



## TRUE NORTH CONSULTING, LLC

### Advanced Thermal Performance Training

#### Advanced Thermal Performance Training--Nuclear January 15- 18, 2019

True North Consulting will be conducting an Advanced Thermal Performance Training course for Nuclear Plant Thermal Performance Engineers beginning January 15 and concluding January 18, 2019. Course offering and associated details are enclosed with additional information available at the provided link. The course is designed for those who have had a basic thermal performance course or one year or more experience in thermal performance. This training was developed by utility engineers who have solved many plant thermal performance problems and are uniquely qualified to help you understand how to deal with efficiency issues at your plant. Please forward this invitation to persons at your site responsible for Thermal Performance. In addition this training has been presented to system engineers who have benefited from the overall troubleshooting skills developed.

#### Course Summary

- **Setting Baseline Values:** Thermal performance monitoring program starts with establishing and verifying baseline values for important performance parameters. Baseline values need revision after plant uprates or other modifications. This course will describe and provide hands on examples of how to determine baseline values.
- **Development of Correction Curves:** In addition to baseline values, correction curves are required to determine the effect of the plant parameters deviating from the baseline values. This course will describe how to develop correction curves using thermodynamic modeling as well as empirical data.
- **How to Troubleshoot Thermal Performance Problems:** This course will provide examples of actual plant problems and the students will use the troubleshooting process to identify the problem.

Links to more information can be found on our website: [www.tnorthconsulting.com](http://www.tnorthconsulting.com)

#### Schedule

January 14-18, 2019

**Monday:** Arrive in Montrose, Colorado

**Tuesday:** Troubleshooting introduction, Baseline Values and Correction Curves ----8:00 a.m. – 4:30 p.m.

**Wednesday:** Troubleshooting Examples – Session #1 ----8:00 am - 4:30 pm

**Thursday:** Troubleshooting Examples – Session #2 ----8:00 am – 4:30 pm

**Friday:** Troubleshooting Examples – Session #3 ---- 8:00 am – 11:30 am

#### Pricing

\$2,695/person (Lunches will be catered and beverage service provided during scheduled breaks.)

#### Items to Bring

Laptop with Excel and PEPSE™ installed, Calculator, Heat Balance Diagram and/or Thermal Kit of your Plant

## Training Facility

### [The Bridges](#)

2500 Bridges Drive  
Montrose, CO 81401 Phone: 970 – 252- 1119

## Accommodation Suggestions

Hampton Inn  
1980 North Townsend  
Montrose CO 81401  
970-252-3300

Holiday Inn Express  
1391 South Townsend Ave  
Montrose, CO 81401  
970-240-1800

## Course Qualifies for Continuing Education Units (CEU)

Each attendee will receive a Certificate of Completion for 2.8 Continuing Education Units (CEU) credits to qualify for 28 Professional Development Hours (PDH) needed to fulfill Professional Engineers' continuing education requirements. The credits will be awarded without authorization. It is the attendee's responsibility to keep and present the certificate to any organization that requires the certificate.

## Instructors

Frank Todd  
[fdt@tnorthconsulting.com](mailto:fdt@tnorthconsulting.com)  
970-964-2753

Frank serves as Manager of Thermal Performance at True North Consulting. Frank is highly skilled in the use of analytical tools designed to evaluate thermal performance and improve plant efficiency and reliability. These tools include a variety of approaches using computer based plant modeling with strong emphasis on problem analysis and resolution. Additionally, Frank has developed a wide spectrum of test specifications, procedures, and testing configurations in support of thermal performance improvements.

Katelin Kohn  
[kkohn@tnorthconsulting.com](mailto:kkohn@tnorthconsulting.com)  
970-964-2752

Katelin serves as a senior consulting engineer for True North Consulting with over 10 years of experience in the power industry with a special focus on thermal performance, and secondary side plant inspection and optimization. She has worked extensively with water treatment and water production systems. She has also been recognized for her unique contributions in maintaining plant efficiency and has a deep understanding of thermal performance from the perspective of a utility engineer.

Please contact us if you have any questions about our courses!

## Questions

Contact Karla Todd  
609-247-9467  
[kjt@tnorthconsulting.com](mailto:kjt@tnorthconsulting.com)

## Registration

Please register by 5 p.m. Friday, January 4, 2019  
There are four easy ways to register!  
E-mail: Complete the following form and send as an attachment to: [kjt@tnorthconsulting.com](mailto:kjt@tnorthconsulting.com)  
Go to our Training Registration on our website: [www.tnorthconsulting.com](http://www.tnorthconsulting.com)  
Fax: Complete the following form and fax to 970-252-1837

Mail: Complete the following form (along with check or CC information) and mail to: Karla Todd, True North Consulting, 150 Merchant Drive, Montrose, Colorado 81401

<b>Advanced Thermal Performance Training--Nuclear</b>		<b>January 15 - 18, 2019</b>
<b>General Information</b>		
Name:		
Title:		
Company:		
Credit Card Billing Address		
Telephone:		
Fax:		
Email:		
<b>Payment Information</b>		
Check one form of payment:	<input type="checkbox"/> CREDIT CARD <span style="float: right;"><input type="checkbox"/> CHECK # _____</span> <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> American Express <input type="checkbox"/> Other	
Card #		
Exp. Date:		
Cardholder Name:		
Signature:		
Cardholder's Email Address/Phone Number:		
<ul style="list-style-type: none"> <li>Remittance of payment is due one week prior to the first day of training.</li> <li>Receipt for payment will be emailed to you as your confirmation.</li> <li>If your company or another party will be compensating True North Consulting for your registration fee via check or credit card, please include a contact name, number and email address of the person responsible.</li> <li><b>All information shall remain confidential.</b></li> </ul>		
If you have any questions about registering, please call 609-247-9467 or email <a href="mailto:kjt@tnorthconsulting.com">kjt@tnorthconsulting.com</a> . Check our website for updated training information and schedules: <a href="http://www.tnorthconsulting.com">www.tnorthconsulting.com</a> .		