

**DOCKET****08-AFC-9****Hilarie Anderson - PHPP AQ ERC Issues**

**From:** Felicia Miller  
**To:** Docket Optical System  
**Date:** 8/16/2010 9:52 AM  
**Subject:** PHPP AQ ERC Issues

**DATE** AUG 12 2010**RECD** AUG 16 2010

please docket and POS

>>> Steve Radis <steve.radis@mrsenv.com> 8/12/2010 5:07 PM >>>  
 Felicia,

Below I have summarized where we stand on the applicant's current emission reduction credit (ERC) proposals. There is still work that needs to be done in order to establish a reasonable level of confidence that ERCs can be identified and evaluated in the FSA (and prior to licensing per Public Resources Code §25523(d)(2), and demonstrate that the mitigation is effective and results in a net air quality benefit.

**Ozone Precursor ERCs (NOx and VOC)**

The map below (Figure 1) shows the location of the proposed PHPP ERCs for NOx and VOC. The swap for the ERCs in Stockton and Tracy would involve a trade between Calpine and a currently unknown party to swap for reduction sites in the southern part of the basin. The fact that all of the ERCs are from Calpine, and that there appears to be a need for Calpine to swap ERCs from Stockton and Tracy, would make one suppose that there is some sort of relationship between the applicant and Calpine. There are plenty of other ERCs out there that would avoid the need for Calpine to swap ERCs, but perhaps dealing with just one party simplifies the process for the City of Palmdale.

The yellow circle on the map represents a 50 mile radius around the PHPP, while the salmon colored area represents a 50 mile wide zone extending from the western boundary of the Mojave Desert Air Basin (MDAB). No ERCs have been identified within a 50 mile radius of the PHPP, while only two ERC sources are within 50 miles of the MDAB. However, the majority of the ERCs are not that much further beyond 50 miles from the MDAB, with the main NOx ERCs from Elk Hills about 89 miles from PHPP and 60 miles from the western MDAB boundary (see Table 1). The proposed ERCs all appear to have been properly banked from actual emission reductions. The ERCs were also discounted at the time they were banked in order to produce a net air quality benefit. The main concern that we have at this time is whether or not some of these ERCs are too far from the PHPP to offset project emissions and result in a net air quality benefit.

The use of ERCs from the SJVAPCD is a reasonable approach and has been done in the past. Pollutant transport from the San Joaquin Valley and the impact on Antelope Valley Air Quality has been well established and is addressed in the AVAQMD's Air Quality Attainment Plan. Under AVAQMD Rule 1305, the Applicant will be required to obtain NOx and VOC ERCs at a ratio of 1.3:1 for those sources in the San Joaquin Valley (Rule 1305(C)(1)). However, given the distance of most of these ERCs, we should consider the level of benefit that these ERCs would provide in offsetting PHPP emissions, and explore additional offset ratios.

In the PSA, while under the assumption that all ERCs would be located in the southern San Joaquin Valley, Condition of Certification AQ-SC-18 required an offset ratio of 1.5:1 for all ERCs located more than 15 miles from the MDAB. A ratio of 1.5:1 was selected based on SJVAPCD Rule 2201, Table 4.2, which required a 1.5:1 for ERCs located "15 miles or more from the new or modified emissions unit's Stationary Source." The SJVAPCD also allows ERCs from another district as follows:

*Offsets from another district may be used only if the source of the offsets is within 50 miles of the proposed emissions increases and the APCO has reviewed the permit conditions issued by the district in which the proposed offsets are obtained and certifies that such offsets meet the requirements of this rule and CH&SC Section 40709.6. (Rule 2201, 4.13.2)*

None of the PHPP ERCs would meet this requirement, and only 11.7 tons/year of the VOC ERCs would be within 50 miles of the MDAB. While the AVAQMD is not bound by the SJVAPCD Rules and Regulations, the Commission can use the SJVAPCD Rules and Regulations as guidance for evaluating inter-district and inter-basin ERC transfers that involve large distances between the emission source and ERCs.

**PM10 ERCs**

The Applicant proposes to obtain PM10 ERCs through a new AVAQMD Rule that would be modeled on the Mojave Desert Air Quality Management District (MDAQMD) Rule 1406. Energy Commission staff has major issues with this mitigation approach since it is speculative as the rulemaking has not been completed and potentially may not be completed anytime soon. Therefore, the Energy Commission as the Lead Agency cannot find this mitigation approach to be acceptable if it remains speculative due to the need for other Agency future actions and also if it remains deferred in terms of the mitigation specifics. ERCs must be federally enforceable and be quantifiable, surplus, real and permanent. Currently, the proposed PM10 ERCs do not meet any of the required criteria.

I talked with the EPA this morning and it would appear that they require new rulemaking for any ERCs from non-traditional emission reductions, such as road paving. They are quite firm that the AVAQMD must pass a rule in order to use road paving ERCs for any federal permits. The AVAQMD would also be required to complete an emission inventory and identify the potential ERCs as surplus in their plan. However, since the AVAQMD is in attainment of the federal PM10 standard, the burden of accepting road paving ERCs falls to the ARB. The ARB has also indicated that the AVAQMD will need to pass a new rule to allow for the use of PM10 emissions from road paving. The position of the EPA and ARB staff firmly support our concerns that we have been raising since April 1, 2009 where Data Request 102 specifically requested that the applicant "...identify the progress in developing a fugitive dust from paving roads banking rule with the AVAQMD."

The Applicant has not provided any information on the status of this proposed rule and the AVAQMD Rule Development Calendar does not provide any information on proposed Rule 1309.2 (AVAQMD Rule Development Calendar 2010; <http://www.avagmd.ca.gov/Modules/ShowDocument.aspx?documentid=917>). Even if the AVAQMD successfully passes a new rule allowing for PM10 offsets from road paving, the ERCs would not be valid until the State Implementation Plan is revised and approved.

Compliance with AVAQMD Rule 1305 cannot be determined in the absence of approval of proposed Rule 1309.2, and a detailed analysis of how the Applicant would comply with this new, yet to be defined, rule. The Applicant has identified the specific roads in the vicinity of the PHPP that will be used to generate the PM10 ERCs, but has not provided all appropriate calculations including vehicle miles traveled via traffic counts and silt content analysis used to quantify the emission reductions that are expected to be generated. While we have preliminary estimates for these parameters, specific roads have not been identified and formal traffic counts have not been conducted.

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Based on the AVAQMD "Rule Development Activities and Timing" guidance, the development of a new rule requires at least 90 days for public/agency review and approval once the rule has been developed. Therefore, it would appear that adoption of the final rule would not occur until sometime in early 2011 at the soonest, with PHPP compliance and ERC approval occurring sometime later in 2011. This represents an optimistic schedule for the development of an enforceable PM10 ERC package since the AVAQMD has not even completed a detailed PM10 emission inventory.

#### Issues Requiring Resolution

The main issues with the ERC package that need to be resolved are:

- **Will ARB allow the use of road paving ERCs in the absence of a new rule?** The ARB has recommended "... that AVAQMD should advise the applicant to find PM offsets from another source."
- **Will the San Joaquin Valley APCD approve of the ERC transfer?** The ARB has recommended "...that AVAQMD consult with ARB and USEPA staff prior to granting the use of the referenced inter-district/inter-basin offsets."
- **Should distance ratios be applied to the ERCs from the San Joaquin Valley?** Since the AVAQMD is very small (see Figure 2), no distance ratios were included in their rules. If the SJVUAPCD rules are used as guidance, many of the ERCs identified in the San Joaquin Valley would be questionable in terms of offsetting PHPP emissions and demonstrating a net air quality benefit. This is probably a decision best left to the ARB and USEPA prior to project licensing; however, per SJVAPCD Rule 2201 guidance, an offset ratio of 1.5:1 should be used at a minimum give the large distance between the PHPP and proposed ERCs.
- **Should ERCs beyond 50 miles from the MDAB air basin be allowed?** Under the SJVUAPCD rules for inter-district/inter-basin offsets, ERCs beyond 50 miles would not be allowed. Again, ARB and USEPA should be consulted for a determination prior to project licensing.

Figure 1. Location of PHPP Proposed Emission Reduction Credits

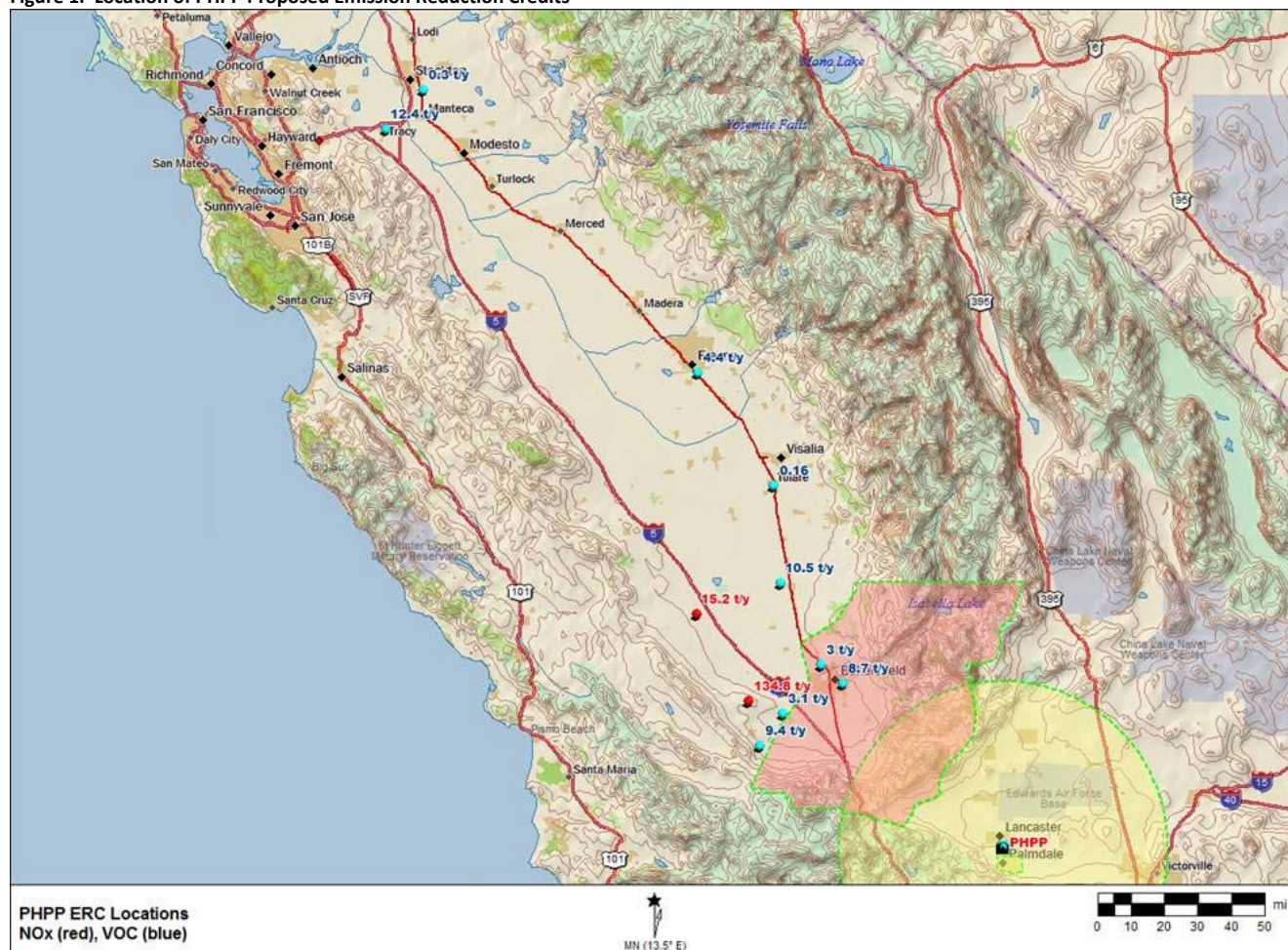


Figure 2. California Air Districts

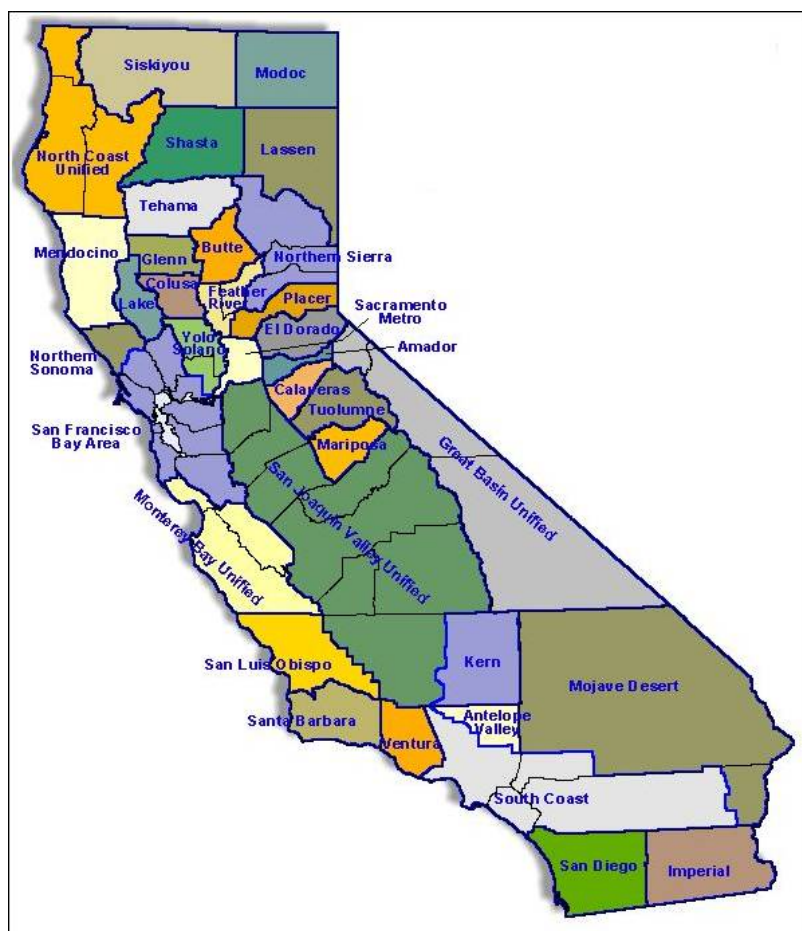



Table 1. Summary of PHPP Proposed Emission Reduction Credits

Certificate #	ERC Type	Qtr 1 (pounds)	Qtr 2 (pounds)	Qtr 3 (pounds)	Qtr 4 (pounds)	Total (lb/yr)	Total (t/y)	Price (\$/tpy)	SJVAPCD Region	Location of Emission Reduction	Distance from PHPP (mi)
S-3298-2	NOx	2,103	9,681	9,531	9,076	30,391	15.20	\$88,768	Southern	Heavy Oil Western, Lost Hills; STR 19/26S/21E	116
S-3114-2	NOx	65,601	66,862	68,123	69,023	269,609	134.80	\$88,768	Southern	Elk Hills, Tupman, CA; STR NE35/30S/23E	89
<b>Total</b>	<b>NOx</b>	<b>67,704</b>	<b>76,543</b>	<b>77,654</b>	<b>78,099</b>	<b>300,000</b>	<b>150.00</b>	<b>\$88,768</b>			
S-3368-1	VOC	1,500	1,500	1,500	1,500	6,000	3.00	\$32,400	Southern	Rosedale Hwy; STR 8/29S/27E	78
S-3261-1	VOC	4,454	4,972	3,890	4,155	17,471	8.736	\$32,400	Southern	2201 East Brundage Lane, Bakersfield, CA 93301	69
S-3283-1	VOC	0	150	171	0	321	0.161	\$32,400	Southern	400 South M Street, Tulare, CA	128
N-882-1	VOC	157	144	137	137	575	0.288	\$32,400	Northern (anticipated ERC Swap)	4547 Frontier Way, Stockton, CA 95215	285
Formerly C-1027-1	VOC	2,235	2,161	2,112	2,251	8,759	4.38	\$32,400	Central	2365 E North Ave, Fresno, CA 93725	169
N-710-1	VOC	6,210	6,210	6,210	6,210	24,840	12.42	\$32,400	Northern (anticipated ERC Swap)	757 11 th Street, Tracy, CA 95376	282
S-3300-1	VOC	4,636	4,705	4,774	4,771	18,886	9.443	\$32,400	Southern	Heavy Oil Western, Moco T; STR 35/12N/24W	80
S-3116-1	VOC	1,440	1,546	1,621	1,621	6,228	3.114	\$32,400	Southern	South Coles Levee Gas Plant; STR SW0313S/25E	78
S-3292-1	VOC	4,804	6,146	6,632	3,338	20,920	10.46	\$32,400	Southern	391 Road 120, Delano; Str NW35/24S/26E	104
<b>Total</b>	<b>VOC</b>	<b>25,436</b>	<b>27,534</b>	<b>27,047</b>	<b>23,983</b>	<b>104,000</b>	<b>52.00</b>	<b>\$32,400</b>			

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**APPLICATION FOR CERTIFICATION**  
**For the *PALMDALE HYBRID***  
***POWER PROJECT***

**Docket No. 08-AFC-9**

**PROOF OF SERVICE**

*(Revised 7/1/2010)*

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### DECLARATION OF SERVICE

I, Hilarie Anderson, declare that on, August 16, 2010, I served and filed copies of the attached Email Regarding Air Quality Issues. 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/palmdale/index.html>]**. The document has 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:**

- ☒ sent electronically to all email addresses on the Proof of Service list;
- ☒ by personal delivery;
- ☒ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

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##### **For filing with the Energy Commission:**

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

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I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

**Original Signature in Dockets**  
**Hilarie Anderson**