Efficiency Extra Edition Happy Engineer's Week! T2E3, Inc. Newsletter February 2011

•

Performance Training Opportunities

It's less than one month to the next <u>LM6000 Performance Seminar</u>. This year the seminar will be in Palm Springs **March 17 & 18,** the Thursday and Friday prior to the WTUI conference.

During the two days, we'll discuss the performance aspects of the LM6000 including expected output, heat rate, exhaust energy, and the benefits of inlet cooling and SPRINT systems. By the time you leave on Friday afternoon, you'll know what instrumentation you need to calibrate to get better performance, how best to collect data and run the calculations to track corrected output & heat rate, compressor efficiency and evap cooler effectiveness.

Seating is limited, so **call or e-mail now to reserve your space**: 425-821-6036/tinat@t2e3.com. The seminar is \$1275 per person for the two days, with multi-attendee discounts available – so bring a friend!

If you're interested in learning more about performance for frame units and combined cycle facilities, I'm working with ASME to present a one-day combined cycle workshop at the 2011 ASME Power Conference. Please contact me if you're interested. More details will be posted on the conference website later. Currently it's listed as track 8-4: Workshop 8-4 Combined Cycle Plant Thermal Performance

This week (Feb 20-26, 2011) is Engineer's Week, according to The National Engineers Week Foundation (<u>www.eweek.org</u>). This week - as every week - is a good time to mentor a young student and encourage them to pursue a career in power & engineering. I encourage you all to get involved in the local schools to share what you enjoy best about working with power equipment. I routinely visit the local universities to share my experiences with the incoming freshmen and am always amazed at the interest I see when I show pictures of facilities in action such as the one below.

From this one picture, I can draw students into the need for civil, thermal, material, construction, start-up and design engineers. Just look at the number of axles on that trailer – and they still had to re-build the road from the rail station to the plant (it started out as a small county lane) in order to handle the weight of this HRSG section.



Announcements

- Training Available
- Read & Comment at Tina's Blog: www.t2e3.com/blog
- Next LM6000 Seminar March 17 & 18, 2011 Palm Springs, CA see details on page 2
- Follow me on Twitter @tltoburen

Products & Services

Analysis Tools & Models

Excel Workbooks, Macros and Add-Ins

Training Seminars

Compressor Efficiency
Tracking Software

Performance Monitoring Program Design, Support and Evaluation

Performance Test Design, Direction and Owner's Engr Support



T2E3, Inc.

Tina Toburen's **Energy Efficiency Enterprises**









14260 120th PL NE Kirkland, WA 98034

Phone: 425-821-6036 Fax: 253-550-6992

E-mail: performance@t2e3.com

To receive a copy of this newsletter, along with other announcements for T2E3 products and services, send an email to:

performance@t2e3.com

and mention this newsletter in the subject or body of the message.

Your email address will be held in strict confidence and not be shared with any other parties.

To view this or other T2E3 newsletters online, visit:

http://www.t2e3.com/news.php

(cont. from front page) In my continuing pursuit of bringing more ME's into the power industry, I will be teaching a class at Seattle University starting next month on power generation performance issues (the title of the class is "Applications in Power Generation"). I'll be including some sections on alternative energy (solar, wind, geo-thermal, etc.) - which will be a learning experience for me, as well. I'm looking forward to it.

If you have any stories that you can share and think students would be interested in - I'd love to hear them. I may be looking for lecture material by the end of the 10 week term!

If you're an ASME member, you can send free Engineer's Week e-cards to all your friends and family at go.asme.org/ecards.

On The Blog ———

February 22nd's post was a short overview of an article in this month's Power Engineering magazine regarding methods to improve Gas Turbine Availability. The article goes back to a paper presented at PowerGen 2010 by a group from MHI, but the results are applicable to many aspects of power plant operation.

LM6000 Performance

Characteristics, Testing and Long-Term Condition Monitoring Seminar

> When: March 17 & 18, 2011 Where: Palm Springs, CA

Near the WTUI Venue: http://www.wtui.com

Additional information on the seminar, including an agenda, can be found on at www.t2e3.com/LM6000.php.

Green Beer for St. Patrick's Day included!

T2E3 Performance Analysis Services for Power Plants

Including:

Analysis Tools & Software – from customized spreadsheets to add-ins for Excel or complete compiled programs, T2E3 can develop software tools and analyses to support all your performance monitoring needs,

Training – both public and private seminars are available. Interactive sessions increase attendees' knowledge and understanding of the thermodynamic cycles, instrumentation and analyses needed to improve equipment performance and reliabilPerformance Test Support - for annual capacity or PPA performance tests. Support available includes developing procedures, analyses and reports as well as on-site test direction.

Performance and Dispatch Models

Support for power marketers and dispatchers to increase their understanding of the operation of your facility. Do they constantly dispatch the plant at loads which are difficult or impossible to maintain? T2E3 can help you build tools and training programs to help all parties understand the expected changes in performance due to ambient conditions and operating constraints.

Make your own Luck.



Call for more information on how we can work together, to improve your performance today!