

STAFF APPROACH FOR ALTERNATIVE SITE ANALYSIS FOR METCALF ENERGY CENTER

INTRODUCTION

One of the basic purposes of the California Environmental Quality Act (CEQA) is to identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1). The discussion of alternatives is required to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines, Section 15126.6). CEQA requires a description of a reasonable range of alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives.

STAFF APPROACH FOR ALTERNATIVE SITE ANALYSIS

Energy Commission staff (staff) has developed the following approach for conducting the alternative site analysis for the Metcalf Energy Center.

1. Describe the project objectives.
2. Identify any potential significant environmental impacts of the project.
3. Determine which, if any, of the potential significant impacts could potentially be avoided by use of an alternative site.
4. Develop screening criteria for feasibility of alternatives.
5. Select a reasonable range of alternatives that:
 - a. Meet most of the basic objectives of the project.
 - b. Avoid or substantially lessen one or more of the potential significant effects of the project.
 - c. Satisfy the feasibility screening criteria.
6. If any alternatives are deemed infeasible, explain why.
7. Evaluate the environmental impacts of each feasible alternative site.
8. Compare the environmental impacts of the sites.

IMPLEMENTATION OF STEPS 1 THROUGH 5 OF STAFF'S ALTERNATIVE SITE ANALYSIS

Staff has implemented steps 1 through 5 of its alternative site analysis. The results are as follows.

1. DESCRIBE THE PROJECT OBJECTIVES

Staff has identified the following project objectives relevant to alternative site selection:

1. Being on-line by the summer peak of 2002.
2. Providing Bay Area electric grid reliability benefits.
3. Mitigating transmission congestion into the area.
4. Located near key infrastructure.
5. Having land of adequate size and shape to contain the proposed facilities and other site improvements.

2. DETERMINE THE POTENTIAL SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROJECT

Staff has not completed its evaluation of the potential significant environmental effects of the project. However, because of the schedule limitations of the siting process, staff has proceeded based on the preliminary identification of the potential significant environmental effects of the project. Staff has identified such effects in the following areas, most of which were identified in the Issues Identification Report:

- Air Quality—downwash due to nearby hill
- Biological Resources
 - encroachment upon a riparian corridor
 - loss of Significant Trees
 - threats of nitrogen loading to rare serpentine communities and associated sensitive plant and animal species
- Land Use—nonconformity with local plans and policies
- Traffic and Transportation—safety risk of railroad crossing
- Visual Resources
 - potential impact of power plant
 - nonconformity with General Plan and zoning ordinance

3. DETERMINE WHICH, IF ANY, OF THE POTENTIAL SIGNIFICANT IMPACTS COULD POTENTIALLY BE AVOIDED BY USE OF AN ALTERNATIVE SITE

Staff has determined that all of the potential significant impacts identified above could potentially be avoided by use of an alternative site.

4. DEVELOP SCREENING CRITERIA FOR FEASIBILITY OF ALTERNATIVES

Staff has considered the following five screening criteria in identifying alternative sites. The first two criteria are the same as two of the project objectives.

1. Site suitability. Approximately 14 acres are required for the site. The shape of the site also affects its usability.
2. Availability of infrastructure. The site should be within a reasonable distance of the electric transmission system, natural gas supply, and water supply.
3. Availability of the site.

4. General Plan and zoning consistency.
5. Not located adjacent to moderate or high density residential areas or to sensitive receptors (such as schools and hospitals) or to recreation areas.

5. SELECT A REASONABLE RANGE OF ALTERNATIVE SITES

Staff considered the following factors in selecting alternative sites:

- a. Meet most of the basic objectives of the project.

Staff has made the following determinations regarding the extent to which alternative sites are likely to meet the five basic project objectives identified above that are relevant to alternative site selection:

1. Being on-line by the summer peak of 2002.

It is unlikely that use of any alternative site could satisfy this objective, because detailed site investigation and the permit process has not begun on any alternative site.

2. Providing Bay Area electric grid reliability benefits.
3. Mitigating transmission congestion into the area.

To satisfy objectives 2 and 3 the site must be connected to one of following six Pacific Gas & Electric substations or the 230 kilovolt transmission lines that connect them: Metcalf, Monta Vista, Jefferson, Newark, Ravenswood, or San Mateo. Staff assumed this in identifying sites.

4. Having land of adequate size and shape to contain the proposed facilities and other site improvements. Staff only considered sites 14 acres or larger, and considered the shape of the site for usability.
5. Located near key infrastructure.

Staff has limited its search area to a reasonable distance from the substations and connecting transmission lines. Major natural gas lines are located in the vicinity of the identified sites. Staff has not yet identified natural gas tie-in line routes and distances. Identification of water supply sources will require further investigation.

In summary, the sites that staff identified satisfy most of the project objectives that are relevant to alternative site selection. The sites satisfy objectives 2, 3, and 4, and, to the extent of staff's current knowledge they satisfy objective 5.

- b. Avoid or substantially lessen one or more of the potential significant effects of the project.

Biological Resources

- None of the alternative sites would infringe on a riparian corridor.
- None of the alternative sites would require the removal of Significant Trees.

Traffic and Transportation

- Use of any of the four alternative sites would avoid the traffic safety problem of the proposed project.

- c. Satisfy the feasibility screening criteria.

1. Site suitability.

2. Availability of infrastructure.

As discussed above, criteria 1 and 2 are the same as two of the project objectives, and have been addressed.

3. Availability of the site.

Staff has investigated the availability of identified sites. All identified sites are potentially available.

4. General Plan and zoning consistency.

Staff has evaluated the consistency of each alternative site with the applicable general plan and zoning. Two of the sites are consistent with existing general plan and zoning designations. Two other sites would require a general plan amendment and zoning change. However, Calpine/Bechtel have already applied for general plan amendments for these sites, which are currently zoned for light industrial use.

5. Not located adjacent to moderate or high density residential areas or to sensitive receptors (such as schools and hospitals) or to recreation areas.

All of the identified sites satisfy this criterion.

Staff identified four sites that meet most project objectives relevant to an alternative site analysis, satisfy the site feasibility criteria, and could avoid or substantially reduce at least one of the potential environmental impacts of the proposed project. The sites are located in the following areas:

- Two sites near each other in northern San Jose, north of Highway 237 and between Zanker Road and I-880, in an area zoned for light industry.
- In the City of Fremont just north of South Grimmer Road and east of Old Warm Springs Blvd, in an industrial area.
- In unincorporated Alameda County, on grazing land south of I-680 and just east of Andrade Rd.

Staff is also considering another site in the Fremont area. More information will be provided at the December 15, 1999 alternative sites workshop.

Staff has also determined that use of alternative Site B (IBM site) identified in the application could avoid or substantially lessen one or more of the potential significant impacts of the proposed project, so it qualifies for further investigation. Staff has considered the two other alternative sites discussed in the application: Site A (UT site) and Site C (Almaden site). Staff has determined that neither site qualifies for further evaluation because their use would cause several significant environmental impacts that the proposed project would not cause.

Staff will also evaluate sites suggested by the public. To date, such sites consist of the following:

- Gilroy (at the existing power plant)
- Alviso (a different site from those identified by staff)
- Moss Landing Power Plant site