bushings and functionalities such as full directional protection, built-in automation algorithms and powerful application software have turn the OSM product into the solution of choice for standalone and Smart Grid applications of several Power Utilities in Brazil and worldwide. Another key point of the company´s success in Brazil is NOJA Power´s unrivalled service and support provided by factory trained engineers and technicians available on a 24/7 basis to provide customized technical support and engineered solutions, assisting the users to make the most of their devices.

The new office and factory premises will allow for intense marketing and sales activities, as well as for the manufacture of the OSM Automatic Circuit Recloser up to 38 kV both for overhead and substation applications and the RC10 controller, being the first units scheduled to be outputted in the second quarter of 2012. The strict quality and environmental policies which are part of the NOJA Power business philosophy will also apply to the Brazilian branch and certifications such ISO 9001 and ISO 14001 are also on the way.

Whilst primary planned to supply the domestic market, NOJA Power Brazil will have the capabilities to assist other markets in Latin America, not only from the supply but also from the marketing, service and support perspectives, strengthening NOJA Power´s presence and business activities in that part of the world.

"NOJA Power established NOJA Power Do Brasil to service the Brazilian market due to the growing demand for pole mounted switchgear in Brazil. We see Brazil as the powerhouse of South America and the right location to develop our South American base. NOJA Power Do Brasil capabilities will be developed to manufacture

NOJA Power Do Brasil Factory Office (São Paulo)

our standard pole mounted switchgear products in Brazil to service the local and surrounding markets", says the Managing Director of The NOJA Power Group, Mr. Neil O´Sullivan.

'SELF HEALING' KEY TO MEETING SMART GRID PROMISE

While smart meters receive the hype, reclosers are the true building blocks of the intelligent electrical distribution grid, underpinning its reliability.

Smart grids are increasingly touted as a large part of the answer to combating climate change and fossil fuel reliance. By endowing the electrical distribution network with the flexibility to adapt to new patterns of 'green' usage and the variability of generation capacity from renewable sources such as wind, wave and solar, engineers hope to reduce wastage and improve reliability.

The International Transport Forum – an Organisation for Economic Co-operation and Development (OECD) intergovernmental body – for example, reports in its July 2012 Policy Brief "Smart Grids and Electric Vehicles: Made for each other?" that smart grid technologies make it possible for electric vehicles (EV) to proliferate without overloading the electric supply industry.

The report also notes that at the same time EVs, among other green technologies, are driving investment in smart grid technologies, a view echoed by US-based analyst IHS. The research firm says that the US has budgeted US$4.5 billion ($4.36 billion) for investment purposes while China is expected to become the largest smart grid market in the world, with US$586 billion ($568 billion) set to be

invested in the electrical power supply infrastructure during the next 10 years.

But to meet this promise of flexibility, smart grids – electrical distribution networks that employ computers and modern communications to improve reliability, efficiency and robustness – must feature 'self-healing' properties that ensure rapid recovery from outages.

Traditional power grids are unidirectional and typically, just a single line feeds a suburb or city block. If the power fails, due to, for example, a lighting strike, consumers and industry in the area affected can be without power until the damaged line is repaired. With current technology it often takes several hours to locate the fault before an engineering team can be despatched and then several more hours to affect a repair.

Smart grids overcome this weakness by utilising bidirectional lines and distribution topologies that ensure a geographical area can be supplied from several alternative branches of the network. This endows the grid with the ability to self-heal; if failure occurs on a particular line, power can be re-routed via a different branch - reversing the flow of electricity if required – minimising the impact on the consumer.

"It's all very well to talk about how smart grids will help us deal with the variability in supply that comes with increasing the amount of electricity generated from renewable generation capacity," Neil O'Sullivan, Managing Director of Brisbane-based recloser manufacturer NOJA Power said.

"That's important, but even more important is ensuring the grid is totally reliable – no matter what the source of the power. And nothing underwrites that reliability more than reclosers."

Reclosers are the "intelligent circuit breakers" that endow the smart grid with its self-healing properties. These "computers on poles" – capable of handling between 10 and 38 kV and robust enough to resist vibration, temperature extremes and inclement weather, yet weighing in at just 100 kg - are mounted on transmission poles at critical points on the grid.

Reclosers are able to immediately cut the power if the line they are on suffers a failure, preventing further damage or a knock-on effect to other parts of the network.

"People like to talk about smart meters as key to this new electrical distribution technology because those are the devices with which the consumer identifies as the enabler for the smart grid," O'Sullivan explained.

"But while smart meters are indeed useful, they are a peripheral part of the infrastructure; reclosers are the true building blocks of the technology - although they remain 'unsung heroes' because they're invisible to the public."

Because modern reclosers, like those manufactured by NOJA Power, utilise powerful microprocessor-based electronics and modern communications protocols they can do much more than just isolate a failed conductor.

"In the event of a power outage, because the recloser is linked directly to the control facility and can sense the line in both directions it will immediately inform the supervisor of the location of the fault," Oleg Samarski, NOJA Power's Quality and Service Director, said.

"That means engineers can set out to make the repair in minutes.

"In addition, modern reclosers are also able to store useful data such as the time of the outage as well as local usage patterns that can be used by the utility to better manage the grid in the future."

According to Samarski, reclosers, unlike traditional circuit breakers that remain open until they are manually reset, are able to close and re-establish the power in seconds if the fault proves to be only temporary. Alternatively, reclosers working in groups can open and close in sequence to re-route power to the zone affected by the outage via a different line - giving engineers breathing space to fix the original fault.

"Smart grids are critical in the fight against climate change, as they have enormous potential to improve the efficiency of our electricity sector and transform the way we use energy in our homes and businesses," Senator Penny Wong (then Minister for Resources and Energy, now Minister for Finance and Deregulation) said on announcing that Newcastle, NSW would become the site of Australia's first commercial-scale smart grid.

"If smart grid applications are adopted around Australia they could deliver a reduction of 3.5 megatonnes of carbon emissions per annum," Senator Wong concluded.

By Peter Field

NEW PRODUCT LAUNCH - NOJA POWER SINGLE PHASE AUTOMATIC CIRCUIT RECLOSER AVAILABLE FOR ORDER

NOJA Power Switchgear is pleased to announce the launch of the new OSM Single Phase Auto Recloser. The new Single Phase Auto Recloser has been designed to be used for single phase overhead distribution lines and distribution substation applications for all voltage classes up to 38kV.

The stainless steel, powder coated Single Phase auto recloser uses technology developed and refined over the last decade. This technology and smart grid features are now readily available for all single wired overhead networks and substations.

The Single Phase Auto Recloser comes with the standard RC10 microprocessor control and communication cubicle. The cubicle provides all protection, data logging and communications functions required for the Smart Grid application. It has been designed for use as a standalone device that is easily integrated into distribution automation and remote control schemes using its flexible in-built communications capability.

The standard safety features found in the NOJA Power OSM recloser product range are inherited by the new single phase automatic recloser, these safety designs include both the solid di-electric insulated technology and the patent arc fault ventilation design. The OSM has been extensively type tested by independent laboratories to ensure long life and reliability under the harshest environmental conditions.

NOJA Power is pleased to announce the newly launched Single Phase Auto Recloser. It is now readily available for single phase distribution network and substations.

NOJA Power Single Phase Automatic Circuit Recloser with RC10 Control and Communication Cubicle

NOJA POWER AUSTRALIA
CORPORATE OFFICE & FACTORY

NOJA Power Switchgear Pty Ltd
16 Archimedes Place, Murarrie
Brisbane Qld 4172, Australia

Phone: +61 (7) 3907 8777
Fax: +61 (7) 3399 6777
Email: sales@nojapower.com.au
Web: www.nojapower.com.au

NOJA POWER BRAZIL
OFFICE & FACTORY

NOJA Power do Brasil Ltda
Avenida Pierre Simon de Laplace, 764
Techno Park – Campinas – SP
CEP 13069-301, Brasil

Phone: +55 (19) 3283 0041
Fax: +55 (19) 3283 0041
Email: vendas@nojapower.com.br
Web: www.nojapower.com.br

NOJA POWER CHILE
SALES OFFICE

NOJA Power SpA
Av 11 de septiembre 1881, Of 1415
Providencia, Santiago
Chile

Phone: +56 (2) 8979649
Email: sales@nojapower.cl
Web: www.nojapower.cl

NOJA POWER UK
SALES OFFICE

NOJA Power Limited
4 Stalyhill Drive, Stalybridge
Cheshire SK 15 2TR
United Kingdom

Phone: +44 (01865) 58 9499
Fax: +44 (01865) 58 9400
Email: sales@nojapower.co.uk
Web: www.nojapower.co.uk

Scan to view NOJA Power website

Distributor: