



## **Joseph C. Hoose**

*Owner, Cool Systems*

*Utility Generation, Distribution and Demand-Side Mgmt.*

For over 30 years, Mr. Hoose has played key design and management roles on both new construction and renovation efforts of site utility analysis for power, heating, cooling, water, waste water and site sustainability goals.

### **Education**

BS/Electrical Engineering:  
Rensselaer Polytechnic Institute,  
Troy NY

Continuing Studies: Rensselaer  
Polytechnic Institute, Troy NY

Practical Engineering Studies:  
ASHRAE  
AEE

Project Management Studies:  
AMA

### **Affiliations**

ASHRAE, American Society of  
Heating Refrigeration and Air-  
Conditioning Engineers  
IDEA, International District Energy  
Association  
AEE, Association of Energy  
Engineers  
NEBB, National Environmental  
Balancing Bureau

### **Industry Experience**

Combined Power, Heating and  
Cooling Generation  
Biomass Digester & Gasifier  
Waste Management  
Thermal Energy Storage  
Electrical Energy Storage  
Building Automation and Controls  
Performance Contracting  
Chiller Plant Optimization  
Flow Metering Instrumentation  
Thermal Energy Metering  
Power Metering  
Pneumatic Controls  
Electric Controls  
Digital Controls  
PLC Based Controls  
Hydronic Balancing

### **References**

Rob Thornton, President  
IDEA  
Al Thumann, Executive Director  
AEE

### **Industry Involvement and Activity**

ASHRAE TC 1.4 Controls, TC 6.1 Hydronics  
ASHRAE TC 9.2 Large Building Chilled Water Systems  
ASHRAE SPC184 Field Performance Measurements Standards for Chillers  
ASHRAE GPC 22 Guidelines for CHW Central Plant COP measurement  
ASHRAE Guideline 14, Measurement of Energy and Demand Savings  
IDEA Chairman of District Cooling Forum; Vice Chair on Metering & Controls forum  
IDEA Editorial Committee member  
AEE Energy Vortex, Ask the Experts consultant  
AEE Course instructor  
AEE World Energy Engineering Congress; District Energy Chairman

### **Recent Industry Presentations, Papers and Articles**

IDEA Waste to Energy Emerging Technologies  
District Energy Central Plant Optimization, AEE ongoing  
Fisonic Technologies, The New Science of Steam Distribution; IDEA Annual 2012  
Energy Storage, the Holy Grail of the SMART Grid; IDEA CE 2011  
Heat Metering and DE; BJMAC Beijing China January 2011  
SMART Grid Technologies, WEEC December 2010  
Leveraging Physical Assets in Financial Markets, IDEA February, 2008  
Chill Out, HFMA May 2008 article on BRMC  
Thermal Energy Storage in Open Access Energy Markets, IDEA June 2007  
Princeton Maximizing Chilled Water, AEE WEEC 8/07  
Raleigh District Cooling, District Energy Mag 4<sup>th</sup> Qtr 2007  
Air-Conditioning Systems Design Manual, Second Edition 2007, Contributor  
Steam Metering using Ultrasonic Transit Time Technology, IDEA February 2007  
Creating Win/Win building District Energy Connections, District Energy Mag 2006  
High Accuracy Steam Measurements using Condensate, Controlotron White Paper  
High Accuracy Thermal Energy Metering, Controlotron White Paper  
COP Metering of Major HVAC Equipment, Controlotron White Paper  
Flow Profile Effects on Flow Metering, Controlotron White Paper  
Metering Everything Every Thing other than Electric, GOVEnergy 2002

### **Recent Site Experience and Analysis:**

The following are a few projects that recently involved Cool Systems or Joe Hoose.  
**DSNY**, Food Waste and other Organic Material to Beneficial Use  
**Green Harvest Augsburg**, Digester and Gasifier Optimization  
**Jamaica HMC**, Thermal Energy Storage and CHW Optimization analysis  
**Flushing HMC**, Thermal Energy Storage and CHW Optimization Analysis  
**Memorial Sloan Kettering CC**, CHW distribution system flow metering and Delta T opt.  
**Novartis East Hanover**, CUP CHW Optimization, flow and energy analysis.  
**Miami Dade Cty District Cooling**, System wide renovation and optimization.  
**Raleigh NCDOA District Cooling**, Retrofit to 7,500 Ton DC with 33,400 TES and 16°DT  
**NY Presbyterian Hospital**, Steam & CHW metering and data collection development.  
**Rutgers University**; High Temp HW master planning, metering and optimization  
**Columbia University**, pressure independent approach to the CHW distribution systems.  
**Bristol Regional Medical Center**, chilled water system analysis and optimization.  
**Pardee Hospital**, Thermal Energy Storage and chilled water system analysis.  
**BREIT**, chilled water analysis  
**Ellis Hospital**, Power/Heating/Cooling/TES system integration analysis  
**ConEdison Steam**, Steam to Hot Water Energy Transfer Station Analysis.  
**UMD, College Park**; CHW Optimization, Steam, Condensate & CHW metering.  
**University of GA**, campus wide energy metering and data collection master plan.  
**University of AZ**, campus wide energy meter master plan for steam, conde and CHW.  
**University of TX at Austin**, steam, condensate, CHW energy metering and data collection

**Roche Molecular**, Analysis of 4,800 ton CHWP operation, analysis of CHW & CW flows.