

The Source

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The International Ground Source Heat Pump Association Newsletter

May/June 2001

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Pennsylvania Energy Initiative

At the IGSHPA MayTech 2001 Conference, Ed Pinero, Director, Program Operations, Pennsylvania Department of Environmental Protection, announced that the State of Pennsylvania had developed an Energy Initiative and would be implementing it in the coming fiscal year. Mr. Pinero stood before the conference attendees at the evening barbecue event and reiterated his state's commitment to GeoExchange as part of this comprehensive energy policy. His attendance at MayTech 2001 was a follow-up to his keynote address at the IGSHPA 2000 Annual Conference in Virginia last year.

In the development of the initiative, Mr. Pinero stated that he had been working closely with Mr. Jack DiEnna, Key Accounts Manager for the Geothermal Heat Pump

Consortium (GHPC), and Dr. Jim Bose, Executive Director for the International Ground Source Heat Pump Association (IGSHPA). He told the attendees that Pennsylvania, under the direction of Governor Tom Ridge, had identified schools and affordable housing as target markets for infrastructure strengthening. Mr. Pinero said that the initiative would include a training program for engineers, mechanical installers, and well drillers. The training segment of the initiative was to be conducted by IGSHPA. He closed his announcement by saying that his state would benefit in many ways from the Energy Initiative, but especially through the economic development and HVAC business opportunity expansion.

The training segment of the Pennsylvania initiative is to be conducted by IGSHPA.

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Iggy the Groundhog is the official educational mascot of IGSHPA.

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Election to IGSPHA Board

During the Advisory Council Meeting of May 20, David Sabatino, Carrier Corporation, was elected to serve. Mr. Sabatino is filling the vacancy recently created by the departure of Chuck Perry.

Mr. Sabatino is the Product Manager for Carrier's water source heat pump products. He has eight years of consulting experience working in construction management, HVAC system design, and project engineering capacities. Mr. Sabatino has a New York Professional Engineering license. While at Carrier, he has been responsible for the upgrade, specification, engineering, and contract administration for all office and manufacturing related to HVAC systems at the Carrier Syracuse campus, working in the plant-engineering department for two years.

IGSHPA would like to congratulate Mr. Sabatino on his election and thank him for his willingness to serve.

May 20, 2001: IGSHPA Advisory Council and Committee Meeting Key Issues:

Marketing Committee Meeting - The Marketing Committee, under the direction of Committee Chairman Jack DiEnna, discussed an Ambassador's Program. The program would identify individuals who had made a significant contribution to the ground source heat pump industry, but who were not now as active professionally. Candidates would be nominated and voted on by the Advisory Council. The Committee voted to present the program to the Advisory Council for approval.

Jeanne Knobbe, IGSHPA Publications Coordinator, announced that the 2000 Closed-Loop/Geothermal Heat Pump Systems, Design and Installation Standards publication was now available. She thanked Mr. Phil Albertson, IGSHPA Standards Committee Chairman, for his work on updating the document.

Training Committee Meeting - Howard Newton, Training Committee Chairman, led the discussion of several key-training issues. Specifically, the suggested Intermediate Pipe Fusion Course as proposed by Steve White, Performance Pipe was reviewed. Mr. White stated that a prototype of the course was planned for the final day of MayTech 2001. The Committee voted to present the course for approval by the Advisory Council.

Jack DiEnna announced that the proposed training programs with Pennsylvania and New York were going forward. Mr. DiEnna also stated that the New York State Energy Research and Development Authority (NISERDA) administered the New York Energy SmartSM program. Through this program, NYSERDA was working on an initiative to promote GeoExchange technology. Mr. DiEnna said that he felt with Governor George Pataki's commitment to provide programs with energy efficiency services to his state, the initiative would be approved. For IGSHPA, Mr. DiEnna stated that training would be a significant part of the deployment aspect of the program.

To read the full minutes from the Committee Meetings and Advisory Council Meeting, visit the Member's Lodge on the IGSHPA web site.

MayTech Highlights

Play Dirty - MayTech 2001 was the place to be this year. IGSHPA hosted 207 participants and speakers, 24 exhibitors, and 26 installation accreditation students to the Wes Watkins Center, Oklahoma State University (OSU), Stillwater, Oklahoma.

Participants were welcomed to the conference by Dr. Thomas C. Collins, Vice President for Research, OSU, and Dr. James E. Bose, Executive Director of IGSHPA. The opening session covered the role of ground source technology in a typical Midwest town and school district. Mr. David Payne and Dr. John M. Vanderford presented the keynote speeches.

Mr. David Payne, Ditch Witch, outlined how Perry, Oklahoma, was chosen as one of three cities to be a "Community of the Future" by the Department of Energy (DOE). Innovative thinking and strong community leadership landed Perry in the spotlight under the DOE grant program. The efforts to develop a stronger infrastructure for growth in Perry included energy efficiency planning which incorporated ground source heat pump technology.

Dr. John M. Vanderford, Executive Director of Facilities and Support Services for Raytown, Missouri C-2 School District, gave an inspiring discussion about his achievements at selling ground source heat pumps in his state, as well as Nebraska and Iowa. Dr. Vanderford told the

(continued on page 4)



Jack DiEnna and Pete Peterson investigate Performance Pipe's header vault.

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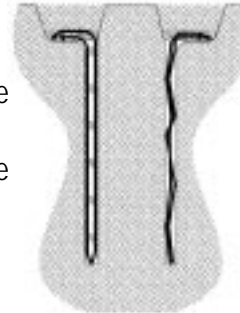


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(continued from page 3)

packed auditorium that he “had a 100% success rate” converting school administrators to the geothermal alternative.

The opening ceremony concluded with an award presentation. The recipient of this year’s award for Innovative and Continued Support of the GeoExchange Industry went to Dr. James E. Netherton. Dr. Netherton has been instrumental in organizing and developing IGSHPA’s training and conference programs for 7 years.

The next two-and-half days were packed with speakers discussing groundbreaking industry issues. For the second time, IGSHPA included an Installation Accreditation Course running concurrently with the conference. Twenty-six ambitious students sat through the rigorous curriculum taught by Phil Rawlings and Larry Eitelman. The students also received pipe fusion technique instruction from Curt Bowen, Phil Schoen, and Steve White.

At the “world famous IGSHPA barbecue” on Tuesday evening, Emily Elliott addressed the capacity crowd. Ms. Elliott serves as Special Assistant to the President/Director of Federal Relations at OSU. She is also OSU’s registered lobbyist with the U.S. Congress. Ms. Elliott announced a “call to action” on behalf of the geothermal industry. She stated that a letter to The Honorable Joe Skeen, Chairman, and The Honorable Norman Dicks, Ranking Member, Appropriations Subcommittee on the Interior, had been drafted. The letter calls attention to “the important role that ground source (geothermal) heat pump



Demonstration Day showed attendees the finer details of slinky assembly.

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technology can play in addressing the energy crisis in our nation.” Ms. Elliott said that the letter would be circulated and asked the attendees to sign in support of this effort.

The conference concluded on Wednesday with software, horizontal drilling with rock bit, vertical drilling, pipe and clip installation, and grout demonstrations. In-situ borehole testing, headering borehole units inside of a building, and slinky trenching, installation, and backfilling were also shown.



Pete Peterson, Doug Duncan, and Jeremy Russo discuss IGSHPA's Intermediate Pipe Fusion Course.

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New Queen's Award for Water Park Society

The Cotswold Water Park Society, the charity that manages the Cotswold Water Park, has been awarded the Queen's Award for Sustainable Development. This new award category was suggested by a committee chaired by Prince Charles and is for 'an outstanding advance in sustainable development'. The awards have been approved by Her Majesty the Queen and the Prime Minister.

The award specifically cites the new Millennium Visitor Centre at Keynes Country Park. Roger Brown, Society Chief Executive, said, "We are over the moon about this new award...."

The building, which serves as the headquarters of the Society, was designed to showcase practical sustainability and make a direct contribution to improving the environment. It combines traditional construction with 'green' building techniques. The Millennium Visitor Centre used recycled plastic piling installed by the Society's Ranger team. The main building frame is of British Green Oak, crafted by Carpenter Oak and Woodland's Chippenham yard. Traditionally constructed, not a single nail was used in its construction. In addition to the traditional structure, high technology green features were added, which included a roof made of coated stainless steel and windows of coated glass.

The main energy saving feature of the building is its innovative heat pump technology, which uses the first large 'lake loop' system in the UK to extract all its heating and cooling needs from the lake, without endangering the environment. Some 700 metres of piping coiled on the lakebed, act as a heat exchanger and eight ClimateMaster heat pump consoles heat the building. Stroud-based Ecotricity supplies the electricity for the circulating pumps and lighting.

Details and photographs of the lake loop installation are available from Victoria Clarke, GeoScience Limited - Tel: 01326 211070





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Finer Points of Fusion

IGSHPA held its first class for Intermediate Pipe Fusion at MayTech 2001. Steve White, Performance Pipe, proposed the class to the IGSHPA Training Committee on May 20. A prototype course had already been developed and scheduled for demonstration during MayTech 2001.

During the committee meeting, Mr. White was persuasive in convincing the committee members of the need for this continuing education opportunity. During discussion, the committee voted to recommend to the Advisory Council that the course require pre-qualification for participation. Candidates for the course must be IGSHPA Accredited Installers and hold a pipe manufacturers' fusion card.

The course will cover pipe and fittings utilizing a chain clamp sidewinder and fusion machine for pipe sizes 2" through 8." The prototype



Naval Air Station Gets \$6 Million in Energy Upgrades

The Patuxent River Naval Air Station in Lexington Park, Maryland is under renovation. Alliant Energy Integrated Services - Cogenex announced in April that work had begun on the nearly six million dollar project that will lead to reduced operational costs and improve the energy efficiency of the facility. Company officials estimate that the upgrades will save the station more than three hundred thousand dollars annually.

An added environmental benefit of the project is the elimination of water that is currently being discharged from the current cooling system into the Chesapeake Bay. The State of Maryland recently determined that the discharge is environmentally detrimental to the water quality of the bay. The project will include the installation of one hundred twenty-five new geothermal heat pumps to replace existing conventional heating and cooling systems in buildings on the base. Other components of the Patuxent River Naval Air Station project include installation of energy management systems and upgrades to the lighting systems.

course scheduled three hours of instruction and two tests. McElroy Manufacturing volunteered the use of their No. 28 Fusion and Sidewinder™ Fusion Machines. Fourteen students signed up for the course.

The Training Committee, in addition to approving the course structure, determined that students who passed the tests gained one continuing education point (CPU). The Advisory Council approved the course and CPU award.



Students are hands-on testing with the McElroy Sidewinder™ (above) and the No. 28 Fusion (at left) machines.

The Patuxent River Naval Station houses the U.S. Naval Air Systems Command, Naval Air Warfare Center Aircraft Division and approximately fifty tenant activities. The facility serves as the research, development, testing and evaluation, engineering and fleet support center for the air platforms of the Navy. The facility includes 935 buildings and employs more than 18,000 people.

The work is being performed under the Department of Energy's Geothermal Technology Specific Super Energy Savings Performance Contract. For this substantial undertaking, Alliant Energy Integrated Services - Cogenex has partnered with Co-Energy Group, L.L.C. Jon Bancks, president of Alliant Energy Integrated Services - Cogenex said, "We are honored to be chosen by the Patuxent River Naval Air Station to make these energy-efficient improvements." The company expects to complete the project in the fall of this year.

If you have questions about this exciting project, contact Tom Petersen, Alliant Energy Integrated Services at 319-861-5671 or visit their web site at <http://www.alliant-energy.com>.



Calendar of Events

July 15-16

2001 Marketing Expo

National Rural Electric Cooperative Association (NRECA)

Arlington, VA

www.nreca.org

800-230-2601

August 26-29

Geothermal Resources Council 2001

Annual Meeting

Geothermal Resources Council

San Diego, CA

www.geothermal.org

530-758-2360

August 29-30

Integrated Energy Efficiency Congress

American Energy Engineers (AEE)

Cleveland, OH

www.aeecenter.org

770-279-4392

September 19-21

IGSHPA Installation Workshop

International Ground Source Heat Pump Association

Stillwater, OK

www.igshpa.okstate.edu

800-626-4747

September 28-30

Green Living & Sustainability Fair

Texas Solar Energy Society

Texas Renewable Energy Industries Association

Fredericksburg, TX

www.treia.org

512-345-5446

October 2-4

IGSHPA Installation Workshop

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HVAC Training Center, Verbena, AL

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