State of California

Energy Resources Conservation and
Development Commission

In the Matter of:	)	Docket No.
The Application for Certification of the	)	07-AFC-6
Carlsbad Energy Center Project	)	

Comments of Intervener Terramar on the Presiding Member's Proposed Decision

Kerry Siekmann
Catherine Miller
5239 El Arbol Dr.
Carlsbad, Ca. 92008
760-438-5611
June 8, 2011

State of California

Energy Resources Conservation and
Development Commission

In the Matter of:	)	Docket No.
The Application for Certification of the	)	07-AFC-6
Carlsbad Energy Center Project	)	

Comments of Intervener Terramar on the Presiding Member's Proposed Decision

Terramar realizes the complex issues that the California Energy Commission has had to address in reaching their decision regarding the Carlsbad Energy Center Project. With tremendous cut backs in the budget of the state of California and the voluminous number of Renewable Projects that the Energy Commission has had to address, Terramar understands the constraints that the Energy Commission has lived under for a long period of time. Unfortunately these constraints have led to grievous errors and omissions in the PMPD submitted for the Carlsbad Energy Center Project (CECP).

Due to the 30 day time constraint put on these comments which included preparation time required for the Supplemental Hearings on May 19 and 20, Terramar has chosen to focus on three areas in our comments. Terramar chooses to join in and support the comments made by Power of Vision, regarding the PMPD in other areas of concern.

As a matter of Law, this project is inconsistent with local LORS. This project also fails to meet the standard of the California Environmental Quality Act (CEQA) and the Coastal Act.

PMPD disregards Serious LORS Safety Issues

> *The Energy Commission must determine whether the CECP (Carlsbad Energy Center Project) will be designed, sited, and operated to ensure safe and reliable operation. (Pub. Res. Code, § 25520(b); Cal. Code Regs., tit. 20, § 1752(c)(2)*

Presiding Member's Proposed Decision (PMPD) Worker Safety Section pp. 5 and 6 discuss the fire road width decisions for the CECP. The PMPD ignores fire code LORS by disregarding the authority of the Carlsbad Fire Department (CFD) Chief and Fire Marshall. The CDF Chief and Fire Marshall were ignored in their decision that a 25 ft. upper ring road and a 50 ft. fire road in the bowl were necessary to fight fires safely at the CECP.

> *Aside from its effect on response times, CFD testified that the proposed access roads on the CECP site were not sufficiently wide to allow it to adequately respond to fires and other emergency events. The access is depicted on* ***Worker Safety Figure 1****. Condition of Certification* ***WORKER SAFETY-6*** *specifies a minimum 28-foot width for the fire lanes and ramps leading down into the recessed plant areas. Fire Code standards specify a 20-foot minimum width, but allow fire officials to increase the width where circumstances require it. (2/4/10 RT: 46.) Here, CFD asserts that anything less than a 50-foot width inadequate. 50 feet allows the flexibility they feel they need in parking fire response vehicles and accessing the equipment stored on those vehicles without impeding the passage of other vehicles. (2/4/10 RT: 52 – 55.)*
> PMPD Worker Safety, p. 10

Even the California Energy Commission's (CEC's) own authority Dr. Greenberg testified on Feb. 4, 2010 (p. 46) that the CDF has the authority in determining necessary road widths for fire fighting.

> *The California Fire Code, which is the controlling code in this matter, does indeed mention a 20-foot width. The fire chief and fire marshal correctly point out that the next paragraph gives the fire authority great latitude in determining whether they need to have a wider width.*

When the Interstate-5 expansion occurs (a future project-under CEQA Guidelines § 15130, a proper cumulative analysis must include past, present and probable future projects) much of the existing upper ring road will be lost. This 25 ft. upper ring road was listed by the Carlsbad Fire Dept. as a necessity for fire fighting along with the 50 ft. fire road in the bowl.

> *In addition, CFD is concerned that the "rim" road along the top of the berms in which the CECP power units would not completely encircle the berms, especially if the Interstate Widening Project goes forward... (2/4/10 RT: 24.)* PMPD Worker Safety p. 10

Therefore, the 25 ft. upper ring road will not be available when the I-5 expansion occurs, and the PMPD allocates only 28 ft. fire access road in the bowl.

As the CFD authority is ignored, LORS are ignored. If the PMPD is going to ignore these facts then an over-ride must be made.

Contrary to PMPD conclusions CECP is not Coastal Dependent and would violate the Coastal Act and CEQA as the shut-down of once through-cooling is a "foreseeable event".

> Public Resources Code §30101 defines *"Coastal-dependent development or use" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all."* PMPD, Local Impacts Assessment, p. 6

CECP does not "require a site on, or adjacent to, the sea to be able to function at all" as noted in the CECP's Application for Certification (AFC). The AFC stated that CECP would use reclaimed Carlsbad water to fulfill their needs thereby avoiding once through-cooling and avoiding the need to connect to Encina's sea water once-through cooling system.

> *Another critical component of the CECP generating units is that the project will be air cooled, thereby avoiding the need to connect to the existing Encina Power Station's sea water once-throughcooling system. For the project's raw water needs, CECP will use CCR Title 22 reclaimed water, thereby, minimizing its use of potable water.* AFC page 1.1

Originally NRG requested no desalination unit for the CECP. The addition of the desalination unit for the proposed CECP happened only after the City of Carlsbad explained to NRG that the reclaimed water was sold out in the summer months.

> Letter from Joe Garuba to Mike Monasmith docketed February 20, 2008 **Clarification to California Energy Commission on Carlsbad MunicipalWater District Projected ReclaimedWater Supply (07-AFC-6)**

City of Carlsbad offered NRG reclaimed water if they would be willing to expand the recycled water plant. Mr. Garuba explains that the City was:

- sold out of reclaimed water during the summer months,
- the Applicant did not approach the City about reclaimed water before submitting their CECP application
- and then the City offered expansion terms for the reclaimed water plant:

Supporting testimony from Joe Garuba, City of Carlsbad Municipal Projects Manager, during the February 3, 2010 Hearing, page 468:

> *…during the summer months, especially by the time this project came online, the CECP, it would not have -- we would not be able to dedicate water to the plant. We were all committed, we were sold out, and the*

> *Applicant never came and talked to the city while we were expanding our plant to say, hey, we're going to build a new power plant, you know, factor us in. It wasn't in any of our plans.*
> *We actually talked to the Applicant about expansion. They didn't like what we had to say, they didn't want to -- they wanted us to do something different with our system than what we have designed, and we didn't feel compelled to adjust.*

Lack of due diligence and refusal by the Applicant to work with the City to obtain water does not create "coastal dependence". Mr. Garuba once again intimated in testimony May 19, 2011, pages 56-62 at the hearing in Carlsbad, Ca. that the Applicant could work with the City on expansion of the reclaimed water plant.

In the CEC Final Staff Assessment (FSA) staff claims the CECP desalination unit is to "piggy back" Encina's once through cooling system.

> *The Carlsbad Energy Center Project proposes to "piggy back" its proposed desalination unit utilizing Encina's permitted ocean water intake and discharge facilities.* (FSA, pp. 1-2.)

As CECP's desalination unit is considered "piggy backed" to Encina's once through-cooling system, CECP is a willing participant of once through-cooling "in its own right".

> *In addition, because the City of Carlsbad is unable to supply reclaimed water (Exs. 193; 200, p. 4.9-14) to the project for cooling and other industrial purposes, it is necessary that CECP use its proposed ocean-water purification system. Thus, the proposed project (CECP generating units 6 and 7) is an expansion of a coastal dependent use and a coastal-dependent use in its own right. (Ex. 200, pp. 4.5-10 – 4.5-13.)* PMPD, Local Impacts Assessment p. 7

> *The source of the CECP's seawater will be the existing Encina Power Station water discharge stream.*
> PMPD, Biological Resources p. 8

The Coastal Commission has stated along with the CAISO, the California Public Utilities Commission, and the State Water Quality Control Board that once through-cooling needs to end due to the negative effects it creates for marine life.

> *In fact, the 2005 IEPR and 2007 IEPR identified Encina (960 MW) and South Bay (708 MW) as among the aging facilities that the state needs to shut down, repower, or replace, while preserving system reliability in the San Diego load pocket. This policy is endorsed by the CAISO, the California Public Utilities Commission, and the State Water Resources*

> *Control Board; the latter agency insists that all once-through cooling facilities (like those at South Bay and Encina) eventually be replaced by power plants that do not use this form of cooling technology.*
> PMPD GHG p. 13-14

Once-through cooling results in impacts referred to as impingement and entrainment, an issue of concern to Terramar, and also the California Coastal Commission as well as other state agencies. As noted in the Feb., 2010 hearings,

> Ms. Vahidi ..*"And also impingement and entrainment due to once-through cooling. And that was, at that time, the impingement and entrainment issues were the biggest major issue for the Coastal Commission" (Feb. 1,'10 pp. 180-181.)*
> *"MR. RATLIFF: And has the Coastal Commission indicated that entrainment and impingement are the most important consideration that they've had with the Energy Commission's licensing cases on the coast?*
> *MS. VAHIDI: Yes, absolutely." (Testimony Feb. 1, '10 p. 182.)*

The PMPD states that CECP is an expansion of a coastal dependent use and a coastal – dependent use "in its own right" due to "piggy backing" the use of once through-cooling. Then PMPD denies that the CECP will use once through-cooling.

> *We note that the evidence establishes that the CECP is air cooled and will not use OTC or require additional water from the Lagoon, and that the potential shutdown of EPS Units 4 and 5 is a speculative matter, which is not part of the present project. (02/24/10 RT 266:17-23; Exs. 145; 200, pp. 4.2-16 to 17, 4.2-29; Staff Opening Brief, pp. 7-8; Staff Reply Brief, pp. 3-7.) We are thus persuaded that the CECP will not create significant impacts on biological resources.*
> PMPD Biological p. 9

The CEC's coastal dependence argument is predicated on the "expansion of a coastal dependent use and a coastal-dependent use in its own right". That use is once through-cooling.

Yet as of May, 2010 the Regional Water Quality Control Board adopted a policy to end once through cooling. There is a proposed schedule for shutting down Encina's once through-cooling by the end of 2017. The end of once through-cooling is a foreseeable event and must be considered per CEQA (Guidelines § 15130).

> *…we note that the evidence establishes that the CECP is air cooled and will not use OTC or require additional water from the Lagoon, and that the potential shutdown of EPS Units 4 and 5 is a speculative matter, which is not part of the present project.*

> *(02/24/10 RT 266:17-23; Exs. 145; 200, pp. 4.2-16 to 17, 4.2-29; Staff Opening Brief, pp. 7-8; Staff Reply Brief, pp. 3-7.) We are thus persuaded that the CECP will not create significant impacts on biological resources.* PMPD Biological p. 9

The PMPD also violates CEQA by calling the shutdown of Units 4 and 5 a "speculative matter". But the shut down of Encina Units 1-5 once through-cooling scheduled for 2017, is most certainly a foreseeable event and therefore must be considered under CEQA Law (Guidelines § 15130).

Upon the proposed shutdown of Encina once through-cooling, the CECP desalination unit will no longer have a source of water for its industrial use and will have to apply for a water permit "in its own right". Thus, the CECP will result in entrainment and impingement impacts for the maximum 4.32 mgd commencing in 2017. These impacts were not addressed in the FSA. CEQA requires that the whole of the action be considered over the life of the project, not just at start-up. (Public Resources Code § 21065; CEQA Guidelines § 15378.)

The PMPD refers to an October, 2007 letter from the Coastal Commission strongly supporting the CECP because it is not using once-through cooling and employing dry cooling technology. The PMPD failed to reveal that the letter from the Coastal Commission was written while the CECP was still proposing to use reclaimed water from the City, not as a parasite of the destructive use of seawater for once through-cooling by Encina Units 1-5.

> In October, 2007, the Coastal Commission informed the Energy Commission by letter that, due to workload and resource constraints, it would not be supplying a detailed report on the conformance of this and other Coastal Zone projects before the Commission. It did note, however, that CECP is proposing to end the environmentally destructive use of seawater for once-through cooling and instead employ dry cooling technology, which the Coastal Commission has strongly supported during past power plant reviews. (Ex. 195, pp. 1 – 2.)
> PMPD Local Impacts Assessment p. 5

- The CECP does not "require a site on, or adjacent to, the sea to be able to function at all" as indicated by the Applicant in their AFC.

- Once through-cooling is no longer a viable reason for coastal dependence per CEQA as the end of once through-cooling is a foreseeable event.

- In addition, based on the new June 3, 2011 proposed Land Use Conditions of Certification (Land Use 2 and 3) submitted by NRG, the coastal dependence argument put forward by CEC staff and the PMPD is null as there will no longer be any Encina Units.

Therefore, if the CECP is to be certified there must be an over-ride as it would otherwise fail to meet the standards of the Coastal Act and CEQA.

PMPD contains material false statements regarding reliable operation issues and violates the Public Resources Code.

> The Energy Commission must determine whether the CECP will be designed, sited, and operated to ensure safe and reliable operation. (Pub. Res. Code, § 25520(b); Cal. Code Regs., tit. 20, § 1752(c)(2)

Terramar raises significant issues with the grid reliability value CECP is proposed to replace (when Encina Units 1-3 are retired) in the San Diego grid. Encina Power Station has been reported as offering great value to San Diego grid reliability. CEC documents and testimony have stated for the past three years that Reliability Must Run (RMR) agreements existed on Encina Units. CAISO, CEC staff, and even Hearing Officer Kramer and Commissioner Boyd have testified and/or documented that RMR status existed for Encina Units.

> In the San Diego area, the CAISO has "reliability must run" contracts with several old, less-efficient plants in part to provide ancillary services. (Ex. 222, p. 4.1-111.) GHG p.12 of the PMPD.
>
> The units-South Bay and Encina-have RMR (reliability must run) contracts with the CAISO for this purpose." FSA 4.1-111 (Nov. 2009)

The following is an example of testimony from Mr. McIntosh, a director for CAISO, and Hearing Officer Kramer at the CECP Hearings Feb. 3, 2009, page 197 regarding RMR and the grid reliability that Encina offers:

> MR. McINTOSH: There's a term that we use. It's called "reliability," an RMR unit, that's required for local voltage control in the area. So it's a factor of how many megawatts you can transport into an area from the imports out of the area and also be able to maintain --
> able to withstand the loss of a major facility, like in this area would be a Palomar or a San Onofre unit going off, and keep the grid reliable under that first contingency condition. So you have to have a number of plants like the Encina plant here online in order to protect the local area so you don't have a cascading blackout as a result ofthat.

> HEARING OFFICER KRAMER: And do I understand correctly two of the Encina units, the newest ones are RMR right now?
> MR. McINTOSH: I believe that's the case.
> HEARING OFFICER KRAMER: Two of the -- the newest two Encina units, those would be 4 and 5?
> MR. McINTOSH: 4 and 5.
> HEARING OFFICER KRAMER: They are RMR. …"

Additional testimony from the same day of testimony Feb. 3, 2010, pp. 201-202

> HEARING OFFICER KRAMER: Mr. McIntosh, this may call for speculation on your part, but what would it take to allow the RMR contracts for Units 4 and 5 to be canceled and perhaps allow those units to be retired as well as 1 through 3?
> MR. McINTOSH: Sir, you're right, it would be speculation on my behalf, but with my years in the industry, it would require something that is electrically equivalent to creating the value that those plants bring now.
> HEARING OFFICER KRAMER: So another power plant -- and it would have to be a power plant in the basin basically?
> MR. McINTOSH: Well, it might not have to be a power plant, but it could be some means of stabilizing the voltage in the San Diego area. Not transmission.
> HEARING OFFICER KRAMER: Okay. Thank you.

Additional testimony from Feb. 3, 2010 where Mr. McIntosh explains how RMR units protect grid reliability:

> MR. McINTOSH: It's based on the local needs. If there's a requirement to maintain grid reliability in that area and a plant is there to support that, we're going to RMR the units.
> Hearings, Feb. 3, p. 213

However after thorough investigation, Terramar has documented (Exhibits 377-379) that CAISO has no RMR contracts on Encina Units 1-5 and that the RMR contracts have not existed on these units since ending 12/31/07.

The Applicant never came forward to correct this information until Terramar announced the 12/31/07 expiration.

There is however a tolling agreement with SDG&E for Encina Units 1-5. This agreement is currently scheduled to expire 12/31/11. It is important to note that the CEC has stressed that contracts with San Diego Gas and Electric are a non issue in these proceedings as "need" is a non-issue. Therefore, statements that the shut down of Encina Units 1-3 must require replacement to meet grid reliability are material false statements by CEC and CAISO. The Applicant is also responsible for allowing material false statements made regarding Encina to go on for a period of three and a half years by omission.

From the publication of the FSA forward, the CEC has reported that Encina Units are on RMR status and grid reliability must be replaced by the CECP units. Terramar, as well as other interveners have fallen victim to relying on highly erroneous information in preparing Testimony, Briefs and Status Reports.

The PMPD states:

> The Commission's certification process provides a thorough review and analysis of all aspects of a proposed power plant project.
> PMPD Introduction p. 3

Yet this process has clearly failed. Terramar has great misgivings about other material misinformation that has been presented by CEC and how that misinformation will affect certification of the CECP.

Throughout the process, the CEC has stressed grid reliability and maintained SDG&E contract "needs" were a non-issue. Yet in the hearings on May 20, 2011, pp. 4-11 (the day after the revelation of the lack of any RMR contracts with CAISO) a conversation among Mr. McKinsey (counsel for the Applicant), Mr. Kramer (Hearing Officer) and Commissioner Boyd occurred. This conversation revolves around the subjects of grid reliability, need and the RMR revelation. Mr. McKinsey reveals that tolling agreements exist between SDG&E and Encina. How are these tolling agreements any different than the contracts that SDG&E has offered other power providers? Yet CEC refuses to acknowledge the significance that SDG&E has offered no contract to CECP.

Mr. McIntosh, a director of CAISO, stated in the Hearings:

> MR. McINTOSH: We determine the need, that's correct, and the utilities contract for the power.
> Hearings, Feb. 3, p 213

CEC violates their own rules by acknowledging the importance of SDG&E tolling agreements with Encina and not acknowledging the fact SDG&E is not offering a contract to CECP. If Encina's tolling agreement affects grid reliability, then all of the other decisions by SDG&E affect grid reliability.

> In its decisions approving long-term procurement plans submitted biennially by the state's investor-owned utilities (e.g., D.07-12-052, December 20, 2007), the CPUC imposes the loading order established in the state's Energy Action Plan upon the utilities. This takes the form of requiring that the utilities meet energy efficiency and demand-side management targets established by the Commission prior to procuring fossil resources. In authorizing the utilities to procure sufficient new generation capacity on behalf of all service area customers to meet system and local reliability needs, the CPUC also assumes that these targets will be met. As such, the amount of new fossil capacity deemed necessary to retire the aging Encina power plant assumes that SDG&E will satisfy requirements for the procuring energy efficiency and establishing demand-side management programs that are derived from state policy goals. (Ex. 200, p. 6-15.)
> PMPD, Alternatives p. 13

The PMPD and other CEC documents contain material false statements regarding grid reliability and violate the Public Resources Code. All interveners have relied on these material false statements and confidence has been lost in the CEC process. Terramar suggests that the next draft of the PMPD be a denial of certification.

Conclusion

In conclusion, Terramar points out serious flaws in the PMPD and suggests the project be denied. The PMPD "as is "will cause violation of local LORS and is inconsistent with the Coastal Act and CEQA. Also due to material false statements made in the record, the PMPD should be denied as it would violate the Public Resources Code.