

Hydro Generator Data Analysis & Diagnostics Course

Hosted by
Avista

Oct. 16-18, 2018 / Avista Headquarters

Main Auditorium, Room 120, 1411 E. Mission Ave, Spokane, WA

Learn how to increase machine profitability

We will show you exactly what to look for when analyzing machine data and how to correctly interpret it.

DIRECTED AT

- Power generation personnel
- Utility decision makers
- Owners of generating assets
- Plant managers
- Assets managers
- Operations and maintenance personnel
- Engineers
- Technicians



Mr. André Tétreault - Course Instructor

Mr. Tétreault is a member of the International Council on Large Electric Systems (CIGRÉ) and the Institute of Electrical and Electronics Engineers (IEEE®). He also actively contributes to the Electric Power Research Institute (EPRI®) and the International Electrotechnical Commission (IEC). He has published a variety of papers on generator behavior at various conferences. Mr. Tétreault's experience in the installation and commissioning of monitoring systems, as well as 20 years of analyzing results, has given him a wealth of knowledge in regards to large rotating machines, including hydro generators, turbo generators, as well as SAG mills and ball mills. He has travelled worldwide conducting various machine behavior training sessions.



TOPICS

Day	Topics	Details
DAY 1	<ul style="list-style-type: none"> ■ Monitoring equipment justification ■ Introduction to machine monitoring software ■ Introduction to air gap results ■ Air gap monitoring <ul style="list-style-type: none"> - Basic air gap monitoring terminologies and standards 	<ul style="list-style-type: none"> ■ Overview of the importance of implementing a monitoring system appropriate to the machine. You will be introduced to VibroSystem's ZOOM monitoring software, an open architecture software that allows for quick & easy trends and in-depth diagnostics of air gap, vibration, flux, temperature and other parameters that have a direct impact on the availability of large rotating machines. You will also be introduced to air gap results interpretation and to basic air gap monitoring terminologies and standards, allowing you to correctly analyze rotor-stator dynamics.
DAY 2	<ul style="list-style-type: none"> ■ Air gap monitoring <ul style="list-style-type: none"> - Rotor evaluation - Stator evaluation - Transient conditions ■ Vibration monitoring <ul style="list-style-type: none"> - Basic vibration monitoring strategies 	<ul style="list-style-type: none"> ■ You will learn about air gap monitoring more extensively, specifically how it allows for a detailed analysis of rotor and stator dynamics. You will be introduced to a series of techniques on how to correctly evaluate the condition of your machine's rotor and stator. Through our ZOOM monitoring software we will show you examples and actual results of measurements taken during transient conditions and what to look for when monitoring your machine's behavior. The second day will also include an introduction to vibration monitoring.
DAY 3	<ul style="list-style-type: none"> ■ Vibration monitoring <ul style="list-style-type: none"> - Basic measurement principles - Installation and calibration - Data collection and interpretation - Acceleration and velocity interpretation - Results Interpretation Service (RIS) ■ Generator Asset Management Tool <ul style="list-style-type: none"> - ZOOMWatch 	<ul style="list-style-type: none"> ■ Basic vibration measurement principles and terminologies. It will also cover the importance of proper sensor installation and calibration. You will also be introduced to data collection and interpretation, as well as acceleration and velocity data & graph interpretation. <p>During this 3 day course, various case studies will be presented exemplifying what has been covered and showing you exactly how the information provided by the ZOOM software and ZOOMWatch Generator Assets Management Tool can help you better manage your machines.</p>

Breakfast, breaks and lunch included

Training material included

Attestation certificate included

Hydro Generator Data Analysis & Diagnostics Course

Hosted by **Avista Corporation** at their headquarters:
Room 120 Auditorium, 1411 E. Mission Ave., Spokane, WA 99220-3727

October 16, 17, and 18, 2018

To register for this training course, please fill in this form and send it to info@randywallman.com

Registration Fee: **\$1,995 USD** per person*

**Includes full breakfast, lunch, breaks, and all training materials in .pdf format. Does not include hotel accommodations, or travel expenses.*

Name/s: _____

Company: _____

Address: _____

City and Province/State: _____

Postal/ZIP Code: _____

Tel.: _____ Fax: _____

Email: _____

Payment made via: (please check boxes as appropriate)



Credit card #: _____ Expiry Date: _____
(month / year)

CSC (Card Security Code): _____

Card Holder Name: _____

Card Holder's Billing Address: Same as above

Signature: _____

Invoice my company at: _____

PO#: _____

Send invoice attention to: _____

Send check: Make check payable to: IndustrialReliability.com Inc.

Remit to: P.O. Box 728, Liberty Lake, WA 99019