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FILED

JUN 26 2015

SUPERIOR COURT OF CALIFORNIA
COUNTY OF MONO
BY _____

SUPERIOR COURT FOR THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF MONO

MAMMOTH COMMUNITY WATER
DISTRICT,

Petitioner,

vs.

GREAT BASIN UNIFIED AIR POLLUTION
CONTROL DISTRICT, a public agency;
BOARD OF DIRECTORS OF THE GREAT
BASIN UNIFIED AIR POLLUTION
CONTROL DISTRICT; and THEODORE
SCHADE, Air Pollution Control Officer for the
Great Basin Unified Air Pollution Control
District,

Respondents.

ORNI 50, LLC; and DOES 1 through 20,
inclusive,

Real Parties in Interest.

Case No. CV140076

STATEMENT OF DECISION

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INTRODUCTION

The Petition for Writ of Mandate was filed by Mammoth Community Water District (MCWD) on August 15, 2014. The petition alleges that Great Basin Unified Air Pollution Control District (Air District) violated the California Environmental Quality Act (CEQA) when it certified the Final Environmental Impact Report (FEIR) for the Casa Diablo IV Geothermal Development Project (CD IV). The CD IV developer, ORNI 50 LLC, is the real party in interest.

A hearing was conducted on April 1 and 2, 2015 and the matter was taken under submission.¹

PROJECT DESCRIPTION

CD IV would include the construction and operation of a new geothermal power plant in the Casa Diablo area adjacent to existing power plants and related facilities. The new plant would have a net capacity of 33 megawatts. Up to 16 new geothermal wells (production and injection) and conveyance pipelines would be constructed. Up to 14 of the new Wells would be located in the Basalt Canyon area which is west of US Highway 395 approximately two miles from the existing MCWD wells which supply drinking water to the residents of the Town of Mammoth Lakes.

At full capacity the Project would increase the pumping of geothermal fluids in the Basalt Canyon from it baseline rate of about 4000 gpm by about 6000 gpm. The Project operates as a closed loop system such that the water is retained within the ground.

The Project is in response to the state establishing a Renewable Portfolio Standard Program with the goal of increasing renewable energy in California's electricity mix (Pub Res Code § 25740 et seq).

¹ There are two companion cases involving different petitioners which present similar as well as different issues. The hearings were conducted simultaneously and these cases are also under submission and require separate decisions.

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PETITIONER'S CONTENTIONS

I.

The Air District Abused its Discretion in Certifying the FEIR
Based on Determination of no Significant Impact on Groundwater
Quality or Quantity not Supported by Substantial Evidence
(Pub Res Code § 21168; *Uphold Our Heritage v. Town of
Woodside* (2007) 147 Cal.4th 587).

II.

The Air District Abused its Discretion when it Based its Decision
on Numeric Modeling not Adequately Described in the FEIR.

III.

The FEIR does not Adequately Respond to Petitioner's Comments
on the DEIR (14 CCR § 15088(a); *Santa Clarita Organization for
Planning the Environment* (2003) 106 Cal.App4th 715).

IV.

The FEIR Improperly Relies on an Inadequate Monitoring Plan
Regarding Protection of Groundwater Resources
(Pub Res Code § 21081.6).

V.

The Air District Abused its Discretion by Certifying the FEIR
Without Exercising its Independent Judgment
(14 CCR § 15084(d)(e)).

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VI.

The Air District Abused its Discretion when it Filed its CEQA
Notice of Determination for the Proposed Project
(Pub Res Code § 21108, 21152).

STANDARD OF REVIEW

Public Resources Code § 21168 states that a writ of mandate seeking to set aside the determinations of an agency under CEQA shall follow the provisions of CCP § 1094.5.

In any such action the court shall not exercise independent judgment on evidence but shall only determine whether the act or decision is supported by substantial evidence in light of the whole record.

"The reviewing court must resolve reasonable doubts in favor of the administrative findings and decision" *Topanga ASSN for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506,514). "A Court may not set aside an agency's approval of an EIR on the grounds that on opposite conclusion would have been equally or more reasonable" (*Laurel Heights Imp. ASSN v. Bd of Regents* (1988) 47 Cal.3d 376, 393). Petitioner has the burden of proving that the EIR is inadequate (*Santa Monica Baykeeper v. City of Malibu* (2011) 193 Cal.App4th 1538). The public agency's determinations in the EIR are supported by substantial evidence if there is "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached" (14 CCR § 151834(a); *Laurel Heights Imp. ASSN v. Bd of Regents* supra 47 Cal.3d at p 393).

DISCUSSION

I.

Substantial Evidence Supports the Finding of no Significant
Impact on Groundwater Quantity or Quality.

In concluding that the groundwater impacts, as it relates to MCWD operations, if any, from project operations will be insignificant, the FEIR relied upon the following five lines of evidence:

- 1 1. Geologic features that physically separate the geothermal reservoir from the
- 2 groundwater resources.
- 3 2. Lack of response in the shallow groundwater wells to pressure changes in the
- 4 geothermal reservoir.
- 5 3. The chemical signatures of the water in the reservoir as compared to the
- 6 groundwater aquifer.
- 7 4. Temperature differentials.
- 8 5. Isotope data indicating different recharge sources for the reservoir and aquifer.

9 The critical inquiry as to the Project's potential for groundwater impacts relates to the issue
10 of evidence of hydrologic connections between the non--thermal groundwater and the geothermal
11 reservoir. The FEIR concludes that:

12 Available evidence indicates that the shallow Mammoth
13 Groundwater Basin is physically isolated from the deeper
14 geothermal system. Because these two symptoms are separate, the
15 CD IV Project would be unlikely to affect the availability or quality
16 of shallow groundwater. No effects on the shallow cold water basin
17 have been observed during monitoring of the 27 years of operation
18 of the existing Casa Diablo facilities. Further, even if there are
19 connections, the forecast pressure declines are unlikely to cause
20 adverse impacts to the overlying groundwater system. In addition,,
21 producing from the deeper Basalt Canyon geothermal reservoir
22 proposed under the CD IV project would have less potential to
23 adversely affect shallow groundwater resources (AR-A-6158-59).

24 This conclusion of separation is based on the aforementioned five lines of evidence
25 compiled by multiple experts in their respective fields of inquiry.² Peer reviews of the analysis

26
27 ² It is interesting to note that MCWD's expert, John Wildermuth, opined in
28 2009 that the two systems are separated by an impermeable bedrock (AR-A-803,
A-1709).

1 clearly support the original conclusion of no connectivity (AR-B-1146). A peer review report
2 prepared by Dr. Sabohd Garg is notable in the following quotation:

3 The groundwater aquifer is hosted by Glacial Till interbedded with
4 basalt andesites west of Highway 395 the latter formation is
5 separated by an unconformity from the underlying Early Rhyolites
6 (production zone for Casa Diablo wells). The location of the
7 unconformity (and hence thickness of the Glacial Till or alluvium)
8 is less certain east of Highway 395. The unconformity provides an
9 impermeable barrier between the groundwater aquifer (west of Hot
10 Creek gorge) and the underlying geothermal reservoir. Additional
11 support for the latter hypothesis is provided by stable water isotope
12 and fluid chemistry data (AR-D-199).

13 Dr. Garg goes on to state that:

14 ... It is clear from differences in chemistry, depths, and temperature
15 that the systems are not comingling in the vicinity of the MCWD
16 drinking water wells (AR-D-179).

17 A careful review of Appendix D of the FEIR clearly demonstrates that there is substantial
18 evidence for the Air District's findings of no impact on MCWD's groundwater aquifer.³ Despite
19 MCWD's contentions to the contrary, the administrative record demonstrates a thorough and
20 exhaustive study by various experts based on complete data from the past decades to the present.

21 ³ The Geologic and Geothermal Resources Technical Report states: "chemical,
22 thermal and isotopic data provide no consistent evidence of hydrologic
23 connections between service waters, cold groundwater and thermal waters
24 beneath the western part of Long Valley Caldera (Sorey 2011). If there is no
25 hydraulic connection between the shallow cold groundwater and surface waters
26 in that area, the potential changes in the geothermal reservoir related to
27 exploitation for power generation cannot affect the shallow cold groundwater
28 systems" (AR-B-17694).

1 These studies include, contrary to Petitioner's assertions, extensive research in the Basalt Canyon
 2 area including borings within the MCWD well field (AR-A-304), fault location and analysis (there
 3 are no faults in the subject area; AR-A-314), analysis and opinion regarding higher water
 4 temperatures in certain MCWD wells⁴, tree kills⁵, and groundwater aquifer drawdown.⁶

5 Given the mandatory standards of review the Court must follow:

6 Our California Supreme Court has cautioned reviewing courts
 7 against performing our own scientific critiques of environmental
 8 studies, a task for which we have neither the resources nor scientific
 9 expertise. Our duty is not to pass on the validity of the conclusions
 10 expressed in the EIR, but only on the sufficiency of the report as an

11 ⁴ In order for the elevated temperatures to be the result of mixing, the
 12 groundwater must display the geochemical signature of the geothermal fluids,
 13 yet there are no traces of geothermal chemistry in the MCWD well water (AR-A-
 14 8048).

15 ⁵ In discussing carbon dioxide releases in the Basalt Canyon over the decades,
 16 the "prominent tree and brush kills in the center of Basalt Canyon have been
 17 the focus points for steam and gas upflows for decades (AR-B-
 18 29168)."Isobutene has been detected in gas samples around Basalt Canyon since
 19 1995, well before the start of geothermal production from the two wells in
 20 Basalt Canyon (AR-A-1117). Actually the USGS report indicates that injection
 21 in Basalt Canyon is a means of controlling the evolution of gases by
 22 stabilizing the depths of boiling in the reservoir and, consequently,
 23 controlling the upflows of steam and CO² (AR-B- 29168).

24 ⁶ Testing revealed no resultant drawdown which would be expected if the
 25 shallow aquifer and geothermal reservoirs were connected (AR-A-306, A- 804,
 26 A-1154. Also note that cold groundwater would have to flow nearly two miles
 27 sideways and nearly 1000 feet downward through bedrock to affect the thermal
 28 water.

1 informative document. The issue is not whether the studies are
2 irrefutable or whether they could have been better. The relevant
3 issue is only whether the studies are sufficiently credible to be
4 considered as part of the total evidence that supports the findings
5 (*Eureka Citizens for Responsible Government v. City of Eureka*
6 (2007) 147 Cal.App4th 357, 372, citing *Laurel Heights ASSN v. Bd*
7 *of Regents*, supra at p 393).

8 Substantial evidence supports the adequacy of the FEIR's discussion and conclusion
9 regarding groundwater impacts.

10
11 **II.**

12 **A.**

13 **The Numeric Model is Reliable.**

14 The real party in interest commissioned Richard Holt of Geothermal Science, Inc. to create
15 a geothermal reservoir model in order to determine if it would be economically feasible to carry
16 out the CD IV Project. This model was used to forecast pressure conditions in the geothermal
17 reservoir under various production scenarios.

18 An expert peer review of the model was conducted by the aforementioned Dr. Garg and
19 others and is described in the administrative record as "a comprehensive evaluation of the
20 voluminous technical studies and monitoring data available for the Long Valley since the
21 beginning of geothermal operations (AR-A-6148)." Neither Dr. Garg or SAIC (and their peer
22 review) were selected by ORNI. In any event CEQA agencies may rely on expert opinions such
23 as those utilized in this EIR process (*Eureka Citizens for Responsible Government v. City of*
24 *Eureka*, supra; 14 CCR § 15084(a)).

25
26 **B.**

27 **The Air District Complied with the Guidelines by Excluding the Holt Report.**
28

1 Information that is a trade secret shall not be included in an EIR or otherwise disclosed by
2 the CEQA agency (14 CCR § 15120(d); Pub Res Code § 21160). Although agencies may require
3 submission of data related to a proposed project that may have sufficient effects on the
4 environment (as was certainly done in the case at bar), a proprietary report such as the Holt report,
5 based on a technological process regarding pressure changes in the geothermal reservoir under
6 various scenarios, is not subject to disclosure. In the competitive business of geothermal energy
7 generation, the process is and should be a protected trade secret that promotes technological
8 innovation. As mentioned the FEIR contains voluminous and significant data that was generated
9 by this proprietary model and the peer review process.

10 In complying with the CEQA guidelines and the Public Resources Code, the Air District
11 did proceed "in a manner required by law" (Pub Res Code § 21168.5) when it deemed the Holt
12 Model to be a trade secret and therefore excluded from the report.

14 III.

15 The FEIR Contains Adequate Responses to Comments.

16 Petitioner contends that the Air District failed to comply with CEQA requirements (14
17 CCR § 15088) when it certified the FEIR without adequately responding to MCWD's comments
18 on the DEIR.

19 Peer review of the administrative record indicates that MCWD submitted 140 comments
20 on the DEIR that were responded to (AR-A- 1708-1734; A-798 - 801; App. D; B-1146 as
21 examples). MCWD cites *Santa Clarita Organization for Planning the Environment v. County of*
22 *Los Angeles* (2003) 106 Cal.App4th 715 to support its contention of inadequate responses.
23 However a review of the facts in that case indicate that the EIR attempted to calculate the total
24 available water supply for a proposed residential/commercial development by relying on future
25 water entitlements without any attempts to "calculate or even discuss the differences between
26 entitlements an actual supply;" (*Santa Clarita supra* at p 722) a response that was deemed
27 inadequate by the Court.
28

1 In the case at bar the aforementioned administrative record of responses is replete with
2 detailed analyses which result in the establishment of substantial evidence upon which the FEIR
3 was certified (see § I of "Discussion").
4

5 IV.

6 The Monitoring Plan is not a Mitigation Requirement.

7 The criticism of the proposed groundwater impacts monitoring plan by Petitioner is
8 misplaced. The groundwater impact was appropriately determined to be less than significant (see
9 § I of "Discussion"). Therefore no mitigation measures are necessary to reduce project impacts.

10 Nonetheless a monitoring program is in place as a safeguard measure. This program is
11 substantial and requires participation by a consortium of agencies including USGS, USFS, BLM
12 and Long Valley Hydrologic Advisory Committee. Continued compliance with this monitoring
13 program, "including additional monitoring determined necessary by the LVHAC for assessment
14 of the CD IV Project would be required by the USFS and BLM as Conditions of Approval of the
15 Project" (AR-Λ-566).

16 As there was a finding of less than significant impact, this monitoring plan is outside of
17 and in addition to the CEQA process. Therefore the utilization of federal agencies in this context
18 is entirely proper.
19

20 V.

21 The Administrative Record Establishes That the Air Districts Evaluation for Certification Was
22 the Result of Independent Evaluation.

23 While Petitioner is correct in noting that no response was filed that addressed this issue
24 thus submitting the matter (*County of Butte v. Beech* (1985) 172 Cal.App3d 848), an examination
25 of the decision-making process leading up to the certification clearly demonstrates that the Air
26 District, after a thorough and exhaustive review of the voluminous data, comments and expert
27 evaluation, was able to reach its own independent conclusion as represented in the "Decision and
28 Findings" (AR-A-2).

1 While there are assertions that many if not all of the reports and studies considered by the
2 Air Districts are somehow compromised because ORNI has paid the bill, this procedure is, of
3 course, common in the development of environmental impact reports. The Court needs to evaluate
4 these reports and studies and attendant data to determine if substantial evidence supports the
5 findings and certification. There is no evidence presented to suggest that the primary consultant,
6 ESA, answered to any entity but the agencies (Air District, BLM, USFS). There is certainly
7 nothing to indicate that the certification was, in some matter, compromised at the price of exposing
8 the environment, and, particularly Mammoth Lakes' water supply to irreparable damage.

10 VI.

11 The Air District Complied with Public Resources Code §§ 21108 and 21152.

12 For purposes of CEQA and the requirements of the Public Resources Code the Project was
13 approved. However, as previously discussed (§ IV), there are conditions that are placed on the
14 Project before it can go forward.

15 The lead agency, the Air District, has made a final CEQA determination and certified the
16 FEIR. The CEQA action is complete and properly certified. The remainder of the Project has other
17 conditions and permits of approval apart from the CEQA process to further ensure protection of
18 the water supply by virtue of BLM's oversight.

19 *Collation for Clean Air v. City of Visalia* (2012) 209 Cal.App4th 408 cited by Petitioners
20 is inapposite in that it pertains to notice of exemption filing requirements pursuant to
21 14 CCR § 15026(a) (*supra* at p 423).

23 CONCLUSION


24 The science-based conclusions within the FEIR, the experts' opinions, the opinions of the
25 consultant's retained by the agencies, and the conclusions of the agencies themselves are consistent
26 in establishing substantial evidence that there is no connectivity between the deep geothermal
27 reservoir and MCWD's groundwater aquifer.

1 The Court, in according "great deference" to the agency's conclusions (*Vineyard Area*
 2 *Citizens for Responsible Growth Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435), must
 3 also note the significant investment by ORNI in the Project. It is logical to assume that such a
 4 project would be allowed to proceed if there was evidence of connectivity as this would greatly
 5 devalue if not terminate the Project outright.⁷

6 The process was proper. The findings were supported by substantial evidence the Petition
 7 for Writ of Mandate is denied.

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Dated: June 26, 2015



STAN ELLER,
 JUDGE OF THE SUPERIOR COURT,
 MONO COUNTY

26
 27 ⁷ If there is a connection, the cold water would cool the geothermal brine
 28 thus eliminating or greatly reducing the energy producing ability of the
 geothermal reservoir.

PROOF OF SERVICE

I served the foregoing document, STATEMENT OF DECISION, on the date and at the place stated below, by depositing a copy thereof, enclosed in a sealed envelope(s), first class postage prepaid, in the United States mail, addressed to each party or to his/her attorney as follows:

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Katrina C. Gonzales, Esq.
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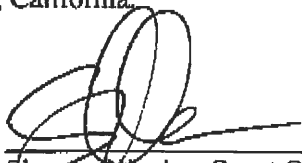
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At the time of service, I was at least 18 years of age, a United States citizen employed by the Mono Superior Court, and not a party to the action. My business address is:

P.O. Box 1037, Mammoth Lakes, CA 93546

I declare under penalty of perjury that the foregoing is true and correct, and that this declaration was executed on June 28, 2015, at Mammoth Lakes, California.



Sharon Oliveira, Court Operations Manager