

Heating Subcommittee Meeting Minutes

Thursday, April 26, 2007

In attendance: Adam Hird, Peter Henderson, Damian McDonald

Notes:

- Review of Encon Estimates for GeoThermal (Energy Usage & Installation Cost)
 - Full install cost estimate of \$3.4-3.8 million
 - 1/3 of cost is well drilling, roughly \$1.2MM
 - Team noted that tonnage is not 200 but a little over 400
 - Costs not included are incidentals for e.g. items related to lowering ceilings
 - Encon also performed a comparative energy usage analysis
 - Analysis favors Geothermal by roughly \$60K per annum
 - Savings will grow with the price of oil and energy
 - Oil costs used were \$2.10/gal, all expect this to grow over time perhaps with next bid / contract
- Comparison with other proposals
 - Need to find out what items on the F&D list will be covered by the Geothermal install, do any remain, for example, roof recovery units?
 - As we discussed, we need to obtain operating cost estimates for the other two proposals
- Discussion of Geothermal in general
 - Adam commented that since he has started this project, he has seen more of a push for the use of Green technology and Green buildings. At the beginning, Adam mentioned that he was somewhat skeptical at the efficacy of geothermal for this particular application. Adam is now working on a large Green building and advised that he is even seeing lenders calling out Green building as a requirement. Adam also advised that Encon is seeing a growth trend toward the use of Geothermal and the trend is flowing over to large buildings
- Damian reviewed the power point for the May 1 Board of Ed meeting
 - Damian will be flying back from SFO and will need support and speaker just in case flights are delayed. Damian advised that John Milner and Pete have offered. Adam Hird will also be present
 - Ideally, the team should be present for this board meeting, so people know the faces behind the names
- Next steps
 - With the data just provided by Adam and Encon, we believe we have sufficient information to meet with F&D and have a civil & productive conversation regarding the analysis of the three proposals. We understand from Wayne (last meeting) that F&D is well versed on Geothermal, the objective of the meeting is to better understand their thoughts on the use of geothermal. (As I am writing these notes, I am wondering if the objective of F&D was to provide the lowest initial cost options and not consider long term cost of ownership?)

- Once we meet with F&D we will also need to meet with Meryl on the development of the cost analysis. Peter has created a financial model to capture TCO on a year/year basis but needs to better understand the bond impact / treatment
- Closing comments
 - We believe that Geothermal is within the ballpark, the gap between steam and Geothermal is getting closer when you consider the \$500/ton grant, energy savings, and other benefits like getting AC for the facility.