

Free Educational Seminar

For PGE Commercial and Industrial Customers

Commercial (Freon) Refrigeration Systems

This free half day seminar covers elementary Freon related refrigeration concepts and introduces various energy efficiency techniques that, when properly applied, can save on energy costs. The instructor is a highly qualified industry expert and will address the latest refrigerant issues, efficiency measures, and equipment options.

This seminar will equip participants to better:

- *Understand technical basics, refrigeration system operation, and current industry issues*
- *Learn from case studies to develop proven implementation strategies*
- *Increase performance, enhance reliability of your system, and find savings opportunities*
- *Justify capital investment to improve energy efficiency*
- *Use incentives and services from local resources and governmental agencies: cash incentives, tax credits, loans, and case studies from qualified consultants and contractors*

Who should attend?

This course is designed for owners and managers of 5 to 500 horsepower refrigeration systems as well as service professionals.

- *Industrial refrigeration professionals*
- *Industrial and commercial facilities managers and planners*
- *System operators and plant engineers*
- *Maintenance technicians*
- *Engine room operators*

Instructor

David Wylie, P.E., Vice President, ASW Engineering Management Consultants

David was one of the founders of ASW in 1976. He has an engineering degree from Cal Poly San Luis Obispo and completed an MBA at National University which provided him with even more tools to analyze energy efficiency investment from both a mechanical and financial perspective. He holds college teaching credentials and has an ability to take sophisticated engineering concepts and relate them in a way you can understand. Several of his articles have been published in trade magazines and he has written a book titled "New Refrigerants for Air Conditioning and Refrigeration Systems". He is currently the president of the Southern California Association of Professional Energy managers.

Nov. 10, 2009 • 2 World Trade Center • Portland, OR

Time and Location

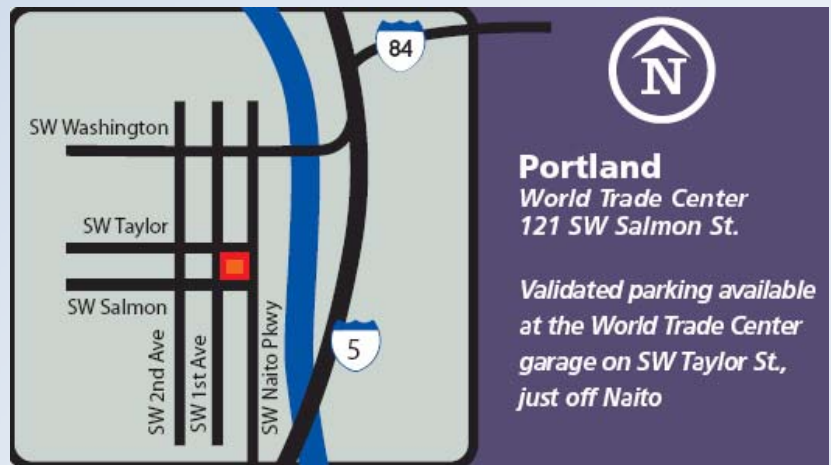
Tues., Nov. 10, 2009

7:30 a.m. - 12:00 p.m.

2 World Trade Center

Continental Breakfast: 7:30 a.m.

Seminar: 7:50 a.m.



Cost

Free to PGE customers. Others are welcome based on availability of space, small fee may apply.

Accreditation

- **Clackamas Community College:** 0.4 CEU's (continuing education units)

Registration

RSVP is requested as soon as possible. However, we can accommodate a few walk-in registrations. To register, e-mail PGE.Seminars@pgn.com or call **503-464-8020** and press "1" for classes.

More educational opportunities

For more information on additional classes for PGE business customers, visit our Web site at PortlandGeneral.com/Classes. Classes may be added throughout the year. If you'd like to receive e-mail notices of new class offerings, e-mail PGE.Seminars@pgn.com.

Additional classes to look forward to in 2009/2010:

- *Ammonia Refrigeration*
- *Compressed Air Systems*
- *Chilled Water Systems*
- *Energy Champions Workshop*
- *Industrial Fan Systems*
- *Lighting Retrofits*
- *New Trends in Lighting*
- *Smart Investments in EE for Multifamily Property Managers*



Portland General Electric



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