A P P E N D I X F (of the Final EA)

C O M M E N T L E T T E R S O N T H E D R A F T E N V I R O N M E N T A L A S S E S S M E N T A N D R E S P O N S E S T O T H E C O M M E N T L E T T E R S

Bear Valley
Electric Service
A Division of Golden State Water Company

December 17, 2007

Mr. James Koizumi
South Coast Air Quality Management District
c/o CEQA
21865 Copley Drive
Diamond Bar, CA 91765-4182

Subject: Comments on Draft Environmental Assessment for Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines (ICEs)

Dear Mr. Koizumi:

Bear Valley Electric Service (BVES) herewith submits its comments on the South Coast Air Quality Management District's (SCAQMD) Draft Environmental Assessment (EA) on Proposed Amended Rule (PAR) 1110.2. This letter supplements BVES' written comments to Mr. Marty Kay dated September 20, 2007, which are attached and herein incorporated by reference. 1-1

Comments on Draft EA for PAR 1110.2
BVES has two primary comments regarding the Draft EA and associated PAR 1110.2. The first is that the SCAQMD proposes to impose major and costly new requirements on facilities, including BVES' Bear Valley Power Plant (BVPP), that do not fall within the scope of the SCAQMD's stated Objective of the PAR 1110.2. The second is that the PAR requirements for additional CEMS equipment and inspections, monitoring and reporting activities will impose significant costs on BVES' small customer base and service area, and will have adverse socio-economic effects on an already strained local economy. 1-2

Before we further discuss our two primary comments, BVES requests that the SCAQMD staff and Board review and address BVES' previously submitted (attached) comments on the PAR 1110.2. The attached letter describes BVES' Bear Valley Power Plant (BVPP) state-of-the-art design, emissions monitoring and controls, and emissions limits as set forth in the May 2007 Permits to Operate (PTOs for Facility ID No. 129033). BVES requests that the staff and Board consider that the PAR 1110.2 would add duplicative and costly equipment, systems and procedures that are already in place for the BVPP as specified through the BVPP PTOs. 1-3

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In addition to the above, the BVPP PTO emissions limits (NOx 7.3 ppm, CO 36 ppm, and VOC 11 ppm) are significantly more stringent than the PAR 1110.2 limits (NOx 11 ppm, CO 250 ppm and VOC 30 ppm). The SCAQMD-certified NOx CEMS system actively monitors emissions, BVES' operators check CO emissions frequently, the PTOs specify quarterly assessments and documentation of CO concentrations, and BVES voluntarily replaced older design air/fuel (A/F) ratio controllers with state of the art A/F ratio controllers. The SCAQMD PTO conditions, BVPP operator inspections and monitoring, and new A/F ratio controllers represent significant costs for operating this relatively small (8.4 MW) electrical generating plant that is used for meeting peak system loads, emergency power supply during Southern California Edison Company (SCE) transmission system outages of the radial lines supplying the high elevation service area, BVES' own distribution system outages, and overall voltage support during SCE system-wide peaking conditions. 1-4

BVES requests that the SCAQMD recognize that adding more layers of equipment and monitoring through the PAR 1110.2 will not substantially contribute to BVES' or the SCAQMD's mutual goals of ensuring compliance, but it will have substantial adverse impacts on BVES' small customer base due to the high capital and operating costs to comply with the PAR 1110.2 requirements that are redundant to the BVPP PTOs.

<u>PAR 1110.2 Stated Objective Is Not Applicable to the BVPP</u>
Page 2-2 of the Draft EA identifies the following as the Objective of the PAR 1110.2:

1. To implement facility modernization to achieve NOx emissions equivalent to BACT;
2. To achieve further VOC and CO emissions reductions based on the cleanest available technologies;
3. To increase engine compliance through improved monitoring, recordkeeping, and reporting;
4. To implement SB 1298 distributed generation emissions standards for new electrical generating engines; and, 1-5
5. To address issues identified by the Environmental Protection Agency so that 1110.2 can be approved for incorporation into the State Implementation Plan.

The requirements of the PAR 1110.2 should not apply to the BVPP because the BVPP already has equipment, systems, permit conditions, and monitoring, recordkeeping, and reporting procedures that meet or exceed those identified as the Objective of the PAR:

1. The NOx emissions limits specified in the BVPP PTOs are already much lower than SCAQMD-identified BACT for NOx;

2. The BVPP includes the cleanest available technology for controlling VOC and CO emissions, and the BVPP VOC and CO emissions limits are already much lower than the PAR 1110.2 limits;
3. The SCAQMD's recently issued PTOs for the BVPP include monitoring, recordkeeping and reporting requirements that are comparable to the PAR 1110.2,; except for the new PAR CO CEMS requirement, the PAR would impose duplicative requirements for the BVPP and even CO monitoring and recordkeeping are already required through the PTOs; 1-5 (cont.)
4. The BVPP is an existing facility that does not fall under SB 1298; and,
5. The BVPP PTOs already address the EPA issues except for the frequency of source testing, which the EPA recommends at every two years.

The BVPP is a newly constructed facility that overall utilizes the latest in power plant design and equipment. Considering the above point-by-point comparison to the PAR, it is clear that the BVPP already substantively complies with the Objective of the PAR, except for the increased frequency of source testing.

PAR 1110.2 Will Have Adverse Socio-Economic Impacts on BVES Customers

The capital and operational costs of the additional, duplicative requirements of PAR 1110.2 to BVES' service area will be substantial. The addition of CO CEMS, duplicative monitoring, recordkeeping, and reporting on operations, and increased frequency and amount of source testing for the BVPP will have considerable initial and recurring cost impacts on BVES customer rates. The attached letter to Mr. Kay describes the anticipated costs just for the equipment installation of CO CEMS, which when combined with the costs of the other duplicative testing, monitoring, recordkeeping, and reporting provisions of the PAR, will cumulatively add to the socio-economic strain on the struggling economy in the Big Bear Valley. Increased electricity costs to the Big Bear area customers will adversely impact both seasonal and permanent residents, affordable housing, the cost of other public and private services in the Big Bear Valley, and cumulatively and negatively contribute to an already struggling community. As a result, BVES requests that the SCAQMD address the cumulative adverse impacts that would result to BVES' service area. 1-6

Request for BVPP Exemption from New Requirements Under PAR 1110.2

The BVPP is operated to provide emergency and peaking power supplies that cannot otherwise be met due to the operation and capacity limitations on SCE transmission lines serving the BVES area. The BVPP profile does not match SCAQMD staff's emphasis on electrical generation facilities that are mainly used for economic dispatch. 1-7

BVES therefore requests that the SCAQMD staff and Board exempt the BVPP from PAR 1110.2 because it already complies with the Objective, intent and substance of PAR 1110.2 and because of its non-economic basis for operations. To help ensure continued future compliance, BVES is willing to increase the frequency of its source

testing for NOx, CO and VOCs from the current three-year interval to every two years. This commitment could be instituted through some administrative action, or through the Board's decision-making on the PAR.

1-7 (cont.)

We appreciate your consideration of the above comments and look forward to your response. We also look forward to the staff's and Board's responses to BVES' request for exemption from PAR 1110.2.

Sincerely,

Tracey L. Drabant
Energy Resource Manager

Attachment (Letter to M. Kay dated September 20, 2007)

cc: Marty Kay, South Coast Air Quality Management District
Ken Markling, Bear Valley Electric Service
Emil Schultz, Schulco LLC
Dave Zamorano, Cornerstone Energy Services, Inc.
Rick Lind, EN2 Resources, Inc.

FILE

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9/26/07

Bear Valley
Electric Service
A Division of Golden State Water Company

September 20, 2007

Mr. Marty Kay
South Coast Air Quality Management District
Science and Technology Advancement
21865 Copley Drive
Diamond Bar, CA 91765

VIA FACSIMILE

Subject: Comments on South Coast AQMD Proposed Amendments to Rule 1110.2

Dear Mr. Kay:

Bear Valley Electric Service (BVES) appreciates the opportunity to provide its comments on the proposed amendments to Rule 1110.2 dated August 7, 2007. BVES owns and operates an 8.4 MW natural gas-fired electric generating plant (Bear Valley Power Plant or BVPP). BVES is a small electric utility that serves approximately 23,000 customers in and around the Big Bear Lake recreational area in the San Bernardino Mountains.

BVES has worked proactively with South Coast Air Quality Management District (AQMD) staff over the last few years to address and reach agreement on acceptable permit operating, monitoring and reporting conditions for the BVPP. Permits to Operate (PTOs) were issued by the AQMD in May 2007 that we believe establish an effective and reasonable emissions control and monitoring program for the BVPP. 1-8

However, in its comments, BVES wishes to relay to the AQMD that the proposed amended rule (PAR) for 1110.2 would substantially increase BVES' operating, monitoring and reporting conditions, and would have significant operational, management, cost and other impacts on BVES and its customers. The PAR would impose numerous new requirements on BVES that are far beyond those established by the recently issued PTOs. As described in the enclosed comments, BVES considers many of the PAR requirements to be unnecessary and redundant to existing conditions of the BVPP PTOs.

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Before the amendments are finalized and the AQMD Board adopts an amended rule, BVES requests that the AQMD staff and Board carefully consider the burden of these additional requirements on facilities such as BVPP where emissions controls and plant operations already achieve the objectives that are intended by the PAR. BVES further requests that the AQMD specifically consider the marginal, if any, gain to emissions compliance that would be achieved at the BVPP versus the substantial costs and related impacts to BVES electric customers that would result from the PAR. 1-8 (cont.)

Lastly, a continuing concern of BVES is that the AQMD developed the PAR based on a skewed test program of existing facilities. Only eleven lean-burn engines were tested, yet 180 rich-burn engines were tested, leading the AQMD staff to conclude the need for and prepare the PAR to require much more onerous changes for rich-burn engines. The AQMD staff emphasis on mandatory requirements for rich-burn engines, while exempting lean-burn engines from costly retrofits (e.g., CO CEMS), is not defensible given the disproportionate sampling of the facilities. 1-9

BVES looks forward to the opportunity of reviewing and commenting on the AQMD's California Environmental Quality Act document for the PAR. BVES requests that Ken Markling and I are included on all future public notices and documents regarding the PAR. A hard copy of these documents will follow by mail.

Sincerely,

Ken Markling
Operations & Planning Manager
For:
Tracey L. Drabant
Energy Resource Manager

Enclosure

- BVES Comments on the Proposed Amendments to Rule 1110.2
- BVES Comments on the Proposed Changes to the Portable Analyzer Protocol
- Oral Comments Presented by Ken Markling at the September 6, 2007 Workshop

Cc: Mr. James Koizumi, South Coast AQMD
Ken Markling, Bear Valley Electric Service
Emil Schultz, Schulco
Dave Zamorano, Cornerstone Energy Services, Inc.
Rick Lind, EN2 Resources, Inc.

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BEAR VALLEY ELECTRIC SERVICE (BVES) COMMENTS ON THE SOUTH COAST AQMD AUGUST 7, 2007 PROPOSED AMENDMENTS TO RULE 1110.2

BVES Comment 1 – Section (e)(3)(A), which addresses Stationary Engine CEMS, indicates that the first CEMS summary report for the period ending June 30, 2008 shall be due on July 30, 2008. This would establish a 30-day time limit for the operator to poll data, prepare the report, perform QA/QC reviews, and then submit the semi-annual CEMS report to the AQMD. BVES' experience is that 30 days is insufficient. Typically, BVES' CEMS contractor takes 30 or more days to deliver its first draft report to BVES. *BVES requests that this provision be changed to no earlier than 60 days, and preferably 90 days.* Extending the submittal due date would also make it more consistent with the AQMD's Annual Emissions Report due date. 1-10

BVES Comment 2 – Section (e)(3)(B) addresses time limits to modify existing or install new CEMS required by the PAR. For public agencies, it allows up to one additional year of time to install or modify CEMS on an existing engine. The additional one year allowance does not apply to private entities such as BVES, which would be subject to the much shorter time limits specified in Table VII. BVES' recent experience is that CEMS contractors are in high demand, and are a relatively new sector of the consulting industry that is having difficulty being responsive to industry needs. *While BVES does not believe that it should be subject to additional CEMS requirements for CO as described in Comment 4 below, if the AQMD does not grant BVES relief from the CO CEMS requirement, then BVES and other private organizations should be afforded the same additional time that public agencies will be afforded.* 1-11

BVES Comment 3 – Section (e)(4) and (f)(1)(D) require the preparation, submittal and AQMD approval of a Stationary Engine Inspection and Monitoring (I&M) Plan that addresses acceptable ranges for engine and control equipment operating parameters. The parameters for the I&M Plan for rich-burn engines include: 1) engine load, 2) maximum deviation of the oxygen sensor set point, and 3) exhaust temperature at the catalyst inlet and temperature change across the catalyst. The I&M Plan is also to identify procedures for: a) diagnosing and notifying the operator (alarming) of engine control malfunctions, b) weekly or 150-operating hour checks of NOx and CO with a portable analyzer, c) daily monitoring, inspection and recordkeeping of: engine parameters, engine elapsed operating hours, hours since the last portable analyzer emissions check for NOx and CO, the deviation of the exhaust oxygen sensor voltage from the air-to-fuel ratio controller set point, and engine control system and air-to-fuel ratio controller faults and alarms that affect emissions, d) procedures and schedules for preventive and corrective maintenance, e) portable analyzer sampling to verify or re-establish the set point following oxygen sensor fault or replacement, f) procedures for reporting noncompliance to the Executive Director within one hour of a non-compliance event, g) procedures for recordkeeping required by the I&M Plan, and h) procedures for I&M Plan revisions and AQMD approval of such revisions prior to changes in emission limits or control equipment. Per the May 2007 AQMD Permits to Operate (PTOs) for its Bear Valley Power Plant 1-12

(BVPP), BVES is already required to inspect, monitor and report on the parameters described above. Because the PTOs already include these procedures that are specific to BVPP operations, *BVES does not believe that another type of I&M Plan should be imposed that would be redundant and costly. Instead, BVES requests that the AQMD accept what has already been required of BVES through the PTOs.* This could be accomplished by adding a provision to this subsection that waives the I&M Plan if acceptable ranges and procedures for inspection, monitoring, reporting and recordkeeping of engine and control equipment operating parameters are already established through a facility's PTO or other AQMD approval. 1-12 (cont.)

Comment 4 – Section (f)(1)(A) would require the addition of seven CO CEMS to the BVPP. *As described in BVES' Comments Presented orally at the September 6 AQMD Workshop (copy attached), BVES requests that it be exempt from CO CEMS.* The costs for equipment purchase, installation, testing, AQMD fees for certification, and other related costs would be greater than $250,000 in the first year and over $100,000 per year thereafter, which is in addition to similar costs already paid and now being paid annually by BVES for its NOx CEMS. The AQMD's May 2007 PTOs for the BVPP already require portable analyzer CO monitoring and recordkeeping to make sure that the BVPP stays in compliance with CO emission limits, and the added costs for CO CEMS for each of the seven engines would be unnecessary and represent a significant increase in costs to BVES' small customer base. An alternative would be for BVES to increase the frequency of its portable analyzer monitoring and recordkeeping in lieu of the CO CEMS. *BVES requests that the AQMD address the alternative of increased portable analyzer CO monitoring and record keeping in lieu of requiring CO CEMS at the BVPP.* 1-13

Comment 5 – Section (f)(1)(A)(vi) establishes exceptions to Rule 218 CEMS requirements, including electronic storage of data in lieu of a strip chart recorder and conducting RATA on the same schedule as source testing. As worded, the provision pertains to "engines that are required to install a CEMS by clause (ii) of this subparagraph…". *BVES requests that the same exceptions be established for existing CEMS as well as CEMS that may be required* "…by clause (i) of this subparagraph." 1-14

Comment 6 – Section (f)(1)(C)(i) proposes to increase the frequency of source testing from every three years to …"every two years, or 8,760 operating hours, whichever occurs first." A sentence is then added to the section that states …"The source test frequency may be reduced to every three years if the engine has operated less than 2,000 hours since the last source test." No rationale is presented for increasing the frequency of the source testing from 3 years to 2 years, or for the selection of 2,000 hours of operation. Further, no consideration is given for the many new testing, monitoring and reporting requirements of the PAR. If the AQMD threshold for source testing is changing to 8,760 hours, then the frequency should not change from 3 years to 2 years, but rather be expressed as …"every 3 years or 8,760 operating hours, whichever occurs first." *BVES therefore requests that the AQMD change this provision to require source testing based only on …"every three years, or every 8,760 hours, whichever occurs first."* 1-15

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Comment 7 – Section (f)(1)(D)(x) would waive the I&M Plan requirement if the facility is required to have a NOx and CO CEMS by the PAR, or if the permittee voluntarily has a NOx and CO CEMS that complies with the PAR. BVES was required to have, and has installed and operates, a NOx CEMS in accordance with AQMD permit to construct requirements. In the May 2007 AQMD PTOs, BVES is now required to regularly monitor and record CO as described under Comment 4. Because BVES has a NOx CEMS and because it already regularly monitors and records CO per the terms of the recently issued PTOs, *BVES requests that it be exempt from the I&M Plan requirements.* Comment 3 above provides further detail on the reasons that an I&M Plan would be unnecessary, costly, and redundant to procedures already required through the PTOs. 1-16

Comment 8 – Section (f)(1)(F)(i) and subsequent paragraphs would require electric meter monitoring and CEMS recording for new, non-emergency electrical generating engines. The requirements appear to specifically pertain to facilities that are eligible for emissions credits for heat recovery. However, electrical meter information is not needed by the AQMD for facilities that do not claim emissions credits for heat recovery. *Therefore, Section (f)(1)(F) should be revised to be applicable only to ... "engines subject to the requirements of subparagraph (d)(1)(F)(ii) ... ".* 1-17

Comment 9 – Section (f)(1)(G) requires that portable analyzer tests only be conducted by persons who have completed ..."an appropriate District-approved training program in the operation of portable analyzers and has received a certification issued by the District." *BVES requests that a reasonable time allowance be specified within which operators are to have received the training and certificate.* 1-18

Comment 10 – Section (f)(1)(H)(i) would require an operator to report any noncompliance with Rule 1110.2 or permit condition to the Executive Officer within one hour of the noncompliance or within one hour of the time the operator knew or reasonably should have known of its occurrence. BVES believes that this time limit is unreasonably short and could lead to miscommunication of information. The BVPP has seven engines that are operated intermittently. BVES often starts multiple engines, but its operators cannot simultaneously troubleshoot or investigate a noncompliant engine. If a noncompliant event occurs or is about to occur, the BVES operator shuts down the problem engine and starts another engine in its place. After the engines are running and the operator confirms that the plant is serving load, then the operator will return to the noncompliant engine at a later time to investigate the problem. For an operator to troubleshoot an engine, identify the equipment or other cause of the problem, and determine an estimated time for repairs often involves several hours and sometimes a day or more of investigation. *BVES therefore requests that the AQMD change the reporting time from one hour to one business day, which will help ensure that the operator provides complete and accurate information to the Executive Officer and AQMD staff.* 1-19

Comment 11 – *BVES supports the proposed text addition to Section (h)(10)*, which specifies a start-up exemption limit of 30 minutes, ..."unless the Executive Officer approves a longer period for an engine and makes it a condition of the permit to operate." 1-20

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BVES COMMENTS ON SOUTH COAST AQMD PROPOSED CHANGES TO THE (PORTABLE ANALYZER) PROTOCOL FOR THE PERIODIC MONITORING OF NOx, CO, AND 02 FROM STATIONARY ENGINES

BVES has reviewed the proposed protocol for portable analyzer monitoring. At this time, BVES requests that the AQMD defer adoption and provide a future opportunity to review and comment on the proposed revisions to the protocol for two reasons: 1-21

1) the protocol text is directly related to the requirements of Rule 1110.2, and until the AQMD finalizes the proposed amended rule for 1110.2, the text for the protocol cannot be presented for public comment.
2) the proposed forms for linearity and stability tests (Form 1), calibration recordkeeping (Form 2), and periodic monitoring recordkeeping (Form 3) are not included in the draft protocol for review and comment.

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- Attachment to BVES Comments on PAR 1110.2 -

ORAL COMMENTS SUBMITTED BY KEN MARKLING OF BVES AT THE SEPTEMBER 6, 2007 SOUTH COAST AQMD WORKSHOP

Opening: Hello, I am representing Bear Valley Electric Service (BVES), a small electric utility that serves approximately 23,000 customers in and around the Big Bear Lake recreational area in the San Bernardino Mountains.

Introduction: Due mainly to limitations on the three transmission lines that deliver power to our mountaintop community, BVES needed to install its own generation equipment. As of January 2005, we now have seven, rich-burn internal combustion (Waukesha) natural-gas fired engines at our Bear Valley Power Plant (BVPP), for a total of 8.4 MW in capacity. BVES operates the BVPP for peaking power and emergency generation needed during outages caused by forest fires and winter weather.

BVES has a number of comments on the proposed rule, which we will submit in writing by the September 17 deadline. Today, however, BVES will comment on only two of the proposed changes, because if the PAR is implemented as proposed, it would significantly impact BVES' electric customers.

Comment 1: The Proposed Requirement to Add CO CEMS Is Costly and Unwarranted
The AQMD proposes to require CO CEMS for rich-burn internal combustion engines only. BVES currently has NOx CEMS for each of its seven engines, and already has installed state-of-the-art air-fuel ratio controllers to maintain NOx levels per the AQMD's Permit to Operate (PTO) limits. 1-22

The capital cost for installing CO CEMS at the BVPP would be over $100,000. The annual costs for operating, maintaining, testing and reporting to the AQMD would be comparable to the annual costs for NOx CEMS, which averages roughly $70,000 per year. These capital and annual costs exclude BVES staff time for contracting, consulting, reviewing, and reporting to the AQMD which will, in turn, increase. It is estimated that the annual cost for retrofitting and operating CO CEMS equipment the first year would exceed $200,000.

BVPP operators already sample and record CO levels during engine operation. The operators also perform quarterly CO sampling as required by the Permits to Operate (PTOs). Third party Source Emissions testing for CO is also performed every third year.

It is BVES' understanding that the BVPP has the most stringent CO emissions limits (36 ppm corrected) in the SCAQMD for ICEs, and BVES has not been cited for any CO violation. The AQMD already requires BVES to regularly monitor and document CO levels. BVES additionally self-tests for CO levels. The added burden of the capital and annual costs to BVES ratepayers for installing, maintaining, testing and reporting on a CO CEMS at the BVPP is unjustified. There would be no public benefit, but would

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result in significant public cost to BVES' service area and, in turn, increased rate for its electric service customers.

Comment 2: The Proposed Change in Frequency of Source Testing from Every Three Years to Every Two Years or 8,750 Hours, whichever Comes Sooner, Is Unnecessary
I described earlier the NOx and CO testing and reporting that we undertake at the BVPP. The existing NOx CEMS undergoes Relative Accuracy Test Audits (RATA) annually. The CO is sampled and recorded frequently. Increasing Source Testing from every 3 years to every 2 years would merely duplicate information that is already collected through other testing (e.g., annual NOx RATA) and monitoring (e.g., CO sampling) activities. This would only increase costs to BVES customers without providing new information. 1-23

Summary: Overall, as an electric utility providing a service vital to its customers, BVES has an obligation to provide service at a reasonable cost within the given regulatory framework. By unnecessarily increasing the regulatory cost to do business through costly, unjustified, and unwarranted rules, and without direct public benefit, the AQMD is not allowing BVES to meet its obligation to its customers as an electric utility. 1-24

Thank you for your consideration and the opportunity to address you today. I would like to provide you a copy of these oral comments to be followed by our written comments due on September 17.

Responses to Comment Letter #1
Bear Valley Electric Service
December 18, 2007

Response 1-1
SCAQMD staff strongly disagrees with the opinion expressed by the commenter that the requirements of PAR 1110.2 do not fall within the scope of the SCAQMD's stated Objective of PAR 1110.2 for the following reasons:

First, the commenter incorrectly states later in the comment letter that the objectives of PAR 1110.2 are not applicable to the commenter. The statement of objectives does apply to the objectives of the proposed project, in this case PAR 1110.2, not individual facilities that may be subject to PAR 1110.2. If the equipment operated by the commenter already complies with PAR 1110.2, then no further equipment modifications are necessary.

PAR 1110.2 partially implements 2007 AQMP Control Measure MSC–01 – Facility Modernization, which requires facilities not participating in the NOx Regional CLean Air Incentives Market (RECLAIM) Program to retrofit or replace existing equipment at the end of a predetermined life span to achieve NOx emissions equivalent to BACT. PAR 1110.2 would require affected facility operators to meet existing BACT standards for non-NOx RECLAIM facilities. In order to meet BACT standards some of the existing ICEs would need to retrofit or replace existing equipment. In addition to achieving NOx emission reductions, one of the objectives of PAR 1110.2 is to achieve further VOC and CO emission reductions for new and existing engines based on the cleanest available technologies.

PAR 1110.2 would also increase engine compliance through improved monitoring, recordkeeping and reporting. The additional monitoring, recordkeeping and reporting requirements are expected to eliminate the excess emissions found during unannounced source testing completed by SCAQMD enforcement staff. Additional CEMS, source testing and inspection and monitoring (I&M) would ensure that engines are operating correctly and emissions are below PAR 1110.2 requirements.

PAR 1110.2 would partially implement SB 1298 distributed generation emission standards for new electrical generating engines. The original staff proposal would have required affected engines to comply with CARB's distributed generation standards that, as of January 1, 2007, applied to equipment that does not require local district permits. The CARB standards are based on the emissions from large new central generating stations with BACT. Since large and small electrical generators are already required to meet these standards, the proposed standards would simply extend the same requirements to ICEs that require SCAQMD permits. Based on comments submitted by the Engine Manufacturers Association, staff raised the proposed limits, in lbs/MW-hr, from 0.10 to 0.20 for CO and from 0.02 to 0.10 for VOC. Therefore, one of the objectives was modified from implementing SB 1298 to partially implementing SB 1298.

Finally, a major objective of PAR 1110.2 is to address and correct issues identified by EPA relative to the existing version of Rule 1110.2, so it can be approved for incorporation into the SIP. EPA had five concerns with:

- Lack of an I&M plan similar to CARB' RACT/BARCT document. PAR 1110.2 includes and I&M plan.
- EPA requested that source testing every two years or 8,760 hours instead of every three years. PAR 1110.2 includes source testing every two years.
- Source testing at peak load as well as at under typical duty cycles.
- A removal, or further justification, of the exemptions for engines at ski resorts, the far eastern portion of Riverside County, and San Clemente Island.

Therefore, the objectives of PAR 1110.2 clearly reflect the scope and requirements of PAR 1110.2. Even though all objectives and requirements may not apply to Bear Valley Electric Service (BVES), they not preclude the need for other facilities to meet these objectives and requirements to ensure attainment of criteria pollutants in the SCAB.

Response 1-2
Economic factors direct or indirect are not considered in the Draft or Final Environmental Assessment unless they cause adverse environmental impacts. CEQA Guidelines §15131(a) states that "economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by economic or social changes… The focus of the analysis shall be on the physical changes." CEQA Guidelines §15131(b) states "economic or social effects of a project may be used to determine the significance of the physical changes cause by the project." CEQA Guidelines §15131(c) states that "economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether change in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. CEQA statutes §§21100 and 21151 also state that significant effects are limited to physical conditions. No direct or indirect economic or social effects that could cause physical impacts to the environment were identified as a result of implementing PAR 1110.2.

Permit data indicates that BVES would need to install seven CO analyzers to its internal combustion engines in 2010, resulting in an average annual compliance cost of $16,359, assuming a ten-year equipment life. It would not incur other costs. Therefore, the impact is minimal. Also, see Response 1-6.

Response 1-3
Specific comments have been identified in the attachment to BVES' letter and responses have been prepared.

BVES operates seven rich-burn, 1,695-bhp engines that are currently required by Rule 1110.2 to have a CEMS for NOx. Prior to 1997, Rule 1110.2 also required a CO monitor for such engines. Because SCAQMD testing has found that 28 percent of rich-burn engines tested are in violation of CO emission limits, SCAQMD has proposed to reinstate the requirements for continuous monitoring of CO, in addition to NOx, for large engines. BVES' permits only require a quarterly test for CO, which is not as effective in ensuring compliance as continuous monitoring. BVES'

currently permitted CO emission limit is 36 ppm, which is much more stringent than the proposed 250 ppm emission limit in Rule 1110.2, so ensuring compliance with this lower limit through continuous monitoring is much more critical.

Response 1-4
Since BVES already has a NOx CEMS, the cost of adding a CO monitor to the system is relatively small. BVES can pass on the costs to its customers. Further, BVES' equipment already complies with emission limits in PAR 1110.2, so no additional emission control equipment will be required. As a result no further cost will be incurred to purchase, install or maintain emission control equipment. BVES did not provide any specific analysis to show there are "…substantial adverse impacts on BVES' small customer base…" However, SCAQMD staff believes that when the compliance cost is amortized over the life of the equipment, the impacts to the ratepayers should be minimal.

Response 1-5
The emissions limits specified in the BVES permits to operate are already lower than the emission limits of PAR 1110.2. As a result, equipment at the BVES facility already meet most of the objectives of PAR 1110.2 except for the enhanced compliance through improved monitoring, recordkeeping, and reporting. See Response 1-3.

Response 1-6
BVES states that PAR 1110.2 requirements would increase electricity cost to customers, which would adversely impact seasonal and permanent residents, affordable housing, the cost of other public and private services and cumulatively and negatively contribute to an already struggling community. BVES did not provide sufficient information on the expected costs incurred to be able to evaluate the assertions that PAR 1110.2 would adversely affect the economy of Big Bear Valley.

Please see the Response 1-2. Data on total electricity generated by BVES is not publicly available so it is not possible to calculate the additional rate impact from compliance costs associated with the proposed amendments. However, given that Bear Valley Electric Service (BVES) serves about 17,500 residential customers and 2,500 commercial, industrial, and government customers, the impact of the $16,359 annual cost, assuming a ten-year equipment life, on its customers is not expected to be significant.

Response 1-7
Please see Response 1-3, which explains why improved CO monitoring is necessary. BVES offers to source test every two years. BVES is already required by Rule 218 to test at least annually for NOx CEMS certification. PAR 1110.2 will add CO to that requirement. If the engines are used primarily for "emergency and peaking power", they may not have to source test annually for VOC. PAR 1110.2 requires testing every two years or 8,760 hours, whichever occurs first. If the engines operate less than 2000 hours between source tests, the VOC test can be once every three years. SCAQMD rules do not typically exempt individual facilities. Generally, rules apply to specified equipment across the board as a measure of fairness and to enhance inspectors' abilities to enforce rule requirements for similar types of equipment.

Response 1-8
The September 20, 2007 fax from BVES was submitted to the SCAQMD prior to the release of the Draft EA on October 30, 2007; therefore, does not contain comments on the environmental analysis in the draft EA. Instead, the comments in this letter focus only on PAR 1110.2 provisions. In spite of this, specific comments have been identified and responses prepared for each comment. See previous responses 1-1, 1-3, 1-4 and 1-7.

Response 1-9
There is a sound technical basis for having different CO monitoring requirements for lean-burn engines. Because of the high levels of excess air with lean-burn engines, they inherently have much lower and more stable CO emissions than rich-burn engines. AQMD testing confirmed this. With regard to rich-burn engines, see Response 1-3.

Response 1-10
Rule 218 already requires CEMS reports within 30 days of the end of the six-month period.

Response 1-11
Giving public agencies an additional year to comply with the CEMS requirements actually addresses BVES' concern about the availability of CEMS contractors by stretching out the process over a three-year period, instead of a two-year period. BVES is not a public agency and can move faster than a public agency. With regard to financing and hiring contractors, public agencies are typically required to go through lengthy request for proposal processes, which can add substantial time to the contractor selection and hiring process.

Response 1-12
Pursuant to (f)(1)(D)(x) of the PAR, BVES will not be subject to the Inspection and Monitoring (I&M) plan requirements of the PAR because BVES will have NOx and CO CEMS. BVES should apply for a change of permit conditions to remove the parameter monitoring and quarterly CO testing on the current permit once the CO monitor is added to the current CEMS.

Response 1-13
See previous responses 1-1, 1-3 and 1-4. With regard to cost impacts, see Responses 1-2 and 1-6.

Response 1-14
Those exceptions to Rule 218 are intended only for smaller engines under 1,000 bhp that will be required to install a new CEMS. BVES' NOx CEMS already complies with Rule 218 as is.

Response 1-15
Both CARB and EPA require source testing at least every two years, but they have consented to the 2,000-hour exception. The source testing frequency provision is a necessary requirement for approval by EPA to incorporate the rule into the SIP. Incorporating a rule into the SIP is necessary to allow SCAQMD to take credit for anticipated emission reductions and for required attainment demonstration.

Response 1-16

BVES is exempt from I&M plan requirements, but please see previous responses 1-1, 1-3 and 1-4 regarding the need for continuous CO monitoring.

Response 1-17
Subparagraph (f)(1)(F) does not apply to BVES' engines, New electrical generating engines that are subject to this provision will be required to install electric meters in order to be able to determine emissions in pounds per megawatt-hour of electricity produced. As a result, the requested changes are not appropriate.

Response 1-18
BVES will not be required to have portable analyzer training because it will not be subject to I&M plan requirements. Other facilities subject to the portable analyzer training would have up to ten months after the adoption of PAR 1110.2 to complete the training, since that is when I&M plans are to be implemented.

Response 1-19
SCAQMD has revised the PAR 1110.2 reporting requirements substantially. Rule 430, however, currently requires breakdowns to be reported within one hour. If an operator doesn't know the exact cause of non-compliance or expected time for repairs within one hour, the operator does not have to include this information in the breakdown report. For excess emissions detected by a CEMS that are not caused by a breakdown, Rule 218 currently requires a report within 24 hours or the next working day. Other problems may be reported quarterly.

Response 1-20
SCAQMD understands that BVES supports the current proposal in paragraph (h)(10).

Response 1-21
BVES will not be subject to the portable analyzer protocol requirements because it will have a NOx and CO CEMS. The forms attached to the protocol have been on SCAQMD's website since November 2007.

Response 1-22
See previous responses 1-1, 1-3 and 1-4.

Response 1-23
See previous responses 1-7 and 1-15.

Response 1-24
Improved monitoring, testing and reporting in the PAR will improve engine compliance, reduce emissions, and benefit the customers of BVES, as well as all residents within the SCAQMD jurisdiction. Also, see Responses 1-2 and 1-6 regarding costs to do business.