

WELCOME

It is my pleasure to send you the inaugural issue of NeuCo News. The success of the 3rd ProcessLink Users Summit, which became the industry's largest gathering of optimization visionaries, and the only conference that focuses on advancing the state-of-the-art in optimization software solutions, has prompted us to adopt new ways to communicate with our ever-growing Users Group.

Because of your Users Summit feedback, this newsletter is now part of our larger effort to create an interactive community. In the near future, we hope to announce the completion of our Users Group website, which will feature an expanded library of papers and presentations, a contact database and an interactive message board; a secure online meeting room that will enable you to exchange information with industry members that you know and trust. We hope that these additions will help all of us continue finding solutions to our optimization challenges more quickly.

We invite all of you to submit articles and information for publication, along with any ideas you have to make this newsletter better. Please forward any submissions and ideas to editor@neuco.net.

I hope you find this newsletter both interesting and informative and that it becomes a welcome piece of correspondence.

Sincerely,

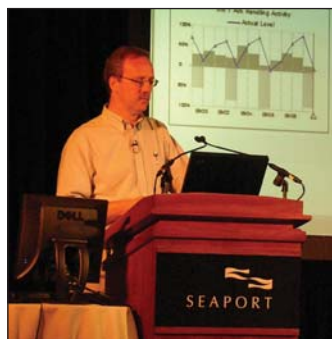
Curt Lefebvre, *President & CEO*

NeuCo Hosts 3rd ProcessLink Users Summit

NeuCo's 3rd Annual ProcessLink Users Summit gave attendees access to the latest optimization products and tools addressing their most critical emissions, efficiency and availability challenges as well as the ability to help shape future NeuCo solutions.



Curt Lefebvre, NeuCo's President and CEO, opens the 2005 ProcessLink Users Summit detailing NeuCo's role in Enterprise Asset Optimization.



Stan Conn, OMU, giving his Showcase Site Presentation.



Attendees from CPS Energy.

Story on page 3, Summit

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Customer Spotlight

Power Engineering Magazine Profiles CSU Martin Drake

In the August issue of *Power Engineering Magazine*, PE Managing Editor Brian Schimmoller interviewed Bob Head, Operations Superintendent at Colorado Springs Utilities' Martin Drake power plant for the magazine's monthly "Managing the Plant" series. As with all of the unique challenges that Martin Drake employees face, Bob Head was up for the task.

CSU Martin Drake is a three unit, 254 MW coal-fired plant located in downtown Colorado Springs, in the middle of the Pike's Peak region. Because of its location, Martin Drake must meet tight environmental requirements while also satisfying the growing power demands of the Front Range. When you factor in the age of the facility, CSU Martin Drake's staff deserve accolades for maintaining efficient, cost effective operations and keeping the plant competitive against newer, cleaner burning plants.



"Recent performance results are impressive," wrote Schimmoller. "The equivalent forced outage rate for first quarter 2005 was 0.7 percent; equivalent availability was 98.3 percent; peak equivalent availability was 97.9 percent; and nonfuel O&M production costs were \$7.01/MWH."

These results are not lost on Head, who credits employee's "ownership culture" as the reason for Martin Drakes' success. "We have a strong ownership culture here and our personnel love projects," said Head.

This "ownership culture" extends to the use of new hardware and software technology to help create value from the plant equipment. This includes a computerized PLC-based blending system to control coal blend quality, baghouses to meet a state-imposed opacity limit and a dry fly ash vacuum system which enables Martin Drake to sell ash to local concrete companies and save on water usage.

Martin Drake currently uses NeuCo's CombustionOpt system not only to cut its NOx emissions, but also to see another benefit. "Many companies install neural networks only for their NOx reduction capabilities," said Head. "But the heat rate reduction capabilities are just as important." Because of CombustionOpt's ability to control variables such as mill temperatures, fan settings and mill groups as a whole, significant heat rate reductions are possible. These controls, along with other systems, have reduced heat rate at Martin Drake by 150 Btu/kWh.

The Martin Drake ownership culture has enabled the plant to achieve notable milestones. On July 18, Unit 7 passed the 200-day mark without an outage, an impressive feat for a 30-year old plant.

Colorado Springs Utilities Martin Drake facility is located in downtown Colorado Springs.

We congratulate CSU Martin Drake employees for being visionaries in the industry.

To read the full CSU Martin Drake "Managing the Plant" article, please visit *Power Engineering Magazine's* website at www.power-eng.com and click on August issue. ■

Product Talk: CombustionOpt

During the 2005 ProcessLink Users Summit, we highlighted the advancements that have been made to CombustionOpt. In order to expedite the upgrade roll-out, we've highlighted below some of the important questions Users have asked in regards to CombustionOpt.

Why update CombustionOpt?

As a result of the significant upgrades made to our ProcessLink platform, combined with feedback from our Users Group, we have been able to enhance CombustionOpt to be more benefits-focused than ever before.

Will we have to reinstall the new system?

No. The new CombustionOpt upgrade will simply integrate into your current CombustionOpt system.

When will the upgrade be available?

We are currently rolling out the CombustionOpt upgrade. The sooner you sign up for the upgrade, the quicker you will receive it.

What is the cost of the upgrade?

We've created three upgrade packages and linked them with our one-stop, hassle free, 24 hour x 7 day Annual Maintenance & Support program subscription to guarantee seamless integration of the CombustionOpt upgrade package.

For more information on the upgrade options or to schedule your upgrade, contact Vikas Malik at malik@neuco.net or (617) 425-3646. ■

NeuCo Webcast Series The Road to EAO: Real-Time, Coordinated Combustion & Soot Blowing Optimization

On October 25, NeuCo held the first in a series of webcasts focusing on Enterprise Asset Optimization (EAO). This webcast highlighted the importance of an integrated combustion and soot blowing optimization approach as a starting point toward reaching your plant-wide emissions, efficiency and commercial availability goals.

The webcast was moderated by Peter Kirk, NeuCo, Vice President, Business Development and featured CombustionOpt analysis by Graham Bird, NeuCo, Director, Product Strategy, and SootOpt analysis Neel Parikh, NeuCo, Engineering.

To view the webcast, please go to *Power Engineering Magazine's* website (www.power-eng.com), click on webcasts and scroll down to the NeuCo logo. The webcast is free to view and lasts approximately 1 hour. ■

To be alerted to future webcasts please contact Jennifer Hutchings at hutchings@neuco.net or 617.425.3375. ■

Name our Newsletter!

Think you can do better than NeuCo News? Email your idea(s) to editor@neuco.net with the subject "contest."

The person who comes up with the winning name will receive a NeuCo shirt and get their plant highlighted in the Customer Spotlight section of the newsletter. Good Luck!

New Members SpotLight

NeuCo would like to welcome the staff from the following plants to the ProcessLink Users Group:

- Platte River's Rawhide Plant
- Gainesville Regional Utilities' Deerhaven Plant
- FirstEnergy's Sammis Plant, Units 1-5
- Dynegey Wood River, Units 4 & 5

Summit, *continued from page 1*

The ProcessLink Users Summit, which ran from September 6 – 9 in Boston, MA, consisted of product presentations and demos, customer-led case studies and roundtable discussion forums that focused on enabling attendees to help shape NeuCo's future product development. Event highlights included unveiling the next generation of NeuCo's ProcessLink® integrated optimization platform and the latest version of its market-leading CombustionOpt® product. Attendees were also able get hands-on with NeuCo's SootOpt™, PerformanceOpt® and MaintenanceOpt™ and see how the solutions are able to be coordinated



Attendees listen to NeuCo's Sanjay Patnaik discuss NeuCo's PerformanceOpt® and MaintenanceOpt™ solutions.

toward the attainment of a plant's financial goals as part of the EAO strategy.

NeuCo's customers were joined at the event by NeuCo employees, NeuCo's partner, Black & Veatch, and industry experts from IDC's Energy Insights, EPRI and *Power Engineering Magazine*.

Jill Febowitz of Energy Insights gave the keynote address, which focused on current power generation trends, recommendations for surviving the turbulent times, and the role that IT must play. ■

more photos from the Summit, page 4

NeuCo Calendar

NeuCo is scheduled to be at the following conferences:

2005 Power-Gen International Conference

December 6 – 8, 2005 | Las Vegas, NV

Booth # 1248

Highlights: Papers and presentations by Joe Naberhaus, Dynegey-Midwest Generation, Patrick Frazier & Scott Barta, AMP-Gorsuch, Gerry Hascal, Deseret and Curt Lefebvre, NeuCo.

50TH FOMIS Winter Conference

December 13 – 15, 2005 | Clearwater Beach, FL

Exhibiting

Reinhold Environmental NOx Round Table and Expo

January 23 – 24, 2006 | Charlotte, NC

Booth # 37

Highlights: Peter Spinney, NeuCo will host the Neural Network workshop.

If you are going to be at any of these conferences, or are interested in working with NeuCo on a conference paper, please contact Jennifer Hutchings at hutchings@neuco.net or 617-425-3375 for more information. ■

Ask NeuCo

Q: What does soot blowing have to do with NOx? Isn't it more of an issue with regard to heat rate, Particulate, Hg, & Acid Mist (as opposed to Acid Rain) emissions?

A: It is widely accepted that changes to heat transfer characteristics can have a significant impact on unit NOx performance. In general, heat transfer that is more even and more correctly proportioned between the furnace and the convection pass improves NOx performance. One likely mechanism is through the reduction of "hot spots" that result from ineffective or inconsistent cleaning. Other possible mechanisms are tied to more appropriate relative thermal conditions in the lower furnace zone, burner zone, and OFA region, as well as efficiency feedback through the combustion controls that results in reduced firing intensity. One major challenge in soot cleaning optimization is just how to find the best interaction of these complex phenomena on a given boiler, and how to move the average heat transfer toward that interaction through available controls and soot cleaning hardware. This is essentially an empirical effort, only feasibly done in closed-loop, with support from advanced instrumentation and/or high resolution first principles modeling – just the kind of thing ProcessLink and SootOpt were designed to do.

To submit a question to the Ask NeuCo section, please email your question to editor@neuco.net with the words "Ask NeuCo" in the subject line. ■

Employee Spotlight

Name: Vikas Malik

Title: Customer Support Engineer

Where I live: "Attleboro, Massachusetts"

Daily responsibilities: "Ensuring that all of our project installations continue to deliver benefits for our customers by responding to their requests, following up with personnel at the plants and conducting weekly checks."

Favorite part of my job: "Being the "go-to" contact for our customers as they try to realize their unit specific goals, whether that be environmental, performance-based or both."

Family: "Leena, Wife; Raghav, Son; and Manav, Son"



Update: "On Wednesday, November 2, my wife Leena delivered a healthy baby boy! Manav was born at 10:30 pm and was 8.6lbs and 21 inches long at birth. Everyone's doing great and all of us, especially his big brother Raghav, are very excited. I'm sure you'll be hearing all about Manav the next time you call." ■

Summit, *continued from page 3*



During the Championship Views party, Stan Conn (left), OMU, and Scott Barta (right), AMP, discuss plant optimization while debating which Boston sports team has better fans.



The crew from Platte River's Rawhide Energy Station sample Boston's version of Rocky Mountain Oysters.



Users Group members sampling local Irish fare at Murphy's Law pub.