

ROBIN M. MAYER  
CARYN J. HOLMES  
Counsel for California  
Energy Commission Staff  
1516 9<sup>th</sup> St., Mail Station 14  
Sacramento, CA 95814  
Ph: (916) 654-3951  
Fax: (916) 654-3843

## TABLE OF AUTHORITIES

### State Cases

<i>City of Antioch v. City Council of the City of Pittsburg</i> (1st Dist. 1986) 187 Cal.App.3d 1325, 1337 .....	11
<i>City of Long Beach v. Los Angeles Unified School Dist.</i> (2d Dist. 2009) 176 Cal.App.4th 889, 905 .....	9, 10
<i>Environmental Council of Sacramento v. City of Sacramento</i> (3d Dist. 2006) 142 Cal.App.4th 1018, 1031-1032 .....	10
<i>Gray v. County of Madera</i> (5th Dist. 2008) 167 Cal.App.4th 1099, 1127-1128.....	11, 12
<i>Kings County Farm Bureau v. City of Hanford</i> (5th Dist. 1990) 221 Cal.App.3d 692, 718, 728-730.....	11
<i>San Francisco for Reasonable Growth v. City &amp; County of San Francisco</i> (1st Dist. 1984) 151 Cal.App.3d 61, 74, 75 .....	10, 12
<i>San Franciscans for Reasonable Growth v. City and County of San Francisco</i> (1987) 193 Cal.App.3d 1544, 1547 .....	10
<i>San Francisco for Reasonable Growth v. City &amp; County of San Francisco</i> (1989) 209 Cal.App.3d 1502, 1513.....	11
<i>Terminal Plaza Corp. v. City and County of San Francisco</i> (1st Dist. 1986) 177 Cal.App.3d 892, 905.....	11

### California Statutes

#### Government Code

Sections 11400 et seq., 11425.6 .....	5
---------------------------------------	---

## **California Statutes (Continued)**

### Public Resources Code

Section 21068 .....	8
Section 21083 subdivision (b)(2) .....	9
Section 21100 subdivision (a) .....	8
Section 21100 subdivision (d) .....	8

## **California Regulations**

### California Code of Regulations

Title 14, Section 15130 .....	9
Title 14, Section 15130, subdivision (b) .....	9
Title 14, Section 15130, subdivision (b)(1) .....	9
Title 14, Section 15130, subdivision (b)(2) .....	9
Title 14, Section 15130, subdivision (d) .....	9, 10
Title 14, Section 15355 .....	9
Title 14, Section 15355, subdivision (b) .....	9

## **Federal Cases**

<i>Blue Mountains Biodiversity Project v. Blackwood</i> (9th Cir. 1998) 161 F.3d 1208, 1214 .....	13
<i>Native Ecosystems Council v. Dombeck</i> (9th Cir. 2002) 304 F.3d 886, 896 .....	14
<i>Kleppe v. Sierra Club</i> (1976) 427 U.S. 390, 414 .....	12

## **Federal Statutes**

42 U.S.C. § 4331(b) .....	13
42 U.S.C. § 4332(C) .....	12, 13

## **Federal Regulations**

40 C.F.R. § 1508.7 .....	13
--------------------------	----

**Federal Regulations (Continued)**

40 C.F.R. § 1508.25 .....	13
---------------------------	----

**Federal Register**

73 Fed. Reg. 40916, 40917 .....	7
---------------------------------	---

In the Matter of: ) Docket No. 09-AFC-8  
)  
)  
Application for Certification for )  
the Genesis Solar Energy Project )

On December 24, 2009, the applicant for the Genesis Solar Energy Project filed a Motion for Scoping Order, Hearing and Order Scheduling Time for Filing of Briefs. On January 8, 2010, the Committee issued an Order granting that Motion, and directed the parties to file briefs responding to the following questions:

- This is staff's response to the Committee Order. As noted previously, staff supports all efforts to resolve critical issues as early as possible in this proceeding. In fact, it is our interest in ensuring timely review of projects potentially eligible for federal subsidies that leads us to note that we have serious reservations as to whether this project should be permitted to use groundwater. State law and policy encouraging conservation of water create high evidentiary hurdles for such projects. We believe that our discussion

of the issues identified in the Committee Order will both underscore the difficulties associated with the use of groundwater by this project for cooling, and demonstrate why the schedule will likely be delayed if the applicant continues with its current proposal.

## **I. IEPR Water Policy**

### **A. The Basis of the IEPR Water Policy is the State's Interest in Protecting Water Resources in California when Licensing Thermal Power Plants.**

The Energy Commission first formally articulated a policy on the use of water for power plant cooling in the 2003 Integrated Energy Policy Report (IEPR). In a chapter entitled "Stewardship of California's Environment" the Energy Commission identified its concerns about power plant water use and wastewater discharge, stating "[w]ater conservation is of paramount importance to the state." (2003 IEPR, p. 40.) Referencing State Water Resources Control Board (Board) Policy 75-58 (discussed below), the IEPR states:

Consistent with the Board policy and the Warren-Alquist Act, the Energy Commission will approve the use of fresh water for cooling purposes by power plants which it licenses only where alternative water supply sources and alternative cooling technologies are shown to be "environmentally undesirable" or "economically unsound." . . . The Energy Commission interprets "environmentally undesirable" to mean the same as having a "significant adverse environmental impact" and "economically unsound" to mean the same as "economically or otherwise infeasible." (2003 IEPR, p. 41.)

Policy 75-58 (*Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling*), which was referenced by the Energy Commission in the 2003 IEPR water policy, was adopted by the Board in 1975. The purpose of this policy is:

to provide consistent statewide water quality principles and guidance for adoption of discharge requirements, and implementation actions for powerplants which depend upon inland waters for cooling. In addition, this policy should be particularly useful in guiding planning of new power generating facilities so as to protect beneficial uses of the State's water resources and to keep the consumptive use of freshwater for powerplant cooling to that minimally essential for the welfare of the citizens of the State.

One of the policy bases articulated by the Board that is particularly applicable to use of water for cooling by inland plants is as follows:

There is a limited supply of inland water resources in California. Basin planning conducted by the State Board has shown that there is no available water for new allocations in some basins. Projected future water demands when compared to existing developed water supplies indicate that general fresh-water shortages will occur in many areas of the State prior to the year 2000. The use of inland waters for powerplant cooling needs to be carefully evaluated to assure proper future allocation of inland waters considering all other beneficial uses. . . The loss of inland waters through evaporation in powerplant cooling facilities may be considered an unreasonable use of inland waters when general shortages occur.

In light of the need to protect beneficial uses, the Board adopted a principle that identified the following priority of cooling water sources, depending on site specific considerations such as environmental, technical, and economic feasibility:

- (1) wastewater being discharged to the ocean,
- (2) ocean,
- (3) brackish water from natural sources or irrigation return flow,
- (4) inland wastewaters of low TDS, and
- (5) other inland waters.

Unlike the Commission's IEPR water policy, the Board did not address alternative cooling technologies. The Board has continued to address the use of water for cooling and is currently considering a policy that will phase out the use of ocean water for cooling (the second highest priority in the list of cooling water sources). (See *Draft Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling*, November 23, 2009.) Similarly, the Energy Commission has revisited the issue of once-through cooling in subsequent IEPRs, including the report adopted in December 2009. Neither agency has adopted additional policy guidance on the use of inland waters for power plant cooling.

B. The Energy Commission Has Allowed the Use of Groundwater for Cooling in Only One Case Since Adoption of the 2003 IEPR Water Policy.

Since the 2003 IEPR water policy was formally adopted, the Commission has licensed 11 combined-cycle or solar power plants. Of these, only one has been permitted to use

groundwater for cooling -- the Blythe Energy Project Phase II (Blythe II). One simple cycle project that uses significant amounts of groundwater for inter-cooling with LMS 100 turbines was also licensed -- the Panoche Energy Center project. That is a peaking facility that operates intermittently and hence, uses less water than similarly-sized baseload facilities. All of the others are required to use either recycled water for cooling or an alternative cooling technology. Of the nine other solar thermal projects currently before the Energy Commission, only one besides the Genesis project proposes to use groundwater for cooling, and none of the other solar thermal projects in Eastern Riverside County will use groundwater for cooling. One other project using significant amounts of water for LMS 100 turbines is also proposed. In staff's experience, proposals to use extensive amounts of groundwater require significantly more time for analysis than projects that do not.

C. The Commission Has Discretion to Determine Whether an Alternative Cooling Technology or Cooling Water Source Is Feasible.

In determining compliance with the 2003 IEPR water policy, the Energy Commission needs to make two factual determinations: 1) whether the water proposed for use is fresh water; and 2) if yes, whether alternative cooling technologies or water supply options are feasible. The applicant has claimed that the Energy Commission should find that the water underlying the Genesis project is not fresh because use of groundwater was permitted in the Blythe II project.

The Blythe II project was filed in February 2002, almost two years before the adoption of the 2003 IEPR water policy. The Energy Commission applied the policy to the project by considering a number of factors in evaluating the acceptability of the proposed water use. Although it found that the water proposed for use was "marginally brackish" and did not "readily" conform to Policy 75-58, it also considered the fact that the water was initially dedicated to agricultural use, such that the water is "effectively being used twice." (Blythe II Decision, p. 245, 254.) The Energy Commission also considered the feasibility of dry cooling. In finding that dry cooling was not a feasible option, the Blythe II Decision relies, in part, on the facts that dry cooling was not compatible with the planned intermediate load operation of the facility, and that dry cooling could create thermal plume impacts at nearby Blythe airport. (*Id.* at p. 266.) In addition, although the applicant's proposed water offset program was voluntary, the Energy Commission imposed verification requirements because of "California's critical interest in water conservation." (*Id.* At 272-273.) The decision does not address the Colorado River Regional Water Quality Control Board Basin Plan or other State Water Resources



Control Board policies that offer guidance in determining the appropriate uses of groundwater. The complexity of the water issues in Blythe II was a significant factor in the time required to process the case, which was more than three years.

In addition to Blythe II, the Energy Commission has permitted one other project with a potential for significant groundwater use since the 2003 IEPR. In the Panoche Energy Center case, use of groundwater for inter-cooling LMS 100 peaking turbines was evaluated, and found to be in conformity with state water policies. This finding was based on the applicant's agreement to contribute funding to a water conservation program in an amount that would conserve approximately 9% more fresh water than the project's maximum use of groundwater. (Panoche Decision, pp. 184, 185.) Perhaps due to the fact that the issue was not contested by any party, there is no discussion of specific water policies in the decision. In addition, this project was licensed relatively quickly, exceeding the one-year licensing deadline by only one month. Neither the Blythe II nor the Panoche decisions were precedent decisions under Section 11425.6 of the Administrative Procedure Act (Gov. Code, §§ 11400 et seq.).

Review of the Blythe II and Panoche decisions demonstrates that the Energy Commission has never used a simplistic test in determining the acceptability of water for cooling pursuant to its water policy.<sup>1</sup> The Energy Commission's decision to avoid rigid interpretations of its water policy is entirely appropriate. The basis of the policy is the need to protect beneficial uses. (Water Policy 75-58, p. 3) There are isolated areas of the state that are not facing shortages, and there, it may not be necessary to protect low quality water. However, in other parts of the state, water scarcity may make it imperative to protect low quality water. In addition, given the ever-increasing

---

<sup>1</sup> Although the Energy Commission has not rendered a decision in the CPV Sentinel Energy Project case, staff expects that the project will be found in conformity with state water policy, as the record is closed and no party adjudicated this issue. In that case, the applicant's proposal to use groundwater for inter-cooling the LMS 100 turbines resulted in a significant level of analysis, and more than one year passed between data adequacy and the issuance of the Preliminary Staff Assessment. As with Blythe II, a number of factors were considered by staff in assessing the project's conformity with state water policy. After extensive negotiations, the applicant agreed to recharge the aquifer with 108% of the groundwater pumped under a precise recharge schedule. (Final Staff Assessment for the CPV Sentinel Energy Project, pp. 4.9-29, 4.9-33) The applicant has also agreed to a two-part water conservation program that will conserve fresh water in excess of the amount of groundwater permitted for cooling uses. (*Id.* at p. 4.9-60.)

challenges in providing sufficient water to Californians for domestic, agricultural, and environmental purposes, water of a given quality that may have been deemed surplus at one time may now represent an extremely valuable resource and deserve protection. The newspapers – and the courts – are replete with stories arising from the economic and environmental costs associated with water shortages, and of the need to “do more with less.”

As in the Panoche and Blythe II cases, staff will consider a number of factors in arriving at its recommendation on the Genesis project’s conformity with the 2003 IEPR water policy. They include:

- The Colorado River Regional Water Quality Control Board Basin Plan, which reiterates State Board Policy 88-68 in concluding that groundwater is considered to be suitable, or potentially suitable, for municipal or domestic water supply if the total dissolved solids (TDS) levels are 3000 mg/l or less. (*Water Quality Control Plan Colorado River Basin – Region 7*, p. 2-3.)
- State Board Policy 88-68, which states that all surface and groundwaters of the state are considered to be suitable, or potentially suitable, for municipal or domestic water supply unless, among other factors, the TDS level exceeds 3000 mg/L.
- State Board Policy 75-58, which contains two potentially relevant definitions. It defines fresh inland waters as those which are suitable for use as a source of domestic, municipal, or agricultural water supply. It also defines brackish waters as all waters with a salinity range of 1,000 to 30,000 mg/l and a chloride concentration range of 250 to 12,000 mg/l.
- The quantity and quality of water available to meet current and projected domestic, agricultural, and environmental purposes.
- The feasibility of dry cooling for this project.
- The availability of water recharge or conservation programs in which the project can participate.

Staff will give great weight to the comments of the State Water Resources Control Board and Colorado River Regional Water Quality Board, but will also consider the other factors enumerated above. Given that the state's water policies do not constitute a seamless body of principles, staff will need to collect and analyze facts about existing and proposed water uses in the area affected by the project. In addition, staff will perform an analysis of the feasibility of dry cooling. The need to conduct these assessments means that an expedited schedule for this project is unlikely. The scarcity of water in this desert region, combined with the fact that virtually all of the projects reviewed by the Energy Commission since 2003 use alternative water supplies or technologies for cooling, indicates that groundwater use for cooling is questionable and requires close scrutiny. The applicant's water proposal is not compatible with an expedited schedule.

## **II. Accounting Surface Methodology**

### **A. U.S. Bureau of Reclamation's Accounting Surface Methodology May Result in a Determination that the Genesis Project Impacts Colorado River Water, Thus Raising Reliability Questions about the Project.**

By the applicant's own analysis, the Genesis project faces two risks in regard to groundwater pumping in the Chuckwalla Valley Basin. The first is that if the basin falls into overdraft, another landowner may challenge the project's right to pump water on the basis that the amount extracted is unreasonable. (Data Adequacy Supplement 1A, Attachment I, p. 6.) The second is that the U.S. Bureau of Reclamation (BOR) may expand regulation to include wells used by the project. (*Id.* at p. 6-7.) According to the rule proposed by BOR in July 2008, the accounting surface is the area within which the BOR will apply the U.S. Geological Survey method "to determine whether water pumped from a well is replaced with water drawn from the lower Colorado River." (Dept. of the Interior, BOR, 43 C.F.R. Part 415, Regulating the Use of Lower Colorado River Water without an Entitlement; Proposed Rule, 73 Fed. Reg. 40916, 40917 (Jul. 16, 2008).) Although the 2008 rule was withdrawn, the BOR is actively working on and intends to propose a similar rule in the near future. (Telephone interview, Paul Matsuka, BOR, Boulder Canyon, Nevada (Jan. 8, 2010).)

Staff agrees that at present, the project's estimated wet-cooled pumping requirements of 1644 acre feet per year (afy) would not likely impact Colorado River water very soon. However, staff has great concern that over the life of a thirty-year project, pumping by this project and others could result in impacts to Colorado River water. If the water

surface of the project well were to fall below the BOR's accounting surface, a contract to use Colorado River water would be required. (E-mail from Gerald Zimmerman, Executive Director, Colo. River Bd. of Cal., Jan. 11, 2010.) Without such a contract, "the wells providing the water supply for [the Genesis project] could be shut down" by the BOR. (*Ibid.*)

A further risk is posed because no water may be available under contract. Of the 10,000 afy per year currently allotted to California for the Lower Colorado Water Supply Project, 5,000 are contracted for and other applicants are in line to contract for the rest. (Paul Matsuka, *supra*.) The applicant chose not to pursue a subcontract at this time. The Colorado River Board of California warns that there is a "limited window of opportunity" to acquire a legal right to use the river water, and that once those subcontracts are gone, there are "no other known opportunities available to secure a valid water contract." (Colo. River Bd. of Cal., Lower Colorado Water Supply Project Questions & Answers, at <http://www.crb.ca.gov/documents.html>.) Moreover, a Colorado River water rights holder may challenge use of lower Colorado River water as interfering with their water rights. (Data Adequacy Supplement 1A, *supra*, p. 7.)

Staff would be remiss in disregarding all these risks to the long-term reliability of the project. In order to assess the likelihood that this project (either alone or in conjunction with others) would be subject to water use restrictions, the Energy Commission will need to consider evidence concerning the long-term use and availability of water in the project area. Staff's experience in addressing similar issues in other projects is that developing an adequate understanding of this issue is not compatible with a shortened review schedule.

### **III. Cumulative Impacts Analysis under CEQA and NEPA**

#### **A. Applicant's Proposed Stipulations for What is "Reasonably Foreseeable" At Most Constitute Minimum Requirements for Cumulative Effects Analysis under CEQA.**

The California Environmental Quality Act (CEQA) requires that lead agencies consider all significant effects on the environment of the proposed project. (Pub. Res. Code, § 21100(a).) Additionally, the discussion shall include brief explanations for why a particular effect is not significant. (§ 21100(d).) A significant effect on the environment means a "substantial, or *potentially* substantial, adverse change in the environment." (§ 21068; emphasis added.) Clearly, determining what is substantial or potentially substantial requires a close examination of all relevant facts.

Analysis of cumulative effects delves a step deeper. Possible effects of a project may be “individually limited,” but “cumulatively considerable.” (Pub. Res. Code, § 21083, subd. (b)(2).) CEQA Guidelines, which are regulations with the force of law, define cumulative impacts as “two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts.” (Cal. Code Regs., tit. 14, § 15355.) Also, minor effects may add up to be “collectively significant” over time. (§ 15355, subd. (b); see *City of Long Beach v. Los Angeles Unified School Dist.* (2d Dist. 2009) 176 Cal.App.4th 889, 905 (“*Long Beach*”).) Cumulative impacts analysis must include “closely related past, present, and reasonably foreseeable probable future projects.” (§ 15355, subd. (b).) As *Long Beach* puts it, the analysis assesses cumulative impacts as a “whole greater than the sum of its parts.” (*Long Beach, supra*, at p. 905; internal quotations omitted.)

What the applicant proposes as criteria for including future projects in cumulative analysis is not a ceiling. It is not even a solid floor. However, exhaustive CEQA guidelines and substantial case law supply the place to begin. They support a conclusion that there are a number of factors the Energy Commission must consider in determining the scope of the cumulative impacts analysis.

#### 1. Deciding Which Future Projects to Include in Cumulative Impacts Analysis is a Process that Heavily Depends on Facts

Title 14, section 15130 discusses CEQA cumulative impacts in detail, stating the discussion should be “guided by the standards of practicality and reasonableness.” (Cal. Code Regs., tit. 14, §15130, subd. (b).) In considering which projects are appropriate to analyze, the lead agency may either list “probable” future projects, or use existing projections from regional planning documents. (§15130, subd. (b)(1).) Planning documents may also be relied on when making a list. (See § 15130, subd. (d).) Nothing in the regulation suggests a particular hurdle is determinative of the need to include a project in the analysis.

Additionally, when using the list method, the lead agency should consider the “nature” of the resource. (Cal. Code Regs., tit. 14, §15130, subd. (b)(2).) Thus, the fact that water is an increasingly precious resource in California is relevant to which projects considered. A thousand acre feet of water may not have amounted to a cumulatively considerable impact in the past; but in light of extended drought or evidence of changed precipitation patterns due to climate change, it probably does. Location is also key. (*Ibid.*) As example from the regulation states, water from a different watershed (basin)

may not be relevant to the analysis of water quality. But clearly the regulation's drafters viewed the area of impact as important, as that is one of the methods for selecting which projects to analyze. (See § 15130, subd. (d).) Additionally, the choice of the assessment area is "left to the agencies' expertise." (*Long Beach, supra*, at p. 908.) Under *Long Beach*, the primary determination is whether it is "reasonable and practical to include the projects and whether, without their inclusion, the severity and significance of the cumulative impacts were reflected adequately." (*Id.* at p. 906, internal quotations omitted.)

## 2. "Probable" Future Projects Are Not Limited to Those That Have Passed Certain Agency Hurdles

The California Court of Appeal, First District explained what constitutes a probable, reasonably foreseeable project in *San Franciscans for Reasonable Growth v. City & County of San Francisco*. ((1984) 151 Cal.App.3d 61 ("SFRG").) The case remains good law, heavily cited and rarely distinguished. In *SFRG*, San Francisco's planning agency had left out a number of planned but unconstructed buildings during cumulative analysis review of new projects, resulting in millions of square feet unconsidered. (*SFRG*, at p. 74.) The court remonstrated that the agency had a duty to use "best efforts to find and disclose all that it reasonably can." (*Ibid.*) By omitting "other closely related projects currently under environmental review," the agency applied an "unreasonably narrow interpretation" of CEQA guidelines, and abused its discretion. (*Ibid.*) Thus, projects undergoing environmental review are probable, reasonably foreseeable future projects.

Specifically, the court explicitly rejected that the agency was "entitled to ignore projects that have not passed all regulatory hurdles." (*SFRG, supra*, at p. 75.) Later the same court summarized the original case:

We concluded that it would have been both practical and reasonable for the City to include in the cumulative analyses projects under environmental review, even if the projects had not yet surmounted all the "regulatory hurdles."

(*San Franciscans for Reasonable Growth v. City and County of San Francisco* (1987) 193 Cal.App.3d 1544, 1547, citing and quoting *SFRG, supra*, at pp. 74-75.)

Of course, a project that is too vague would not be reasonable or practical to include in the analysis. (See *Environmental Council of Sacramento v. City of Sacramento* (3d Dist. 2006) 142 Cal.App.4th 1018, 1031-1032.) But this cannot be determined summarily; the

choice is the result of careful consideration of planning documents, applications, etc. from the lead agency and outside agencies. If the water use of a future project is estimated, and there are sufficient facts (substantial evidence) to analyze its impact, it should be included in the cumulative analysis. Indeed, it must. “[A]ny future project where the applicant has devoted significant time and financial resources to prepare for any regulatory review should be considered as probable future projects.” (*Gray v. County of Madera* (5th Dist. 2008) 167 Cal.App.4th 1099, 1127-1128.) The “inability” of the agency to identify impacts does not “relieve it of the responsibility” to include the impacts in the analysis, as specifically as possible. (*Terminal Plaza Corp. v. City and County of San Francisco* (1st Dist. 1986) 177 Cal.App.3d 892, 905; see also *City of Antioch v. City Council of the City of Pittsburg* (1st Dist. 1986) 187 Cal.App.3d 1325, 1337 (agency must examine foreseeable but unspecific development).)

Courts rarely, if ever, chastise agencies for including too wide a scope of projects in their cumulative analyses. The guiding principle of CEQA is that it should be interpreted “in such a manner to afford the fullest possible protection to the environment” within the reasonable scope of the statute. (*San Franciscans for Reasonable Growth v. City and County of San Francisco* (1989) 209 Cal.App.3d 1502, 1513; internal quotations omitted.) This is especially important when the baseline condition of the resource is poor, such as a polluted air basin, or when impacts may be severe, such as potential impacts to a water basin. (See *Kings County Farm Bureau v. City of Hanford* (5th Dist. 1990) 221 Cal.App.3d 692; see also pp. 718, 728-730 (inadequate cumulative impacts analysis for groundwater basin, despite no impact projected, because agency failed to evaluate whether water would be available for recharge).)

With wet cooling, the applicant projects to pump 1644 acre feet a year, 1512 afy more than dry cooling. The extra water required for wet-cooling not only would take supplies for as many as ten similarly-sized dry-cooled solar projects in the area, it would take more than half of staff’s estimated surplus for the Eastern Chuckwalla Valley Basin, during an average year of precipitation. (E-mail from Michael Donovan, Senior Hydrogeologist.) The resource is precious, and the Energy Commission must be careful to reflect that fact in its cumulative impacts analysis.

As a result of these legal requirements, staff is considering a variety of planning documents in forming its final list of probable future projects. Those documents include, most importantly, a thoroughly-examined list of “plans of development” offered by the Bureau of Land Management (BLM). The “POD” list is a step past the application stage, and cannot happen without the significant investment of time and

resources so described in *Gray v. County of Madera*. (*Supra*, 167 Cal.App.4th 1099, 1127-1128.) Even so, BLM has been responsive in dropping projects from the list that are no longer active. Less detailed, but still likely, are solar projects envisioned for the I-10 corridor, where Genesis is planned. For example, the BLM is evaluating the immediate area as a concentrated spot for solar development, and is offering an interactive look at the area on an interagency website. (Solar Energy Programmatic Development EIS, at <http://solareis.anl.gov/>.) There is also the Desert Area Renewable Action Plan, currently in progress. There are relevant Memorandums of Understanding between the CEC and other agencies, the Governor's Executive Order S-14-08 regarding development in the desert, and the goals of AB 32. (See CEC, Implementing the Renewable Energy Executive Order, at <http://www.energy.ca.gov/33by2020/>.) It may result that prospective impacts are unclear from one or more projects and cannot reasonably be evaluated. However, the staff cannot ignore these documents, and being aware of their existence, cannot unring the bell. The fact that the applicant would like to curtail the list of projects included in the cumulative impacts analysis should not be determinative. As *SFRG* warns, "expediency should play no part in an agency's efforts to comply with CEQA." (*SFRG, supra*, at p. 74.)

B. Applicant's Proposed Stipulations for What is "Reasonably Foreseeable" Are Completely Inadequate for Cumulative Effects Analysis Under NEPA

1. Federal Agencies Must Approve Staff's Analysis for NEPA Purposes

The Committee should be aware that not only the Department of Interior's Solicitor General must approve staff's analysis for NEPA purposes, but the joint document also must pass muster with the U.S. Environmental Protection Agency. While this brief summarizes basic law for cumulative impacts analysis under NEPA, in particular where it differs from CEQA, ideally those federal agencies would directly answer this question. The decision on the extent and effect of cumulative effects "is a task assigned to the special competency of the appropriate agencies." (*Kleppe v. Sierra Club* (1976) 427 U.S. 390, 414.)

2. The Standard for "Reasonably Foreseeable" under NEPA Includes Broad and Thorough Consideration of Planning Documents

The National Environmental Policy Act (NEPA) applies to the Genesis Solar project because the plant would be sited on federal land, and environmental review is required for all major federal actions "affecting the quality of the human environment." (42



U.S.C. § 4332(C).) Subject to other national policy, federal agencies must “use all practicable means” when planning to, among other aims, “attain the widest range of beneficial uses of the environment without degradation. (42 U.S.C. § 4331(b).)

As an example of the complexity of considering cumulative effects under NEPA, the Council of Environmental Quality (CEQ) offers a handbook on that topic alone, consisting of more than one hundred pages. Fortunately for the sake of clarity, the CEQ regulation defining cumulative impacts under NEPA strongly resembles the CEQA standard. A cumulative impact on the environment “results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” (40 C.F.R. § 1508.7; *Blue Mountains Biodiversity Project v. Blackwood* (9th Cir. 1998) 161 F.3d 1208, 1214 (“*Blue Mountains*”).) Minor effects may become collectively significant over time. (40 C.F.R. § 1508.7.) To avoid piecemealing, actions that may trigger cumulative effects in combination with other proposed actions should be discussed in the same environmental impact statement. (40 C.F.R. 1508.25). The Ninth Circuit has stated several actions creating cumulative effects must be considered in a single impact statement. (*Blue Mountain* at p. 1214.)

As for what projects to include, NEPA practice takes a wide view of potential projects, and regulatory hurdles are not mentioned for that crucial decision. One state agency contrasts this methodology: “[w]hile the use of regional projections is one possible method of analyzing cumulative effects under CEQA, it is the required method under NEPA.” (Caltrain, *Electrification Program EA/EIR*, § 5.4 (2004).) Emphasizing the open mindedness of the process, EPA guidance advises agencies to consider a “broad range of activities and patterns of environmental degradation” in the vicinity of the project. (U.S. EPA, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (1999) § 4.3 (*EPA Guidance*).)

The EPA offers six ways to evaluate the influence of other projects, including another project’s geographic or temporal proximity; likelihood it affects the same environmental system, especially when systems are susceptible to development pressure (as with desert solar plants); likelihood the project will lead to wide effects or associated projects; its similarity of effects to the project under review; likelihood the future project will happen; and temporal issues such as how soon it will happen. (*EPA Guidance*, § 4.3). Note that definiteness is one factor out of the six. The EPA explains, “final approval is the best indicator [the project will occur] but long range planning of government agencies and private organizations and trends information should also be used.” (*EPA*

*Guidance*, § 4.3.) Bolstering the importance of considering all relevant planning documents, the Ninth Circuit regarded a memorandum as contributing to what was reasonably foreseeable. (*Native Ecosystems Council v. Dombeck* (9th Cir. 2002) 304 F.3d 886, 896.)

BLM Guidelines suggesting what is reasonably foreseeable include “existing decisions, funding, formal proposals, or [projects] which are highly probable, based on known opportunities or trends.” (BLM, *NEPA Handbook*, § 6.8.3.4) EPA guidance tackles the core question directly:

The critical question is “What future actions are reasonably foreseeable?” Court decisions on this topic have generally concluded that reasonably foreseeable future actions need to be considered *even if they are not specific proposals*. The criterion for excluding future actions is whether they are “speculative.” The NEPA document should include discussion of future actions to be taken by the action agency. The analysis should also incorporate information based on the planning documents of other federal agencies, and state and local governments.

(*EPA Guidance*, § 4.3; emphasis added.)

Finally, the EPA warns that its reviewers should determine whether analysts used geographic and time boundaries “large enough to include all potentially significant effects on the resources of concern.”

Even more firmly than under CEQA, applicant’s suggestion that specific regulatory approvals are required for cumulative effects analysis fails to apply here. Staff must at the very least review all relevant planning documents, especially regional ones such as the emerging solar plant “corridor” along Interstate 10. Again, what future projects are finally included in the analysis involves extensive questions of fact.

#### **IV. Policy on Projects Not Yet Identified**

The Commission has no separate policy of conserving water for projects that are not yet identified. However, regional plans to develop an area cannot be ignored under CEQA, nor under NEPA. Staff must include analysis of all probable future projects in its analysis of cumulative effects, including water impacts. As stated above, it is a factual determination which projects should be included in the cumulative impacts analysis.

## V. Conclusion

Staff has demonstrated that the applicant's proposal to use water for cooling raises issues that are difficult to resolve, and make the success of an expedited schedule highly doubtful. Staff looks forward to discussing these issues with the parties and the Committee at the hearing, and moving forward with its review.

Date: January 19, 2010

Respectfully submitted,

\_\_\_\_\_/S/\_\_\_\_\_  
ROBIN M. MAYER  
CARYN J. HOLMES

Counsel for California  
Energy Commission Staff

1516 9<sup>th</sup> St.  
Sacramento, CA 95814  
Ph: (916) 654-3951  
Fax: (916) 654-3843



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
1-800-822-6228 – [WWW.ENERGY.CA.GOV](http://WWW.ENERGY.CA.GOV)

**APPLICATION FOR CERTIFICATION FOR THE  
GENESIS SOLAR ENERGY PROJECT**

**Docket No. 09-AFC-8**

**PROOF OF SERVICE  
(Est. 12/15/09)**

**APPLICANT**

Ryan O'Keefe, Vice President  
Genesis Solar LLC  
700 Universe Boulevard  
Juno Beach, Florida 33408  
[Ryan.okeefe@nexteraenergy.com](mailto:Ryan.okeefe@nexteraenergy.com)

Scott Busa/Project Director  
Meg Russel/Project Manager  
Duane McCloud/Lead Engineer  
NextEra Energy  
700 Universe Boulevard  
Juno Beach, FL 33408  
[Scott.Busa@nexteraenergy.com](mailto:Scott.Busa@nexteraenergy.com)  
[Meg.Russell@nexteraenergy.com](mailto:Meg.Russell@nexteraenergy.com)  
[Duane.mccloud@nexteraenergy.com](mailto:Duane.mccloud@nexteraenergy.com)

Mike Pappalardo  
Permitting Manager  
3368 Videra Drive  
Eugene, OR 97405  
[mike.pappalardo@nexteraenergy.com](mailto:mike.pappalardo@nexteraenergy.com)

Diane Fellman/Director  
West Region  
Regulatory Affairs  
234 Van Ness Avenue  
San Francisco, CA 94102  
[Diane.fellman@nexteraenergy.com](mailto:Diane.fellman@nexteraenergy.com)

**APPLICANT'S CONSULTANTS**

Tricia Bernhardt/Project Manager  
Tetra Tech, EC  
143 Union Boulevard, Ste 1010  
Lakewood, CO 80228  
[Tricia.bernhardt@tteci.com](mailto:Tricia.bernhardt@tteci.com)

Christo Nitoff/Project Engineer  
Worley Parsons  
2330 East Bidwell Street, Ste 150  
Folsom, CA 95630  
[Christo.Nitoff@Worleyparsons.com](mailto:Christo.Nitoff@Worleyparsons.com)

**COUNSEL FOR APPLICANT**

Scott Galati  
Galati & Blek, LLP  
455 Capitol Mall, Suite 350  
Sacramento, CA 95814  
[sgalati@gb-llp.com](mailto:sgalati@gb-llp.com)

**INTERESTED AGENCIES**

California ISO  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

Allison Shaffer/ Project Mgr.  
Bureau of Land Management  
Palm Springs  
South Coast Field Office  
1201 Bird Center Drive,  
Palm Springs, CA 92262  
[Allison\\_Shaffer@blm.gov](mailto:Allison_Shaffer@blm.gov)

**INTERVENORS**

\*Tanya A. Gulesserian  
Marc D. Joseph  
Adams Broadwell Joesph & Cardoza  
601 Gateway Boulevard, Ste 1000  
South San Francisco, CA 94080  
[tgulesserian@adamsbroadwell.com](mailto:tgulesserian@adamsbroadwell.com)

**ENERGY COMMISSION**

JULIA LEVIN  
Commissioner and Presiding  
Member  
[jlevin@energy.state.ca.us](mailto:jlevin@energy.state.ca.us)

JAMES D. BOYD  
Vice Chair and Presiding Member  
[jboyd@energy.state.ca.us](mailto:jboyd@energy.state.ca.us)

Kenneth Celli  
Hearing Officer  
[kcelli@energy.state.ca.us](mailto:kcelli@energy.state.ca.us)

Mike Monasmith  
Siting Project Manager  
[mmonasmi@energy.state.ca.us](mailto:mmonasmi@energy.state.ca.us)

Caryn Holmes  
Staff Counsel  
[cholmes@energy.state.ca.us](mailto:cholmes@energy.state.ca.us)

Robin Mayer  
Staff Counsel  
[rmayer@energy.state.ca.us](mailto:rmayer@energy.state.ca.us)

Public Adviser's Office  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

DECLARATION OF SERVICE

I, Chester Hong, declare that on January 19, 2010, I served and filed copies of the attached:

**Response of Commission Staff to Committee Order Granting  
Genesis Solar, LLC Motion for Scoping Order, Hearing,  
and Order Scheduling Time for Filing Briefs**

dated January 19, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:  
[[http://www.energy.ca.gov/sitingcases/genesis\\_solar](http://www.energy.ca.gov/sitingcases/genesis_solar)].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

*(Check all that Apply)*

FOR SERVICE TO ALL OTHER PARTIES:

  X   sent electronically to all email addresses on the Proof of Service list;

  X   by personal delivery or by depositing in the United States mail at Sacramento, with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

**AND**

FOR FILING WITH THE ENERGY COMMISSION:

  X   sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

**OR**

       depositing in the mail an original and 12 paper copies, as follows:

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 09-AFC-8  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct.

\_\_\_\_\_  
/s/  
CHESTER HONG