

## **Avalon Publications & Presentations Since 1996**

- "Turbine Inlet Cooling Case Study for an Industrial CHP System for Multiple Buildings in the Midwest," International District Energy Association (IDEA) Conference, Chicago, IL, July 2, 2012
- 2. "Turbine Inlet Cooling: An Overview," a Webinar presentation Sponsored by the Turbine Inlet Cooling Association (TICA), June 20, 2012
- 3. "Benefits of Turbine Inlet Cooling and Thermal Energy Storage for CHP and Cogeneration Systems," Midwest Cogeneration Conference, "Implementing Winning Cogeneration/CHP Projects," Elgin (Chicago Area), IL, October 11, 2011
- 4. "Turbine Inlet Cooling Technologies and Applications for Optimizing Cogeneration / CHP Systems," a Webinar Presentation Cosponsored by the Midwest Cogeneration Association and the U.S. DOE Midwest Clean Energy Application Center, August 25, 2011
- 5. "Combustion Turbine Inlet Cooling for Power Augmentation: An Overview," ASME Turbo Expo 2011, Vancouver, BC, Canada, June 6-10, 2011
- 6. "Zero-Emission Electricity (ZEE) Generation from Fossil-Fuel Systems," Electric Power 2011, Rosemont (Chicago Area), IL, May 10-12, 2011
- 7. "Optimizing Clean Energy Systems with Thermal Energy Storage and/or Turbine Inlet Cooling," U.S. Clean Heat & Power Association, Washington, DC, May 5-6, 2011
- 8. "Hybrid Systems for Cooling Turbine Inlet Air for Preventing Capacity Loss and Energy Efficiency Reduction of Combustion Turbine Systems," ASME 20100 Power Conference, Chicago, IL, July 14, 2010
- 9. "Turbine Inlet Cooling: Increased Energy Efficiency & Reduced Carbon Footprint Aspects for District Energy Systems," International District Energy Association (IDEA) Conference, Indianapolis, IN, June 14, 2010
- 10. "Carbon Footprint, Environmental Benefits and Emission Controls," Chapter 7 in <u>Sustainable On-Site CHP Systems: Design, Construction and Operations</u>, a McGraw Hill publication, January 2010

- "Hybrid and LNG Systems for Turbine Inlet Cooling," Competitive Power College Curriculum (CPC 504), POWER-GEN International, Las Vegas, NV, December 7, 2009
- 12. "Permitting Guide fro Coal Gasification Plants in Illinois," developed and published by the Illinois Clean Coal Institute, June 2009
- 13. "CHP System at the Janesville Wastewater Treatment Facility, Janesville, WI," a project profile developed for the U.S. DOE's Midwest CHP Application Center, March 2009.
- 14. "CHP System at the Rochester Wastewater Reclamation Plant, Rochester, MN," a project profile developed for the U.S. DOE's Midwest CHP Application Center, August 2008
- 15. "Impact of Turbine Inlet Cooling Technologies on Capacity Augmentation and Decrease in Carbon Footprint for Power Production," Electric Power 2008, Baltimore, MD, May 7, 2008
- 16. "Technologies and Economics of Turbine Inlet Cooling Application in Cogeneration," Midwest Cogeneration Association Conference, Countryside, IL, May 6, 2008
- 17. "To Cool Or Not To Cool," published in Power Engineering, February 2006
- 18. "Turbine Inlet Cooling for Power Augmentation in Combined Heat & Power (CHP) Systems," presented at POWER-GEN International 2005, Las Vegas, NV, December 6-9, 2005
- 19. "Unearthing Hidden Treasure," published in Power Engineering, November 2005
- 20. "Distributed Generation and Cogeneration," a short course presented for the staff and customers of The Southern California Gas Company, October 2005
- 21. "Natural Gas-Fired Cooling," a short course presented for the staff and customers of The Southern California Gas Company, October 2005.
- 22. "Building Energy Analyzer Software," a short course presented for the staff and customers of The Southern California Gas Company, October 2005.
- 23. "Combined Heat and Power Resource Guide," developed for and published by the U.S. DOE Midwest CHP Center, September 2005.
- 24. "Turbine Inlet Cooling Benefits Plant Owners and the Environment," published in POWER, September 2005.

- 25. "Cogeneration Systems," a chapter co-authored for the Natural Gas-Fired Cooling Technologies and Economics, a textbook developed for the Gas Technology Institute, June 2005.
- 26. "Building Energy Analyzer," a chapter co-authored for the Natural Gas-Fired Cooling Technologies and Economics, a textbook developed for the Gas Technology Institute, June 2005.
- 27. The Natural Gas-Fired Cooling Technologies and Economics, a textbook, coedited and developed for the Gas Technology Institute, June 2005.
- 28. "Combined Heat and Power Systems Training Course," developed for the Gas Technology Institute, November 2004.
- 29. "Hybrid & LNG Systems for Turbine Inlet Cooling," published in Energy-Tech, October 2004.
- 30. Database of U.S. Combined Heat & Power Installations Incorporating Thermal Energy Storage and/or Turbine Inlet Cooling," a report prepared for the U.S. Department of Energy, September 2004.
- 31. "Chiller Technologies for Turbine Inlet Cooling- Part 2," published in Energy-Tech, June 2004.
- 32. "Chiller Technologies for Turbine Inlet Cooling," published in Energy-Tech, April 2004.
- 33. "Gas Cooling and Desiccant Dehumidification Systems," Web-based tutorials developed for the Cooling Solutions Fund members of the Gas Technology Institute, April 2000-2004.
- 34. "Gas Cooling Application Savings Calculators," Web-based Calculators
  Developed for 14 members of the Cooling Solution Fund of the Gas
  Technology Institute, April 2000-2004
- 35. "An Introduction to Turbine Inlet Cooling," published in the Energy-Tech, December 2003.
- 36. "University of Texas at Austin, TX" a CHP case study developed for the Gas Technology Institute, October 2003.
- 37. "GT Inlet Air Cooling Boosts Output on Warm Days to Increase Revenues," published in the Combined-Cycle Journal, October 2003.

- 38. "Combined Heat and Power," a Resource Guide Developed for and Published for the U.S. DOE Midwest CHP Application Center, September 2003.
- 39. "Turbine Inlet Cooling Technologies & Economics," a Web-based tutorial developed for the Web site of the Turbine Inlet Cooling Association, June 2003.
- 40. "Building Energy Analyzer Training Seminar," a Web caste developed and presented to the members of the Cooling Solutions Fund members of the Gas Technology Institute, June 2003
- 41. "Turbine Inlet Cooling: A Great Strategy for Maximizing the Potential of Combustion Turbines and Addressing the Needs of Restructuring Energy Market," presented at the ASHRAE seminar on Technical, Energy and Government Issues Update, Chicago, IL, January 2003.
- 42. "Impact of Turbine Inlet Cooling on Power Availability in California," presented at the ASHRAE Seminar on Combustion Turbine Inlet Cooling, Atlantic City, NJ, January 2002.
- 43. "A Hybrid System for Combustion Turbine Inlet Cooling for a Cogeneration Plant in Pasadena, TX," ASHRAE Transactions Vol.107, Part 1, 2001.
- 44. "Absorption Chiller Application for Power Generation: A Case Study for a 316-MW Cogeneration Plant in Pasadena, Texas (USA)," presented at the International Gas Research Conference, Amsterdam, The Netherlands, November 2001.
- 45. "A Hybrid System for Combustion Turbine Inlet Cooling at a Cogeneration Plant in
- 46. Pasadena, Texas," presented at the ASHRAE Symposium on Combustion Turbine Inlet Cooling, Atlanta, GA, January 2001
- 47. "Emerging Growth Opportunity for Sorption Heat Pumps: Power Capacity Enhancement of Gas Turbine Systems," International Sorption Heat Pump Newsletter, Vol.5, No.4, Fall 1999.
- 48. "Application of Absorption Chiller for Combustion Turbine Inlet Cooling: Some Technical and Economic Analysis and Case Summaries," presented at the ASHRAE Seminar on Combustion Turbine Inlet Cooling, Seattle, WA, June 1999.