ASSIGNED

48934

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office MAR 22 1985

Returned to applicant for correction

Corrected application filed

Map filed MAR 22 1985

The applicant Trans-Pacific Geothermal Inc.

1419 Broadway, Suite 415 (Street and No. or P.O. Box No.), of Oakland (City or Town),

CA 94612 (State and Zip Code No.), hereby makes application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) Trans-Pacific Geothermal Inc., incorporated in Nevada on July 7, 1981 is Operator for TGS Associates, a Nevada Partnership established on Nov. 10, 1983.

1. The source of the proposed appropriation is the Dixie Valley geothermal reservoir located (Name of stream, lake, spring, underground or other source) at a depth of between 8000 ft. and 12,000 ft. below ground level.

2. The amount of water applied for is 2.77 sec.-ft. total flow at well head with 20% (0.55 sec.-ft.) used consumptively and 80% (2.22 sec.-ft.) reinjected into reservoir. (One second-foot equals 448.83 gals. per min.) second-feet

   (a) If stored in reservoir give number of acre-feet

3. The water to be used for generation of steam for electrical production. (Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.)

4. If use is for:

   (a) Irrigation, state number of acres to be irrigated

   (b) Stockwater, state number and kinds of animals to be watered

   (c) Other use (describe fully under "No. 12. Remarks" See No. 12, Remarks.

   (d) Power:

      (1) Horsepower developed 8 megawatts electric, 10738 horsepower equivalent.

      (2) Point of return of water to stream N/A

5. The water is to be diverted from its source at the following point Located in the NE1/4 of SW1/4, (Describe as being within a 40-acre subdivision of public survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.) Sec. 22, T24N, R36E, MDB&M; from said point the South 1/4 corner of Sec. 36, T24N, R35E MDB&M bears S 60° 10' 45" W a distance of 24,030.80 feet.

6. Place of use NE1/4 of SW1/4, Sec. 22, T24N, R36E, MDB&M. (Describe by legal subdivision. If on unsurveyed land, it should be so stated.)

7. Use will begin about Jan. 1 (Month and Day) and end about Dec. 31 (Month and Day), of each year.

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Well will be self-flowing, vertically drilled (State manner in which water is to be diverted, i.e. diversion structure, ditches and flumes, drilled well with pump and motor, etc.) to a depth of 10,000 feet. (See Exhibit A,B)

9. Estimated cost of works $2.2 million.

10. Estimated time required to construct works 90 days for drilling of well, 15 months to complete power plant.
If well completed, describe works.

11. Estimated time required to complete the application of water to beneficial use 18 months.

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

Produced hot water will be flashed to steam in a dual flash geothermal power plant for production of electricity. 80% of the produced fluid will be reinjected into the geothermal reservoir. 20% will be used consumptively through loss by evaporation in cooling tower. Total consumptive use is 0.554 sec.-ft. which is 15,955,200 cubic feet per year (366 acre-feet per year) assuming 8000 hours of operation per year.

By s/Levi Meidow President
Trans-Pacific Geothermal, Inc.
1419 Broadway, Suite 415
Oakland, CA 94612

Compared js/se js/se

Protested

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.
(CONTINUED ON Page 2)

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 2.77 cubic feet per second.

Work must be prosecuted with reasonable diligence and be completed on or before November 21, 1989

Proof of completion of work shall be filed before December 21, 1989

Application of water to beneficial use shall be made on or before November 21, 1992

Proof of the application of water to beneficial use shall be filed on or before December 21, 1992

Map in support of proof of beneficial use shall be filed on or before

Completion of work filed

Proof of beneficial use filed

Cultural map filed

Certificate No. Issued

IN TESTIMONY WHEREOF, I PETER G. MORROS State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 21st day of November, A.D. 19 86

State Engineer

218 (Rev.)

WITHDRAWN BY APPLICANT NOV 22 1993

STATE ENGINEER

(PERMIT TERMS CONTINUED)

An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2,005 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 10% of the volume withdrawn annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

This Permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined consumptive duty of geothermal fluid under Permits 36931, 41892, 41914, 41920, 41923, 41929, 43050, 43051, 43052, 43557, 46951, 47142, 47322, 47323, 48932, 48933, 48934, 48935, 49572, 49573, 49574, 49644, 49802, 49803 and 49806 shall not exceed 10,704 acre-feet annually.