



1801 J Street  
Sacramento, CA 95814  
(916) 444-6666  
Fax: (916) 444-8373

July 12, 2002

Cheri Davis  
Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Subject: East Altamont Energy Center  
01-AFC-04

Comments on CEC Staff's Air Quality Mitigation Proposal

Dear Ms. Davis:

As requested in the Committee's June 28, 2002 workshop notice, the enclosed comments are presented by the East Altamont Energy Center (EAEC) regarding the CEC Staff's air quality mitigation proposals. As requested by the Staff and discussed at the Staff's July 9 workshop, EAEC will include technical comments regarding the emission reduction calculations for each mitigation measure in the draft consensus mitigation proposal to be circulated on July 19, 2002. The enclosed comments focus more specifically on the Staff's conclusion that the project will result in significant, unmitigated air quality impacts and hence warrant further mitigation.

As reiterated by counsel for the Applicant, EAEC continues to respectfully disagree with the Staff's interpretation of the California Environmental Quality Act (CEQA) as it relates to the issues set forth in Staff's air quality mitigation paper. Nevertheless, EAEC will continue to work closely and cooperatively with the Staff and other interested parties in hopes of avoiding the need to litigate these issues during evidentiary hearings. Specifically, EAEC believes that a reasonable mitigation proposal can and should be developed, making such legal issues moot.

Accordingly, as part of the cooperative effort to develop a suitable mitigation proposal, it is important to note that in providing these comments, EAEC is not withdrawing from its commitment to pursue negotiations with the CEC Staff, San Joaquin Valley Unified Air

Pollution Control District (SJVUAPCD), and the community regarding additional air quality mitigation measures that seek to address the concerns raised by these parties in the Commission's proceedings to date. To the contrary, EAEC shares the view that a reasonable mitigation proposal suitable to all can be developed before this proceeding moves to evidentiary hearings and welcomes the opportunity to provide a draft consensus mitigation proposal on July 19, 2002.

We look forward to continuing our discussions with the CEC Staff on this issue.

Sincerely,

  
Gary Rubenstein

Encl

cc w/encl:

Service List  
Tuan Ngo, California Energy Commission  
Mike Ringer, California Energy Commission  
Keith Golden, California Energy Commission  
Steve Hill, Bay Area AQMD  
Seyed Sadredin, San Joaquin Valley Unified APCD  
Alicia Torre, East Altamont Energy Center  
Jim McLucas, Calpine  
Steve DeYoung, Calpine  
Susan Strachan, Calpine  
Gregg Wheatland, Ellison, Schneider & Harris  
Jeff Harris, Ellison, Schneider & Harris  
Jerry Salamy, CH2M Hill

East Altamont Energy Center  
Comments on the CEC Staff's Air Quality Mitigation Proposal

July 12, 2002

As requested in the Committee's June 28, 2002 workshop notice, the following comments are presented by the East Altamont Energy Center (EAEC) regarding the CEC Staff's air quality mitigation proposals. As requested by the Staff and discussed at the Staff's July 9 workshop, EAEC will include technical comments regarding the emission reduction calculations for each mitigation measure in the draft consensus mitigation proposal to be circulated on July 19, 2002. The following comments focus more specifically on the Staff's conclusion that the project will result in significant, unmitigated air quality impacts and hence warrant further mitigation.<sup>1</sup> We believe there are no significant, unmitigated air quality impacts associated with the EAEC project as proposed for approval by the Bay Area Air Quality Management District (BAAQMD).

We begin by noting that the significance of the project's air quality impacts, particularly as related to PM<sub>10</sub>, were expressly addressed by the BAAQMD in the Preliminary Determination of Compliance (PDOC) issued for EAEC. In particular, the District addressed the question of whether the emission reduction credits provided for the project's PM<sub>10</sub> impacts would result in a net air quality benefit. In Appendix C to the PDOC, the BAAQMD set forth a rational procedure for evaluating the air quality impacts of both the project and the emission reduction credits in determining whether a net air quality benefit resulted. The BAAQMD concluded that the reductions in SO<sub>2</sub> emissions provided by EAEC as ERCs resulted in a significant air quality improvement, while the increases in PM<sub>10</sub> emissions as a result of the operation of EAEC would not result in a significant adverse impact. As a result, the BAAQMD concluded that the EAEC project would not result in any significant, localized adverse PM<sub>10</sub> impacts, and that the ERCs provided by EAEC to address PM<sub>10</sub> impacts would result in a net air quality benefit on a regional basis. EAEC believes that the BAAQMD's approach to this issue is rational and well-founded technically, and that the CEC Staff should use a similar approach to evaluating the significance of project air quality impacts and the need for additional mitigation.

---

<sup>1</sup> In providing these comments, EAEC is not withdrawing from its commitment to pursue negotiations with the CEC staff, San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD), and the community regarding additional air quality mitigation measures that seek to address the concerns raised by these parties in the Commission's proceedings to date. Further, as reiterated by counsel of Applicant, the Applicant continues to respectfully disagree with the Staff's interpretation of the California Environmental Quality Act (CEQA) as it relates to the issues set forth in Staff's air quality mitigation paper. Nevertheless, the Applicant will continue to work closely and cooperatively with the Staff and other interested parties in hopes of avoiding the need to litigate these issues during evidentiary hearings. Specifically, Applicant believes that a reasonable mitigation proposal can and should be developed, making such legal issues moot.

The CEC Staff's mitigation analysis purports to address localized project impacts related to ozone and PM<sub>10</sub>. We believe that the Staff's analysis is misguided initially because it claims to address localized air quality issues when in fact ozone and, to a lesser extent, PM<sub>10</sub>, are both regional air quality problems.<sup>2</sup>

With respect to ozone, the Staff indicates that "the area" experienced 5 to 22 days per year of violations of the state 1-hour average ozone standard between 1992 and 2000. The Staff further goes on to suggest that there is no clear trend or indication that ozone air quality is improving in the project area. However, although the Staff proceeds to recommend a series of mitigation measures specifically intended to reduce emissions in the San Joaquin Valley area, the ozone data relied upon by the Staff are taken from the Livermore monitoring station, within the Bay Area air basin. Furthermore, the Staff fails to note that the Livermore monitoring station has recorded not more than two hours of violations of the federal ozone standard per year since 1999, and that the Tracy monitoring station has recorded not more than two hours of violations of the federal ozone standard per year since the station began operation in 1995. While additional progress is certainly needed to achieve the state ozone standard, as well as the new federal 8-hour average ozone standard, it would be inappropriate to characterize the project area as having a severe ozone problem.

With respect to particulate matter, the Staff notes that most of the observed PM<sub>10</sub> violations occur in the wintertime, and are attributable to emissions from residential wood combustion, combustion of fossil fuels, and entrained dust from motor vehicles and construction activities. While perhaps factually accurate, these statements are not an indication of the severity of the PM<sub>10</sub> air quality problem. The only comment that the Staff makes regarding the severity of the particulate air quality problem is that "[t]he area experienced the highest level of PM<sub>2.5</sub> concentrations of all the counties in the Bay Area District air basin." As in the case of the Staff's comments with respect to ozone, the Staff is referring to a measurement in Livermore, and not to a measurement made in the San Joaquin Valley. Further, the Staff is referring to a single measurement taken in Livermore on January 7, 2001, which recorded PM<sub>2.5</sub> concentrations 70% higher than the next highest value measured during the three years in which PM<sub>2.5</sub> has been measured at Livermore. Furthermore, during the two other years in which PM<sub>2.5</sub> was measured at Livermore, 1999 and 2000, that station did not experience the highest PM<sub>2.5</sub> concentrations in the Bay Area. Finally, the single high level in 2001 is the only recorded level in excess of the federal 24-hour average PM<sub>2.5</sub> standard, and does not constitute a violation of that standard (which is evaluated based on the 3-year average of 98<sup>th</sup> percentile values, rather than on a single measured maximum). In fact, in the three years that PM<sub>2.5</sub> has been measured at Livermore, there have been no violations of the federal 24-hour or annual average PM<sub>2.5</sub> standards, and no violations of the recently adopted state annual average PM<sub>2.5</sub> standard.

---

<sup>2</sup> Although PM<sub>10</sub> impacts can be localized under certain conditions, such as when emissions of fugitive dust are involved or when severe inversions trap pollutants from low-level emissions sources such as fireplaces, the PM<sub>10</sub> emissions associated with operation of the EAEC project do not involve either of these situations.

At the monitoring station in the San Joaquin Valley where PM<sub>2.5</sub> is measured nearest to the project site, in Stockton, there have been up to five days per year in which PM<sub>2.5</sub> has been measured at levels in excess of the federal 24-hour average standard; however, there has not been a recorded violation of that standard, which, as noted above, is based on a three-year average of the 98<sup>th</sup> percentile value measured. The three-year annual average PM<sub>2.5</sub> level at Stockton has recently been recorded at slightly above the federal standard, 16.4 µg/m<sup>3</sup> as compared with the federal standard of 15 µg/m<sup>3</sup>. Once again, it is inappropriate to characterize the project area as having severe air quality problems related to this pollutant.

The CEC Staff bases its claim that EAEC's impacts will be significant if further mitigation is not provided on their general conclusions regarding existing air quality in the project area (discussed above), and on its concern that the emission reduction credits provided by EAEC do not "fully mitigate the project PM<sub>10</sub> and ozone impacts to the local area due to the distant location of the source of the credits." Thus, the Staff reaches its conclusion without regard to the project's emission rates or modeled air quality impacts; merely the existence of air quality levels in excess of state or federal air quality standards and the distance between the project site and the location of the emission reduction credits is sufficient, in the Staff's opinion, to justify its concern. EAEC believes that such a position is technically insupportable. A comparison of the facts in the EAEC case with those in the case of the Tracy Peaker Project (TPP) is illuminating on this point.<sup>3</sup>

Figure 1 (attached) shows the locations of the EAEC and TPP projects relative to the locations where each project's ERCs were created. The EAEC project and its ERC locations are shown with green/bold labels on this map, and the TPP project and its ERC locations are shown with red/italic labels on the same map. As can be clearly seen, the locations of the EAEC ERCs are substantially and consistently closer to the EAEC project site than are the TPP ERCs to the TPP project site.

Although the CEC Staff may argue that this is an unfair comparison because the EAEC ERCs are derived from sources located in the Bay Area Air Basin, this argument is misguided. State law<sup>4</sup>, local air district regulations<sup>5</sup>, and CEC Staff opinions<sup>6</sup> have long recognized that emission reduction credits obtained in adjoining air basins can provide real benefits in the area impacted by proposed new projects. In the case of EAEC, the new source review rule of the San Joaquin Valley UAPCD expressly provides for the use of offsets in adjoining air districts if the source of the offsets is within 50 miles of the SJVUAPCD boundary and other specified conditions of state law (requiring approval of

---

<sup>3</sup> The CEC Staff and Presiding Member have recommended certification of the Tracy Peaker Project.

<sup>4</sup> See, for example, H&SC Section 40709.6.

<sup>5</sup> See, for example, SJVUAPCD Rule 2201, Section 4.13.2.

<sup>6</sup> See, for example, the Commission's decision for the High Desert Power Project:

*However, sufficient local offsets to satisfactorily mitigate all the project's air impacts are unavailable. Therefore, and in part because local air quality degradation is caused by transport of pollutants from the South Coast air basin, Applicant will also obtain ERCs for NOx and VOC from the South Coast Air Quality Management District (SCAQMD), pursuant to inter-basin, inter-pollutant trading ratios and protocols developed by the appropriate state and federal agencies, and approved by local authorities. {citations omitted} (CEC Decision 97-AFC-1, p. 101)*

both Districts) are satisfied. While these other conditions do not apply (as the EAEC project and its offsets are, in fact, located within the same air district), the distance criteria in SJVUAPCD Rule 2201, Section 4.13.2, are a clear indication that this air district believes that nearby credits from adjoining districts can be used for projects in the San Joaquin Valley.<sup>7</sup> All of the ERCs proposed for use by EAEC are located within 50 miles of the SJVUAPCD boundary.

In fact, as shown in the attached Table 1, the weighted-average distances of the EAEC project's ERCs are consistently and substantially lower than the distances between the TPP project location and the ERCs provided for that project. The data in Table 1 demonstrate that the ERCs provided for the EAEC project average between 34 and 42 miles from the project site, depending on the pollutant; in contrast, the ERCs provided for the TPP project average between 46 and 213 miles from the project site, depending on the pollutant.<sup>8</sup>

Furthermore, the Staff's position on this point with respect to EAEC is in direct opposition to the conclusion reached by the Staff in the Tracy Peaker Project (TPP) case currently before the full commission. In that proceeding, the CEC Staff concluded that the provision of emission reduction credits from locations as far as 200 miles from the project site was adequate to ensure that there were no significant unmitigated air quality impacts. Although the CEC Staff may be quick to cite the local mitigation program proposed by the TPP project developer, in doing so the Staff overlooks the language in PMPD condition AQ-78 that deals with the TPP local mitigation program. This condition reads as follows:

*This condition is agreed to in order to address concerns raised by the public, and is not imposed to mitigate a significant impact under CEQA.*

Thus, the CEC's conclusions regarding the significance of air quality impacts for TPP rest solely on that project's provision of emission reduction credits – without regard to the distance between the project site and the location of the ERCs.

Although the Staff Assessment in the TPP project does not clearly set forth the calculations that led the Staff to its conclusion regarding the significance of the air quality impacts, based on our participation in and review of CEC Staff assessments in other proceedings, we believe that the calculation was simply based on a comparison of project emissions with emission reduction credits, ensuring that the quantity of emission reduction credits provided is at least as great, on a 1:1 basis, as the project emissions requiring mitigation.

---

<sup>7</sup> The SJVUAPCD has indicated that credits from adjoining districts may need to be discounted by some unspecified amount. While we do not believe that the SJVUAPCD's regulations provide for such a discount, we acknowledge the District's position on this issue.

<sup>8</sup> This comparison excludes carbon monoxide emissions, for which the CEC has never historically required mitigation, and which is not at issue in the EAEC case. The CO ERCs voluntarily provided by TPP are located an average of 19 miles from the TPP project site.

Table 1 shows this comparison for both the EAEC and TPP projects. For TPP, as expected, the analysis demonstrates that the ERCs provided by the project applicant are at least as great as the project's emissions, on a one-for-one basis, without regard to the benefits of the local mitigation program. The comparable analysis for EAEC reaches the same conclusion, except for CO and SO<sub>2</sub> emissions. With respect to CO emissions, the CEC Staff has never alleged that a power project would result in significant CO air quality impacts that require further mitigation, and no such allegation has been made in this case. With respect to SO<sub>2</sub> emissions, the CEC Staff has been inconsistent in requiring mitigation for the trace levels of SO<sub>2</sub> emissions associated with natural gas combustion.<sup>9</sup> However, even if one were to conclude that the SO<sub>2</sub> increases, if not mitigated, represented a significant air quality impact due to their potential contribution to ambient PM<sub>10</sub> levels, the CEC Staff has, in past cases, accepted reductions in other PM<sub>10</sub> precursors (such as direct PM<sub>10</sub> emissions, oxides of nitrogen emissions and, in some cases, POC emissions) as suitable mitigation.<sup>10</sup> The net decrease in NOx emissions shown in Table 1 for EAEC will be in excess of the unmitigated SO<sub>2</sub> increase, and hence we believe that there are no significant, unmitigated emissions associated with the EAEC project.

We further note that the CEC Staff has historically, and correctly, taken the position that when it comes to evaluating impacts for significance under CEQA, it is appropriate to look at reasonable worst-case scenarios and not absolute worst-case scenarios. The previous context in which the CEC addressed this issue was in the manner used to determine worst-case daily emissions from a project to evaluate the need for, and adequacy of, mitigation. For example, even if the air permit for a project would have allowed the operation of duct burners for all 24 hours in a day, the CEC staff evaluated whether that was a likely worst-case scenario and, in some cases, concluded that, for example, only 16 hours of duct firing operation would occur on a "reasonable worst case day". The CEC staff presently evaluates project impacts looking at annual emissions, and not daily emissions; however, the "reasonable worst case" concept still applies. We believe that with respect to PM<sub>10</sub> emissions from EAEC, this issue is particularly relevant. The CEC Staff is in receipt of source test data from comparable facilities that demonstrate that expected PM<sub>10</sub> emission rates will be approximately one-half, or less, of the maximum PM<sub>10</sub> emission rates shown in Table 1, even if EAEC operates to the maximum level allowable under the BAAQMD permit.<sup>11</sup> An evaluation of EAEC emissions based on this "reasonable worst case" emission rate for PM<sub>10</sub> lends further credence to the position that the EAEC project's PM<sub>10</sub> impacts are fully mitigated through the provision of emission reduction credits provided to satisfy BAAQMD offset requirements.

---

<sup>9</sup> See, for example, EAEC's response to CEC Data Request 27 on this subject.

<sup>10</sup> See, for example, CEC Staff assessments in the cases of Delta Energy Center, Metcalf Energy Center, Moss Landing Power Plant, and Morro Bay Power Plant.

<sup>11</sup> See, for example, source test data submitted to the CEC related to the Sutter and Los Medanos facilities. Although EPA has recently noted that the PM<sub>10</sub> source test methods used on those facilities have not yet qualified for formal EPA approval, the CEC Staff is in possession of additional test results conducted at the Crockett Cogeneration Facility that indicate that even the methods used at Sutter and Los Medanos overstate PM<sub>10</sub> emissions from gas-fired combustion turbines.

Finally, if one were to reject all the above arguments but still apply the reasoning used in the TPP PMPD, the quantity of emissions that remain unmitigated is simply the allowable SO<sub>2</sub> emission rate of 21.33 tons per year.

In conclusion, EAEC believes that the project will not result in significant, unmitigated air quality impacts if the project is evaluated in a manner consistent with either the BAAQMD's technical approach or the CEC's treatment of other, contemporaneous, nearby projects. Nonetheless, as stated at the July 9<sup>th</sup> workshop, EAEC is committed to provide additional air quality mitigation to address concerns that have been raised by the CEC Staff, SJVUAPCD staff, and community residents.