

8-Ball Gives Vague Answers to Maintenance Questions

Reliability-Centered System Life Planning Provides Better Method for Predicting Equipment Life

“Reply Hazy. Try again later.?! C’mon, I’ve got a crew to run here,” came the frustrated curse from the maintenance office. The job of predicting where and when mission-critical components of a control system are likely to fail is a tough one, and the cryptic responses from the popular toy do not make it any easier.

With a limited maintenance budget and an exceedingly complex system of interdependent parts, maintenance personnel face a continuing dilemma of where and when to replace or upgrade mission-critical control system components.

Enter NovaTech Process Solutions’ new Reliability-Centered System Life Planning (RC-SLP) service. A comprehensive analysis of all system hardware, software, and network components, RC-SLP provides a thoroughly detailed and prioritized roadmap for system optimization.

NovaTech senior engineer Phil Leibowitz says, “As control systems age, some types of hardware components begin to fail. These include fans, capacitors, surge suppressors, relays, voltage regulators, etc. These failures can affect power supplies, microprocessors, communications interfaces, I/O devices, etc. Plant infrastructure that may have been adequate in the past



An unusually direct response from an 8-Ball about control system health.

may have degraded or had its capacities exceeded by control system expansions. From a software standpoint, virus, spyware and adware protection, system software service packs and patches need to be current and non-conflicting to ensure optimal functionality. Anomalies caused by these deficiencies can cause loss of production and plant safety issues.”

After a thorough inspection of all system components and the multitude of environmental, electrical, and procedural practices that can affect their functional life, RC-SLP provides customers with a document that outlines which components are more likely to fail and prioritizes those which will have the greatest affect on system performance. This report includes:

- Inventory and recommendations for hardware, software, and spare parts
- Network (Ethernet and industrial communications) inventory and analysis
- Analysis of problems and safety issues found, including recommendations for improvements
- Review of preventive maintenance and system software backup procedures and recommendations for improvements
- Path for future system upgrades

RC-SLP maximizes the functional life of all field equipment by establishing a strategic needs-based maintenance approach instead of arbitrary scheduling or guesswork. For more information on RC-SLP, contact your NovaTech representative.



A New Look for D/3[®] and Orion

New Product Artwork Reflects Integrated NovaTech Identity



Starting this month, all D/3[®] process control units and Orion Automation Platforms will look a little different. Incorporating the diamond motif of our company logo, the new product logos are part of a comprehensive new visual identity program.

"It's our hope that the diamond becomes for NovaTech, in our industries, what the swoosh has become for Nike[®], or the arches are for McDonald's[®]. When you see a diamond from across the room, you'll know it's us," explains Chief Brand Architect Caroline Fricks.

"The Orion is about easy connectivity and it refers to a constellation of three stars," explains Conrad Oakey, the logo's designer, "and the D/3[®] logo updates the older black and red logo to reflect the incorporation of both company's technologies. Plus, it just looks good. I wouldn't be surprised if customers upgrade their D/3 just to get to look at them. Well, that and all the new diagnostics and connectivity options and being able to program the controllers with a Visio[®] chart. I guess those things could drive sales, too."



A PCM 4100 with the new D/3[®] artwork.



An Orion5r Automation Platform.

D/3[®] On-Line Upgrades Available in March

In response to customer demands for the ability to upgrade their D/3[®] system software without shutting down their process, NovaTech is pleased to announce the availability of On-Line Upgrades (OLU) for the D/3[®] starting in March of 2005.

The On-Line Upgrade (OLU) capability will be rolled out in phases that will eventually support upgrades from version 10.2 to the current version. The process can operate with different D/3 software

versions on individual system components during the upgrade. For example the CDCM could be running a newer version of the D/3 while individual PCMs and DCMs are running either the new or older versions. During this time, upgrade status and progress will be displayed for the operator. The OLU capability has minimal manual involvement, but provides the operator control over the timing of the implementation.



NovaTech attended this year's DistribuTECH Conference at the San Diego Convention Center from January 25-27. At our booth, we highlighted several applications including Smart RTU, Distribution Automation, SCADA Master, and Turnkey Systems.

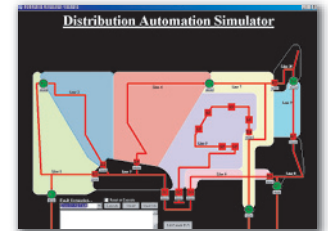
Smart RTU

The pass through and data aggregation capabilities of the Orion5 and Orion5r were demonstrated as they connected to Schweitzer and ABB relays, an ICMI voltage regulator controller, and our own distributed I/O board.



Distribution Automation (DA)

This station had a demo of NovaTech's DA Master and DA Sim software which allow design and testing of DA schemes prior to implementation.



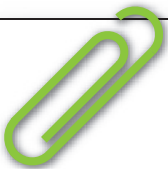
SCADA

NovaView Plus is our SCADA master tailored specifically for electric utilities. At this station, visitors could see the full functionality of the software as it is used in Nebraska City.



Turnkey Solutions

NovaTech provides a full range of engineering services to electric utilities, including customized design, testing, installation, training and commissioning for automation and integration projects of any scope and complexity.



**New White Paper:
"Putting Your DA to the Test"**

Distribution Automation (DA) systems, particularly feeder automation schemes, look great on paper, but how much do you trust them in the field at the moment you place them in service for the first time? We Energies and NovaTech have developed a new method of developing DA systems as part of We Energies' Distribution Vision 2010 initiative. This system integrates relay controlled substation feeder breakers, automated line reclosers and automated switches on numerous feeders with multiple bridging points into a single control at the substation. The automation control software runs on multiple platforms and tests the DA system in three different environments, speeding the debugging of DA applications. This paper will discuss the technology of the DA system design, the simulated automation system tools, and the testing procedures that were used to place several independent and unique DA schemes in service at We Energies in 2004.



Some of the many customers who visited our booth at DistribuTECH. Our thanks to everyone who stopped in and made this such a successful show.

To obtain a complete copy of the white paper, contact your NovaTech Sales Representative.

Archer Daniels Midland (ADM)

ADM recently awarded NovaTech a global support contract under its Facets™ service program to provide support coverage for 29 D/3® Systems located throughout the U.S and Europe. The Facets program offers a comprehensive array of support services tailored to address a variety of automation support requirements. The ADM agreement included features such as Customer Central Call Center support, guaranteed response time coverage, educational services, flexible system support, software upgrades and maintenance releases. NovaTech representatives worked closely with ADM to customize a global agreement that would fully address ADM's unique requirements for the coming year. ADM's ongoing commitment to the Facets program was based in part on NovaTech's pledge to incorporate online upgrade capability in the D/3 product. This important new feature released in D/3 version 12.1 will allow ADM to install and capture product enhancements, without shutting down an operating facility. This greatly increases the value of ADM's ongoing investment in the Facets program.

From the "Satisfied Sunoco" Department:

Mike [Duran] and the guys have indeed been on top of our requirements for delivery of the Coke Plant Interface items, and are playing a critical role in the success of my team on this project...Thanks very much for your extraordinary support of our recent efforts.

-Brett Senters, Sunoco Chemical

Alliant Energy Madison, Wisconsin

Alliant Energy, a purchaser of NovaTech Orion5 and Orion5r automation products, selected NovaTech to supply small RTU equipment for the remote monitoring of 110 radio antenna sites. NovaTech will supply single board RTUs with 16 inputs and 4 outputs for monitoring several alarms associated with the antenna sites, and communicate the information back to Alliant central locations via DNP3 serial communications. The RTUs utilize RS-232 communications media for the Alliant application, but offer swappable options for either RS-485 or fiber optic communications in lieu of the RS-232 and, eventually, DNP TCP/IP via an on-board 100BaseTX Ethernet port. Other future enhancements to the product planned include availability of other I/O mixes and sequence of events capability.

Riverside Public Utilities Riverside, California

Riverside Public Utilities (RPU) and KEMA Consulting recently selected NovaTech to provide substation automation systems for four of RPU's substations plus a simulator and training system. The systems being provided include multiple NovaTech Orion5r automation units for interface to numerous IEDs and RPU's current and future SCADA Master system via DNP3 serial and TCP/IP communications, PLC I/O, integrated sequence of events capability, and options for future in-substation HMI capability. NovaTech is providing full design, configuration, assembly, testing, commissioning, and training services on these substation automation systems.

RJ Reynolds Tobacco (RJR) Winston-Salem, NC

NovaTech Process Solutions, LLC was awarded a contract for an Air Washer Controls upgrade. This project is to upgrade to Version 12.0 and will expand the existing D/3® in the Powerhouse and use the D/3 OPC Connect system to interface multiple Allen Bradley PLCs on a dedicated Ethernet Network. The PLCs will have local display panels with the ability to perform D/3 Operator Console Displays providing the local Operator Interface for all the Air Washers.

Dear Valued NovaTech Customer,

Welcome to 2005!

We hope you had a peaceful and pleasant holiday season. After all the shopping, travelling, eating and visiting the holidays entail, it's actually kind of relaxing to get back to work again. Of course, this may mean that we're workaholics.

We're especially excited about the first implementations of some of our new products and services with key customers in the coming year. Our Utilities Management offering, focused on improving the use of electrical power, air, steam, water, and other utilities, will move from theoretical to real-world implementation. And our System Life Plan, introduced last year and featured in the lead article of this issue, is seeing active duty at several customer sites as part of their Facets™ contracts.

Coming up with new products and services is an exciting process, but seeing them installed at customer sites validates the value we envisioned during their conception. It's only when new initiatives are in the field that we truly get a sense of how to improve them and add continuing value to our customer base.

A new year also means a new season of trade shows, and our first and largest of the year was January 25th in San Diego. DistribuTECH is our largest show for the electric utility market, where our Orion Automation Platforms continue to set the pace for flexibility and ease

of use for several automation and SCADA applications. In addition, Eric Schultz and Pat Russo from our Kansas office co-authored and presented a paper on distribution automation (DA) with We Energies entitled, "Putting Your DA to the Test".

The new year brings a new look to our product line, as the NovaTech blue diamond motif is carried through to our new Orion, D/3® and other hardware faceplates.

Finally, we would like to gratefully acknowledge the efforts and leadership of Steven Sheeley in his role as chairman of our User Group Steering Committee. Steven recently took on additional responsibilities for ADM and has designated the able Brett Senters to assume his Chairman duties in the coming year. Thanks again, Steven, for all your hard work, and we look forward to working with Brett during his tenure.

Best wishes for continued happiness and success in the coming year!

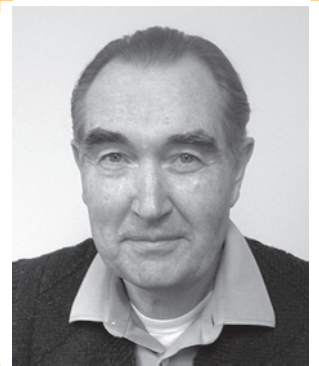
Sincerely,
Buz Zey, President



Volker Oakey, Chairman




Buz Zey, President



Volker Oakey, Chairman



“oooohhh...
counter-clockwise!”

 **Paperless Procedures™**
Execute every procedure correctly.

SAVE THE DATE

March 23–24: ECNE Spring Engineering Conference, Portsmouth, NH

May 10–12: Western Power Delivery Automation, Spokane, WA

September 18-21: User Conference, Tremont Suites Hotel, Baltimore, MD

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