Energy - Docket Optical System

From: Loyer, Joe@Energy
Sent: Monday, April 29, 2013 12:04 PM
To: Energy - Docket Optical System
Subject: Docket # 13-IPR-1P

Categories: Ready to Docket

California Energy Commission
DOCKETED
13-IEP-1P
TN 70509
APR 29 2013

Please add this email (no attachments) to the Docket 13-IPR-1P and forward to the Web Team.

Thanks, Joe.

From: Marco Alves [mailto:marco.alves@pae-engineers.com]
Sent: Wednesday, April 24, 2013 4:18 PM
To: lisa@meline.com
Cc: Loyer, Joe@Energy; 'Phil Henry'
Subject: RE: Policy Update for the AB 2339 Working Group

I agree that most geo systems will be closed loop, but that is due to code/AHJ barriers. Financially, and even environmentally, there is a strong case to be made for open systems (much larger capacity for heating/cooling at greatly reduced cost).

We have some clients CA central valley which use wells in their property to drawn water used for domestic/fire-protection/irrigation. In one case we added a heat exchanger to a booster pump station that pretty much became our geo system for that project, there was a big cost difference between a heat exchanger ($200k) and geo field ($1 million).

So I see this effort as an opportunity to attempt to get past the code/AHJ/DWR/local-water-board barrier in California.

Marco Alves, PE
PAE
415.544.7703 d

From: Lisa Meline [mailto:lisa@meline.com]
Sent: Tuesday, April 23, 2013 8:08 AM
To: Marco Alves
Cc: 'Loyer, Joe@Energy'; 'Phil Henry'
Subject: RE: Policy Update for the AB 2339 Working Group

Within the GHEW Standard the open loop system is addressed in the introductory section; we are not proposing any changes. Wells used for drinking water or heat exchange are the same based on current draft and planned standards. It's the discharge side that muddies the water and does not reside within DWR or County jurisdiction. It's a Regional Water Quality Control Board issue. That is why it is such a challenge in CA. I suggest we focus on the closed loop piece for now as that is where 90% of our geothermal heat pump systems will fall.

From: Marco Alves [mailto:marco.alves@pae-engineers.com]
Sent: Tuesday, April 23, 2013 7:44 AM
To: lisa@meline.com
Cc: Loyer, Joe@Energy; Phil Henry
Subject: Re: Policy Update for the AB 2339 Working Group

Lisa,

My comment regarding the open loop design is an attempt to work towards a comprehensive approach to geo exchange systems and be as inclusive as possible, plus set a state baseline that would level the plain field when it comes to permitting open well for geo exchange purposes.
DWR has a standard for open wells, but should that be used for geo exchange?

Can you share more data with the group on the project in Sacramento you mention below?

Thx

Marco Alves
PAE
415.544.7703 d

On Apr 23, 2013, at 6:07, "Lisa Meline" <lisa@meline.com> wrote:

> Joe
>
> I am quickly reading through the proposed changes to the policy and note that there is a reference on page 2 regarding open loop systems. IGSHPA covers only closed loop systems. There is no IGSHPA Standard for source (or production) wells or reinjection wells. The process in California is that the source well be permitted as a standard water well process (County) and the reinjection well permit would have to be authorized by the governing Regional Water Quality Control Board. That is a 'discharge' permit or waiver of – if for instance they allowed a more traditional "pump" and "dump" type system. By the way there is one permitted long the Sacramento River by the airport.
>
> I have other comments, but I will wait until Thursday. I was a little unsure as to whether the attached comments were yours or Marco's. A lot of information to process in a short amount of time…..thanks for keeping on top of all this!
>
> Lisa
>
> ---
>
> **From:** Marco Alves [mailto:marco.alves@pae-engineers.com]
> **Sent:** Monday, April 22, 2013 12:13 AM
> **To:** Loyer, Joe@Energy
> **Subject:** FW: Policy Update for the AB 2339 Working Group
>
> Hello Joe,
> See attached my comments to the policy document.
> PAE, the firm I work for, has designed geothermal heat exchange systems in CA, OR, WA states that are closed, open, vertical, horizontal, pond, and geopile. See attached presentation slides recently presented at the Golden Gate ASHREA chapter. If you or other members of this committee have any questions related to the information in it I would be happy to clarify. We also have real data from projects in operation that we may be able to share with this group assuming our clients will accept sharing that data.
>
> I look forward to contribute to this effort.
>
> Best,
>
> Marco

Marco Alves, PE
PAE
415.544.7703 d

From: Loyer, Joe@Energy [mailto:Joe.Loyer@energy.ca.gov]
Sent: Friday, April 19, 2013 3:09 PM
To: Ashuckian, Dave@Energy; Barker, Kevin@Energy; Beth Morelli; Bohan, Drew@Energy; Brett Lehman; Burgoyne, Daniel@DGS; Dan Bernstein; Mehl, Dave@ARB; David Maul; Dennis Murphy; Donna Mills; Geiszler, Eurlyne@Energy; Green, Lynette@Energy; Miranda, Hazel@Energy; Hazlyn Fortune; Hoellwarth, Craig@Energy; Jeff Guy; Jim Charters; John Kreber; John Townsend; Haas, Julie@DWR; Kent Penning; Korosec, Suzanne@Energy; Lisa Meline; Loyer, Joe@Energy; Manuel Alvarez; Marco Alves; Mark Morelli; Marvelli, Mia@DGS; Mike Keesee; Oglesby, Rob@Energy; Patrick Splitt; Paul Bony; Phil Henry - California Geo; Sandy Goldberg; Sara Arce; Sean Dillon; Steve Kavanaugh; Susan Nichol
Subject: Policy Update for the AB 2339 Working Group

To Everyone,

I didn't get a lot of input other than the first working group meeting.
I expect that I will get further comments via email and at the April 25th meeting.
I will pass those comments along as they come in.

This update includes only minor changes; they have been highlighted in yellow.

The April 25th meeting will be held via webex and on-site in conference room 3 North B.
3 North B is a much nice venue than last time with a substantially better conference system (many thanks to Dave Maul for the use of his laptop).

If you have any questions, feel free to contact me.
-Joe Loyer
916-654-4811