

It's said that, "a picture is worth a thousand words", so the picture above should qualify and then some! The points denoted on this picture of Nevada are surface level geothermal springs located at over 400 locations throughout our state. even within the tahoe basin, there's robust access to earth's bountiful heat resources. so, after decades of routine power outages here in incline village, we decided to explore how to turn this scalable resource into a permanent power solution. while doing so, we quickly realized that we could use our town's wastewater effluent, ~327MM gallons/year which otherwise gets discarded into a highly toxic Carson river watershed, to make liquid hydrogen. USDOE agrees with us about an urgent need to innovate and has expressed serious interest in federally financing our entire project.

Should our microgrid project here in incline perform as expected, we can couple local geothermal baseload power sources to effluent conversion throughout NV (& our entire nation), changing the economics and diversifying the availability of renewable energy forever. what a wonderful way to create wealth and a carbon free legacy to be proud of.



November 5, 2022

IVGID Board of Trustees
c/o Mr. Tim Callicrate, Chairman
893 Southwood Blvd.
Incline Village, NV 89451

Dear Tim:

Thank you for our meeting on October 14 with you, Indra Winquest and Brad Underwood, and your follow-up letter dated November 1, regarding the possibility of installing a geothermal plant in Incline Village. As discussed, we would like to utilize a small portion of IVGID land to install a closed-loop geothermal power plant. This plant would supply all of its generated electric power to NV Energy ensuring renewable baseload power for Incline and the Tahoe Basin.

Since our meeting, we have had follow-on meetings with NV Energy, the United States Department of Energy (DOE) and green-energy investors. NV Energy and the DOE continue to support creation of a microgrid in Incline Village. NV Energy has expressed interest in the purchase of all renewable power generation and associated renewable benefits; and we are actively engaged with the DOE in our application for renewable energy funding in accordance with federal guidelines.

Attached is a summary description of the Project for your review and for the upcoming Board of Trustees meeting on November 9.

Our attorney has also drafted a proposed geothermal lease agreement for your consideration. The lease provides for substantial benefits to IVGID as the Lessor in the form of advance rental and pre-paid royalties. The lease is also an essential component of the proposed geothermal plant financing in accordance with the updated provisions for renewable energy in the recently-passed Inflation Reduction Act.

We are excited about the possibility of generating clean, geothermal energy in Incline. The generated power will increase energy security for Tahoe; and assist the State of Nevada in meeting its renewable energy goals.

I look forward to further discussions with you and briefing the trustees on the Project. Thank you for your interest and support.

Regards,

A handwritten signature in black ink, appearing to read "W. Chastain", written over a horizontal line.

William J. Chastain
Manager
(775) 636-4637 chastain748@gmail.com

cc: Indra Winquest, General Manager, IVGID
Brad Underwood, Director of Public Works, IVGID

Enclosure

774 Mays Blvd. #10-465, Incline Village, NV 89451

Incline Geothermal Microgrid Project

November 2022

Overview

The purpose of the Incline Geothermal Project (the "Project") is to build a geothermal power plant that will provide Incline Village and the surrounding Tahoe Basin area with reliable electric power that is clean and renewable with zero emissions and zero contaminants.

Lake Tahoe is an ecological treasure and the environmental resources in Incline Village are abundant and pristine. However, these resources and the resiliency of our community are threatened by climate change. In January 2022, the US Environmental Protection Agency (EPA) reported:

Global climate change is projected to have unprecedented impacts on the health of the environment and economy in the Lake Tahoe Basin. As temperatures rise and more precipitation falls as rain rather than snow, management efforts to protect the watershed's forests, fish and wildlife, and famed water clarity will face unique challenges.¹

The Project offers Incline and the surrounding area with a green energy solution to the damaging effects of climate change while, at the same time, providing reliable baseload (*i.e., on-all-the-time*) power. Due to its remote location and its distance from the generation source of power, Incline will never have reliable power unless it has a microgrid self-contained power system.

Minimal Environmental Impact

There are already several residential geothermal installations operating in Incline Village. The geothermal resources in the area are vast and well-researched. The Project will deploy strategic technology that greatly improves the availability and energy potential of these geothermal resources with minimal environmental impact.

- Geothermal closed-loop technology provides renewable, clean power with no harmful emissions, no steam, and quiet operation.
- Minimal environmental impact from drilling.
- Minimal visual impact of plant and equipment.
- Smallest above-ground footprint of any renewable power. Except for the generating plant itself, everything is underground. No sprawling solar farm or wind turbines.
- No noise or odor impact after drilling is completed.
- Neighbor and neighborhood friendly. Closed-loop heat harvesting eliminates manmade seismicity concerns from water removal & injection and irritating gas or odor associated with traditional geothermal methods.

Additional Benefits to the Community

- Upfront and annual revenues to IVGID for the life of the Project.
- Reliable power for all residents and businesses.
- Reliable power for Diamond Peak Ski Resort and the Public Works facilities.
- Potential for underground utilities throughout the village; aids in fire prevention.
- Power generation dedicated to the village complements other important community services already in place, such as water, sewer and sanitation.
- At capacity, the plant could service the entire Tahoe Basin.

¹ "About Lake Tahoe", US EPA, 12 Jan. 2022, www.epa.gov/lake-tahoe/about-lake-tahoe. Accessed 3 Nov. 2022.

Generating Capacity

The generation capacity of the plant is based on the intensity of the heat, the transmission capacity and the desired generated power output. In Incline Village, the heat intensity and the transmission capacity are optimal. The desired output depends on how much power the Project wants to generate. For example, a 50 megawatts electric (MWe) plant would service Incline Village and a 250 MWe plant would service the entire Tahoe Basin. In each case, the Project has the potential to eliminate vast quantities of carbon dioxide while generating significant revenue.

Eliminating CO₂ Emissions and Estimated Power Sales

While it produces significantly more power compared to traditional geothermal practices, the technology solution of the Project also has the benefit of being much more green. Legacy geothermal plants emit excessive and harmful quantities of carbon dioxide through their energy production. As a closed-loop system, the geothermal renewable power produced by the Project will emit no carbon dioxide. Based on current non-renewable emissions:

- At 50 MWe label power, the Project has the potential to eliminate a lifetime 24MM tons of carbon dioxide while generating approximately \$49MM in electric power sales per year with large margins.
- At 250 MWe label power, the Project has the potential to eliminate a lifetime 119MM tons of carbon dioxide while generating approximately \$243MM in electric power sales per year with large margins.

Power sales are based on \$110/megawatt hour (MWh) once the Project is fully commissioned and on-line.

In addition to measureable climate solutions, the Project eliminates the recurring business expense of purchasing, transporting and burning carbon-based fuels. Fuel availability issues and market pricing variability are likewise eliminated.

Technology Description

The Project's key advantages come from its portfolio of proprietary intellectual properties for accessing and extracting heat from geologic formations.

- Scalable technology that incorporates patented proprietary aspects coupled with new enabling technologies, targeted at reducing carbon dependent power generation.
- Closed-loop heat harvesting technology that delivers abundant energy production with zero emissions and zero contaminants.
- Eliminates the byproduct from traditional geothermal energy which is typically discarded or reinjected into the substrata with deleterious environmental effect.
- Exceptionally cost competitive with natural gas at \$4 per MMBTU, and free from availability issues and market variations. Baseload power, always there. A replacement for coal and gas.
- Proprietary drilling technology produces deeper wells, faster. The new well depth expands the zones of usable geothermal energy, making qualified geothermal generation sites nearly ubiquitous.
- Technology is protected by traditional IP rights.

Project Participants

- **Aidlin Operating Company, LLC (AOC)** - Developer and Operator of the Incline Geothermal Plant. AOC is a Nevada Special Purpose Entity (SPE) for the Project; headed by long-time local residents of Incline Village and staffed with experienced senior geothermal personnel from The Geysers and China Lake.² AOC sells the generated power, renewable energy certificates (RECs) and investment tax credits (ITCs). (*Note: Proposed Power Purchase Agreement (PPA) with NV Energy pending.*)
- **DTS Technologies, LLC (DTS)** - Proprietary Technology Solution & Implementation.³
- **Incline Village General Improvement District (IVGID)** - Landowner, Lessor and Community Partner. IVGID receives upfront and annual revenues for the life of the Project (*Note: Proposed lease submitted to IVGID by AOC.*)
- **NV Energy** - Public Utility Offtaker. NV Energy purchases the generated electric power and associated RECs and ITCs. NV Energy is a public utility which generates, transmits and distributes electric service in northern and southern Nevada. (*Note: Proposed PPA pending.*)
- **Tule River Economic Development Corporation (TREDC)** - A designated Section 17 corporation.⁴ TREDC is a tribal entity that facilitates government funding for renewable energy projects in partnership with the U.S. Government and private entities. TREDC is a direct beneficiary of these projects through proceeds that support the livelihood of the Tule River Tribe members and their community.
- **U.S. Department of Energy (DOE)** - Government funding source for community-scale geothermal projects. (*Note: Project application pending.*)

Project Site Location

An ideal site identified for the Project is in proximity to an existing NV Energy substation and IVGID's water and wastewater facilities. The Project requires the smallest above-ground footprint of any renewable power at only 10 - 25 acres.

Project Jobs

Five full-time employees per MWe

Project Timeline

24 - 36 months

Life of Plant

50 years

² The Geysers, located in Northern California, is the world's largest geothermal field with 18 geothermal power plants. China Lake, located in the western Mojave Desert area of California, is one of the top three producers of geothermal electrical power in the U.S.

³ A further description of the proposed technology solution is available upon request. Based on preliminary evaluations of the geothermal specifications and feasibility, we believe DTS's technology solution may be a good fit for the Project; however, there are alternative and/or complementary closed-loop solutions that may also be applicable.

⁴ Formed through a federal charter under Section 17 of the Indian Reorganization Act.

Project Capital

Plant Size	Cost	Service Area	Reserve Power
50 MWe	\$200MM	Incline Village	Yes
250 MWe	\$1B	Tahoe Basin	Yes

Basis: \$4MM per MW

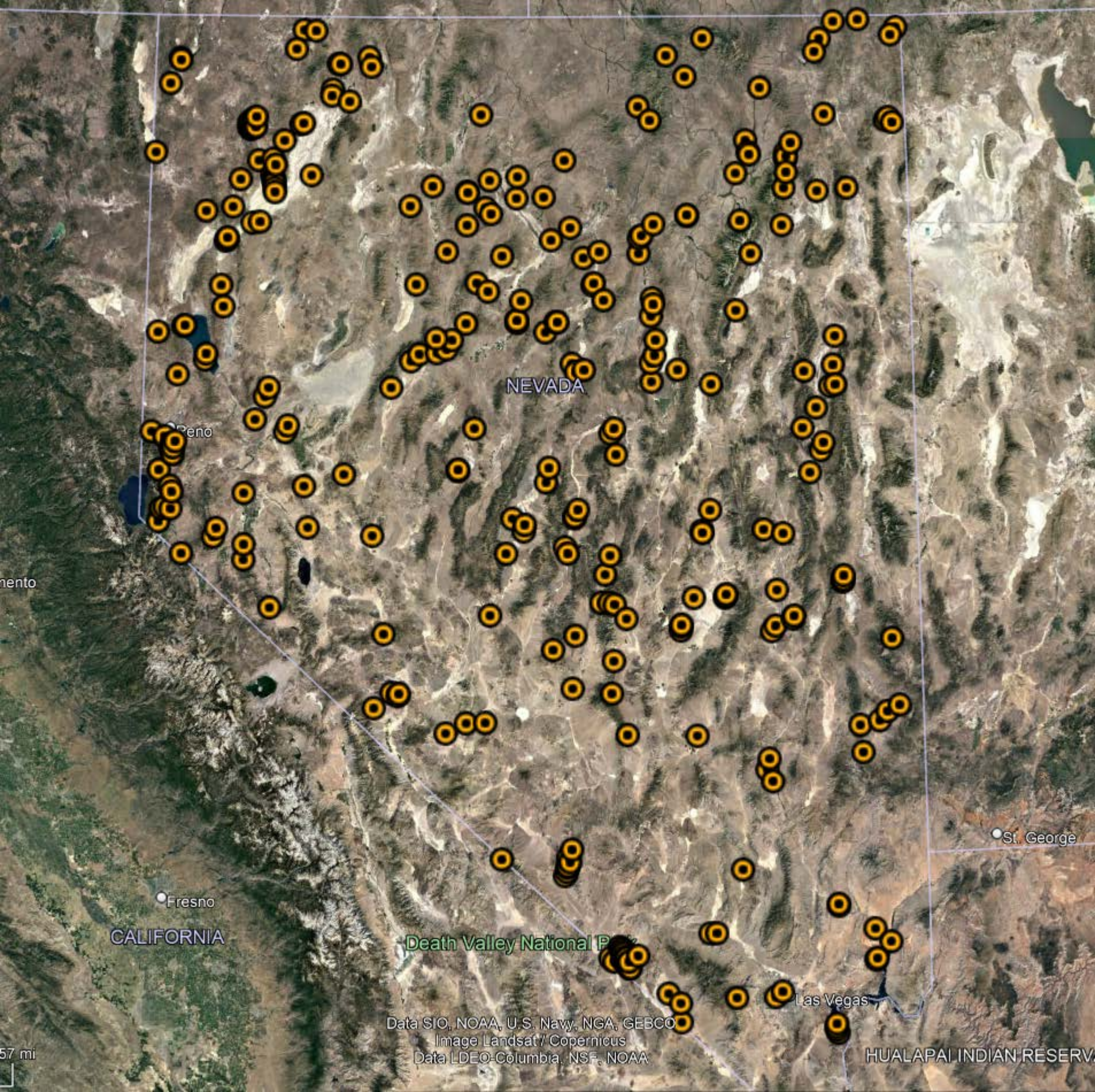
Financing derived from DOE, power purchase sales, RECs and ITCs.

Project Revenue

Plant Size	Annual Gross Revenue Power Sales	Annual Operating Costs	Estimated Annual Royalty to IVGID @ 10% gross
50 MWe	\$49MM	\$7MM	\$4.9MM
250 MWe	\$243MM	\$36MM	\$24.3MM

Basis: \$110/MWH power sales once the Project is fully commissioned and on-line.

Note: IVGID also receives additional royalties for any byproducts sold in addition to power.



NEVADA

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St. George

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CALIFORNIA

Death Valley National P

Las Vegas

HUALAPAI INDIAN RESERV

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Data LDEO-Columbia, NSF, NOAA

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