



Staff Report - Item 05

To: Sonoma Clean Power Authority Community Advisory Committee

From: Ryan Tracey, Director of Planning & Analytics
Geof Syphers, Chief Executive Officer
Miles Horton, Legislative Policy & Community Engagement Manager
Claudia Sisomphou, Public Affairs & Advocacy Manager

Issue: Receive Geothermal Opportunity Zone Update

Date: January 16, 2024

Background

The Geothermal Opportunity Zone (GeoZone) is SCP's initiative to secure affordable, reliable clean energy for our customers by building 600 megawatts of new geothermal power capacity in Sonoma and Mendocino Counties. This will enable SCP to phase out its dependence on natural gas power plants for reliability. The Community Advisory Committee (Committee) meetings are a regularly scheduled public forum for the community to receive updates and provide input on the GeoZone. The updates provided to the Committee each month, and minutes from any discussion are posted on SCP's website at <https://sonomacleanpower.org/geozone-public-updates>. Staff incorporate any feedback received from the Committee presentation into the monthly updates to the Board of Directors. Additional background on the GeoZone can be found on the GeoZone webpage at <https://sonomacleanpower.org/geozone>.

Partner Updates

SCP has cooperation agreements with three private companies to progress geothermal exploration and development in the GeoZone. Below are partner-specific updates for progress in the GeoZone.

Chevron New Energies

At the end of last year, Chevron New Energies publicly disclosed that they acquired property known as the Pocket Ranch, which is located between Geyserville and the

Geysers, with the intent to explore for geothermal energy. This information was shared with Geyserville organizations, including the Geyserville Alexander Valley Municipal Advisory Council. Chevron New Energies is planning on participating in an upcoming Geyserville Planning Committee meeting to answer community questions.

Chevron New Energies also recently shared with SCP that while the company continues to support geothermal development in the GeoZone, they are uncertain as to when activity will commence. Some additional learning from global and U.S. research into EGS will be valuable before this particular site is proposed for exploration. In the meantime, Chevron New Energies has let us know they are in contact with local authorities to ensure proper land and fire management. Chevron New Energies' decision to delay active exploration in the GeoZone will require them to be withdrawn from consideration for the Department of Energy Enhanced Geothermal System grant for which they were selected.

Although staff are disappointed by the delay and decision to forgo grant funding, they are focused on capturing lessons learned and opportunities from Chevron New Energies to inform regulatory and political advocacy opportunities to further promote development interest in the GeoZone. Chevron New Energies' cooperation agreement with SCP requires completion of several key milestones, including permitting and interconnection, by March 2026 which may be at risk with a project delay. Staff appreciate Chevron's continued interest in future development for the GeoZone but will be considering a variety of options in early 2025 on how to sustain forward progress on the GeoZone's objectives.

Eavor

Eavor has completed its technical feasibility study of developing a closed-loop system in the GeoZone and prioritizing the GeoZone project within its portfolio of global projects. Eavor is continuing to evaluate potential site host opportunities. Eavor's cooperation agreement milestones, which include site control for a pilot and submission of an interconnection application, are due June 30, 2025. It is not expected that Eavor will meet all these milestones, and as with Chevron, staff will be considering options early this year on how to proceed. Eavor has expressed that its GeoZone project is still a strategic priority for the company, is technically feasible, and continues to be promising commercially.

Cyrq Energy

SCP submitted two grant abstracts in late 2024 for the GeoZone thermal energy storage system at the Geysers to both the California Energy Commission (CEC) and the Department of Energy (DOE). The abstract to the CEC was not selected to proceed. After meeting with the CEC staff, SCP learned that the abstract score was very high and was of strategic interest but declined due to the CEC's decision to enforce a strict 50% round-trip efficiency cut-off for applications. SCP is working on an advocacy strategy to educate the CEC on why a round-trip efficiency cutoff is not a good measure of performance for thermal storage, which can charge very quickly with low or even negatively priced energy.

SCP's grant abstract to the DOE, which was part of a very competitive solicitation with 141 submissions, was encouraged as one of only 41 projects to proceed to a full application. To proceed to a full application, the grant team will need to receive a formal commitment from an existing geothermal operator at the Geysers to host the demonstration. The project team is engaging site hosts early this month as well as weighing the risk of DOE funds in the new administration before deciding whether to proceed with a full application which would be due in March.

Meanwhile, SCP staff met with the CEC staff working on revisions to the guidelines for counting Renewable Portfolio Standard (RPS) energy. A key risk to the project is that the current guidelines would unfairly reduce the RPS-eligible energy from a geothermal plant that hosts a thermal energy storage system. SCP has started aggressive advocacy on the need for guidelines that allow the RPS-eligibility of a geothermal plant to be preserved. The reception from CEC staff on this issue has been positive, and they've followed up with multiple questions that suggest they are actively considering the changes needed to address the issue.

Community Engagement

SCP's outreach to key stakeholders and community groups on the GeoZone is continuing. In the past several months, SCP staff have met with and briefed several local groups in the GeoZone early interest area, including the Geyserville/Alexander Valley Municipal Advisory Council and the Alexander Valley Association, in addition to continuing to build relationships with key labor and environmental organizations, elected officials, and others. In addition, SCP staff, with the help of K Street Consulting, are beginning the consultation process with local tribal governments.

SCP will also be hosting a town hall meeting on the GeoZone at the Cloverdale Veterans Building on Thursday, February 6 from 5:30 - 7:00 PM. The event will feature Sonoma County Supervisor James Gore, Cloverdale Mayor and SCP Board member Todd Lands, North Bay Building Trades Secretary/Treasurer Michael Allen (tentative), and others. All are welcome to attend.

Regional Planning Grant

SCP is collaborating with the counties of Sonoma, Mendocino, and Lake in submitting a grant application to the California Energy Commission due in late January to fund subsurface modeling, analysis of remote sensing data, surface constraint analysis, community engagement, planning staff development, and surveillance surveys to proactively plan for geothermal development in the region. The National Renewable Energy Laboratory (NREL) has agreed to participate as the main provider of technical services for the project. If awarded, SCP is excited about the potential for the project to augment the capabilities of county staff in planning and permitting geothermal development, as well as guide the geothermal industry to site projects that minimize ecological and cultural impacts. SCP will be providing staff time without reimbursement to the grant project to provide its perspective as a power provider and expertise from the GeoZone, as well as support in administering contracts to NREL and subcontractors.