DOCKETED					
<b>Docket Number:</b>	07-AFC-06C				
<b>Project Title:</b>	Carlsbad Energy Center - Compliance				
TN #:	203815				
<b>Document Title:</b>	Revised Emissions Baseline Calculations for Units 1-3 at Encina Power Station				
<b>Description:</b>	Previously submitted in docket 07-AFC-6				
Filer:	Kerry Siekmann				
Organization:	Terramar Association & Self				
Submitter Role:	Intervenor				
Submission Date:	3/10/2015 9:07:35 PM				
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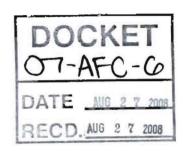
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August 27, 2008

KIMBERLY HELLWIG Direct (916) 319-4742 kjhellwig@stoel.com

#### VIA HAND DELIVERY AND PER PROOF OF SERVICE

Mr. J. Michael Monasmith Siting Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814



Re: Carlsbad Energy Center Project (07-AFC-6)

Revised Emissions Baseline Calculations for Units 1-3 at Encina Power Station

Dear Mr. Monasmith:

Enclosed for docketing in the Carlsbad Energy Center Project proceeding (07-AFC-6) is the revised emissions baseline calculations for the existing boiler Units 1, 2, and 3 at the Encina Power Station. Included herein is correspondence directed to Dr. Steve Moore at the San Diego Air Pollution Control District and the Revised Five Year Average NO<sub>x</sub> Baseline Emissions modeling files as indicated above.

Respectfully submitted,

Stoel Rives LLP

Kimberly J. Hellwig

Senior Paralegal

KJH:kjh Enclosures

cc: See Proof of Service (correspondence only)

Mr. Will Walters, Siting Division, California Energy Commission

Oregon
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Direct: (760) 710-2144 Fax: (760) 710-2158

### Carlsbad Energy Center LLC

August 25, 2008

Dr. Steve Moore Engineering Group San Diego Air Pollution Control District 10124 Old Grove Road San Diego, CA 92131

Subject: Application for Authority to Construct Carlsbad Energy Center Project

Dear Dr. Moore:

On behalf of Carlsbad Energy Center LLC, we are pleased to submit the enclosed revised emissions baseline calculations for the existing boiler Units 1, 2, and 3 at the Encina Power Station. With the exception of NOx emissions, the enclosed baseline emissions for the existing boilers are identical to the values in our April 17, 2008 submittal to the SDAPCD. As agreed during the California Energy Commissioning public workshop on March 26, 2008, the baseline period continues to a 5-year average for the period from 2002 to 2006. For NOx emissions, the emission baseline was revised in response to a recent request from the SDAPCD that the NOx emissions be based on Continuous Emissions Monitoring (CEM) data rather than the SDAPCD-prepared annual emission inventory reports for the Encina Power Station. The initial operation of the new NOx CEM system at the Encina Power Station began on the following dates:

Unit 1: July 1, 2003
Unit 2: May 1, 2003
Unit 3: February 28, 2003

These dates correspond to the initial operation of Units 1, 2, and 3 after the installation of the new SCR systems. Consequently, during all of 2002 and a part of 2003 NOx emissions were not monitored by the new NOx CEM system. During this missing data period, with the exception of boiler startup/shutdown hours, NOx emissions were calculated based on the SDAPCD Rule 69 emission factor of 0.15 lbs/MW-hr and the hourly MW generation of each boiler. For boiler startup/shutdown hours (hours with electric generation less then 1 MW), NOx emissions were calculated based on hourly fuel use and a startup/shutdown NOx emission factor of 0.039 lbs/MMBtu. This startup/shutdown emission factor was calculated based on a review of CEM data during a typical startup of one of the boilers.

Dr. Steve Moore San Diego County APCD August 25, 2008 Page 2 of 2

The revised baseline NOx emissions are enclosed for your review. Also enclosed are the CO, VOC, PM<sub>10</sub>, and SOx baseline emissions. As discussed above, these baseline emissions remain unchanged from the levels shown in our April 17, 2008 submittal to the SDAPCD. The detailed NOx emission calculations and CEM NOx emissions data are included on the enclosed compact disc.

If you have any questions, please contact me at (760) 710-2144 or Tom Andrews at (916) 444-6666.

Sincerely,

Tim E. Hemig Vice President

Carlsbad Energy Center LLC

Enclosure

cc: George L. Piantka, Carlsbad Energy Center LLC
John McKinsey, Stoel Rives LLP
Will Walters, CEC
Michael Monasmith, CEC
Tom Andrews, Sierra Research
Robert Mason, CH2M HILL
CEC Dockets Office (07-AFC-6)

Table 5.1B-12 (Revised 8/20/08)
Actual Annual Emissions For Units 1, 2, and 3
Encina Power Station

	Total Emissions in tons/year							
		Reported Emissions						
Years	Units	NOx	CO	VOC	PM	SOx		
	1	11.3	138.6	4.5	9.6	0.5		
2002	2	14.0	174.6	5.8	13.2	8.4		
	3	14.2	181.3	5.9	12.6	0.6		
	1	8.3	57.0	3.8	7.5	4.5		
2003	2	9.4	70.6	4.7	8.3	3.1		
	3	13.1	100.4	6.7	12.2	4.9		
	1	10.8	82.4	5.4	9.9	0.6		
2004	2	13.7	105.2	6.9	14.9	8.0		
	3	21.5	163.4	10.7	19.3	1.2		
2005	1	9.6	73.6	4.9	9.6	0.6		
	2	10.2	79.9	5.3	11.9	0.7		
	3	12.0	87.6	5.8	11.7	0.7		
2006	1	2.8	12.2	1.6	3.2	0.2		
	2	5.8	68.9	3.0	6.9	1.1		
	3	7.6	28.9	3.7	7.5	1.4		

Table 5.1B-13 (Revised 8/20/08) 5-Year Average Baseline Emissions For Units 1, 2, and 3 Encina Power Station

Total Emissions in tons/year							
		Reported Emissions					
Years	Units	NOx	CO	VOC	PM	SOx	
5-Year Lookback 5- Year Average	1	8.6	72.8	4.0	8.0	1.3	
	2	10.6	99.8	5.1	11.0	2.8	
	3	13.7	112.3	6.6	12.7	1.8	
Total =		32.8	284.9	15.7	31.6	5.8	

Table 5.1B-21 (new table as of 8/20/08)

NOx Emission Summary for Units 1, 2, and 3

Encina Power Station

	2002	2003			2004	2005	2006
		Missing			New CEMS	New CEMS	New CEMS
	Sum	Data	New CEMS	Sum	Sum	Sum	Sum
Boiler	(tons/yr)						
Unit 1	11,30	5.88	2.40	8.29	10.78	9,57	2,83
Unit 2	13.96	3.09	6.26	9.35	13.69	10.21	5.76
Unit 3	14.17	3.73	9.34	13.07	21.54	11.95	7.58
Total	39.42			30.70	46.00	31.73	16.17

# BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION
FOR THE CARLSBAD ENERGY CENTER
PROJECT

Docket No. 07-AFC-6 PROOF OF SERVICE (Revised 7/31/2008)

## Carlsbad Energy Center Project (07-AFC-6) Revised Emissions Baseline Calculations for Units 1-3 at Encina Power Station

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 07-AFC-6 1516 Ninth Street, MS-15 Sacramento, CA 95814-5512 docket@energy.state.ca.us

#### **APPLICANT**

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Tim Hemig, Vice President Carlsbad Energy Center, LLC 1817 Aston Avenue, Suite 104 Carlsbad, CA 92008 Tim.Hemig@nrgenergy.com

#### **APPLICANT'S CONSULTANTS**

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#### **COUNSEL FOR APPLICANT**

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#### INTERESTED AGENCIES

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#### **INTERVENORS**

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#### **DECLARATION OF SERVICE**

I, Elizabeth Hecox, declare that on August 27, 2008, I deposited copies of the attached document in the United States mail at Sacramento, California, with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

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

Flizabeth Hecox