



## **Electric Utilities' Roles in Promoting Geothermal Technologies**

June 10-11, 2008  
TriState G&T Offices Westminster, CO

August 11-12, 2008  
Snohomish PUD Offices Everett, WA

Western Area Power Administration (Western) is hosting two Geothermal Technologies workshops. Their theme is "Electric Utilities' Roles in Promoting Geothermal Energy Technologies". They are co-sponsored by the American Public Power Association (APPA), the National Rural Electric Cooperative Association (NRECA), and the Utility Geothermal Working Group (UGWG).

The target audiences for these workshops are utility staff who are interested in learning about geothermal technologies – including geothermal heat pumps (GHP) and geothermal power production, who want to compare them with other resource options, or who want to learn how to improve on existing programs. Through class presentations, case histories, and demonstrations, attendees will learn about

- Cost effectiveness tests of GHP from the utility and customer perspectives
- Case histories of GHP systems energy savings over conventional HVAC systems
- How GHP programs qualify as energy efficiency programs
- New drilling and installation techniques
- Cost comparisons of geothermal power and other resource options

Georg Shultz the Director, Electric Staff Division for the USDA's Rural Utility Services (RUS), will give an update on the RUS's work with cooperatives on promoting Geothermal technologies in rural areas. Additional agenda details and other information are on the following pages. Both workshops are similar in structure and content.

Workshop fees are \$90 for one day and \$125 for both days. Reduced fees for APPA, NRECA, NWPPA, and State Working Group members and Western Customers are \$60 and \$90. If you wish to attend, please fill out the registration form on the following page and send a check to made payable to Utility Forum Connection and mail to:

Utility Forum Connection  
PO Box 255  
Lincoln City, OR 97367

Questions? Contact Guy Nelson [energyguy@utilityforum.com](mailto:energyguy@utilityforum.com) or (541) 994-4670.



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Registration Form

CO Workshop

WA Workshop

Name \_\_\_\_\_ Organization and Title \_\_\_\_\_

Address, State, and Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ email \_\_\_\_\_

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Colorado Workshop Agenda

June 10

- 9:00 Registration
- 9:30 Opening Remarks: Tom Plant, Director, Colorado Energy Office; Tim Meeks, Administrator, Western Area Power Administration
- 10:00 "Geothermal Heat Pumps: Benefits and Issues", Rich Mignogna, CO PUC
- 10:30 "A Tale of Two Buildings, side by side building energy use – GHP vs Conventional HVAC" Jerry Brown, Palo Alto Utilities
- 11:15 Break to Exhibits
- 11:30 GHP Analytical Tools" Katherine Johnson, Market Development Group
- 12:15 Luncheon Presentation: "Geothermal Technologies and Utility Leadership Roles in Promoting Rural Development; Georg Shultz, USDA
- 1:30 Geothermal Technologies in Waste Heat Recovery Applications, Guy Nelson, Utility Geothermal Working Group
- 2:00 Panel Discussion: "Utility Perspectives" Ron Ebenkamp, TriState Chair  
Paul Bony, Delta Montrose Electric Association  
Beth Chacon, Xcel Energy
- 2:45 Breakout Sessions: "How Do We Get More Cost-Effective Geothermal Heat Pumps Into the Market?"  
Utility Programs  
Residential Applications  
Commercial/Industrial Applications
- 3:45 Break
- 4:00 Reports from the Breakout Sessions
- 4:30 Products and Services Panel, Steve Bromly, Western Area Power
- 5:15 Adjourn for the Day

## Colorado Workshop Agenda (continued)

June 11

- 7:30 am Continental Breakfast
- 8:00 Panel Discussion: "Geothermal Power Production Potential In Colorado"  
Joani Matranga, Chair  
Kermit Witherbee, Bureau of Land Management  
Kevin Rein, Colorado Department of Water Resources
- 9:15 "Building and Operating Geothermal Power Plants" Dan Fleischmann,  
Manager, ORMAT Technologies, Inc
- 9:45 "Risks and Rewards of Including Renewable in a Utility's Resource Portfolio"  
Brian Walshe, ALTERA Energy
- 10:15 Break to Exhibits
- 10:30 Utility Resource Portfolio Options and Costs, Steve Johnson, Cooperative  
Research Network
- 11:45 Customer Surveys as a Tool for Utility Resource Planning, Guy Nelson UGWG
- Noon Adjourn

## Washington Workshop

August 11

- 9:00 Registration
- 9:30 Opening Remarks: Steve Klein, General Manager SNOPUD
- 9:45 Panel Discussion: "Geothermal Potential in the Pacific Northwest" Susan  
Petty, AltaRock Energy, Inc, Chair
- 11:15 Break to Exhibits
- 11:30 "Building and Operating Geothermal Power Plants" Dan Fleischmann,  
Manager ORMAT Technologies, Inc
- 12:15 Luncheon Presentation: "Geothermal Technologies and Utility Leadership  
Roles in Promoting Rural Development; Georg Shultz, USDA
- 1:30 "Geothermal Heat Pumps: Benefits and Issues", Toni Boyd, Geo Heat Center
- 2:00 Panel Discussion: "Utility Perspectives" Craig Collar, SNOPUD Chair  
Craig Collar, Snohomish PUD  
Marilynn Semro, Seattle City Light  
Paul Bony, Delta Montrose Electric Association
- 3:30 Break to Exhibits
- 3:45 "Risks and Rewards of Including Renewable in a Utility's Resource Portfolio"  
Brian Walshe, ALTERA Energy
- 4:15 Products and Services Panel, Guy Nelson, Utility Geothermal Working Group
- 5:15 Adjourn for the Day

## Washington Workshop Agenda (continued)

August 12

- 7:30 am Continental Breakfast
- 8:00 "A Tale of Two Buildings, side by side building energy use is compared, one using GHP and the other using conventional HVAC" Jerry Brown, Palo Alto Utilities
- 8:30 "GHP Analytical Tools" Katherine Johnson, Market Development Group
- 9:15 Geothermal Technologies in Waste Heat Recovery Applications, Guy Nelson, UGWG
- 9:45 Breakout Sessions: "How Do We Get More Cost-Effective Geothermal Projects Into the Market?"  
Utility Perspective  
Regulatory/Government Perspective  
Customer Perspective
- 10:45 Break
- 11:00 Reports from the Breakout Sessions
- Noon Adjourn

About some of the Speakers



**Katherine Johnson** is a Partner with Market Development Group, a woman-owned strategic marketing firm specializing in the energy efficiency field. For more than 15 years, Katherine has conducted marketing analysis activities to determine technical and market potential for a variety of energy efficient technologies. She has also designed, launched, implemented, and evaluated marketing and program activities for energy organizations throughout the United States. She has a Masters in Business Administration from Rollins College with concentrations in Marketing and Finance, an undergraduate degree in Business-Journalism from Indiana University. She is completing her doctoral dissertation for a Doctors in Business Administration from the University of Southern Queensland, Australia.



**Guy Nelson** is the Team Lead of the Utility Geothermal Working Group and has more than 30 years of utility experience in energy education and training. The training focuses on all aspects of the utility business, including transmission, distribution, power operations, billing, marketing, and rate design. He assists utilities in developing and implementing their future business and resource plans. This assistance includes energy efficiency, renewable energy, resource acquisition, rate analysis, load control and reliability, and energy services program design. He has conducted over 100 workshops and training programs focusing on improving utility performance. Guy holds a BS degree in Chemical Engineering from Oregon State University. He did post graduate studies in education at University of Oregon.

Questions, contact Guy Nelson, Utility Geothermal Working Group (541) 994-4670  
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