The Fight’s Not Over

The Game Changed with the Elections, But GEO Still Sees Hope for Federal Tax Credits

By Joe Parsons – GEO Chairman of the Board

The clock struck midnight on New Year’s Eve, and with it the federal tax credits for geothermal heat pumps (GHPs) came to an end—for now. They didn’t go down without a fight. The Geothermal Exchange Organization (GEO) led the industry’s effort to extend the credits for residential and commercial installations against some pretty strong political headwinds.

GEO put in a maximum effort to correct the oversight. When Congress extended the tax credits for solar in late-2015, they should have done the same for GHPs and several other renewable energy technologies like fuel cells, small wind and microturbines struggling against conventional, fossil-fueled equipment for market share.

Armed with the facts about how the tax credits for GHPs benefit American investments, businesses and jobs, GEO and our allies among other “orphaned” technologies lobbied hard in Washington all year long. Our message to legislators remains clear: Congress shouldn’t be picking winners and losers when it comes to renewable energy and fairness in tax policy.

Last year was like a rollercoaster. We went from hopes of attaching our amendment to a Federal Aviation Administration funding bill to backing Congressman Tom Reed’s (R-NY) renewable energy tax legislation (H.R. 5167), to major disappointment when it wasn’t included in the continuing funding resolution that Congress approved at the end of 2016.

My thanks to out to GEO staff and our Washington, DC team for a doing such a great job in creating the necessary awareness—and putting us at the right place, at the right time in front of the right people—but we faced too many uncertainties over which they had no control. With the national elections and so much political turmoil, there was just no winning our issue last year in Congress.

Our fight for the federal tax credits isn’t over. The GEO Board of Directors is intent on maintaining and creating U.S. jobs by reinstating the tax credits for GHPs, and extending them on a timeline matching solar through 2021. Our talking points about tax policy, fairness and saving jobs have already echoed far and wide across Washington, and we expect our message to resonate positively with new leaders elected last fall.
GEO is already at work in the early days of 2017 on securing cosponsors for reintroduction of Rep. Reed’s H.R. 5167 and a bipartisan companion bill in the Senate. We are also strengthening the coalition GEO brought together in support of the tax credits last year. Our fellow renewable energy technology organizations are critical to our effort. Coalition partners also include builders, realtors, the National Ground Water Association and the National Rural Electric Cooperative Association. All are dedicated and very supportive of our cause, and bring with them a very recognized and respected presence in Washington.

Many distributors and contractors in the GHP industry are very close to influential members of Congress and the new administration. This has allowed us direct lines of communication to remind them about the support that they won last year from rural America, where GHPs are manufactured and many installed. GEO member contact with legislators and leadership will be more important than ever in 2017.

With a temporary loss of the tax credits, the GHP industry will experience a decline in sales that will be evident by the second quarter. By then, we hope that Congress will have finally taken positive steps to extend our tax credits so they can better establish GHPs as the “go-to” technology for green heating and cooling across America.

While we remain focused on the federal tax credits, we mustn’t forget GEO’s involvement with advocacy on a number of issues facing the industry at the state level. Our work with state geothermal advocacy groups over the years has offered political insights and advice plus financial support to help those organizations get off the ground and secure expert local lobbying support. GEO has been involved in several regulatory proceedings, and currently supports efforts to gain tax credits in Virginia and New York [see articles in this edition of GEO Industry News].

Greater awareness of GHP benefits is an important key to our future. As the industry matures, we need to build even greater consumer awareness about GHPs, selling them on the basis of their energy savings—and because it’s the right thing to do for the environment. In my opinion, companies that build their GHP businesses around innovative marketing, creative financing and focus on their customers with great service will have the best chance for success over the long-term.

To accomplish our goal for regaining the federal tax credits and solving problems for the industry in the states, GEO and the International Ground Source Heat Pump Association (IGSHPA) must maintain and strengthen their integral relationship. That means understanding the distinct purpose of each organization and what they do best. For IGSHPA, that includes installation training and technical research, and for GEO, it means advocacy of legislation and regulations that will benefit the industry.

GEO remains committed to extending the tax credits for GHPs during the 115th Congress, and helping enhance the industry’s future through better consumer awareness and state legislative and regulatory actions. We’ll do that by working with IGSHPA and the geothermal community—and above all, speaking with one voice. [Joe Parsons is Chief Operating Officer of Earthlinked Technologies]
A Resolution for Congress
By Doug Dougherty, President and CEO
GEO – The Geothermal Exchange Organization

Some call it a drafting error. Others call it a mistake. Regardless of how it happened, in December 2015, Congress passed a spending bill that extended tax credits for big wind and solar energy but left other clean energy technologies in the cold. As a result, residential and commercial tax credits for geothermal heat pumps, fuel cells, microturbines, small wind, and combined heat and power all expired on December 31, 2016.

Congress’ failure to right this wrong is having real consequences. Geothermal heat pump manufacturers project sales declines of 30-40 percent in 2017 and beyond. The entire geothermal heat pump supply chain, which is entirely U.S.-based, is at risk for loss of investment and jobs. This means distributors, dealers, contractors, installers, drillers – plus all the families and small businesses that they help support – will see job losses.

Whether it is the homeowner looking to save money or the commercial project looking for the most efficient heating and cooling technology, geothermal heat pump projects across the country are being shelved. Take the Whisper Valley project near Austin, Texas as a prime example. Taurus Development Group is building 7,500 affordable net-zero energy homes and two million square-feet of retail space. They planned to invest more than $100 million in geothermal heat pumps to service the community. But without the tax credits, the economics no longer work and the project, along with hundreds of local jobs, may not go forward using geothermal heat pump technologies.

To be clear, our industry does not view the tax credits as key to our long-term survival. When Congress created the credits in 2008, the goal was to drive economies of scale to reduce installation costs. But as soon as the credits were enacted, the housing market cratered and commercial construction came to a halt.

That’s why we urged Congress to provide a short-term extension before phasing out the credits – the same glide path Congress provided for big wind and solar. If Congress wants to do away with ALL energy tax credits, we would be the first industry to sign up for that deal. As the most efficient heating and cooling technology, we are confident we can compete in a fair market. But we cannot compete on a playing field that is tilted against us and in favor of other technologies.

The irony is that by not fixing the tax credit issue, Congress is not only destroying thousands of jobs, but subsidizing foreign competition! Only 25% of solar panels are made in America, and many wind developments are of foreign origin. Compare that to geothermal heat pumps, which are 100% “Made in the USA,” with American-made components manufactured and installed by American workers.

Some Members of Congress suggest this will be addressed during the tax reform debate. But we can’t wait. With thousands of jobs on the line, we urge House Ways and Means Committee Chairman Kevin Brady and his colleagues to take immediate action to fix the “error” and ensure equal tax treatment for all clean energy technologies. (GEO)
GEO Advocacy in Washington

GEO 2016 • Year in Review

Tax Credits for Geothermal Installations  With their expiration looming at the end of the year, the federal tax credits for geothermal heat pump (GHP) installations took center stage for the Geothermal Exchange Organization (GEO) during 2016.

The Omnibus spending bill passed by Congress in December 2015 extended for five years the Wind Production Tax Credit (PTC), the 30% solar Investment Tax Credit for commercial installations (IRC Sec. 48, including bonus and 5-year depreciation), and the 30% solar income tax credit (IRC Sec. 25D) for residential applications.

Though GEO was assured that GHPs would be included in the bill, they were left out during last-minute negotiations that also forgot fuel cells, small wind, microturbines, and combined heat and power. House Ways & Means Chairman Kevin Brady (R-TX) acknowledged that the ITC and income tax credit extensions did not include eligible technologies, and promised immediate action along with Senate Minority Leader Harry Reid (D-NV) and House Minority Leader Nancy Pelosi (D-CA).

GEO and its allies lobbied hard for an amendment to the Federal Aviation Administration reauthorization bill that would have extended the residential and commercial tax credits for GHPs and other qualifying renewables through 2021 (with a phase-out). But in late April, the Senate passed the legislation with no amendments.

Hope was renewed in May when Rep. Tom Reed (R-NY) introduced H.R. 5167 to put all orphaned technology tax credits in line with solar. The Reed bill also included an important change to the tax provision’s "placed in service" eligibility requirement to "commenced construction." You can read a copy of the bill here.

As the fight wore on into summer, GEO was joined by associations representing its fellow orphaned technologies, builders and realtors, plus important groups like the National Rural Electric Cooperative Association (NRECA), Pew Charitable Trusts, National Ground Water Association (NGWA) and the International Ground Source Heat Pump Association.

GEO President Doug Dougherty was a regular in the halls of Congress throughout the year, with more than a dozen trips to Washington. He was joined in June and September by the GEO Board of Directors, company and allied industry representatives during formal “Fly-Ins” to the capitol. On both occasions, the groups visited more than 50 congressional offices to drive home the GEO plea for parity.

Such outreach was greatly enhanced by industry wide Action Alerts that spawned hundreds of emails and calls to House and Senate leaders. Industry supporters scheduled a number of geothermal job site visits around the country in a further bid to educate their elected officials on the need for tax incentive parity with the solar industry.

In September, GEO doubled down on its push for tax credit extension, strengthened by a sizable infusion of new funds. Immediate steps were taken to convince legislators that Congress must correct their “drafting error” when extending the solar tax credits. GEO bolstered its Washington, DC advocacy team by adding two lobbying firms, and initiated a focused Beltway public outreach effort aimed at the lame duck Congress following the national elections in November.

The message? That Congress should not be in the business of picking winners and losers in renewable energy markets, and that leveling the field for all renewables is a policy issue of fairness.
GEO hoped that passage of continuing resolutions in September and then in December to keep the government functioning would open the door for the Reed bill as an amendment, but both passed as “clean” bills, with no amendments. The federal residential and commercial tax credits for GHPs quietly expired at midnight on Dec. 31.

GEO remains extremely disappointed at this outcome after a year of intense effort to extend the tax credits. The industry is already feeling the pinch, with thousands of jobs in jeopardy across the country.

Editor’s Note: A recent BuzzFeed article recaps the history and the frustrations of the GEO and the geothermal heat pump industry over the tax credit issue during the past year. Read it here.

**GEO’s Tax Credit “Ask” to Congress in 2017**

GEO will continue to work for tax credit parity in the new Congress during 2017. The GHP industry wants nothing less than parity with the solar industry tax credits included in Congressman Reed’s H.R. 5167 (which will be reintroduced in the 115th Congress). For the 30% income tax credit (IRC Sec. 25D) applicable to residential GHP installations, this includes:

- Retroactive 30% after 12/31/16 and placed in service before 1/1/20,
- 26% after 12/31/19 and placed in service before 1/1/21, and
- 22% after 12/31/20 and placed in service before 1/1/22.

For the 10% business investment tax credit (IRC Sec. 48) applicable to commercial GHP installations, this includes extension to Dec. 31, 2021 with no phase out. In addition, the language governing eligibility requirements for GHP installations under IRC Sec. 48 must be changed from “placed in service” to "construction of which begins before Jan. 1, 2022.”

**GEO Seeks Change to Federal Definition of Clean, Renewable Energy** GEO continued its work to codify GHPs as a clean, renewable source of energy under the Federal Renewable Energy Purchase Requirement in the 2005 Energy Policy Act. GEO’s definition reads: “The term ‘renewable energy’ means energy produced or, if resulting from a thermal energy project placed in service after December 31, 2014, thermal energy generated from, or avoided by, solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or hydropower.” Though GEO successfully included the clarification in Senate and House versions of the bipartisan Energy Policy Modernization Act (S.2012), the broad-based energy legislation died before the end of the year.

**GEO Asks EPA for Energy Efficiency** On Aug. 17, GEO signed on to a letter to the U.S. Environmental Protection Agency from the American Council for an Energy Efficient Economy that promotes energy efficiency as a vital component of the EPA Clean Energy Incentive Program (CEIP). The letter says that credits available for clean energy resources should include energy efficiency. “We recommend that early investments in energy efficiency receive at least the same incentive as early investments in renewable energy.” This can be achieved by expanding EPA program scope so that investment in energy efficiency can receive emission rate credits with a federal match at a ratio of 1:1. Read the letter here.
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2017 State and Regional Geothermal Heat Pump and Related Energy Conferences

- **Feb. 7-8** South-central Partnership for Energy Efficiency as a Resource (SPEER) Summit – Westin Downtown, Austin, TX – [Info and Registration](#).
- **Feb. 22-24** Midwest Energy Efficiency Alliance Conference (MEEA) Chicago Hilton Hotel – [Info and Registration](#).
- **Feb. 22-23** Wisconsin Geothermal Association Annual Conference Holiday Inn, Stevens Point, WI – [Info and Registration](#).
- **March 14-16** IGSHPA Conference and Expo – Crowne Plaza Denver Airport – [Info and Registration](#).
- **March 18** Connecticut Geothermal Association Annual Conference Location TBD – [Info and Registration](#) (when available).
- **March 20-21** Iowa Geothermal Association Annual Conference Prairie Meadows Casino, Altoona, IA – [Info and Registration](#).
- **March 22-23** Minnesota Geothermal Heat Pump Association Annual Conference Treasure Island Resort, Red Wing, MN – [Info and Registration](#).
- **March 27-29** Geothermal Alliance of Illinois Annual Conference Par-a-dice Casino, Peoria, IL – [Info and Registration](#).
- **April 19-20** New York Geothermal Energy Organization Annual Conference – Radisson Hotel Albany – [Info and Registration](#).
- **April 26-27** Michigan Geothermal Energy Association Annual Conference Soaring Eagle Casino and Resort, Mt. Pleasant, MI. Info and Registration when available.
Geothermal Advocacy in the States

During 2016, GEO continued to support the efforts by state-level stakeholders in their quest for public policies favorable to GHPs. "State GHP associations are growing in sophistication and strength," said GEO President Doug Dougherty. “They have done a great job of promoting tax credit legislation and favorable regulatory policies for the technology.” Following are highlights of state association advocacy for the GHP industry during the year.

South Carolina Geo Tax Credit Signed Into Law  On Feb. 16, South Carolina Gov. Nikki Haley (R) signed into law H. 3874, which provides an income tax credit to any individual or business that “constructs, purchases, or leases certain solar energy property and places it in service in this state... and allows an income tax credit for certain costs incurred by the taxpayer in the purchase and installation of geothermal machinery and equipment.” The law took effect retroactively to Jan. 1, 2016, allowing a tax credit against the income tax liability of a taxpayer, equal to 25% of the costs incurred in the purchase and installation of geothermal machinery in or on a facility in South Carolina and owned by the taxpayer. The tax credit cannot be claimed before an installation is completed. The amount of the credit in any year may not exceed $3,500 for each facility, or 50% of the taxpayer’s tax liability for that taxable year, whichever is less. If the credit amount exceeds $3,500, the taxpayer may carry forward the excess for up to 10 years. Local geothermal advocates promoted H. 3874, with political guidance from GEO. “This bill represents a significant change in public policy by recognizing the thermal energy capabilities of geothermal heat pumps,” said Bret Ross (WaterFurnace International) in testimony for the measure to the South Carolina House Ways and Means Committee. Read the text of the law here.

Iowa Geo Tax Credit Signed Into Law  On April 29, the Iowa Legislature passed HF 2468, which provides for a 10% standalone tax credit for residential installations of GHPs in lieu of federal tax incentives. Both the House and the Senate voted unanimously in favor of the measure. Gov. Terry Branstad signed the measure into law on June 15. It took effect on Jan. 1, 2017. The measure is not capped, and doesn’t allow a tax credit for commercial installations. The Iowa Geothermal Association was instrumental in securing the new law. The new Iowa tax credit “…shall not be available during any tax year in which the federal residential energy efficient property tax credit for geothermal heat pumps provided in section 25D(a)(5) of the Internal Revenue Code is available.” Per existing Iowa law, there is a 6% state tax credit that is tied to the current federal tax incentive for residential GHP installations. When the current federal tax credit for GHPs expired at the end of 2016, the 6% Iowa state tax credit also expired. They were then replaced with Iowa’s new 10% standalone credit.

New York Governor Vetoes Geo Tax Credit Bill  On Nov. 28, New York Gov. Andrew Cuomo vetoed Assembly Bill 9925, a bill that would amend the tax law to reduce personal income tax liability by an amount equal to 25% of qualified geo energy systems expenditures. The bill passed the state legislature in spring 2016, promoted by the New York Geothermal Energy Organization (NY-GEO). In his veto message, Gov. Cuomo said the geothermal tax credit bill suffered from the same fundamental flaw as a similar bill he vetoed in 2015, by not identifying a designated source of funding to offset the cost of providing a tax credit for the GHP installations. He said such funding decisions should occur in the context of the annual budget negotiations. NY-GEO lauded the administration’s intention to support geothermal energy, and work with their many friends in the legislature to include the tax credit in the 2017-18 state budget. GEO is providing assistance for a renewed legislative push in 2017.
Michigan Recognizes GHPs for Renewable Energy Credits  On Dec. 16, the Michigan legislature passed energy bills that will boost renewable energy investment in the state. Senate Bills 437 and 438 raise Michigan’s renewable portfolio standard from 10% to 15% by 2021, and retain the state’s energy optimization standard (1% annual efficiency improvement for electric utilities) through 2021. The measures boost incentives for utilities to hit higher efficiency targets, and set a nonbinding goal to meet 35% percent of Michigan’s power needs through a combination of renewable energy and energy conservation by 2025. For the GHP industry, the legislation’s definition of renewable energy now includes the technology and makes it eligible for renewable energy credits. The Michigan Electric Cooperative Association (MECA) was instrumental in favorable treatment for GHPs. GEO will assist the MECA in developing recommendations to the State on how to measure, quantify and report the energy produced by GHPs to determine the appropriate number of renewable energy credits for their use (article, pg. 12).

VGHPA Pushes for Geothermal Tax Credit  In early December, the Virginia Geothermal Heat Pump Association (VGHPA) worked toward filing legislation with the state General Assembly that will offer a tax credit for residential GHP installations. The credit will cover 25% of residential GHP equipment (Energy Star rated) and installation cost, with a $10,000 cap. Consumers can take $2,500 annually on their tax form. Credit cannot exceed 50% of taxable liability, and can be carried forward for 10 years. The aggregate cap for any fiscal year is $10 million, and the credit sunsets at the end of 2022. GEO and GHP manufacturers support the effort, which includes advocacy by May Fox and Tom Lisk with Eckert Seamans (Richmond, VA). Senate Commerce Chairman Frank Wagner (R-21st Dist.) and House Caucus Chairman Rep. Tim Hugo (R-40th Dist.) will patron the legislation, which is supported by the Virginia Homebuilders Association, Virginia Well-Drillers Association, and Association of Electric Cooperatives in Virginia, Delaware and Maryland. The state’s major utility, Dominion Power, and the Virginia Oil and Gas Association have taken a neutral position. Companion bills were introduced in the House (HB 1891) and the Senate (SB 1391) in mid-January 2017.

GEO Comments on Governors’ Clean Energy Accord  On March 3, GEO responded to a bipartisan group of governors from 17 states who pledged to boost renewable energy after the U.S. Supreme Court stayed implementation of the U.S. Environmental Protection Agency’s (EPA) Clean Power Plan. The “Governors’ Accord for a New Energy Future” sets commitments to expand renewable energy and energy efficiency, and integrate solar and wind generation into electricity grids. New standards and benchmarks for energy efficiency and renewables will also be set. GEO sent letters to the governors and their energy advisors in California, Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, New Hampshire, Nevada, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia and Washington. GEO President Doug Dougherty extolled the many environmental and economic benefits of GHPs, concluding: “GEO hopes your state will strongly consider promoting new and/or expanded state and utility sponsored efforts to help homeowners and businesses install geothermal heating and cooling systems to reducing power plant emissions.”

GEO Comments on Connecticut Energy Strategy  On Nov. 3, GEO submitted comments to the Connecticut Department of Energy and Environmental Protection (DEEP) Bureau of Energy and Technology Policy on the role that GHPs should play in the state’s Comprehensive Energy Strategy. “GEO recommends that Connecticut’s Comprehensive Energy Strategy make room for aggressive promotion of the many benefits of GHPs. We would also like to see the state adopt strategies for basic financial incentives for GHP installations. Finally, we urge the development of state- and/or utility-
sponsored loan guarantee programs for GHPs. Such a program would allow ratepayers to more easily enjoy the comfort and economic benefits of the technology while making monthly payments that are less than the money they save on utility bills.” Text of GEO comments on the importance of GHPs to Connecticut’s Comprehensive Energy Strategy is posted on GEO website, [here](#).

**GEO-IGSHPA States Advocacy Meeting**  On July 27, GEO and International Ground Source Heat Pump Association (IGSHPA) jointly convened a meeting of several state geothermal associations. Their leaders took part in wide-ranging discussions about federal and state policies, regulation, and other activities. Participating state associations included the California Geothermal Heat Pump Association (CalGeo), Geothermal Alliance of Illinois (GAOI), Iowa Geothermal Association (IGA), Michigan Geothermal Energy Association (MGEA), Mid-Atlantic Geothermal Industry Coalition (MAGIC), Minnesota Geothermal Heat Pump Association (MNGHPA), New England Geothermal Professional Association (NEGPA), New York Geothermal Energy Organization (NY-GEO), and the Wisconsin Geothermal Association (WGA). GEO Chief Operating Officer Ryan Dougherty moderated the meeting. Also representing GEO was President and CEO Doug Dougherty, and Outreach and Communications Manager Ted Clutter. Cary Smith (Sound Geothermal – Sandy, UT) and David Thomison (Oklahoma State University - Stillwater) represented the IGSHPA Advocacy Committee. Discussion included a federal tax credit update with a GEO primer on inviting legislators to geothermal job sites—to provide on the ground education and to recruit cosponsors for tax credit extension legislation. State association leaders provided updates on activities in California, Illinois, Iowa, Michigan, the Mid-Atlantic states, Minnesota, New England, New York and Wisconsin. GEO and IGSHPA intend to make these information and strategy meetings a regular occurrence.

**Geo Guides to Help States**  On Feb. 1, the Geothermal Energy Association (GEA), Geothermal Resources Council (GRC), and GEO announced the release of guidance for states on meeting new clean energy standards from the U.S. Environmental Protection Agency (EPA). The free state-by-state guides walk through the benefits and uses of three major types of geothermal applications: power generation, direct use and heat pumps. The materials are available from GEA, and are focused on the needs of state officials, regulators and the public. They provide valuable information about geothermal energy uses in their individual states that should be considered as policymakers and stakeholders seek ways to meet the mandates of EPA’s Clean Power Plan. For free copies, contact GEA at (202) 454-5261.

**GEO-IGSHPA Alliance**  2016 saw increased cooperation by GEO and the International Ground Source Heat Pump Association (IGSHPA), with GEO Chief Operating Officer Ryan Dougherty serving as liaison between the two organizations. The July edition of **GEO Industry News** featured an in-depth interview of IGSHPA President John Turley and GEO Chairman Joe Parsons, who laid out their cooperative vision for the future of the associations in concert with the GHP industry. GEO’s monthly publication has also promoted IGSHPA training workshops and its annual conference and expo. IGSHPA worked with GEO on the tax credit issue at the federal level, with members of its Advocacy Committee attending a legislative Fly-In to Washington, DC in September. IGSHPA cosponsored a mid-summer teleconference meeting of state geothermal associations called by GEO (above). On Oct. 27, GEO congratulated Roshan Revankar on his appointment as IGSHPA Acting Executive Director. Revankar joined IGSHPA as the training manager in 2012 after studying ground source heat pumps during master's work in engineering at Oklahoma State University.
International Cooperation

GEO and HRAI Sign MOU   On Aug. 26, GEO and the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) entered into a Memorandum of Understanding that establishes a framework for cooperation in the ongoing development and improvement of the geothermal heating and cooling industry in Canada and the United States.

GEO Stands Against Natural Gas in Ontario   In May, Ontario passed the Climate Change Mitigation and Low-carbon Economy Act, enabling the province to invest money from a carbon emission cap-and-trade program into reducing greenhouse gas pollution. In a letter of support to the Ontario Geothermal Association, GEO supported OGA’s stand against state or ratepayer supported extension of natural gas pipelines into small towns and rural areas of Ontario. The cap-and-trade system program and action plan are the backbone of the province’s strategy to cut emissions to 80% below 1990 by 2050.

C448 Bi-national Geothermal Standard   In February, CSA published its C448 Bi-national Standard, to harmonize differences between existing resources, simplify referencing in regulations and contracts, incorporate the latest advancements, clarify compliance using standards language, and provide credibility through development of accredited neutral standards. The Bi-national Committee included leaders from GEO, IGSHPA and other industry associations, utilities, drillers, installers, manufacturers, regulators, designers, engineers and academia. Watch a video about C448 here; find more info here.

GEO 2016 Administrative News

In Memory – Tom Huntington   Feb. 12 – The geothermal heat pump industry lost one of its key leaders on Feb. 10, with the passing of WaterFurnace President and CEO Tom Huntington, after a long and heroic battle with cancer. Tom proudly served as GEO Chairman in 2012-13.

Parsons Elected GEO Chairman
By unanimous vote of its Directors at its April 20 meeting in Lakeland, FL, the GEO Board of Directors named Joe Parsons (Earthlinked Technologies) as its new Chairman for 2016-17. Parsons has served on the Board since May 2014. He is Chief Operating Officer at Earth-Linked Technologies, responsible for product development, training programs, standards compliance and authorized dealer relationships.

GEO 2016-17 Board of Directors
- Chairman Joe Parsons (Earthlinked Technologies)
- Past Chairman Steve Smith (Enertech Global, LLC)
- Vice Chairman Keith Swilley (Gulf Power-Southern Co.)
- Secty/Treasurer Phil Schoen (GEO-Enterprises)
- Board Member Mike Albertson (WaterFurnace Intl.)
- Board Member Rick Aldridge (ClimateMaster, Inc.)
- Board Member Dan Ellis (ComfortWorks)
- Board Member Martin Forsén (NIBE)
- Board Member David Hules (Emerson Climate Technologies)

New GEO Board Members   On March 4, the GEO Board of Directors replaced Board Member Tom Huntington with Michael Albertson, WaterFurnace International Senior Vice President for Sales & Marketing. On Sept. 28, the GEO Board appointed NIBE Manager of International Affairs Martin Forsén to its ranks. Based in Sweden, NIBE owns GEO Manufacturer Members ClimateMaster, Enertech Global and WaterFurnace International.
ASHRAE 2017 Winter Conference
The American Society of Heating, Refrigeration, and Air-conditioning Engineers (ASHRAE) will convene its 2017 Winter Conference on Jan. 28-Feb. 1 at Caesars Palace. The AHR Expo will be held on Jan. 30-Feb. 1 at the Las Vegas Convention Center. The twin events are expected to draw thousands of professionals from around the world.

- 200 Professional Developed Hours recognized by most U.S. states, AIA LUs and LEED AP credits through ASHRAE Learning Institute course and Technical Program sessions.
- Technical Program will include eight tracks to bridge the gap between the design decisions made today that will impact the future.
- 20 Professional Development Seminars and Short courses are offered by the ASHRAE Learning Institute.
- Two administrations of its six certification program exams, including its new Building Commissioning Professional (BCxP) certification.

CLICK HERE to register for the ASHRAE Winter Conference in Las Vegas, including free access to the AHR Expo

Expo Education Program
The AHR EXPO is the trade show held in conjunction with the ASHRAE Winter Conference. Building on the success at prior AHR Expos, the 2017 event will feature a wide array of educational opportunities. On Jan. 30-Feb. 1, all attendees can participate in a number of free seminars and presentations, paid programming and professional certification exams.

A complete list of 2017 AHR Expo educational opportunities can be found HERE. For more information and registration, click HERE.

DON’T MISS the Water-Energy Nexus technical session on Tuesday, Jan. 31, at 9:45-11:00 a.m. for presentations on geothermal heating and cooling applications that reduce or eliminate the need for cooling towers. Presentations will include:

- “The Energy-Water Highway: Getting the Least Use from Evaporative Devices,” presented by Cary Smith (Sound Geothermal Corp.), and
Michigan Recognizes GHPs for Renewable Energy Credits

Dec. 20 – Michigan Gov. Rick Snyder signed a set of sweeping energy bills just passed by lawmakers that will significantly boost renewable energy investment in the state. Senate Bills 437 and 438 will raise the state’s Renewable Portfolio Standard from 10% to 15% by 2021, and retain the state’s energy optimization standard (1% annual efficiency improvement for electric utilities) through 2020.

The bills also boost incentives for utilities to hit higher efficiency targets, and set a nonbinding goal to meet 35% percent of Michigan's power needs through a combination of renewable energy and energy conservation by 2025. Final versions of the bills also rejected utility-backed proposals to eliminate net metering and implement a buy-all, sell-all policy where distributed solar customers are required to sell 100% of the electricity they generate back to the utility.

Of vital interest to the geothermal heat pump (GHP) industry is SB 438’s new definition of renewable energy. It now includes GHPs, making them eligible for Renewable Energy Credits (RECs). According to Michigan Electric Coop Association Executive Director and geothermal advocate Art Thayer, “This is a great victory for geothermal heat pumps in Michigan.”

SB-438 defines a "Renewable energy resource," as a “resource that naturally replenishes over a human, not a geological, time frame and that is ultimately derived from solar power, water power, or wind power.” The bill specifies that a “Renewable energy resource does not include petroleum, nuclear, natural gas, or coal. A renewable energy resource comes from the sun or from thermal inertia of the earth and minimizes the output of toxic material in the conversion of the energy.” This includes, but is not limited to:

- Biomass.
- Solar and solar thermal energy.
- Wind energy.
- Kinetic energy of moving water, including all of the following:
  - Waves, tides, or currents.
  - Water released through a dam.
- Geothermal energy.
- Thermal energy produced from a geothermal heat pump.
- Municipal solid waste and fuel manufactured from it, including landfill gas.

The next step is to recommend to the State of Michigan how to best measure, quantify and report the energy produced by GHPs in order to determine the appropriate number of RECs they should be granted. The Geothermal Exchange Organization is working with MECA on the most suitable methodology. Click here to read SB 438 (see pg. 15 for renewable energy resource definition). (GEO and MECA)

CLICK HERE for more information about the Geothermal Exchange Organization, and SIGN UP!
NY-GEO Calls on Governor to Include Geo Tax Credit in Executive Budget

Dec. 15 - New Yorkers for Clean Power and the New York Geothermal Energy Organization (NY-GEO) delivered a letter to Governor Cuomo calling on him to include a 25% tax credit for geothermal heat pump (GHP) installations in his 2017 state budget. Cuomo vetoed a geothermal tax credit bill in November that had passed overwhelmingly by the Legislature in June. His veto message said that consideration of the tax credit belongs in the budget process.

The letter to the Governor was signed by more than 160 local elected officials, plus representatives of businesses and environmental organizations. The Geothermal Tax Credit Bill A9925/S6249, as passed by the legislature, gives a tax incentive of 25% up to $5,000 to homeowners and business owners to install geothermal heat pumps, a renewable energy technology for heating and cooling buildings.

The tax credit initiative comes at a crucial time for the geothermal industry, which employs about 1,000 people in the state and will be feeling the impacts from a 30% federal tax incentive that sunsets at the end of this year. The solar industry has benefited from a similar state tax incentive that has made the renewable energy source more affordable and accessible to homeowners and businesses in the state.

Geothermal is critical to executing New York State’s recently adopted aggressive mandate to achieve greenhouse gas reduction goals of 40 percent by 2030, as well as the internationally-recognized target of reducing emissions 80 percent by 2050. The New York State Energy Plan states that 35% of New York’s climate damaging greenhouse gases come from on-site combustion, primarily to heat homes and buildings.

Assembly tax credit sponsor Sean Ryan (D-Erie County) said, “I strongly believe a significant geothermal incentive is consistent with the state policies of reducing our reliance on carbon-based fuels and increasing green jobs within the state. For these reasons I urge you to include in your Executive Budget an allocation of funds for a geothermal tax credit”.

State Senator Rob Ortt (R,C,I – Niagara, Orleans and Monroe counties), who sponsored the tax credit bill in Senate, said, “A strong measure in your budget is needed to continue the momentum this renewable industry has been building in New York State. In addition to protecting our environment for future generations, a geothermal tax credit helps protect and create local jobs and helps reduce costs for financially-strapped energy customers.”

“Geothermal heating and cooling is key to cutting fossil fuel use and helping New York State reach its greenhouse gas reduction goals,” said NY-GEO Executive Director Bill Nowak. “I’m proud to live in a state where the governor remains committed to the challenge of climate change. We ask Gov. Cuomo to boost his administration’s heating and cooling initiative by including the geothermal tax credit in his budget—and protecting 1,000 good-paying New York jobs in the process.” The letter can be viewed here. The Geothermal Exchange Organization is providing assistance for a renewed legislative push by NY-GEO for geothermal tax credits in 2017. (NY-GEO)

When you Think “Geothermal” – Think “GEO”

Certified GeoExchange Designer Course

In cooperation with the Association of Energy Engineers (AEE) and the Geothermal Exchange Organization (GEO), the International Ground Source Heat Pump Association (IGSHPA) has designed a program to offer advanced training towards certification as a Certified GeoExchange Designer (CGD). From an introduction to the technology to a complete review of the design process, participants learn the information they need about design of residential and commercial systems, ground heat exchangers, soil and rock conductivity, borehole grouting, thermal conductivity, in-situ testing, software and system performance.

CGD Plus Course

These courses are offered through IGSHPA and also by independent IGSHPA accredited CGD Trainers. This course includes the same information as the IGSHPA distance learning course PLUS additional material developed by the instructor. You receive the benefit of the instructor’s years of geothermal experience while learning the material. Courses include a minimum 20 hours of instruction, CGD Books and IGSHPA manual set, and an ASHRAE manual.

Check with IGSHPA about Eligibility Requirements

January 9 - Mar 13, 2017
Online - 1 hour webinar per week
Trainer: Ed Lohrenz, B.E.S., CGD
Fee $1665

March 13-14, 2017
in conjunction with IGHSPA’s Conference and Expo in Denver, CO

Register by Feb. 14 – Limited Seating!
Workshop fee includes Conference and Expo

Registration Fee $2,000 with certification / $1,600 without certification • IGSHPA Member Discount ($50)

CLICK HERE to register for the IGSHPA CGD Plus Designer Course

CLICK HERE for more about the IGSHPA Conference and Expo
IGSHPA Certified Inspector Workshops

January 18-19, at Stillwater, OK
Lunch and breaks are provided • Registration begins at 7:30 am.

March 13-14, 2017, in conjunction with
IGHSPA’s Conference and Expo in Denver, CO
Register by Feb. 14 – Limited Seating!
Workshop fee includes Conference and Expo
Workshop registration starts at 7:30 a.m.

Workshop Registration Fee $850 • IGSHPA Member Discount ($50)
GROUP DISCOUNTS are available if five or more people attend from your company
or organization. Please call 800-626-4747 to get a group discount rate.

CLICK HERE to register for the IGSHPA Certified Inspector Workshops

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IGSHPA Accredited Installer Workshops

January 25-27, 2017, at Stillwater, OK
Lunch and breaks provided • Registration begins at 7:45 am.

March 13-14, 2017, in conjunction with
IGHSPA’s Conference and Expo in Denver, CO
Register by Feb. 14 – Limited Seating!
Workshop fee includes Conference and Expo
Workshop registration starts at 7:45 a.m.

Workshop Registration Fee $850 • IGSHPA Member Discount ($50)
GROUP DISCOUNTS are available if five or more people attend from your company
or organization. Please call 800-626-4747 to get a group discount rate.

CLICK HERE to register for the IGSHPA Accredited Installer Workshops

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CLICK HERE for more information about the IGSHPA Conference and Expo
CLICK HERE for travel and Lodging Information for the Stillwater workshop
KEDLI Geothermal Pilot Program

Dec. 16 - In an Order regarding a joint gas service proposal by National Grid NY – KEDNY (formerly Brooklyn Union Gas Co.) and National Grid – KEDLI (KeySpan Gas East Corp.) for the period Jan. 1, 2017 through Dec. 31, 2019, the New York Public Service Commission (NYPSC) wrote on page 121:

“... the Joint Proposal would require KEDLI to implement a pilot program to demonstrate geothermal heating and cooling as an alternative to either new or existing firm or interruptible gas service.” KEDLI will develop the program in coordination with local water utilities and Long Island Power Authority/PSEG Long Island, with “…the use of geothermal technologies to improve sustainability and overall system efficiency by displacing peak gas consumption rather than by addressing those needs through the addition of pipeline capacity.” None of the parties opposed the proposal. “The geothermal pilot program is an appropriate step to further State policy goals in encouraging the use of clean, renewable energy while increasing cost-effectiveness and affordability.”

“NYPSC’s recognition of the value of geothermal heat pumps (GHPs) as an alternative to natural gas is great news for our industry,” said Geothermal Exchange Organization President Doug Dougherty. “It's a game-changing signal to the entire country about the value of GHPs for consumers, the economy and the environment.” Look for a more detailed article about the KEDLI Geothermal Pilot Program in the next edition of GEO Industry News. (GEO)

Otter Tail Power Rebates
Geo Upgrade at Red Lake Falls

Lafayette High School at Red Lake Falls, MN has received a rebate from Otter Tail Power Corp. to upgrade its geothermal heat pump (GHP) system. It was installed during the building's construction in 1997, according to city Superintendent Jim Guetter. "It was a great decision then and has been well-maintained by our custodial staff," he said. "With a new heat pump design and an electronic control system, the district will save even more energy and money." The rebate of $110,800 covered the cost of 41 heat pumps. Otter Tail Powers Minnesota Conservation Improvement Program provides rebates, grants, education, special programs, and financing to encourage individuals and businesses to use electricity wisely. Learn more about this program here. For more about Otter Tail Corp. visit their website here. (OTPCO)