



**EPRI Small HVAC Codes & Standards and Geothermal  
Heat Pump Industry Support Activities—  
FY 2000 Summary**

1000345



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EPRI Project Manager

C. Hiller

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EPRI  
3412 Hillview Avenue  
Palo Alto, CA 94304

Principal Investigator  
C. Hiller

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EPRI SMALL HEATING, VENTILATING, AND AIR CONDITIONING RELATED  
CODES AND STANDARDS ACTIVITIES, AND GEOTHERMAL HEAT PUMP  
INDUSTRY SUPPORT  
SUMMARY OF CY 2000 ACTIVITIES

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This document is meant to provide written documentation of the various activities that have been completed related to Small Heating, Ventilating, and Air Conditioning codes and standards activities and Geothermal Heat Pump Industry Support activities in calendar year 2000. These activities constitute the deliverables for the codes and standards/geothermal heat pump industry support effort (deliverable 1000345) under EPRI's Small HVAC Multi-client Project – Number 50 (Apollo Project No. 047508).

Codes and Standards

The EPRI codes and standards effort related to Small HVAC focuses on the following:

- Attendance at American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) meetings and participation in technical committee and subcommittee meetings related to small HVAC.
- Attendance at International Ground Source Heat Pump Association (IGSHPA) meetings and participation in technical committee and subcommittee meetings related to small HVAC
- Review of relevant DOE codes and standards proposals and attendance at meetings and provision of written commentary when warranted.
- Participation in various state and local small HVAC related processes and/or providing of input or influence as warranted.

Specific activities completed include:

- Attendance at the February 2000 ASHRAE semi-annual meeting in Atlanta, participating in Technical Committee (TC) 6.8 (Geothermal Heat Pumps), TC 1.8 (Owning and Operating Costs), and Special Project Committee (SPC) 90.2 (Residential Building Energy Standards). These activities included attendance at research, program, handbook, and standards subcommittee meetings. These meetings also provided the opportunity for one-on-one meetings and discussions with various persons from the U.S. Department of Energy who were also in attendance at these meetings, and who are directly involved in the Federal small HVAC codes and standards processes.
- Attendance at the June 2000 ASHRAE semi-annual meeting in Minneapolis, participating in TC 6.8 (Geothermal Heat Pumps), TC 1.8 (Owning and Operating Costs), and SPC 90.2 (Residential Energy Standards). These activities included attendance at research, program, handbook, and standards subcommittee meetings. These meetings also provided the opportunity for one-on-one meetings and discussions with various persons from the U.S. Department of Energy who were also in attendance at these meetings, and who are directly

involved in the Federal small HVAC codes and standards processes.

- Attendance at the May 2000 IGSHPA Technical conference in Stillwater Oklahoma. These activities, included attendance either in person or by conference call at research, program, and standards subcommittee meetings. They also included participation as a voting member of the IGSHPA Advisory Council. These meetings also provided the opportunity for one-on-one meetings and discussions with various persons from the U.S. Department of Energy who were also in attendance at these meetings, and who are directly involved in the Federal small HVAC codes and standards processes.
- Review of new proposed small HVAC-related standards and test procedures from the U.S. Department of Energy.
- Direct interaction with and provision of written recommendations to the California Energy Commission aimed at improving the State of California Residential Building Energy Efficiency Compliance Evaluation process, and the eventual development of new California residential building energy efficiency standards.
- Meetings with electric utility and Edison Electric Institute (EEI) personnel to discuss and coordinate overall response strategies for various small HVAC related codes and standards issues. These meetings were in some instances conducted in person during the ASHRAE meetings, and at other times were performed via conference call.
- Attended the December 2000 IGSHPA Annual conference in Norfolk, VA. These activities included attendance at research, program, and standards subcommittee meetings. They also included participation as a voting member of the IGSHPA Advisory Council. These meetings also provided the opportunity for one-on-one meetings and discussions with various persons from the U.S. Department of Energy who were in attendance at these meetings, and who are directly involved in the Federal small HVAC codes and standards processes.

#### Geothermal Heat Pump Industry Support

EPRI's geothermal heat pump (GHP) industry support activities center around the following:

- Participation in GHP-related codes and standards processes
- Participation in ASHRAE GHP related processes
- Participation in IGSHPA
- Participation in and support of the Geothermal Heat Pump Consortium (GHPC)



Specific activities performed this year include the following:

- Participated in codes and standards related processes as noted above
- Participated in ASHRAE TC 6.8 (Geothermal Heat Pumps) as a voting member, and as an active member of the research and program subcommittees. This includes reviewing and providing technical direction on ASHRAE-funded ghp research projects. This included attending the February and June 2000 semi-annual ASHRAE meetings, and reviewing numerous subcommittee correspondence items in the interim.
- Participated in IGSHGPA as a member of its guiding IGSHPA Advisory Council, and as a member of most of its standing committees, including the research, program, standards, and certification committees. This included attending the May and December 2000 IGSHPA conferences and reviewing numerous IGSHPA correspondence items in the interim.
- Participated in the California Geothermal Heat Pump Collaborative – attended meeting held in March 2000 in Auburn, CA
- Attended the Geothermal Heat Pump Consortium board of directors' meetings in March, September, and December 2000, as a voting board member.
- Continued in 2000 to be the largest private funder of the GHPC.
- Participated in several direct face-to-face and telephone conference call meetings to discuss geothermal heat pump research priorities, status of ongoing projects funded through EPRI, ASHRAE, GHPC, DOE, EPA, IGSHPA, electric utilities, and others, and to coordinate research activities in order to avoid duplication of effort.
- Had direct interactions with California Energy Commission personnel to work toward modifying California residential energy code compliance procedures such that geothermal heat pumps receive proper credit for their attributes.





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