

Eden Geothermal Community Liaison Group

Minutes of group meeting Thursday 9th September 2021, 18:30 (Zoom)

Present: Roy Taylor (Chairman); Matthew Luke (Treverbyn PC); Doug Scrafton (SE LAG); Kelvin Simms (St Blaise TC); Dan James (Eden Project); Gus Grand (EGL); Tony Bennett (EGL); Claire Judd (EGL – minutes).

Apologies: James Mustoe (Cornwall Council); Mike Grindley (Luxulyan PC.)

<u>ITEM</u>	<u>ACTIONS</u>
<p>1. Minutes of last meeting and matters arising Minutes of meeting 12/05/21 agreed as an accurate record, with no matters arising not covered by today's agenda.</p>	
<p>2. Operations Update TB provided a summary of operations progress. Drilling is going very well:</p> <ul style="list-style-type: none"> • Crew are very good and atmosphere on site is very positive. • Programme is slightly behind schedule due to some issues encountered early on, but team have been able to make up some time recently. • Current depth is 3978m MD (measured depth). • Recently encountered a 'drilling break' (marked by a significant increase in ROP (rate of penetration) and drilling fluid losses) indicative of a fractured zone. This is an excellent sign, both because it points to existence of the desired fracturing/ permeability at depth and because it is consistent with geologists' predictions upon which the programme is based. • The current fractured zone is not thought to be the target (main) fault, but a smaller fault. Its presence confirms expectations / hopes as we approach the target. • Summary is that we "are in a very good place at the moment". <p>ML asked about how operations had been going in a general sense. TB responded that:</p> <ul style="list-style-type: none"> • Covid restrictions had placed an additional burden on the project – and continue to do so. While government restrictions have eased, our protocols remain very strict in order to protect the crew and the site, and avoid delays. Thus far, this has created extra work but has had the desired result. • We are very pleased with the rig, which is very quiet, and the crew. 	
<p>3. Next Steps TB gave an overview of the next steps.</p>	

<u>ITEM</u>	<u>ACTIONS</u>
<ul style="list-style-type: none"> • The aim had been to drill to 4000m MD and then pull out of hole and set 9 5/8" casing to surface, before drilling the final 8 1/2" diameter open hole section to approx. 4500m. • However, as we have had drilling fluid losses at the proposed casing point, we are stopping short of the 4000m for this section, at 3978m. We will now have to 'seal' the well using a different grade of cement prior to running casing, so that the casing cement is not lost into the faulted zone. • After we have sealed the well and run and cemented the 9 5/8" casing (to surface) we will continue drilling to target. • If we encounter the target fault after another 100-200m, we will drill a little beyond this. • It is unlikely that we will drill further than 5000m, as at such a depth we could encounter temperatures greater than 200°C, which create problems with drilling and handling at surface. • If all goes according to schedule, we anticipate completion of drilling in mid-late October. • When drilling is complete, well-testing will enable us to characterise the flow zone: how it performs, what the temperatures are, what we are able to get from it. This is likely to take between 2-4 weeks. • After well-testing (November) the rig will have to demobilise and leave site. Initially we had hoped to move straight to drilling EG-2 (second well) with the same rig, but the contractor has another job in Europe, so to keep the rig here we would need to pay for it to be on standby for several weeks, which is not possible. • The MND rig and crew could return in April next year to drill the second well. We would like to use them, but they are not under contract to us. Once the rig leaves our site, it will be under the control of MND's new client, which introduces a level of uncertainty in terms of timings. We will therefore take a prudent approach and look at the availability of other rigs and crews. • If all goes well, we would start drilling EG-2 from May 2022 onwards. <p>RT asked about the temperature at current depth, and about comparisons with United Downs Deep Geothermal Project. TB explained that it's not possible to say with certainty what the rock temperature is at current depth, due to the cooling influence of the drilling muds. Currently the muds are returning to surface at around 70°C, and our best estimate is that the rock temperature is about 150°C. The rock temperature at just over 5000m at United Downs was 193°C, and TB would expect temperatures at Eden to be line with those at UD.</p> <p>GG highlighted that having encountered permeability at current depth is a good safety net for the project. In the worst-case scenario, if conditions are not as expected / hoped in the target zone, the current faulted zone would provide a useable resource.</p>	

ITEM	ACTIONS
<p>DS asked if the programme for the 2nd well would be the same length as for EG-1. TB answered that it could be a little shorter, thanks to lessons learned about conditions from EG-1, and perhaps because EG-2 could be a little shallower. (This latter possibility dependent on results in the target zone with EG-1.)</p>	
<p>4. Neighbour communications</p> <p>GG fed back that neighbours seemed comfortable, and EGL had not received any complaints about operations. There had been some initial nervousness on the part of a few individuals prior to drilling start, but the team had done their best to keep the local community informed and to explain the process, and people now seemed happy with how things were going.</p> <p>ML said that he had not received complaints from anyone, apart from 1 resident in Penwithick. There had been a couple of days where a particular wind direction had meant more noise carried to Trethurgy, with some comments on Trethurgy and Friends Facebook, but no one had contacted him to complain. EGL were aware of the comments on Facebook but had not received any complaints either.</p>	
<p>5. Press and wider public relations</p> <p>GG provided an update of upcoming press coverage:</p> <ul style="list-style-type: none"> • Chinese TV channel filming next Tuesday. • GG was interviewed, and filming had taken place, for an episode of Dispatches to be aired in October. Focus on COP26 and government support for renewables. <p>In terms of wider interest, GG reported that Sam Yung (Steve Double's Senior Parliamentary Assistant) had confirmed that there is to be a debate about geothermal in the House of Commons next Wednesday, with the Minister (Anne-Marie Trevelyan) present to answer questions.</p> <p>GG had received a number of new enquiries from organisations around the UK interested in implementing geothermal schemes at their sites, and wishing to discuss input from us. Some of them might be possible to take forward, others not. GG felt that these were encouraging signs that geothermal had 'hit its stride' and that a UK geothermal industry was now more of a reality.</p> <p>DS asked about the House of Lords, and GG confirmed that Lord Teverson, Lord Berkley and Lord Taylor had all either recently visited or were due to visit very soon. Glen Caplin had also visited and had been very positive and supportive, including on discussions around heat parks</p>	

ITEM	ACTIONS
<p>and further sites, and Darren Jones, Chair of the Energy Select Committee, was due to visit soon.</p> <p>GG asked that group members put forward any other suggestions for visitors. ML suggested members of the new Cornwall Council cabinet, many of whom may have had little previous exposure to geothermal, and also universities and colleges with geology departments. GG agreed and was 'on the case' with both of these. Visits had taken place or were due to take place from various colleges and universities. RT suggested the Rt Hon Ed Davey MP. DS suggested FoE and Greenpeace, and GG agreed that these groups and XR should be contacted.</p>	<p>All: to contact GG with any suggestions for visitors</p>
<p>6. Eden Geothermal Community Fund</p> <p>CJ provided a brief overview of the 9 projects supported with the £20,000 fund associated with the first well:</p> <ul style="list-style-type: none"> • 3 schools – Luxulyan, Biscovey Academy and Bugle. Luxulyan Schools funding was for a garden or commemoration and reflection; Bisovey and Bugle were both creating outdoor learning / wildlife spaces, with a focus on pupils with SEMH needs at Biscovey. • Treverbyn Community Trust had received a grant to fund the running costs of their Community Larder (mobile food bank) for 1 year. • Bugle Library of Things had received funding for a seed library and community plant swap events • Cornish Acorn had been funded to construct welfare facilities (a shelter and a compost toilet) for their outdoor learning space at Par Moor. • Friends of Menacuddle Well had received a grant to improve access for the elderly, disable and buggy users – specifically building a new path to replace the old muddy one and removing a chicane. • St Blaise Town Council had received a contribution to the refurbishment of the Penarwyn Green play area, specifically for play equipment for the youngest children. • Trethurgy Village Hall had received funding to improve their village playing field. <p>DJ highlighted that, in light of the large number of excellent applications received, the panel had taken the approach of trying to support as many of the projects that had applied as possible. This had been achieved by mainly providing part-funding, rather than granting larger sums to a much smaller number of initiatives.</p>	

<u>ITEM</u>	<u>ACTIONS</u>
RT asked whether there would be a further round of funding with a second well, and GG confirmed that there would.	
7. AOB GG reported that representatives from the EU-funded MEET (Multi-sites EGS demonstration) Project had visited and discussions were taking place regarding a possible collaboration. DJ and ML offered congratulations to the project team and DS echoed this, reflecting on the long gestation of the project and commenting on how exciting it now felt to be hearing of signs of positive results.	
8. Date of next meeting TBA	