

LIVINGSTON & MATTESICH

204107

DOCKET 79-AFC-4C
DATE <u>MAY 08 2001</u>
RECD. <u>MAY 25 2001</u>

08 MAY 2001

EMILIO E. VARANINI
ATTORNEY AT LAW

May 8, 2001

BY HAND DELIVERY

Charles Najarian, Compliance Program Manager
Nancy Tronaas, Compliance Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

LIVINGSTON & MATTESICH
LAW CORPORATION
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SACRAMENTO, CA 95814 -3938
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Re: *Bottle Rock Power Plant (79-AFC-4C)*
Petition for Ownership Change

Dear Mr. Najarian and Ms. Tronaas:

The purpose of this letter is to share with you the information that we provided to Chairman Keese yesterday, May 7, 2001. We hope the enclosed information will lead to the approval of the transfer of ownership from the California Department of Water Resources to Bottle Rock Power Corporation at the earliest possible date. Among the enclosed information is a comparison between the Bottle Rock Power Plant and the CCPA # 1 facilities with a particular comparison between the closure of wells, collector systems, and cooling systems.

Following are responses to the questions contained in your letter of April 27, 2001:

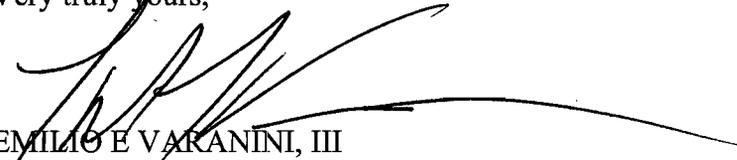
- Response No. 1: *California Laws for Conservation of Geothermal Resources* (Attachment 6)
- Response No. 2: *Final Report - Decommissioning and Cleanup Costs Estimates for Bottle Rock Power Plant* (Attachment 4). Please note that in addition to the cost estimates, the salvage value is estimated to be in the \$3.5 million (US) range.

Response No. 3: Letter dated March 9, 2001 from Oasis Oil Corporation to Gene Varanini asserting Bottle Rock Power Corporation's financial ability (Attachment 8)

I hope that this information is both helpful and will lead to a quick approval of the change of ownership. Given the need for every Megawatt available over the next several years and more particularly increasing resources for the "Green Power" market, it is particularly note worthy that these are indigenous California preferred resources which are reserved to the California market.

If I can be of further assistance, please do not hesitate to contact me. I will keep you informed of our contacts with the Commission itself and anticipate receiving further policy guidance from yourselves, the Chairman, and his Advisors.

Very truly yours,



EMILIO E VARANINI, III

EEV/hn

Enclosure

**Bottle Rock
Power Corporation**
1275 4th Street, No. 105
Santa Rosa, CA 95404

Phone: 707.541.0976

Fax: 707.546.9139

05 May 2001

Hon. William J. Keese
Chairman
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5612

RE: *Bottle Rock Power Plant (79-AFC-4C)
Petition for Ownership Change*

Dear Mr. Keese:

Thank you for agreeing to meet with us on 07 May 2001 to discuss the petition for change of ownership of the Bottle Rock Geothermal Power Plant that was filed with the Energy Commission. At issue is the determination of adequate financial assurance for the possible closure of the Bottle Rock power Plant and Steamfield if the Energy Commission approves the ownership change.

In order to assist the Energy Commission in its determination, the Bottle Rock Power Corporation herein submits the following information for the Commission's use. The Energy Commission per the 27 April 2001 letter from Nancy Tronaas to Emil Varanini requested portions of these attachments:

- Comparison Table of Physical Parameter for CCPA No. 1 and Bottle Rock
- Plant Reclamation Cost Summary for Bottle Rock Decommissioning
- Plant Reclamation Letter to Bottle Rock Addressing Decommissioning Cost
- Dames & Moore Decommissioning and Cleanup Cost Estimates for Bottle Rock
- P G & E Company Retirement and Restoration Costs for Geyser Power Plant
- California Law for Bonding of Wells – Public Resources Code §§ 3723.5 to 3729
- ThermaSource, Inc. Closure and Abandonment Costs for CCPA No. 1
- Oasis Oil Corporation of 09 March 2001 Asserting Bottle Rock Financial Ability

Bottle Rock Power Corporation believes it now has the ability and will maintain the capacity to perform financially for full and complete decommissioning of the Bottle Rock Power Plant and Steamfield.

In the event the Energy Commission will need additional information for its determination, Bottle Rock Power Corporation will respond as fully and quickly as possible.

Respectfully,



Ronald E. Suess, JD
President
Bottle Rock Power Corporation

Attachments

COMPARISON TABLE
PHYSICAL PARAMETERS

**Central California Power Agency No. 1
Geothermal Facility
and
Bottle Rock Geothermal Power Plant**

May 05 2001

COMPARISON TABLE

Central California Power Agency No. 1 Geothermal Facility and Bottle Rock Geothermal Power Plant

<u>Project Area</u>	<u>CCPA</u>	<u>Bottle Rock</u>
• Total Acreage:	±1,500 acres	±350 acres
• Roads (paved):	±12 miles	±2.5 miles
• Roads (unpaved):	±8 miles	±1.5 miles
 <u>Power Plant</u>	 <u>CCPA</u>	 <u>Bottle Rock</u>
• Generation Capacity:	132 mw _e	55 mw _e
• Plant Site Acreage:	8.3 acres	3.5 acres
• Out Building Acreage:	11.5 acres	1.5 acres
• Out Buildings (total):	3 buildings	1 building
 <u>Steamfield</u>	 <u>CCPA</u>	 <u>Bottle Rock</u>
• Well Pads:	18 pads	3 pads
• Pad Sumps:	17 sumps	3 sumps
• Pad Area (total):	37.4 acres	13.3 acres
• Access Road Acreage:	±60 acres	±5.8 acres
• Wells, Production:	19 wells	12 wells
• Wells, Injection:	3 wells	2 wells
• Wellhead Vertical Change:	±1,200 feet	±500 feet
• Steam Pipeline (total):	±32,000 feet (6 mi.)	±10,400 feet (2 mi.)
• Injection Pipeline (total):	±7,000 feet (1.3 mi.)	±2,640 feet (0.5 mi.)
 <u>Closure Cost Differential</u>	 <u>CCPA</u>	 <u>Bottle Rock</u>
• Dollar Amounts:	\$12.5 million (est.)	\$5.0 million (bond)

NOTE: CCPA data taken primarily from Closure and Restoration Plans. Bottle Rock data taken from the various Site Assessments, Engineering Data Books, and other sources.



PLANT RECLAMATION

BOTTLE ROCK PLANT

THE GEYERS

LAKE COUNTY

NEW WORK & COST STUDY

April 19, 2000

REGULATORY COMPLIANCE COSTS	
CEC Closure Plan	-0-
Lake County Reclamation Plan	-0-
Lake county Grading Permit	-0-
CEC Biological Monitoring (3 Years)	-0-
REGULATORY COMPLIANCE SUBTOTAL	
DECOMMISSIONING PROJECT TOTAL	2,635,000



PLANT RECLAMATION

May 4, 2001

Bottle Rock Power Corp.
1275 4th St. - No. 105
Santa Rosa, Ca 95404

Attn: Ron Suess, JD
President

Dear Ron:

As per your inquiry of the removal of C.C.P.A. facility in the Kelseyville area of the California Geysers in Sonoma County the following is a description of the plant.

The power plant consists of two 66 MW rated, low pressure (115 psia), geothermal steam turbines supplied by Toshiba. Each 66 MW turbine generator has an associated tube and shell condenser, non-condensable gas removal system and 10 cell, forced draft cooling tower. A transmission switchyard is adjacent to the turbine generator building which utilizes a separate 13.8 KV to 230 KV step-up transformer for each unit. Both units share a common hydrogen sulfide emission control system including both a Stretford process and a DOW incinerator.

The steam leaseholds include over 2,225 acres. There are 22 wells and over 32,000 feet of pipeline used to supply steam to the power plant.

The generating facility is connected to the PG&E 230 KV geothermal transmission collector line via a 1.7 mile double circuit transmission tapline.

Appurtenant facilities include service buildings, shop facilities, and warehouses located at the plant site and steamfield.

Attached is a list of the equipment removed from the C.C.P.A. plant.

If you compare the C.C.P.A. plant to the Bottle Rock facility a conservative estimate would be Bottle Rock removal cost should be about fifty percent (50%) or less compensatory to site remediation requirements.

The 6 plus miles of steam pipe at C.C.P.A. is considerably more than Bottle Rock.

In a dismantling and site clearance proposal, a contractor would supply you with a formal work procedure of how he would secure and leave work site.

Also, convenient accessibility to Bottle Rock site is a cost factor.

I am sure you have your own detailed list of equipment and structures etc. at Bottle Rock.

I hope this information is what you require, please feel free to request if I can be of any additional assistance.

Sincerely,



Bill Glueck, C.E.O.

BG/cs

SUMMARY EQUIPMENT LIST

<u>Unit</u>	<u>Manufacturer</u>	<u>Specifications</u>
2	Toshiba	66.270 MW Turbine Generators & Auxiliary Equip Generator: 13.8 kv; 3600 rpm; 2 Pole; 3389 Amp; 60 Hz; .9 PF 81 MVA Rating; Hydrogen/Water cooled Steam Turbine: Single Cylinder, Double Flow, Impulse, Condensing Rated Output: 66270 kw Steam Pressure: 115 psia Steam Temperature: 348° F. Exhaust Pressure: 1.75 in. Hg abs. Rated Speed: 3600 RPM
2	Hitachi Limited	Generator Breaker Synchropuffer S.F. Gas Circuit Breaker Type FPTB-20XD-80PA Rated Maximum Voltage: 15.5 kv Rated Maximum Current: 4000 Amps
2	Fuji	Electric Transformers, 3-Phase, 60 Hz Ratings: HV LV 78,000 KVA 78,000 KVA Voltage Rating: 230 KV 13.8 K Current Rating: 196 amps 3381 amps 8.52% Impedance Ynd1 Standard ANSI C57.12.00-1980
2	HVB	SF6 Gas Circuit Breakers Type HVB-242-31500-1 Max Voltage: 242 KV Rated Voltage Range Factor: 1.0 Rated Continuous Current: 2000 Amps 60 Hz
2	Westinghouse	Electric Transformers 3-Phase, 60 Hz Type: SL 13,800 Volt 4160 Volts GRD Y

1	Consolidated Controls	Distributed Control System - Mini Vax Computers - Digital Equipment Computers
2	Graham	Turbine Exhaust Condenser Tube and Shell Design Absolute Pressure @ Steam Inlet 2.11 in. HgA Turbine Exhaust Flow: 880,000 #/hr. Circulating Water Flow: 100,000 gpm Inlet/Outlet Water Temp: 78/93.4° F. Water Pressure Loss: 15.1 psi Material: 304 SS With Titanium Tubes
2	Marley	Cooling Towers Model 6615-5-10 360 HP6-10 Fans at 113 BHP/115 RPM Design - 110,105 GPM at 96-78-67 DB87 Updated Fan Hubs 480 V, 3-Phase Motors
6	Byron Jackson	Vertical Shaft Circulating Water Pumps 33,333 GPM 705 RPM With Hitachi Motors 900 HP 4160V 3-Phase
6	Kubota	Vertical Mixed Flow Pumps (Service Water) 114 Ft. Total HD 893 RPM 8000 GPM 300 HP With Toshiba 4160 3-Phase 300 HP Motors
4	Transamerica Delaval	Multi-Stage Gas Compressors Type 9BK52 9 Stages 652 HP, 6000 RPM, with Speed Increase Gear Box, Siemens Allis Motor Driver Rated at 900 HP, and Auxiliary Equipment Including Lube Oil Supply Skid and Associated Coolers
2	Horton	Fire Water Storage 192,500 Gal. 32 Ft. Diameter 35 Ft. Height

1	Fairbanks Morse	Diesel Driven Fire Pump 3000 Gal. at 120 PSI 420 HP 3406 Caterpillar Diesel 1770 RPM
1	Metron	Fire Pump Control Panel Model FD2 - BFJNP 460/120 Volt AC 24V DC Nag Grnd
1		Diesel Fuel Storage Tank 500 Gal. Approx With Stand
1	Fairbanks Morse	Electrical Driven Fire Pump 2500 GPM at 125 psig Single Stage - Horizontal
2		Domestic Water Storage Tanks Resin: ATEAC 400 Weight Empty 3500 lb. Weight Full H ₂ O 100,000 lb.
4	Kubota	Vertical Mixed Flow Pumps & Motors 1250 GPM 97.5 Ft. Total Head 1755 RPM 480 Volt 3-Phase 50 HP
4	Nagle	Cantilever Pumps 316 L S/S 200 GPM 100 Ft. Total Head Motor 480 Volt 3-Phase 1800 RPM 15 HP
1	Riley-Beaird Inc.	Propane Skid Tank 4517 Gal. Capacity With Electric Vaporizer
2	Ingersoll-Rand	Horizontal Reciprocating Oil-Less Air Compressors 720 RPM 2 Stage 150 psig Discharge Press

2	Ingersoll-Rand	Air Dryers Automatic Desicant
3	Trane	HVAC Units Model 6929 Includes Fans, Condensers, Compressors & Controls Fan Model 1-33F
1	P&H	Bridge Crane 55 Ton/15 Ton Serial #C29132
1	Ershigs, Inc.	Component Cooling Water Surge Tank Fiberglass 630 Gal. Capacity
1	Goulds (NEW)	Horizontal Pump & Motor Skid Mount 316 S/S 1233 GPM 25 HP 50 Ft. Total HD 1180 RPM 480 Volt 3-Phase
2	Chicago (NEW) Blower Corp.	Blower With Motor Skid Mount Axial Centrifugal EQP III-XS Toshiba International Motors 480 Volt 3-Phase 125 HP
3	Aerzen	Blowers Positive Displacement Rotary Maximum Allowable Working Press 45 psig 250 HP 4160 Volt 3-Phase 60 Hz
1	KTI	Evaporative Cooler 1288 GPM Hot Inlet 95° F. Cold Inlet 87.8° F. Evaporative Loss 10.5 GPM

3	Goulds	Horizontal Centrifugal Pump & Motor 4350 GPM 84.9 psig 1180 RPM 333 HP 4000 Volt 3-Phase 300 HP Motor
1	Bulk Material Sys	Soda Ash Silo With Screw Conveyor 8 Ft. Diameter 25 Ft. Height
1	Filtration Sys Tech	Filter Press Model VP-50-2(4) Verti-Press Complete With Associated Pumps, Compressors, and Tanks

Tanks

20,000 Gal Horizontal Stainless Steel Peroxide Supply & Storage Tank

Stretford

4 Second Stage Oxidizer Tanks	
4207 Cu. Ft.	4 First Stage Oxidizer Tanks
13 Ft. Diameter	4733 Cu. Ft.
32 Ft. Height	13 Ft. Diameter
2 Slurry Tanks 36 Ft. Height	
3418 Cu. Ft.	
10 Ft. Diameter	
20 Ft. Height	

Fire Protection System

1	Chemtron	Cardox CO2 System Tank, Compressor, Etc. 6 Ton
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DAMES & MOORE

**Final Report
Decommissioning and Cleanup
Cost Estimates**

Bottle Rock Power Plant

**Summary of Cost Estimates
Decommissioning Scenarios**

Table 1

November 5, 1996

**TABLE 1
SUMMARY OF COST ESTIMATES FOR DECOMMISSIONING SCENARIOS**

POWER PLANT	Scenario 1 / 2¹	Scenario 3	Scenario 4
Mobilization and Management	\$279,309	\$279,309	\$279,309
Above Ground Demolition			
Cooling Towers	\$149,625	\$149,625	\$149,625
Power plant building	\$807,344	\$807,344	\$807,344
Turbine Building Cleaning	\$10,000	\$10,000	\$10,000
Concrete Walks & Paving	\$47,414	\$47,414	\$47,414
Concrete Crushing	\$96,453	\$96,453	\$96,453
ABG SUBTOTAL	\$1,110,836	\$1,110,836	\$1,110,836
Below Ground Restoration			
Power Plant Building	\$507,315	\$507,315	\$507,315
Cooling Tower	\$147,393	\$147,393	\$147,393
BG SUBTOTAL	\$654,708	\$654,708	\$654,708
DEMOLITION SUBTOTAL	\$1,765,544	\$1,765,544	\$1,765,544
Site Restoration			
Grading	\$257,198	\$257,198	\$257,198
Revegetation	\$40,000	\$40,000	\$40,000
RESTORATION SUBTOTAL	\$297,198	\$297,198	\$297,198
Salvage/Sale Values (included above)			
Sale of Power Plant for Reuse	\$0	(\$3,500,000)	(\$3,500,000)
SALVAGE SUBTOTAL	\$0	(\$3,500,000)	(\$3,500,000)
POWER PLANT TOTAL	\$2,342,051	(\$1,157,949)	(\$1,157,949)
WELL FIELD			
Mobilization and Management	\$83,566	\$83,566	
Pipeline Removal			
Above Grade	\$96,882	\$96,882	\$0
Below Grade	\$27,105	\$27,105	\$0
PIPELINE REMOVAL SUBTOTAL	\$123,987	\$123,987	\$0
Pad Restoration			
Pad Grading	\$12,600	\$12,600	\$0
Pad Revegetation	\$59,760	\$59,760	\$0
Off-site Disposal	\$2,000	\$2,000	\$0
PAD RESTORATION SUBTOTAL	\$74,360	\$74,360	\$0

**TABLE 1
SUMMARY OF COST ESTIMATES FOR DECOMMISSIONING SCENARIOS**

POWER PLANT	Scenario 1 / 2¹	Scenario 3	Scenario 4
Road Restoration			
Asphalt Removal (Stomp/Load/Haul)	\$74,531	\$74,531	\$0
Asphalt Recycling	\$225,057	\$225,057	\$0
Road Grading	\$20,650	\$20,650	\$0
Revegetation	\$47,200	\$47,200	\$0
ROAD RESTORATION SUBTOTAL	\$367,438	\$367,438	\$0
Steam Suppliers Compound			
Miscellaneous Equipment Removal	\$0	\$0	\$0
WELLFIELD TOTAL	\$649,351	\$649,351	\$0
REGULATORY COMPLIANCE COSTS			
CEC Closure Plan	\$35,000	\$35,000	\$35,000
Lake County Reclamation Plan	\$30,000	\$30,000	\$30,000
Lake County Grading Permit	\$1,178	\$1,178	\$1,178
CEC Biological Monitoring (3 years)	\$30,000	\$30,000	\$30,000
REGULATORY COMPLIANCE SUBTOTAL	\$96,178	\$96,178	\$96,178
DECOMMISSIONING PROJECT TOTAL	\$3,087,580	(\$412,420)	(\$1,061,771)

1. Scenario 2 = Scenario 1 + 3%/year inflation rate × 15 years = \$4,829,700.

Pacific Gas & Electric Company

Retirement and Restoration Costs

**PG & E Geysers Power Plant
Units 1 & 2, Units 3 & 4, Unit 15**

April 1996

Pacific Gas & Electric Company

Geysers Power Plant Units 1 & 2, Units 3 & 4, Unit 15

Costs through April 1996

The following dollar amounts represent the costs of both the above ground and below ground removal and restoration expenses for all five retired units. Units 1 & 2 (a combined 26 megawatts) and Units 3 & 4 (a combined 58 megawatts) were tandem Units. Thus, these tandems shared common costs. Unit 15 (55 megawatts) was a singular Unit that was bigger than the tandems, and it also occupied a larger area.

It must be noted that these expenses address only the power plant removal and site restoration. Only nominal lengths of steam transmission pipe for each Unit were removed. These expenses do not include any dollars for well closures.

Pacific Gas & Electric Company provided these cost accounting data that is herein summarized.

Retirement and Restoration Cost Summary

•	Units 1 & 2	\$2,274,312
•	Units 3 & 4	\$2,065,451
•	Unit 15	\$2,556,456*

* **NOTE:** This cost was submitted for the CPUC Decommissioning Study.

CALIFORNIA LAWS FOR CONSERVATION OF GEOTHERMAL RESOURCES

**California Department of Conservation
Division of Oil, Gas, and Geothermal Resources**

JANUARY 2001

Sacramento

address, who resides in this state, to receive and accept all orders, notices, and processes of the supervisor or any court of law. Every person so appointing an agent shall, within five days after the termination of the agency, notify the supervisor, in writing, of such termination, and unless operations are discontinued, shall appoint a new agent.

Transfer notification by
seller

3722. The owner or operator of any well shall notify the supervisor or the district deputy, in writing, in such form as the supervisor or the district deputy may direct, of the sale, assignment, transfer, conveyance, or exchange by the owner or operator of such well, and the land, owned or leased, upon which the well is located, within 30 days after such sale, assignment, transfer, conveyance, or exchange. The notice shall contain the following:

- (a) The name and address of the person to whom such well was sold, assigned, transferred, conveyed, or exchanged.
- (b) The name and location of the well.
- (c) The date of the sale, assignment, transfer, conveyance or exchange.
- (d) The date when possession was relinquished by the owner or operator.
- (e) A description of the land upon which the well is situated.

Transfer notification by
buyer

3723. Every person who acquires the ownership or operation of any well, whether by purchase, transfer, assignment, conveyance, exchange, or otherwise, shall, within 30 days after acquiring the well and the land, owned or leased, upon which it is located, notify the supervisor or the district deputy, in writing, of his ownership or operation. The notice shall contain the following:

- (a) The name and address of the person from whom the well was acquired.
- (b) The name and location of the well.
- (c) The date of acquisition.
- (d) The date when possession was acquired.
- (e) A description of the land upon which the well is situated.

Bonding upon transfer

3723.5. Any person who acquires the ownership or operation of any well or wells, whether by purchase, transfer, assignment, conveyance, exchange, or otherwise, shall, within 30 days after acquiring the well or wells, file with the supervisor an individual indemnity bond in the sum of twenty-five thousand dollars (\$25,000) for each well acquired, or a blanket indemnity bond in the sum of one hundred thousand dollars (\$100,000) for any number of wells acquired. The bond shall be stated in substantially the language set forth in Section 3725.

Notice of intention to
drill

3724. The owner or operator of any well, before commencing the original drilling of a well or the redrilling of an abandoned well, shall file with the supervisor or the district deputy a written notice of intention to commence drilling, accompanied by the prescribed fee. Drilling shall not commence until approval is given by the supervisor or the district deputy. If the supervisor or the district deputy fails to give the owner or operator written response to the notice within 10 working days, such failure shall be considered as an approval of the notice and the notice shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor. The notice shall contain the following:

- (a) The location and elevation of the floor of the proposed derrick.

(b) The number or other designation by which the well shall be known. Such number or designation shall be subject to the approval of the supervisor.

(c) The owner's or operator's estimate of the depths between which production will be attempted.

(d) Such other pertinent data as the supervisor may require.

After the completion of any well, the provisions of this section, other than the requirement of the payment of the fee, shall also apply, as far as may be, to the deepening or redrilling of the well, or any operation involving the plugging of the well, or any operations permanently altering in any manner the casing of the well. The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by this section, shall not be changed without first obtaining a written consent of the supervisor.

As set forth by regulation, the appropriate fee to be filed for the drilling of a new well or the redrilling of an abandoned well, shall be twenty-five dollars (\$25), two hundred dollars (\$200), five hundred dollars (\$500), or one thousand dollars (\$1,000).

The fee shall be paid as provided in Section 3724.6.

3724.1. An owner or operator may submit to the supervisor for approval a written program to drill a shallow well or wells for temperature-gradient monitoring purposes. In order to qualify under this section, a program shall contain not more than 25 wells and the maximum total depth of each of these wells shall not exceed 250 feet. Each program submitted for approval shall include:

(a) Well numbers.

(b) Well locations and elevations.

(c) Geologic interpretation of the area under investigation, including any known or inferred temperature data.

(d) Such other data as may be required by the supervisor.

The fee required to be filed for the drilling of these shallow wells shall be twenty-five dollars (\$25) per well or two hundred dollars (\$200) per program, whichever is the lesser.

The fee shall be paid as provided in Section 3724.6.

3724.2. If, after study by the supervisor, it is determined that one or all of the wells proposed pursuant to Section 3724.1 require additional supervision, the supervisor may require that a proposal for such well or wells be submitted in compliance with all the provisions of Section 3724.

3724.3. Drilling of program wells, as described in Section 3724.1, shall not commence until approval is given by the supervisor or the district deputy. If the supervisor or the district deputy fails to give the owner or operator written response to the program within 10 working days, such failure shall be considered as an approval of the program and the program shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor.

3724.35. The supervisor may adopt regulations governing intermediate and deep wells drilled for temperature-gradient monitoring purposes. The regulations may specify the

Subsequent work

Drilling and redrilling fees

Shallow and observation well programs

Additional requirements

Approval to drill

content of any written program for the wells drilled for that purpose to be submitted to the supervisor for approval, the amount of the fee, if any, to be filed for each intermediate or deep well drilled or for each program, and any other matter deemed necessary by the supervisor.

Confidential status

3724.4. The proposal, and all other data submitted as required by Sections 3724.1, 3724.2, and 3724.3, shall be maintained in a confidential status as provided for in Section 3752.

Annual well fee

3724.5. To provide funds for the supervision of geothermal resource wells, the supervisor shall establish an annual well fee, and penalties for late payment, to be applied on an equal basis to all wells as provided under this section.

The annual well fee shall be imposed upon each producing, service, and idle well that existed at any time during the calendar year preceding the statewide fee-assessment date. However, the annual well fee shall not be imposed on any temperature-gradient or observation well, irrespective of its depth, and any low-temperature well, including any well drilled for the purpose of filling a hot water spa or pool intended for human immersion, or any well for which the supervisor has approved suspension.

The annual well fee shall be established so that the sum of the annual well fees plus the estimated sum of those well permit fees provided in Sections 3724 and 3724.1 and pursuant to any regulation adopted under Section 3724.35 are equal to the appropriation for the supervision of geothermal resource wells as provided in the Governor's Budget. The establishment of the annual well fee shall take into account any budget adjustments for actual expenditures in the current and prior fiscal years. Any budget change proposal for support of the provisions of this chapter shall be submitted by the supervisor to geothermal operators for review and comment. A system for determining the fee and penalties and administering the fee and penalty collection shall be adopted by the supervisor by regulation after public hearing.

Paying permit fees and annual well fees

3724.6. The permit application fees established in Sections 3724 and 3724.1 shall be made payable by the operator to the Department of Conservation, and the annual well fee established in accordance with Section 3724.5 shall be made payable to the Treasurer. The proceeds from the permit applications and the annual well fees shall be deposited in the General Fund, and shall be available for appropriation exclusively for the supervision of geothermal resource wells.

Individual bonds

3725. Every person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of any well, except a low-temperature geothermal well, shall file with the supervisor an individual indemnity bond in the sum of twenty-five thousand dollars (\$25,000) for each well drilled, redrilled, deepened, maintained, or abandoned. The bond shall be filed with the supervisor at the time of the filing of the notice of intention to drill, redrill, deepen, maintain, or abandon, as provided in Section 3724 or 3724.1. The bond shall be executed by the person, as principal, and by an authorized surety company, as surety, conditioned that the principal named in the bond shall faithfully comply with all the provisions of this chapter, in drilling, redrilling, deepening, maintaining, or abandoning any well or wells covered by the bond, and shall secure the state against all losses, charges, and expenses

incurred by it to obtain such compliance by the principal named in the bond.

The conditions of the bond shall be stated in substantially the following language:

“If _____, the above bounden principal, shall well and truly comply with all the provisions of Chapter 4 (commencing with Section 3700) of Division 3 of the Public Resources Code and shall obey all lawful orders of the State Oil and Gas Supervisor, or his or her district deputy or deputies, if not appealed as provided in that chapter, or upon affirmation thereof by the Director of Conservation, if appealed thereto, and shall pay all charges, costs, and expenses incurred by the supervisor or his or her district deputy or deputies in respect of the well or wells or the property or properties of the principal, or assessed against the well or wells or the property or properties of the principal, in pursuance of the provisions of that chapter, then this obligation shall be void; otherwise, it shall remain in full force and effect.”

Bond language

3725.5. Any person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of any low-temperature well, as defined in Section 3703.1, shall file with the supervisor an individual indemnity bond in the sum of two thousand dollars (\$2,000) for each well less than 2,000 feet deep, ten thousand dollars (\$10,000) for each well 2,000 feet deep or deeper, but less than 5,000 feet deep, fifteen thousand dollars (\$15,000) for each well 5,000 but less than 10,000 feet deep, or twenty-five thousand dollars (\$25,000) for each well 10,000 or more feet deep. The bond shall be filed with the supervisor at the time of the filing of the notice of intention to drill, redrill, deepen, maintain, or abandon, as provided in Section 3724 or 3724.1. The bond shall be executed by such person, as principal, and by an authorized surety company, as surety, and shall be in substantially the same language and upon the same conditions as provided in Section 3725, except as to the difference in the amount.

Bonding low-temperature wells

3726. Any person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of one or more wells at any time, may file with the supervisor one bond for one hundred thousand dollars (\$100,000) to cover all his operations in drilling, redrilling, deepening, maintaining, or abandoning of any of his wells in this state in lieu of an individual indemnity bond for each such operation as required by Section 3725 or 3725.5. The bond shall be executed by such person, as principal, and by an authorized surety company, as surety, and shall be in substantially the same language and upon the same conditions as provided in Section 3725, except as to the difference in the amount.

Blanket bond

3728. Any individual or blanket indemnity bond issued in compliance with this chapter may, with the consent of the supervisor, be terminated and canceled and the surety be relieved of all obligations thereunder when the well or wells covered by such bond have been properly abandoned or another valid bond has been substituted therefor. Should the person who has filed a blanket bond properly abandon a portion of his wells covered by the bond, the bond may, with the consent of the supervisor, be terminated and canceled and the surety be relieved of all obligations thereunder upon the filing by such person of an individual bond for each well which he is still engaged in drilling, redrilling, deepening, maintaining, or abandoning. Liability as to individual wells that have been drilled and abandoned under a blanket bond may also be terminated with the consent of the supervisor.

Bond termination and cancellation

Cash bonds (see
Pertinent Excerpt 995.710)

3728.5. In lieu of the bond required by Sections 3723.5, 3725, 3725.5, and 3726, a deposit may, with the written approval of the supervisor, be given pursuant to Article 7 (commencing with Section 995.710) of Chapter 2 of Title 14 of Part 2 of the Code of Civil Procedure, other than a deposit of money or bearer bonds or bearer notes.

Abandonment defined

3729. For the purposes of Section 3728, a well is properly abandoned when it has been shown to the satisfaction of the supervisor that all proper steps have been taken to protect underground or surface water suitable for irrigation or farm or domestic purposes from the infiltration or addition of any detrimental substance, and to prevent the escape of all fluids to the surface.

Well records

3730. The owner or operator of any well shall keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well.

Log contents

3731. The log shall show the character and depth of the formation passed through or encountered in the drilling of the well, the amount, size and weight of casing used, and particularly the location, depth and temperature of waterbearing strata, together with the temperature, chemical composition, and other chemical and physical characteristics of fluid encountered from time to time, so far as ascertained.

Core record

3732. The core record shall show the depth, character, and fluid content of cores obtained, so far as determined.

History

3733. The history shall show the location and amount of sidetracked casings, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, the results of production and other tests during drilling operations, and completion data.

Log and tour reports;
inspection

3734. The log shall be kept in the local office of the owner or operator and, together with the tour reports of the owner or operator, shall be subject, during business hours, to the inspection of the board, the supervisor, or the district deputy.

Filing records

3735. Upon the completion or abandonment of any well or upon the suspension of operations upon any well, true copies of the log, core record, history, and, if made, true copies of all electrical, physical, or chemical logs, tests, or surveys, in duplicate and in such form as the supervisor may direct, shall be filed with the district deputy within 60 days after such completion or abandonment. Like copies shall be filed upon the recompletion of any well.

Filing records on request

3736. The owner or operator of any well, or his local agent, shall file with the supervisor a copy of the log, history, and core record, or any portion thereof, at any time after the commencement of the work of drilling any well upon written request of the supervisor, or the district deputy. The request shall be signed by the supervisor, or the district deputy, and served either personally, or by mailing a copy of the request, by registered mail, to the last known post office address of the owner or operator, or his agent.

Central California Power Agency No. 1 Geothermal Facility

Steam Production Wells Closure and Abandonment Costs

Data Provided by ThermaSource, Inc.

May 04 2001

Central California Power Agency No. 1 Geothermal Facility

Steam Production Wells Closure and Abandonment Costs

Costs

- Number of Production Wells: 20 wells
- Cost of Closure and Abandonment: \$2.217 million
- Range of Costs: \$80k to \$300k
- Cost, Arithmetic Mean: \$130,850 (per well)
- Number of Injection Wells: 2 wells
- Cost of Closure and Abandonment: \$324,000 (total)
- Cost, Arithmetic Mean: \$162,000 (each)

Costs – Projected for Bottle Rock

- Number of Production Wells: 10 wells
- Cost of Closure and Abandonment: \$1.308 million
- Number of Injection Wells: 2 wells
- Cost of Closure and Abandonment: \$324,000 (total)
- Total Cost (estimated): \$1.632 million

NOTE: Source of data provided by ThermaSource, Inc., the vendor who performed well closure work for CCPA.

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Oasis Oil Corporation

March 9, 2001

Gene Varanini
Livingston & Mattesich Law Corporation
1201 K Street, Suite 1100
Sacramento, CA 95814

Dear Mr. Varanini;

This letter is intended to answer questions relating to technical and financial capabilities of Bottle Rock Power Corporation and how those capabilities will be implemented to assure performance of start up and operation of the Bottle Rock Power Plant.

Resco, in September of 1999 entered into an agreement with DWR to evaluate and option the purchase of BRPP and the transfer of the related Francisco steam field. Shortly, thereafter Resco formed a new California corporation, "Bottle Rock Power Corporation", to purchase and operate the plant and steam field and sold 88% of the stock in BRPC to two wealthy individual investors. The net worth of the two investors is in the middle eight figures and gives BRPC the capability to develop the steam field and work over the plant on their own. The remaining 12% is split equally with Ron Suess and Louis Capuano. Suess and Capuano together have over 50 years experience in the geothermal industry. Most of this experience is in the geysers area. Capuano is past president of the Geothermal Resources Council and has the reputation of being one of the best geothermal engineers in the world. Suess worked with P.G.& E. for over 30 years in the geothermal area.

In September of 2000, the two investors entered into an agreement with Oasis Oil Corporation and International Group, Inc., IGI, an acquisition corporation, to purchase their 88% ownership in BRPC.

Upon completion of the purchase, Bottle Rock Power Corporation will own Bottle Rock Power Plant and the Francisco steam field. Eighty-eight percent of BRPC will be owned by Oasis Oil Corporation, a public company, and 12% of BRPC will be owned by Capuano and Suess.

Oasis/IGI has arranged financing to purchase 88% of BRPC and put the plant back into service. There are two steps: 1st, rework the plant and eleven of the 15 wells. This should take six months and about 16 million dollars; 2nd, increase production by making the plant turbine more efficient, opening the remaining wells and horizontally drill several wells and putting 50% or more of the produced water back into the formations. An additional fourteen million dollars is available for this work.

Upon the completion of the work described above, there will be adequate income to service debt and make a profit by reopening Bottle Rock Power Plant. It is believed that the first phase will allow BRPP to produce 20 to 25 MWH and the completion of the second phase will increase the production to 45 to 55 MWH.

If there is additional information required, please call and we will quickly reply.

Very Sincerely,

A handwritten signature in black ink, appearing to read 'C. Arlie Beane', written in a cursive style.

C. Arlie Beane, President