

Memorandum

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To: Commissioner Robert A. Laurie, Presiding Member
Chairman William J. Keese, Associate Member

From: **California Energy Commission - Lorraine White**
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Subject: METCALF ENERGY CENTER ISSUES IDENTIFICATION REPORT

Attached is the staff's Issue Identification Report for the Metcalf Energy Center proposal (99-AFC-3). This report serves as a preliminary scoping document as it identifies the issues the Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present the issues report at the Siting Committee's scheduled Informational Hearing on July 12, 1999 at the Oak Grove High School "Theatre" in San Jose, California.

cc: Docket (99-AFC-1)
Proof of Service List
John Hathaway, Calpine Corporation
John Carrier, CH2MHill
Ray Menebroker, California Air Resources Board
Dennis Jang, Bay Area Air Quality Management District
Matt Haber, U.S. EPA, Region IX
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Councilwoman Charlotte Powers, City of San Jose
Councilwoman Cynthia Cook, City of Morgan Hill
Carl Wilcox, Department of Fish and Game
John McMillan, San Jose Fire Department
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Attachment

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METCALF ENERGY CENTER
(99-AFC-3)

ISSUE IDENTIFICATION REPORT

CALIFORNIA ENERGY COMMISSION

Energy Facilities Siting and Environmental Protection Division

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ISSUES IDENTIFICATION REPORT

California Energy Commission Staff

PURPOSE

This report has been prepared by the California Energy Commission staff to inform the Metcalf Energy Center (MEC) Siting Committee (Committee) and all interested parties of the potential issues that have been identified as a result of our preliminary review of the MEC proposal. Our initial efforts have included site visits, discussions with other agencies and interested participants during the pre-filing and data adequacy phases, and our initial review of the MEC Application for Certification (AFC), Docket Number 99-AFC-3.

This report does not limit the scope of staff's analysis throughout this proceeding, but acts to aid in the analysis of potentially significant issues that the MEC proposal poses. For example, members of the public have voiced concerns regarding impacts from the MEC to public health and proper hazardous materials handling at the facility. Although staff, at this time, is not able to clearly define specific issues related to these topics, we will be investigating these areas to determine if there are issues that have yet to be addressed. This report contains a project description, a summary of the potential issues and a discussion of the staff's proposed project schedule.

PROJECT DESCRIPTION

Calpine Corporation and Bechtel Enterprises, Inc. (Calpine/Bechtel) propose to jointly develop the Metcalf Energy Center (MEC), a nominal 600 megawatt, natural gas-fired, combined cycle power plant. The proposed site for the MEC lies at the southern base of Tulare Hill in northern Coyote Valley of South San Jose to the west of Monterey Highway just south of the Metcalf Road intersection. The power plant will occupy approximately 14 acres (10 acres in Santa Clara County, 4 acres in the City of San Jose) of the project's 136 acres. The site is bordered by Fisher Creek to the north and west and the Union Pacific Railroad right-of-way to the east. Blanchard Road is to the south. The site is currently zoned for agricultural use.

Major features of the power plant include two combustion turbines capable of generating a maximum of 200 megawatts (MW), equipped with steam injection power augmentation capabilities; two heat recovery steam turbine generators (HRSG) with duct burners; a single condensing steam turbine generator capable of generating a maximum of 235 MW; a mechanical draft (wet/dry) plume-abated cooling tower; and a 230-kilovolt (kV) switching station. Natural gas will be used as the fuel for this equipment. An associated 900-foot 2-lane road will allow access to the site from Monterey Highway.

Approximately 200 feet of new 230 kV transmission line will be needed to connect the switchstation to PG&E's existing transmission lines feeding into the utility's existing Metcalf Substation. Approximately one mile of new natural gas pipeline will be constructed to supply fuel to the power plant.

The proposed power plant is expected to use approximately 2.9 to 5.8 million gallons a day of recycled water for cooling purposes from the San Jose/Santa Clara Water Pollution Control Plant as part of the South Bay Water Recycling Program. This will necessitate the construction of new 7.3 mile recycled water supply and industrial wastewater discharge lines. Back-up water will be supplied either by the San Jose Municipal Water System or from wells located on site or one mile south of the project. Domestic water will be supplied via a new 1.25 mile long pipeline from the plant to San Jose Municipal Water System pipeline along Santa Teresa Boulevard.

Emissions will be controlled at the combustion turbine generators by dry, low NOx combustors. Overall NOx emissions will be controlled to 2.5 parts per million by volume, dry basis corrected to 15 percent oxygen by a combination of the combustors and selective catalytic reduction (SCR) systems in the HRSGs. The SCR will use anhydrous ammonia and a precious metal catalyst to convert NOx molecules into nitrogen and water. Carbon monoxide (CO) will be controlled to 10 parts per million by volume, dry (ppmvd) at 15 percent oxygen in the CTG combustors. CO will increase to a maximum of 13.3 ppmvd during duct firing and 24.3 ppmvd during power augmentation.

If approved by the Energy Commission, Calpine/Bechtel expects to begin construction of the project by the fall of 2000 and complete it by the Spring of 2002. Calpine/Bechtel anticipates commercial operation of the power plant by the Summer of 2002 after a short testing and start-up period. Electrical energy produced by the proposed facility will be sold in California's newly deregulated electricity market. Calpine/Bechtel expects the power plant to have an annual availability of 92 to 98 percent. An exact operational profile for the power plant is not yet defined, because of changes in the electricity market due the recent deregulation.

Calpine/Bechtel estimates the capital costs of the Metcalf Energy Center to be \$300-\$400 million. Calpine/Bechtel expects to employ a peak construction workforce of 400 over a two year period and a permanent workforce of 20 for plant operation. Construction payroll costs are estimated to be \$40.8 million, while annual operations payroll is expected to be \$1 million.

SUMMARY OF POTENTIAL ISSUES

This portion of the report contains a discussion of the potential issues Energy Commission staff has identified to date. The Committee should be aware that the list may not include all the significant issues that could arise during the case, as discovery is not yet complete and other parties have not yet had an opportunity to identify their concerns. The identification of potential issues was based on our judgement of whether:

- significant impacts resulting from the project may be difficult to mitigate;
- the project as proposed does not comply with applicable laws, ordinances regulations or standards (LORS);

- conflicts could arise between the parties about the appropriate findings or conditions of certification for the Energy Commission decision.

The following table identifies the subject areas evaluated and issue status at this time. Even though an area is identified as having no issue or issues, it does not mean that an issue will not arise related to the subject area. For example, disagreements regarding the appropriate conditions of certification may arise between staff and the applicant that will require discussion at workshops or even subsequent hearings.

Major Issue	Subject Area	Major Issue	Subject Area
Yes	Air Quality	No	Paleontological Resources
Yes	Biological Resources	No	Public Health
Yes	Cultural Resources	Yes	Socioeconomics
No	Efficiency and Reliability	No	Soils
No	Electromagnetic Fields & Health Effects	Yes	Traffic and Transportation
No	Facility Design	No	Transmission Line Safety
No	Geology	No	Transmission System Engineering
No	Hazardous Materials	Yes	Visual Resources
No	Industrial Safety and Fire Protection	No	Waste
Yes	Land Use	Yes	Water Resources
No	Need Conformance	Yes	Alternatives
No	Noise		

The following discussion summarizes each potential issue, identifies the parties needed to resolve the issue, and recommends a process for achieving resolution. Staff plans to use this issue identification report to focus its analysis that will be included in the Preliminary Staff Assessment (PSA) and Final Staff Assessment (FSA).

AIR QUALITY

There are three potentially significant air quality issues that may affect the timing and possible outcome of the licensing process for the Metcalf Energy Center. They include: 1) the provision of emission offsets; 2) compliance with Best Available Control Technology (BACT) requirements; and 3) the outcome of the cumulative analysis.

OFFSETS

SOURCES OF OFFSETS

Calpine/Bechtel has not yet provided details of the progress of their negotiations with the potential Emission Reduction Credit (ERC) sources. A "letter of intent" for each of the offset sources that Calpine/Bechtel plans to use to satisfy the project's offset liabilities should be provided to staff at least 45 days prior to issuing of the Final Staff Assessment (FSA). If any of the offset sources being pursued by Calpine/Bechtel have not yet been accepted by the Bay Area Air Quality

Management District (BAAQMD) into its ERC bank, it could delay the Commission's licensing process. According to the U.S. Environmental Protection Agency (EPA), as stated in the Pittsburg District Energy Facility case, all proposed offsets must be banked as ERCs prior to issuance of the BAAQMD's Preliminary Determination of Compliance. Staff is currently developing data requests for Calpine/Bechtel to address these potential issues. Ultimately, Calpine/Bechtel will need to provide ERC option contracts to the Commission as proof of the availability of offsets prior to the issuance of the final decision on the project.

LOCATION OF OFFSETS

Both the Energy Commission staff and the BAAQMD have expressed a preference for having the offsets provided from within the district. If Calpine/Bechtel chooses to purchase ERCs from sources outside the district, as they have already proposed as an option for the Delta Energy Center proposal, a distance ratio will need to be identified by the BAAQMD and approved by EPA to fully mitigate the project's impacts. Identifying the appropriate ratio and obtaining approval from EPA may delay the issuance of the Preliminary Determination of Compliance. Staff will work with the BAAQMD and the applicant to identify the location of proposed offsets and resolve any associated issues with these locations.

INTERPOLLUTANT TRADING RATIOS

Calpine/Bechtel has not yet identified whether they will propose the use of interpollutant trading to satisfy their nitrogen oxides (NO_x) or particulate matter (under 10 microns - PM₁₀) offset liabilities. If Calpine/Bechtel proposes to use volatile organic compounds (VOC) offsets to offset the project's NO_x emissions, the BAAQMD will require a trading ratio of 1.0 to 1.0. The EPA filed comments with the BAAQMD when they adopted the current rule that the specified ratio was too low and would not be adequate to fully offset impacts. Staff expects that EPA will take issue with a 1.0 to 1.0 ratio if proposed by Calpine/Bechtel for the MEC. Staff is encouraging the BAAQMD to discuss this potential issue with EPA, and is developing data requests to obtain information from Calpine/Bechtel regarding their intentions to use VOC offsets to offset NO_x emissions.

BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

CARBON MONOXIDE (CO)

Calpine/Bechtel is proposing a CO emissions control level of 10 ppm (higher under certain conditions), without the use of a CO catalyst. The BAAQMD requires a 6 ppm control level, with a 3 hour averaging time. The BAAQMD and EPA have also discussed this issue at staff's encouragement in their review of the Delta Energy Center, and are continuing a dialogue to attempt to resolve it prior to the BAAQMD issuing its Preliminary Determination of Compliance for the Delta Energy Center. If successful, this may provide guidance for addressing the issue on the Metcalf Energy Center proposal.

Calpine/Bechtel has also stated that the turbines cannot meet the 10 ppm level during start-ups, power augmentation or duct firing. Therefore, BACT, even at 10

ppm would not be satisfied. The District, EPA and Energy Commission staff will be working closely with Calpine/Bechtel to resolve this issue.

CUMULATIVE AIR QUALITY IMPACT ANALYSIS

Calpine/Bechtel provided only a protocol for their cumulative analysis based on a 20 kilometer radius in their AFC. At this time, Calpine/Bechtel is evaluating the potential for cumulative air quality impacts for nitrogen dioxide and PM10 emissions based on this protocol. The results of this analysis, however, have not been submitted to staff at this time for our review. Staff is concerned that the analysis may not fully consider reasonably foreseeable development similar to the MEC within this identified radius. If this is the case, the air quality impacts may not be fully mitigated. Staff is currently developing data requests for the applicant to better understand the protocol and identify the sources that will be included in the analysis. Staff will also be consulting with the BAAQMD to ensure that all appropriate future sources are included and proper mitigation is proposed.

BIOLOGICAL RESOURCES

The potentially significant issues for biological resources identified to date are encroachment upon a riparian corridor, loss of Significant Trees, and threats of nitrogen loading to rare serpentine communities and associated sensitive plant and animal species.

RIPARIAN CORRIDOR

The City of San Jose's Riparian Corridor Study, a supplement to the General Plan, provides policy guidelines for development along riparian corridors within the Urban Service Area. The Urban Service Area includes the proposed MEC site. Several aspects of the power plant proposal conflict with these guidelines. These include:

- Guideline 1C: Development next to riparian areas should be set back 100 feet from the outside edge of the riparian habitat edge. The edge is defined as the dripline of trees, outer boundary of riparian vegetation or top of bank, whichever is greater. The power plant site is located adjacent to Fisher Creek. Page 8.2-22 of the AFC states that the north and west sides of the plant will be set back 65 feet from Fisher Creek. Page 8.2-44 states that a 10-foot wide area around the fence line will be kept cleared of vegetation using a herbicide, which will reduce the set back area to 55 feet.
- Guideline 3A: Remnant riparian species (such as valley oak trees) should be retained in the development plan. Guideline 6B: Vegetation removal in riparian areas should only be performed for necessary floodway maintenance or to remove exotic plants. The AFC calls for the removal of 85 Significant Trees (discussed below) along the riparian corridor (page 8.2-19 and Table 8.2-34), including valley oak, walnut, and coast live oak.
- Guideline 7B: Direct surface drainage should be directed away from the riparian corridor and applicable NPS pollution control Best Management Practices used to

control water quality. Page 8.2-23 and -27 states that stormwater drainage overflow will be pumped into Fisher Creek.

The Riparian Corridor Study states that setback exceptions may be considered under limited circumstances. It is important for Calpine/Bechtel to consult with the City of San Jose to determine if the project qualifies for these exceptions. Staff will work with Calpine/Bechtel to avoid or greatly reduce the loss of Significant Trees, enhance the riparian corridor and wetland, and ensure high water quality standards of the storm water drainage into Fisher Creek.

LOSS OF SIGNIFICANT TREES

As mentioned above, the proposed MEC calls for the removal of 85 Significant Trees. Significant Trees are defined by the City of San Jose as trees with a circumference of at least 56 inches measured 24 inches above the natural grade slope. Removal requires a permit that includes public notification and a 30-day comment period. Santa Clara County defines Significant Trees as having a diameter at breast height of 12 inches or greater. Removal of such trees requires a County permit. Calpine/Bechtel is conducting a detailed survey of trees on the plant site (8.2-40) and has proposed to replace Significant Trees at a ratio of 3 to 1.

Heritage Trees are defined by the City of San Jose as having a special significance to the community because of a unique quality, species, size or historical value. Removal of Heritage Trees is not permitted. There are several Heritage Trees (Keesling black walnut) as well as Significant Trees, along the water pipeline route. Construction of the pipeline could disturb the root systems, making them susceptible to disease and shock. Calpine/Bechtel is having an arborist prepare a construction impact analysis.

NITROGEN LOADING OF SERPENTINE SOILS

The power plant site is located in the Santa Clara Valley, which is surrounded by the Santa Cruz Mountains on the west and the Diablo Range on the east. These mountain ranges along with Tulare Hill, located immediately north by northwest of the site, support serpentine soils and serpentine bunchgrass communities, a California Department of Fish and Game sensitive habitat. These soils also support several serpentine endemic species (species confined to this soil type), many of which are state or federally listed. Threats to serpentine community types include nitrogen loading from industrial developments. Serpentine soils are low in nitrogen, which helps restrict growth of invasive non-native plant species. Nitrogen deposition from the power plant may promote the growth of non-native species that would compete with the native plant species. Studies have shown that competition with non-natives can lead to extirpation of serpentine endemics. Figures 8.1-5a and 8.1-5c of the AFC shows the prevailing wind direction from the power plant for annual and second quarter (blooming season) time periods to be northwest, or towards Tulare Hill. Tulare Hill has populations of the Santa Clara Valley dudleya (federally endangered) and several host plant species for the bay checkerspot butterfly (federally threatened) and the Opler's longhorn moth (federal species of special concern), all serpentine endemics.

Biology and Air Quality staff will request Calpine/Bechtel to provide a detailed analysis of nitrogen deposition on the surrounding landscape. Staff will work with U.S. Fish and Wildlife Service to determine potential impacts to the serpentine soils in the vicinity of the proposed site. If it is determined that nitrogen loading could promote growth of invasive, exotic plant species, this impact would be significant.

CULTURAL RESOURCES

There is potential for project construction to impact a recorded cultural resource and two identified archaeological loci (locations).

SITE CA-SCL-448

Previously recorded site CA-SCL-448 may be affected by the construction of the recycled water line. The literature search conducted by Calpine/Bechtel identified archaeological site CA-SCL-448 on the route of the proposed recycled water line. The AFC indicates (Confidential Appendix page 8.3-17) that the site was recorded in 1980 and an attempt to relocate the site in 1986 was not successful.

Calpine/Bechtel conducted a “windshield survey” along the route identified for the recycled water line and has not attempted to relocate the site. Calpine/Bechtel has proposed monitoring in the area of CA-SCL-448 (Confidential Appendix page 8.3-17). Staff will request additional information from Calpine/Bechtel concerning the location of the site in relation to the proposed recycled water line. This additional information will help staff to assess the impact, if any, of the construction. If Calpine/Bechtel is able to find the site, and the project may affect the site, testing may be needed to assess the site’s significance and determine any needed mitigation.

NEWLY DISCOVERED LOCI 1 & 2

Archaeological loci discussed in the AFC under Alternatives page 9-18 are located in the path of an alternative access road. These unevaluated resources may also be impacted by proposed project site construction. Staff will request additional information to be able to better evaluate potential impact to these loci. If the project may impact these loci, testing may be needed to assess their significance and determine any needed mitigation.

LAND USE

The Metcalf Energy Center (MEC) at the proposed site is inconsistent with the current City of San Jose General Plan and zoning designations. In addition, the site is partially in the jurisdiction of the County of Santa Clara, and will require annexation of the property into the City of San Jose. Development of the MEC will include the following land use actions from the City of San Jose:

- General Plan Amendment
- Prezoning (required for annexation) / Rezoning of the site
- Annexation
- Planned Development Permit
- Tentative Map / Lot line adjustment (to configure the MEC parcel)

- Tree removal permit (see Biological Resources section of this report)

Although the power plant will only physically occupy 14 acres of land, the MEC project involves 2 parcels of land—totaling approximately 136 acres—in the North Coyote Valley. Of this, 126 acres are currently within Santa Clara County but within the Sphere of Influence (probable future boundary) of San Jose. The unincorporated parcel of land (zoned agricultural by Santa Clara County) is comprised of a 10-acre flat area—described in the AFC as the “northern” portion of the site—and 116 acres of Tulare Hill. The remaining 10 acres of the MEC site (“southern” portion) are within the city limits of San Jose. The 14-acre site is designated Campus Industrial in the San Jose 2020 General Plan (1994). Land uses allowed in this category include industrial research and development, administration, marketing, assembly and manufacturing. This designation does not allow heavy industrial uses such as power plants.

To allow development of the MEC project, Calpine/Bechtel is proposing that the City of San Jose annex the unincorporated land, and amend the San Jose General Plan to change the land-use designation of the MEC site from Campus Industrial to Public/Quasi Public (AFC, page 8.4-4). The Public/Quasi Public category is used to designate public land uses including fire stations, water treatment facilities and some private entities such as public utilities. According to City of San Jose planning staff, a power plant could be allowed by either a Public/Quasi Public or Heavy Industrial General Plan designation; but the City would not support a Heavy Industrial designation in North Coyote Valley¹. The San Jose General Plan states that “the Heavy Industrial designation is applied only to areas where heavy industrial uses presently predominate.” The Tulare Hill portion of the property is designated Non-Urban Hillside in the San Jose General Plan; Calpine/Bechtel is not proposing to change its designation (AFC, page ES-2).

A special provision of the Cortese-Knox Local Government Reorganization Act of 1985 (Gov. Code § 56826) states that the Santa Clara County Local Agency Formation Committee (LAFCO) shall not review annexations of unincorporated land into any city in Santa Clara County if the land is within that city’s Urban Services Area (USA). While the power plant site is within San Jose’s USA, the Tulare Hill portion is not, and thus the annexation of all 136 acres would require review and approval of the Santa Clara County LAFCO. Calpine/Bechtel is requesting that the site be zoned Planned Development (PD), an overlay zone which will be combined with the existing agricultural zoning. According to the Master Development Plan for the North Coyote Valley Campus Industrial Area (1985), development in the valley will occur by PD zoning, which sets the parameters for future development. After zoning approval, a PD Permit must be obtained for specific buildings. The PD Permit includes standards for architecture, location and design of parking, landscaping, and outdoor lighting. The City of San Jose will rely on the Committee’s Presiding Member’s Proposed Decision for the environmental documentation needed for the land-use entitlement proceedings.

¹ City of San Jose Department of Planning and Building staff.

In addition to being inconsistent with the present land-use designation of the site, the MEC project will conflict with Urban Design Policy #11 of the San Jose General Plan. This policy states that 90 feet is the maximum height allowed in areas of North Coyote Valley designated Campus Industrial. For properties in any area of San Jose with a Public/Quasi Public designation, the maximum building height is 95 feet. The HRSG units (105 feet), HRSG stacks (145 feet) and auxiliary boiler stack (100 feet) would not comply with the Urban Design Policy. The General Plan allows the following exception to the height limit: "For structures, other than buildings, where substantial height is intrinsic to the function of the structures and where such structures are located to avoid significant adverse effects on adjacent properties, height limits may be established in the context of project review."

The San Jose General Plan was amended in 1985 to re-designate agricultural land in North Coyote Valley to a then new Campus Industrial land-use category. The Campus Industrial designation is intended to allow low-intensity development, which preserves the rural character of the area. For example, Cisco Systems, Inc., a computer manufacturing company, has announced plans to build a 400-acre, 20,000-employee campus in North Coyote Valley just south of the proposed MEC site (AFC, page 8.4-13).

On May 28, 1985, the City Council adopted as policy the Master Development Plan and Guidelines for the North Coyote Valley Campus Industrial Area. The Master Plan represents a "clear and unequivocal" statement of how the City's General Plan is to be implemented in North Coyote Valley². The Master Plan states that:

"Even the low intensity of development in the Campus Industrial areas of Coyote Valley will not preserve its rural character if the large setbacks, height restrictions and landscape concepts ... are not followed. The unusually restrictive nature of these guidelines is deliberate. North Coyote Valley will attract and hold the major 'high technology' users it is intended to accommodate only if there is a clearly established standard of excellence and a commitment to meet that standard."³

As proposed, the MEC project will not meet the setbacks from Monterey Road, Fisher Creek and the Union Pacific Railroad required by the Master Development Plan for the North Coyote Valley Campus Industrial Area (AFC, pages 8.11-25 – 8.11-26). Energy Commission staff will be consulting with the City of San Jose and potential developers to determine if the proposed MEC is consistent with the City's plans for development of the Coyote Valley and applicable LORS.

AGENCY COORDINATION

The City of San Jose will conduct an entitlement proceeding simultaneous to the Energy Commission's review of the proposed MEC. Calpine/Bechtel is requesting that the City annex the site, amend the San Jose General Plan and rezone the site from agricultural use/campus industrial to public/quasi-public. The City will use the Energy Commission's environmental analysis to make its decision. The Energy

² Master Development Plan and Guidelines for the North Coyote Valley Campus Industrial Area, page 1.

³ Ibid.

Commission staff is working with the City of San Jose staff to develop a memorandum of understanding to coordinate analysis of the potential impacts of the project and coordinate the timing of the two proceedings.

SOCIOECONOMICS

In meetings and communications with staff, members of the community have expressed concerns about the MEC's impact on the property values of residences and other private or public property. The AFC does not address this issue directly, but staff will conduct an appropriate analysis to determine if there are any adverse impacts not yet identified. Staff will also prepare data requests to request that Calpine/Bechtel perform its own analysis on this matter.

TRAFFIC AND TRANSPORTATION

The proposed access road to the power plant site will increase vehicular traffic across the Union Pacific Railroad mainline. The lack of existing or planned active controls (gates) is of particular concern, and the process to obtain necessary approvals from the California Public Utilities Commission (CPUC) for a gated crossing can take many months. The time required to obtain such approvals will likely extend beyond the Energy Commission's twelve-month process.

The Master Development Plan for the North Coyote Valley calls for all new and improved connections to Monterey Road to be grade-separated, creating an expressway-type facility. However, the access road to the site, Blanchard Road, is not grade-separated and the project does not indicate any plans for grade-separation.

During construction of the proposed project, approximately 44 heavy equipment deliveries will be made that would exceed regular weight and height restrictions for roadways. A rail spur is being contemplated for deliveries of heavy equipment but it requires Union Pacific's approval. If the rail spur is not built, then the trip from the nearest rail siding to the site would cover more than 10 miles of City streets, requiring special permitting, escorting, and potential physical modifications (such as raising traffic signal mast arms).

Staff will consult with the CPUC to determine the process conflicts, if any, for approval of the railroad crossing. Also staff will work with San Jose, Santa Clara County and the applicant to resolve issues related to site access and traffic impacts during construction.

VISUAL RESOURCES

ENVIRONMENTAL IMPACTS

Calpine/Bechtel has stated that, with their proposed mitigation, the project will not cause any significant visual impacts. The power plant, however, particularly the HRSG stacks, may cause significant visual impacts to travelers on Monterey Road, recreationists using nearby park facilities and to areas to the south (now rural

residences, but possibly campus industrial uses in the future). The stacks would be a clearly industrial feature in an area that does not contain such features. This impact may be significant and unmitigable, especially for views from the south, where the project would be skylined.

The applicant's analysis in the AFC bases some of its conclusions that the MEC visual impacts are less than significant on future plans for the Campus Industrial development in Coyote Valley. The California Environmental Quality Act which staff bases their analysis criteria on requires assessment of impacts based on changes from existing conditions that would result from the project. The proposed MEC will change the visual character of the northern Coyote Valley area from rural to industrial, with associated impacts to views of rural scenes and open space. Staff will be working with the applicant, San Jose and members of the public to determine the significance of this change and identify if appropriate mitigation is available.

NON-COMPLIANCE WITH LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

The project as proposed does not comply with a number of LORS of the City of San Jose regarding visual resources, including:

- 90 foot maximum building height for existing Campus Industrial designation (95 feet for Public/Quasi-Public)
- preservation of Ordinance-sized and other Significant Trees
- required setbacks from Monterey Road, Fisher Creek, and Union Pacific Railroad
- requirements to break up building mass to allow views between buildings to surrounding landforms
- proposed landscaping is inconsistent with the City's Private Improvement Guidelines regarding trees

Energy Commission staff will consult with Calpine/Bechtel and the City of San Jose to determine the extent to which these non-compliance issues can be eliminated or mitigated. If compliance is not achievable, the project would cause a significant unmitigable visual impact that may require an expanded consideration of site alternatives.

WATER RESOURCES

WATER SUPPLY

Treated effluent from the San Jose/Santa Clara Water Pollution Control Plant (WPCP) will be the cooling water makeup supply for the proposed MEC.

The remaining five percent of the project's water demand, approximately 340 gallons per minute under peak operating conditions, will be met through

groundwater. This groundwater will be supplied from the City of San Jose's wells or wells on-site. In addition, groundwater from either of these sources is identified as a backup for the cooling water make-up supply in case there is an interruption in delivery of the treated effluent.

Groundwater pumping from the proposed project may adversely affect neighboring domestic and community wells through drawdown. In addition, cumulative impacts to community water supply and infrastructure must be evaluated. Finally, groundwater pumping may affect the movement of any groundwater contamination, potentially degrading water supplies.

STORMWATER RUNOFF

Stormwater runoff from the project will be discharged to Fisher Creek, valuable habitat for aquatic resources. Staff will be evaluating the potential for degradation to the creek as a result of contaminants in the runoff.

ALTERNATIVES ANALYSIS

The proposed MEC project may have potentially significant impacts in the areas of air quality, biological resources, land use, socioeconomics, visual resources, water resources and other areas. Residents in the Coyote Valley area, near the proposed site, have expressed numerous concerns regarding potential impacts in the above and other technical areas. They have also raised a broader concern about a large, industrial project such as the MEC conflicting with the proposed campus industrial development planned for the Coyote Valley.

Staff plans to assess the options for alternative sites in the San Jose area that could avoid or reduce any unavoidable significant impacts we may identify from our analysis. We plan to discuss alternative site possibilities with the planning and community development staffs at the Cities of San Jose, Morgan Hill, and Santa Clara County. Keeping in mind Calpine/Bechtel's need for a 14 acre site, plus temporary acreage for a construction laydown area, staff's alternative analysis will include:

- review of the alternative sites proposed by Calpine/Bechtel in the AFC;
- review of any sites suggested by local agencies or members of the public;
- existing Calpine/Bechtel plant repowering or expansion options; and
- vacant or unused parcels suitable for a heavy industrial use in the San Jose area.

SUMMARY OF PROPOSED SCHEDULE

Staff has begun its analysis of the major issues identified above, as well as its assessment of other environmental and engineering aspects of Calpine/Bechtel's proposal. The first step in staff's assessment is the issuance of data requests to Calpine/Bechtel by July 16, 1999. Over the next several months, staff will issue additional data requests, obtain additional information and conduct several workshops to address issues and concerns regarding the MEC proposal.

Staff's initial findings regarding the major issues discussed above, as well as other environmental and engineering findings regarding the project, will be presented in the Preliminary Staff Assessment (PSA) expected to be filed on December 7, 1999. After filing the PSA, staff will conduct additional public workshops to discuss our findings, recommendations and proposed conditions of certification. Incorporating the input and information received during these workshops, staff will present our final conclusions and recommendations in the Final Staff Assessment (FSA) expected to be filed on January 28, 2000.

Following is staff's proposed schedule for key events in this proceeding. Factors that will affect staff's ability to meet these key event dates are Calpine/Bechtel's timely response to staff's data requests, informational requirements of the Bay Area Air Quality Management District and requirements of the City of San Jose's entitlement process. In addition, the actual timing of the issuance of the Bay Area Air Quality Management District's Determination of Compliance, and the review and consultations by the Department of Fish and Game, and the U.S. Fish and Wildlife Service may impact the overall schedule.

METCALF ENERGY CENTER PROCEEDING KEY EVENTS

Date:	Day:	Event:
April 30, 1999	- 54	Calpine/Bechtel filed Application for Certification for MEC
June 8 & 15, 1999	- 15 & - 8	Calpine/Bechtel filed Supplemental Information for AFC
June 23, 1999	0	Energy Commission deems AFC Data Adequate
July 8, 1999	18	Staff files Issue Identification Report
July 12, 1999	22	Committee Informational Hearing and Site Visit
July 16, 1999	26	Staff files Data Requests #1
July 27, 1999	37	Data Request Workshop #1
August 13, 1999	54	Applicant files Data Responses #1
August 31, 1999	72	Committee Issues & Scoping Hearing
October 22, 1999	120	BAAQMD Issues Preliminary Determination of Compliance
December 7, 1999	167	Preliminary Staff Assessment (PSA)
December 20, 1999 – January 7, 2000	180-198	Staff Workshops on PSA
December 20, 1999	180	BAAQMD Issues Final Determination of Compliance
January 17, 2000	208	Committee Prehearing Conference
January 28, 2000	219	Final Staff Assessment
February 14-25, 2000	236-247	Committee Evidentiary Hearings
April 26, 2000	308	Presiding Member's Proposed Decision
April 26-June 21, 2000	308-363	City of San Jose Final Action on the Entitlement Proceeding (tentative)
June 21, 2000	363	Revised Presiding Member's Proposed Decision
June 28, 2000	370	Energy Commission Adopts Decision