



Beyond the Great Firewall.

There's a Smarter Grid powered by real-time information and device interoperability. Lurking just outside are the worms, Trojan Horses, bots and other insidious tools of the Black Hats looking to exploit and compromise the Grid's integrity. How do you provide access to the right people while keeping the bad guys out?

By using the same technologies and IT conventions that keep online commerce and banking secure — Encryption (including HTTPS, SSH, sFTP, and VPN), Firewalls, Strong Passwords, LDAP Remote Authentication and Data Logging — the industry-leading OrionLX Substation Automation Platform creates a Smarter Grid that is both accessible and secure. Learn more at <http://www.ToolsToGetThere.com>



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Twelve Foot Tall John Popiak Presents on the DNP Protocol

John is actually closer to six feet tall, but it does accurately reflect personality.

The fourth of NovaTech's eight 2011 Technical Symposiums attracted engineers from neighboring utilities to our Owings Mills, Maryland office. Engineers from PPL Utilities, Dominion Virginia Power, and Pepco presented on their experiences with using NovaTech products and services to address challenges in capacitor bank monitoring, Turnkey RTU Replacement, and Distribution Substation SCADA Design.

NovaTech's John Popiak and Bryan Gehringer also presented tutorials on the DNP3 protocol, NERC PRC-002 and NERC BAL compliance. Attendees were provided with a local BBQ lunch and toured the Owings Mills facility, including the staging area where Pepco's Distributed RTU cabinets were being assembled for their ongoing upgrade project.

All of the presentations from this year's first four Symposiums are available in the Premium Content section of our Documentation Library (login or registration required) under the heading "Utility Customer Presentations and Papers". "Utility Webinar Materials" are also available.

Comments from attendees included, "the seminar was very informative overall and well put together," "[the sessions were] very well executed, thanks" and that "[the presentations on] upgrade processes used by customers are very helpful, also comparing notes with other users is useful."

The NovaTech Technical Symposium Series is intended to provide a convenient and collegial environments for users to share automation experience and to provide product design feedback directly to NovaTech. The remaining four Symposiums will be held in the Kansas City region (July 21), Chicago, Illinois (Sept 8), Allentown, Pennsylvania and New England (dates TBA).

Please contact barbara.anderman@novatechweb.com or visit the Events section on our website for more information.

New Customer Presentations Available

The presentations described below can be found in the Premium Content section of the NovaTech Documentation Library at <http://www.novatechweb.com/ftp/> under "Utility Customer Application Presentations and Papers". Login or registration is required.

| Presentation Title | Author | Original Presentation | Description |
|--|---|---|---|
| * PDF File Name (if different) | | | |
| "Remote Terminal Units (RTUs) Upgrades and Substation Automation at Northwestern Energy" | Lynn Martzolf, Northwestern Energy | Peak Measure Utility Symposium Moses Lake, WA June 2011 | Pending? |
| "Modernizing the SCADA System at Pedernales Electric Cooperative (PEC)" PEC Presentation_Austin2011.pdf | Prepared by Trent Adams, PEC Presented by Ray Wright, NovaTech | NovaTech Utility Symposium Austin, TX June 2011 | Migration from legacy RTUs to Orion5R, then to OrionLX. Includes "front-ending" legacy RTUs and using multiple Orions with STCP and Cascading. |
| "Web-based SCADA at City of Seguin, TX" City of Seguin TX Web-based SCADA_Austin2011.pdf | William Bissette, City of Seguin TX | NovaTech Utility Symposium Austin, TX June 2011 | Low-cost SCADA system based upon three OrionLX, one in each sub, to serve out webpages to browsing PCs. Requires no investment in PC-based SCADA software. |
| "Transmission Capacitor Bank Controlled Switching Systems" | W. T. Salmon, Dominion Virginia Power | NovaTech Utility Symposium Owings Mills, MD May 2011 | Application of Bitronics 70 Series for high-speed recording of capacitor bank switching operations. Presentation describes how capture data is being used to verify correct operations and how an impending problem was identified and fixed prior to a malfunction. |
| "138/69-12kV Distribution Substation SCADA Design" PPL SCADA Standard Design_Owings Mills 2011.pdf | Salim Salet, PPL Utilities | NovaTech Utility Symposium Owings Mills, MD May 2011 | Standardized OrionLX distribution SCADA design in which all OrionLX contain the same NCD configuration. A one-page .csv file, with selections checked off by the operator, is also loaded into OrionLX to accommodate specific IEDs in substation and other settings. |
| "PEPCO RTU Replacement Project" Pepco RTU Upgrade-R3.pdf | Steve Densford, Pepco | NovaTech Utility Symposium Owings Mills, MD May 2011 | Large project to convert from legacy RTUs and Tasnet automation to new Distributed RTU (DRTU) design. DRTUs are required to support large-scale deployment of Automatic Sectionalizing and Restoration (ASR) at Pepco. NovaTech designs and assembles the DRTUs; then works with Pepco crews to install and commission. |
| "Lakeland Electric Substation Automation and Integration" Power Eng Lakeland_Tampa2011.pdf | Tom Campbell, Power Engineers | NovaTech Utility Symposium Tampa, FL April 2011 | OrionLX-based automation describing emailing of SEL event reports, and web-based alarms and custom graphics. |
| "Keys Energy Services Substation Automation and integration" Keys Energy Automation Integration_Tampa2011.pdf | David Cottar, Keys Energy Services | NovaTech Utility Symposium Tampa, FL April 2011 | Transition from early automation using Tasnet and SEL-2020s based platforms to three generations of Orions (Orion16, Orion5r and OrionLX). Spans mid-90s to the present. |

We'd appreciate your feedback and suggestions on the presentations, audio content, and any examples of excellent online resources for utility engineers (i.e. user forums, videos, blogs and other collaboration tools) that you think we can learn from at web@novatechweb.com.

OrionLX Cyber Security Document Available

This new document, entitled "NERC CIP Cyber Security and the OrionLX Automation Platform" summarizes the cyber security features in the OrionLX and how they can be applied to address the following:

- Creating Strong Passwords / User Groups
- Setting up a Firewall
- Setting up Remote Authentication
- Changing Passwords
- Creating NERC Reports
- Setting up a secure, encrypted VPN tunnel



Copies are available from your local Orion representative or Account Manager.

Updated 70 Series Order Guides

Order guides for the Bitronics 70 Series dual feeder models (M872 and M572) have been updated to include the new dual range options. The dual range option allows for a narrower current over range (four times nominal) but higher revenue accuracy (0.2 class) on bus 1 with a wider current over range (twenty times nominal) but reduced revenue accuracy (0.5 class) on bus two. Thus one unit can provide high end revenue accuracy for SCADA monitoring with one set of three-phase inputs from metering CTs along with wide range fault recording on another set of three-phase inputs from relay class CTs.



New Bitronics Technical Support Engineer



A new Technical Support Engineer has been added to NovaTech's Bitronics division in Bethlehem, PA. Matt Trubilla joins Bryan Gehringer and Joe Kowalski in providing support for all Bitronics products. Along with a BS in Electronics Engineering Technology, Matt brings ten years of experience with PPL Generation to the job. His knowledge of PLC's and SCADA will greatly benefit our Bitronics customers. Matt can be reached at 610-997-5174 or matthew.trubilla@novatechweb.com.

Happy Retirement, Ron!

Ron Gullickson, who managed our Orion Substation Automation Division, based in Lenexa, Kansas, for the past twenty-five years stepped down from the post this past April to focus on playing with grandchildren and riding motorcycles (presumably not at the same time). With Ron's departure, Alan Staatz has assumed responsibilities as VP of Engineering Orion Division, Pat Russo as Software Development Director for the Orion Division, and Paul Wallace as the VP of Utility Sales.



Upcoming Events

- July 21** Kansas City Utility Technical Symposium
- July 28-29** Association of Illinois Electric Cooperative Annual Conference, Springfield, Illinois
- September 7-8** California ISO Stakeholder Symposium, Sacramento, California
- September 8** Chicago Utility Technical Symposium, Chicago Marriott, Oak Brook Illinois

Latest Firmware

- Bitronics 70 Series Firmware and Configurator:** 3.06
- BiView:** 3.01
- Bitronics 50 Series Firmware:** 2.01
- OrionLX Firmware:** Pending
- NCD Software:** Pending