GALATI | BLEK LLP

455 Capitol Mall Suite 350
Sacramento CA 95814
Tel • 916.441.6575
Fax • 916.441.6553

DOCKET
07-AFC-9
DATE May 04 2009
RECD. May 04 2009

May 4, 2009

California Energy Commission
Docket Unit
1516 Ninth Street
Sacramento, CA 95814-5512

Subject:

CRITICAL ISSUES ASSESSMENT ANAHEIM PEAKING POWER SITING STUDIES

Enclosed for filing with the California Energy Commission are the original and (2) two copies of the following two reports for the Canyon Power Plant Docket No.07-AFC-09:

1. **CRITICAL ISSUES ASSESSMENT ANAHEIM PEAKING POWER SITING SUDY(September 2003)**

2. **CRITICAL ISSUES ASSESSMENT ANAHEIM PEAKING POWER SITING STUDY (October 2006)**

Sincerely,

Scott Galati
Counsel to Canyon Power Plant

CRITICAL ISSUES ASSESSMENT ANAHEIM PEAKING POWER SITING STUDY

Prepared for:

Anaheim Public Utilities
201 South Anaheim Boulevard
Anaheim, California 92805
www.anaheim.net

Prepared by:

URS

URS Corporation
130 Robin Hill Road, Suite 100
Santa Barbara, California 93117

September 2003

TABLE OF CONTENTS

Section — Page

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1-1

2.0 PROJECT DESCRIPTION 2-1

3.0 SITE OBSERVATIONS 3-1

4.0 SITE SUITABILITY ANALYSIS 4-1

- 4.1 OVERVIEW 4-1
- 4.2 NEUTRAL CRITERIA 4-2
- 4.3 RANKING CRITERIA 4-6
- 4.4 CRITERIA WEIGHTING 4-12

5.0 SITE SELECTION 5-1

List of Tables

Table 1 List of Potential Major Permit Requirements 1-4
Table 2 Table of Critical Issues 4-1
Table 3 Zoning Consistency Criterion 4-7
Table 4 Surrounding Land Use Compatibility Criterion 4-9
Table 5 Visual Impact Criterion 4-10
Table 6 Buildable Acreage Criterion 4-11
Table 7 Criteria Ranking 4-12
Table 8 Criteria Weights 4-13
Table 9 Summary Site Suitability Score 5-1

List of Figures

Figure 1 Potential Project Locations 1-3
Figure 2 City of Anaheim Zoning 3-5
Figure 3 City of Anaheim Infrastructure 3-6

List of Appendices

Appendix A Ranking and Site Scores
Appendix B Site Photos

EXECUTIVE SUMMARY

The City of Anaheim Public Utilities Department (Department) is considering the construction and operation of a natural gas-fired peaking power plant within the City of Anaheim. It is currently envisioned that the project may consist of four gas-fired turbines operating in simple cycle mode capable of generating up to 200 MW of power. It is anticipated that the power is required to be online in 2006 or 2007 to meet predicted demand and to avoid paying high power prices on a spot market. Given the urban development and characteristics of Anaheim, URS was contracted to determine the feasibility of siting a generation plant of this size within the City limits. The Department and URS have identified potential sites in an effort to identify the best possible siting locations within the City of Anaheim. URS has performed this Critical Issues Assessment to assist in the selection of a preferred location that will optimize proximity to infrastructure and minimize impacts to the environment and the public.

Numerous sites were considered in the evaluation in anticipation that it may be difficult to site a generation facility within Anaheim. The Department conducted a review of open sites in Anaheim, and this effort resulted in locating several sites. In addition, URS contacted the Anaheim Planning Department and Redevelopment Agency, who provided suggested locations. This process resulted in identification of eight sites, one of which was eliminated at the outset because of several constraints (Site 8).

Next, a site suitability analysis was conducted. The goal of this analysis was to identify the sites with the least impacts on the environment and public with close proximity to gas, transmission and water infrastructure. A list of 30 potential site ranking criteria were evaluated. A number of these criteria resulted in common issues that did not adversely eliminate development of a particular site and, therefore; were considered "neutral". Key criteria that did differentiate sites and were considered in the analysis were as follows:

- Zoning Consistency
- Surrounding Land Use Compatibility
- Visual Impact
- Buildable Acreage
- Gas Supply
- Electrical Transmission Issues
- Sewer Discharge
- Water Supply

Each site was numerically rated based upon each of these criteria.

The key environmental/permitting issues are expected to be surrounding land use compatibility, visual impacts, zoning, water supply and discharge, noise impacts and compliance with air quality standards.

The potential project locations are shown in Figure 1. Based upon the scores, the San Farrell (Site 5) and Metal (Site 2) sites appear to be the top candidates for development. Dowling (Site 6) was the only site in the middle group, and the remaining four sites fell into the lower grouping (Yard, OCWD, Disney, and Lewis).

The San Farrel and Metal sites have significant advantages with respect to development over the remaining sites. For example, San Farrel (Site 5) has appropriate zoning and a power generation facility would be relatively consistent with surrounding land use. This location has the least residential urban development in close proximity in comparison to the other sites. Visual impact should be manageable as the site is located in the middle of a block in a heavily commercial area. There is also an approximately 60-foot communication tower located at the business directly behind and to the south of the site. Linear interconnection points for gas, transmission, and water are within one half mile and the SARI line connection is approximately ¾ of a mile. The site is also located within one half mile from the existing Dowling Generation facility, which would consolidate the Utility Dept electrical generation resources.

The primary conclusion of this study is that despite the urban concentration of Anaheim, the development of a power project in Anaheim appears to be feasible from the standpoint of environmental, permitting and public acceptability issues.

SECTION 1.0 INTRODUCTION

The City of Anaheim Public Utilities Department is considering the construction and operation of a natural gas-fired peaking power plant within the City of Anaheim. It is currently envisioned that the project may consist of four or two LM 6000's operating in simple cycle mode. The Department and URS have identified multiple sites in an effort to explore the best potential locations within the City of Anaheim. Site locations were selected based on review of available land and discussions with City of Anaheim agencies. URS has performed this Critical Issues Assessment to assist in the selection of a preferred location that will optimize proximity to infrastructure and minimize impacts to the environment and the public. The seven possible sites, shown in Figure 1, are as follows:

Site 1 – Located near Vermont and East Street (Maintenance Yard)
Site 2 – Located near the 91 Freeway and Kraemer Blvd (Metal Yard)
Site 3 – Located near the 91 Freeway And Richfield Road (OCWD Site)
Site 4 – Located at Katella and Haster Street (Parking Lot)
Site 5 – Located at 3000 La Jolla Street (San Farrel)
Site 6 – Located at Dowling Substation (Dowling Substation)
Site 7 – Located near the Intersection of Lewis Road and Cerritos Avenue
Site 8 – Located at La Palma and Weir Canyon Drive (Car Lot Site)

Note that the sites shown in Figure 1 represent the general location of the potential sites, not the actual area available for construction.

This Critical Issues Assessment consists of an evaluation of these sites against about 30 issues that have the potential to:

- Render a site unacceptable (i.e., a fatal flaw exists), or
- Introduce unacceptable potential for permitting delays, or
- Create unacceptably high site development costs.

URS staff visited Sites 1, 2, and 3 on February 24, 2003, Site 4 was reviewed on April 10, 2003 and Sites 5, 6, and 8 were visited on May 20, 2003. Site 7 was visited on June 30, 2003. URS contacted local staff in the City of Anaheim Planning Department, Redevelopment Agency, Public Works, Utilities Department and Orange County Sanitation District and Water District. All sites were visually observed to determine current land uses, compatibility of surrounding land use, potential presence of sensitive habitat or species and cultural resources. We also utilized our knowledge of key SCAQMD and CEC issue areas to evaluate the potential critical issues for the project. Land use plans for the City of Anaheim were obtained and reviewed for compatibility of the project at the proposed locations. However, the General Plan is currently under revision and should be finalized in September. To the extent possible, URS has attempted to identify General Plan changes that could impact the siting of a facility. No soil or water sampling was performed.

The major environmental issues are expected to be surrounding land use compatibility, visual impacts, zoning, water supply and discharge, noise impacts and compliance with air quality standards.

Section 2.0 of this report presents a conceptual description of the project that served as the basis for our analysis. Section 3.0 presents the general results of our site inspections and Section 4.0 presents the results of the environmental site ranking. Section 5.0 presents conclusion of the analysis. Appendix A contains the spreadsheets used to determine the preferred site selections. Appendix B contains photos of each potential site that was evaluated.

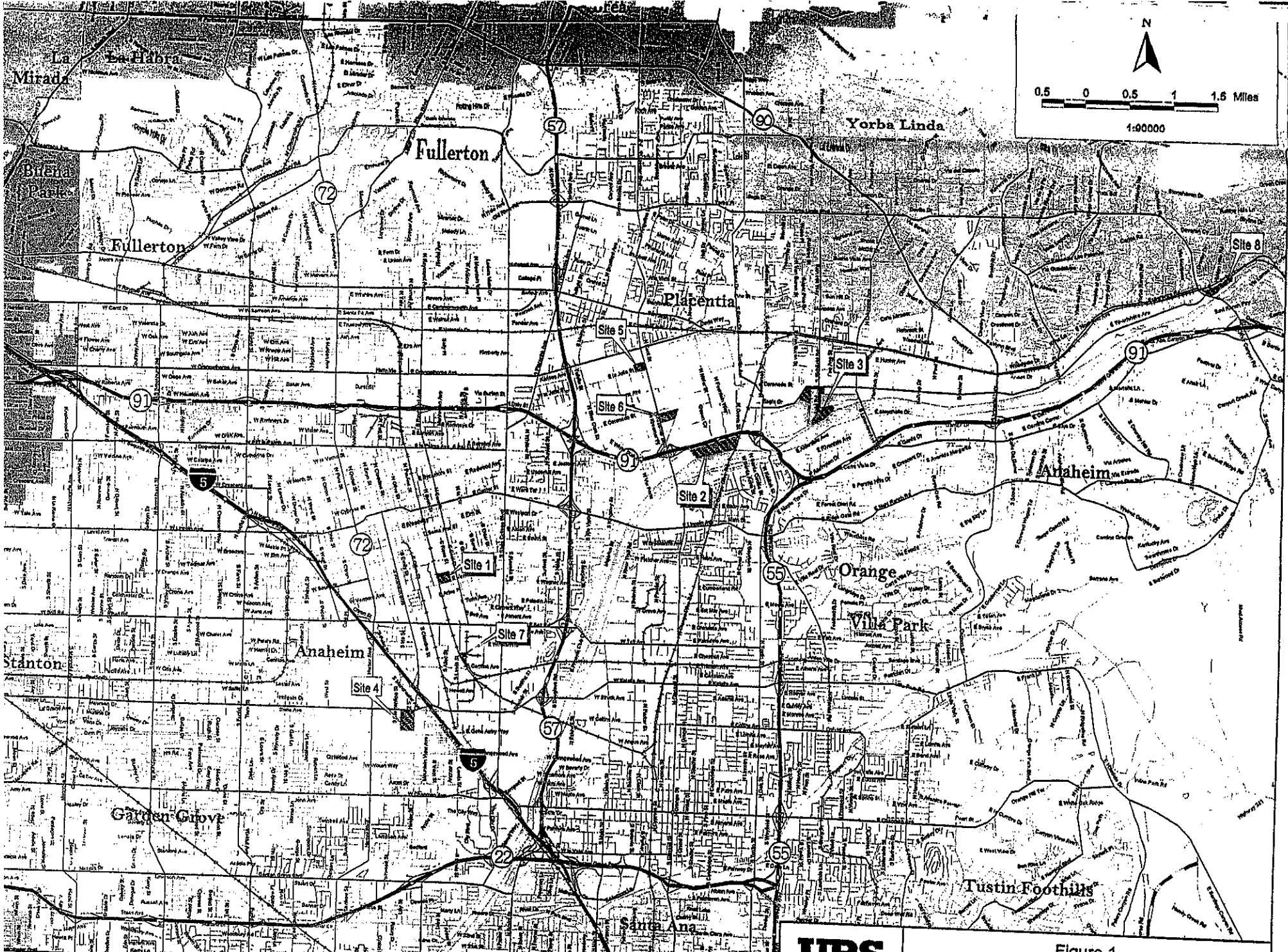

N
0.5 0 0.5 1 1.5 Miles
1:90000
La Mirada
La Habra
Fullerton
Buena Park
Fullerton
Yorba Linda
Placentia
Site 8
Site 5
Site 3
Site 6
Site 2
Anaheim
Site 1
Orange
Villa Park
Site 7
Anaheim
Stanton
Site 4
Garden Grove
Santa Ana
Tustin Foothills
5
57
72
90
91
55
22
URS
Figure 1
City of Anaheim Potential Project Locations
of anaheim\deliverables\anaheim.apr

TABLE 1
LIST OF POTENTIAL MAJOR PERMIT REQUIREMENTS [1]

Permit Type/Regulation	Permit Name	Lead Agency	Contact Person	Location
Project Siting	Application for Certification	California Energy Commission	Mr. Bob Therkelson (916) 64-5100	Sacramento, CA
Air Quality	Permit to Construct/ Operate	South Coast Air Quality Management District	Mr. John Yee (909) 396-2531	Diamond Bar, CA
Stormwater Discharge	Stormwater Discharge Plan	Santa Ana Regional Water Quality Control Board	Mark Smythe (909) 782-4998	Riverside, CA
Potable Water Supply	Water Connection Permit	City of Anaheim Utility Department	Carlos Bustos (714) 765-4231	Anaheim, CA
Wastewater Discharge	Direct Discharge Permit	Orange County Sanitation District	Ms. Adrian Renescu (714) 593-7435	Fountain Valley, CA
Biological Resources	Section 7 / Section 10	US Fish and Wildlife Service (USFWS), Carlsbad Office	Ms. Nancy Ferguson (760) 431-9440	Carlsbad, CA
Biological Resources	Section 2081	California Department of Fish and Game (CDFG)	Don Chadwick (858) 467-4201	San Diego, CA
Reclaim Water Use	Water Reuse Agreement	Orange County Water District	Jill Everhart (714) 378-3200	Fountain Valley, CA

[1] Assumes no Santa Ana River crossing or impacts to the river. If the river is impacted then may need Army Corp of Engineers and CDFG approvals.

Only a conceptual design of the project is available at this time. This potential equipment description was provided by Mr. Steve Sciortino, Anaheim Utility Department. URS has identified some suggested recommendations for the facility design that may help mitigate potential environmental impacts.

The proposed project site will need a minimum of 5 acres of land for development. The project will consist of simple cycle peaking power generation. A total of four units may be installed capable of generating up to 200 megawatts (Mw) of electrical power. It is envisioned that four natural gas fired turbines would be installed for operations in 2006 or 2007.

Natural gas would be the exclusive fuel for the project; fuel oil would not be used as a back up. It is understood that the City has had discussions with Southern California Gas who has indicated that the major gas line routes in the area have sufficient capacity for the project.

For simple cycle operations, minimal water for NO_x control, power augmentation or inlet air cooling may be required. It is roughly estimated that 150,000 gallon per day (gpd) of water would be needed for each gas turbine. Depending upon the selected turbine and the configuration this water usage will vary. The Department has suggested that potable water may be used to meet the plants process water needs; however, URS strongly encourages the Department to use reclaimed water. Pursuant to State Water Resources Control Board Resolution No. 75-58, the use of potable water related to power plant operations is discouraged and alternatives such as reclaim water are preferred. There currently is no reclaimed water available in the area. However, the Orange County Water District in conjunction with the Orange County Sanitation District (OCSD) proposes to install a reclaim water line from the Fountain Valley Reclamation Plant 1 to Orange County Water District Kraemer and Miller Recharge basins for groundwater replenishment. Construction of this line has started and is scheduled to be completed by June 2007.

Best Available Control Technology (BACT) will need to be installed to control air pollutant emissions. It is possible to achieve extremely low levels of air contaminants using BACT and therefore the facility should comply with ambient air quality standards and health risk based levels. It is anticipated that the facility will utilize an oxidation catalyst for the control of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Toxic Air Contaminants (TAC). A Selective Catalytic Reduction System (SCR) that utilizes ammonia for the control of NO_x will also need to be installed.

Wastewater discharge options have not yet been defined and it is roughly estimated that the quantity of discharge is 50,000 gpd per turbine. It is understood that if the project discharges to the City sewer system then it will be necessary to perform a sewer capacity study and there are areas of Anaheim that may be sewer constrained. The Santa Ana Regional Receptor line (SARI) operated by the OCSD may be an alternative discharge line. Based on general discussion with the OCSD sufficient capacity is anticipated to exist in the SARI line at most of the sites selected for consideration.

A substation will be installed as part of the project for a tie in point to the existing 69 kV transmission grid. It is understood that the Department has determined that transmission line constraints are not an issue for the project.

The tallest feature of the project would be the stacks and the emissions control enclosures. While the final stack height will depend on the results of the air quality analysis, it is expected to be approximately 75 feet. To the extent possible, the Department should seek to minimize the height profile of the facility and stacks to comply with the City of Anaheim's height restriction of 60 feet.

It is assumed that the project design will need to incorporate noise silencing equipment in the turbine exhaust, turbine enclosure, gas compression equipment or other devices with the potential to contribute significantly to noise.

SECTION 3.0 SITE OBSERVATIONS

Site visits were performed on February 24th, April 10, and May 20, 2003 by Ms. Joan A. Heredia of URS. Also in attendance during the February 24th visit was Mr. Dan Predpall of URS. The site visit consisted of general observation of the sites and the surrounding land uses. Figure 1 contains a map showing the locations of the sites. Pictures of each site are presented in Appendix B.

URS coordinated with the City of Anaheim Planning Department and Redevelopment Agency to discuss the potential acceptability of the sites as a power generation facility based on both current and proposed land uses. Figure 2 shows the current land use zoning in the project site areas. Figure 3 shows the gas, transmission, water, and water discharge infrastructure in the project site areas. Following is a brief discussion of each site.

Distances to the various gas, transmission, water and water discharge lines are approximate. URS did not confirm allowable routes and actual tie-in points that may be required by the entities responsible for these linear facilities. Where possible, URS attempted to confirm capacity and availability.

Site 1 – This site is currently used as the Utility Department storage and maintenance yard. The entire site is paved and a warehouse is located on the property. It is understood that the Utility Department is currently purchasing land around this area, so that ultimately the City will own roughly 40 acres. The Department has established plans to install a substation at this location to provide a connection point for the 230 kV electric transmission system. The immediate surrounding site area has industrial and commercial businesses and is zoned as limited industrial as indicated in Figure 2. The proposed update to the general plan identifies this location as a utility power block.

However, within 1000 feet east of the site is the Jefferson Elementary School and residential housing. Further, in June 2004 construction of numerous luxury homes is to be initiated in the area of Santa Ana and Olive and this area is to be rezoned as residential.

There were no observed biological resources in the area. The site appears to adjacent access to 69 kV transmission and potable water. The gas pipeline is located within one and a half miles of the proposed project. An EDR literature search identified soil contamination in this area in the past, although it is understood that remediation has been completed.

The closet SARI line connections point is on State College Blvd within approximately ¾ mile. The OCSD has indicated that the SARI line in this area may be capacity constrained. This would need to be confirmed through further investigation. City sewer discharge is available in the immediate area. The proposed reclaim water line is approximately two and one half miles from the site.

Site 2 – This site is currently used by Adams Metal a metal recycling facility, a lumber yard and rail car area. The site is partially paved or is covered by gravel and dirt. It is understood that the Department has not yet approached these existing businesses to assess the potential for site control. The site is within the Specific Plan area 94-1 and is designated as Zone 1 industrial. Surrounding land uses are industrial and light commercial. The property abuts the Santa Ana River to the South and residential development in the City of Orange is located further south on the other side of the river. [redacted] A hotel is located immediately to the east of the site.

There were no observed biological resources at the site. The site appears to be within approximately ¼ mile access to 69 kV transmissions and potable water. The SARI line and gas line are adjacent to the site. The proposed reclaim water line is approximately one half mile away at the intersection of the 91 Freeway and Glasell Street. Access can be obtained without crossing the Santa Ana River. The EDR literature search did not indicate any known contamination in the area, however based upon the current use of the facility as a metal recycling facility there is some potential for surface soil contamination.

Site 3 – This site is currently owned by the Orange County Water District and is surrounded by the Warner Recharge Basin. Most of this site is currently used as a park and includes recreational fishing in the recharge basin. It may be possible to construct a facility on the south end of the site away from the park, but there currently is only a narrow road down to this location. The site is within the Specific Plan Area 94-1 and is zoned as open space. In addition, the area is within a State designated scenic corridor.

Several birds were observed in the area; however a detailed analysis for sensitive habitat or endangered species was not performed. The site appears to have good access to 69 kV transmission and the Lewis substation is within approximately one mile. The main gas line is approximately a mile and a half away in La Palma Avenue. Potable water and SARI lines are located adjacent to the facility. The proposed reclaim water line is approximately two miles to the east of the site. The literature search indicted no known contamination in this area. The area is designated as a potential flood area in the 1984 General plan.

Site 4 – This site is currently used as a parking lot for Disneyland. Apartments are located adjacent to the south side of the site. There are numerous hotels located adjacent to and nearby the site. The area is zoned commercial recreational. There were no observed biological resources within the area; however, a farm land is located on a small plot within a ¼ mile of the site. The EDR report indicated several past spills and leaking tanks in the area, but there was no observed contamination onsite.

Access to transmission is within a half mile at the Katella Substation. There are no nearby main gas lines with the closest connection point more than 3 miles away in La Palma Avenue. There is potable water in the area and the proposed reclaim water line is approximately two miles from the site. The SARI line is approximately 1 mile away.

Site 5 – This site is in light industrial use and several two-story warehouses are located onsite. It is understood that there have been some tentative discussions with the land-owner who has expressed a desire to explore options with the City of Anaheim. The area is within the Specific Plan No. 94-1 area and is zoned industrial. The surrounding area is light industrial. There is a communications company that has a communication tower that appears to be 60 feet or taller located directly behind the facility to the south. There are no housing developments in relative close proximity to this site. The EDR report indicated that there were several past spills and leaking tanks in the area, but there was no observed or reported contamination at the site.

There were no observed biological resources in the area. The site is located less then a ¼ mile from the Dowling Substation and the gas pipeline. The proposed reclaim water line is within a half mile and the SARI line is less than one half mile from the site.

Site 6 – This site currently operates as the Dowling Substation, including the Utilities Department LM 5000 electrical generation facility. It would be necessary to dismantle the existing LM 5000 to create area for the construction of 2 or 4 LM 6000s. There is also a fire station and a single family home at the front of the property that would need to be acquired by the Utilities Dept and demolished. This site may be restricted and not have sufficient space for the proposed project depending upon the reconfiguration of the substation. The zoning of the site is industrial with a utility overlay and is within the Specific Plan No 94-1 Northeast Industrial Area. Adjacent to the property is light industrial and commercial land uses.

There were no observed biological resources in the area. Transmission and gas connections appear onsite, however the current gas line is an 8-inch diameter and it may be necessary to install a ¾ mile gas line to access a larger 36-inch gas line. The SARI line is located within a ½ mile and the reclaim line is adjacent to the site.

Site 7 – This site is currently a vacant lot where the Salvation Army stores delivery/pick-up trucks. Immediately adjacent to the northern border of the site is a ministry facility that appears to have a 50 bed or more temporary housing facility. Other surrounding land use is light industrial. There are no immediate housing developments in the area. A railroad track is located to the east and west of the site. The area is zoned industrial.

There were no observed biological resources in the area. The Lewis transmission substation is located immediately to the south on the corner of Lewis and Cerritos Avenue. The gas pipeline is located to approximately 2.5 miles to the north. The proposed reclaim water line is 1.4 miles to the east and the SARI line is located 0.4 miles to the east.

Site 8 – A car dealership and shopping center is located adjacent to this site. Housing is located in elevated terrain surrounding the site. A Southern California Edison 500 kV line is located overhead of the site, rendering it unusable for the construction of a power generations facility. This site has been dropped from further consideration in this analysis.

4.1 OVERVIEW

URS used the project information from Section 2.0 and site information in Section 3.0 to perform a quantitative ranking analysis for the suitability of the identified sites. Table 2 contains the criteria used to assess suitability. Several of the criteria were deemed to be neutral or of similar concern for all sites and were; therefore, not included in the quantitative ranking. A general discussion on each of these neutral criteria and the factors considered are presented in Section 4.2. Criteria that had the potential to differentiate suitability of the sites were assigned a scale with performance levels of 0 to 10 where 10 is the most favorable or best performance level, and 0 is the worst level. To the extent possible, URS attempted to utilize quantitative measures as opposed to qualitative measures in defining the scale performance levels. A discussion of each of the ranking criteria is presented in Section 4.3. For each suitability criterion an importance weight was assigned based on URS' experience that some criteria may have more bearing on the successful siting of a power plant. URS also sought input from the Department on the establishment of the weight to assure that local public and Department concerns were appropriately elicited. The site weights are presented in Section 4.4.

TABLE 2
TABLE OF CRITICAL ISSUES
ANAHEIM UTILITY DEPARTMENT SITING STUDY

Land/Surface Water Issues
1 Local ordinances
2 Buildable acreage
3 Adjacent land uses / sensitive receptors
4 Land use plans / Gen. Plan
5 Cultural resources
6 Geology/soils/geohazards
7 Stormwater/drainage issues / flooding
8 Zoning status
9 Phase I/Database search (site history)
10 Noise

Ecological Issues
11 Critical habitat

Extraordinary Site Development Costs
12 Foundations, historical uses
13 Soil/groundwater contamination

Water Supply/Discharge Issues
14 Water source quantity
15 Water discharge location/capacity
16 R-O-W availability x2

Air Resources
20 Attainment status
21 Offsets/allowances needed
22 Control technology requirements

Gas Supply Issues
23 R-O-W availability
24 Supply sources

Electric Transmission Issues
25 Transmission congestion
26 Nearest substations/lines
27 R-O-W availability

[redacted]

TABLE 6
BUILDABLE ACREAGE CRITERION

Performance Level	Buildable Acreage Criteria
10 (best)	Sufficient Acreage and Continuous
5	Discontinuous Acreage
0 (worst)	Limited Acreage

Gas Supply

A major gas supply line is routed through Anaheim in the vicinity of Palma Avenue and along the Burlington Northern Santa Fe Railroad route shown in Figure 3. Based on discussions with Southern California Gas it is understood that the line should have sufficient capacity for the proposed project. The performance levels for the sites is based on the normalized proximity of the potential sites to the gas line.

Electrical Transmissions Issues

It is understood that transmissions capacity constraints are not an issue for the proposed project based on discussions with the Utility Department. The performance level for the sites is based on the normalized proximity of the site to the closest 69 kV transmissions line.

Sewer Discharge

It is recommended that the Santa Ana Regional Interceptor (SARI) line be used for the discharge of process water from the facility. This large sewer system is not anticipated to have capacity constraints although there may be some restrictions along the State College Blvd area near Sites 1, 4 and 7. The City could also utilize smaller City sewer lines, however, it is understood that many of these lines are capacity constrained and a detailed sewer capacity analysis would need to be performed. Sewer discharge is not anticipated to be a significant issue. The performance level is based on the normalized proximity of the site to the closest SARI line location that does not require the Santa Ana River to be crossed by a pipeline. Crossing the Santa Ana River has been avoided due to potential permit issues associated with the Corp of Engineers and US Fish and Wildlife who have jurisdictional responsibility for the river. Crossing the river is not a fatal flaw; however, it appears that the river can be readily avoided and should be to the extent possible.

Water Supply

It is recommended that the project propose the use of reclaim water as the main source of water for the project. Based on past URS experience, CEC staff is adamant in support of the State Water Resources Control Board Resolution 75-58. This resolution was written to

require the use of reclaim water in electrical generation cooling towers. It is understood that the proposed project will be a simple cycle configuration and will not require a process water cooling tower [redacted] Some additional potable water will be needed for onsite personnel but based on the small quantities and the number of connections points in the area of the sites should not result in a significant issue. As stated previously the OSWD intends to install a reclaim water line that will be operational by 2007. OCSD has indicated that connections to the reclaim line may only occur at the intersection of the proposed reclaim line with Ball Road, Katella, La Palma and Mira Loma. The performance level is based upon the normalized proximity to one of these connection points.

Summary Ranking

The performance level for each of the criteria are summarized in Table 7.

TABLE 7
CRITERIA RANKING

Criteria	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrell	Site 6 Dowling	Site 7 Lewis
Zoning Consistency	10	8	0	5	8	10	10
Surrounding Compatibility	0	5	3	5	8	8	0
Visual	5	5	0	5	10	5	5
Transmission Connection	10	0	8	9	5	10	7
Buildable Acreage	10	10	5	10	10	0	10
Gas Connection	4	10	8	0	9	7	2
Reclaim Connection	0	8	2	1	7	10	3
SARI Connection	4	10	10	0	1	6	6

4.4 CRITERIA WEIGHTING

It has been URS' experience that certain site criteria may be more important than others in the successful permitting and construction of a power generation facility. For example, compatible surrounding land use is a more significant issue in the permit process in contrast to the site's proximity to a potable water line. URS also evaluated the sensitivity of the ranking to confirm that no one weight clearly skewed the results. This criteria weights also were discussed with the Department to confirm agreement based on the local understanding of the public and Department issues. The criteria weights are designed to sum to 100 percent. Table 8 shows the weights for each criterion.

TABLE 8
CRITERIA WEIGHTS

Criteria	Weight
Zoning Consistency	12
Surrounding Compatibility	24
Visual	20
Transmission Connection	6
Buildable Acreage	14
Gas Connection	7
Reclaim Connection	10
SARI Connection	7

URS used the site suitability analysis to determine the most preferable sites for development. The identification of preferred sites is based on the site suitability score, which is the sum of the criterion performance levels multiplied by the criterion weights. The site that results in the highest score is anticipated to be the preferable site to facilitate permitting and construction of a City of Anaheim power generation project. Prior to actual selection of a site, the Department will need to obtain site control and verify that sufficient land is available dependent upon project equipment and engineering design. The Department should also confirm routes, capacity and connection points for all linear gas, transmissions, sewer, reclaim and water lines. It is also recommended that the Department perform early public outreach to identify public concerns for a specific site.

Table 9 shows the Site Suitability Score. The site most suitable for the potential power generation facility has the highest score (Site 5) and is discussed first and the other sites are discussed in order of their scores.

TABLE 9
SUMMARY SITE SUITABILITY SCORE

Criteria	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrel	Site 6 Dowling	Site 7 Lewis
Zoning Consistency	120	96	0	60	96	120	120
Surrounding Compatibility	0	144	72	96	192	144	0
Visual	120	120	0	120	200	120	100
Transmission Connection	60	0	49	53	30	60	41
Buildable Acreage	140	140	70	140	140	0	140
Gas Connection	37	70	58	0	66	53	15
Reclaim Connection	0	84	19	10	73	100	31
SARI Connection	26	70	70	0	9	43	42
TOTALS	503	724	338	479	806	640	490
	4	2	7	6	1	3	5

First, a word of caution should be made regarding the site suitability scores. There is uncertainty, and sometimes considerable uncertainty, in the data and assumptions made to develop these scores. As a result, relatively small differences in scores do not infer real differences in site preferences. Rather, the scores should be used to establish groups of sites that that score similarly. For example, it is clear that San Farrel (Site 5) and Metal (Site 2) exhibit the best site characteristics. These are the highest rated sites, and they are in the highest site group.

Note that Dowling (Site 6) has an intermediate score, and is located in the middle group. There is considerable concern about buildable acreage, as is explained below. Finally, the Maintenance Yard (Site 1), OCWD (Site 3), Disney (Site 4) and Lewis (Site 7) all exhibit relatively low scores and are located in the lowest group.

Summary Conclusions

San Farrel (Site 5) has appropriate zoning and a power generation facility would be relatively consistent with surrounding land use. This location has the least residential urban development in close proximity in comparison to the other sites. Visual impact should be manageable as the site is located in the middle of a block in a heavily commercial area. Note, however, that four LM6000's would stand out amongst primarily one to one and one-half story facilities that dominate the area. There is also an approximately 60-foot communication tower located at the business directly behind and to the south of the site. Linear interconnection points for gas, transmission, and water are within one half mile and the SARI line connection is approximately ¾ of a mile. The site is also located within one half mile from the existing Dowling Generation facility, which would consolidate the Utility Dept electrical generation resources.

The score for the second preferred site, Adams Metal (Site 2), is lower, but not significantly lower, than San Farrel. This score is slightly lower based on potential visual impact and surrounding land use criterion due to the close proximity to a hotel and residential neighborhood located across the Santa Ana River and in the City of Orange. Based on discussions with the Utility Dept. Business Development Manager it may be difficult to obtain site control of this location, since the existing businesses may prefer their current location over other alternatives in Anaheim. Linear interconnections are all within one half mile.

The Dowling Substation (Site 6) is in the second group according to score. This site is highly dependent upon the buildable available acreage and would require demolishing the existing LM 5000, removing a resident and relocating a firehouse to obtain 5 acres of usable space. Visual impacts could be an issue, since the facility would need to be located in close proximity to the 91 Freeway and the highly traveled Kraemer Boulevard. (Refer to photos in Appendix B). Most linear interconnections already exist onsite, since the facility currently has generation capability. However, it was assumed that a new gas line may need to be installed, since the current line is 8 inches in diameter.

The Maintenance Yard, (Site 1) is in the third, and lowest, group according to score. The site zoning is compatible and the proposed general plan allocates this area as an energy center. URS is concerned about the close proximity to an elementary school and therefore the surrounding land use criterion was significantly discounted. Actual impacts to the school may be minimal; however, URS has typically observed a negative public perception with siting power generation facilities near schools. It may be possible for the Utility Dept. to perform public outreach that could overcome any negative perception, thereby increasing the site suitability. Transmission line connection is extremely favorable at this site. However, the connection for the gas line and reclaim water line are over one and one half mile away.

The Lewis Site (Site 7) is also in the lowest group. It is not a preferred site due to the proximity to the ministry facility with temporary housing. It is also relatively far from the gas line. However, there may be access to another gas line to the south of the facility in or near Garden Grove.

The Disney Lot (Site 4) is also in the lowest group. It is not a preferred site due to the existing commercial recreational site zoning and the proximity to residences and hotels. This site is also the farthest away from gas line interconnection.

The OCWD Site (Site 3) is also in the lowest group. It is not a preferred site due to the existing open space site zoning and the possible discontinuous land availability. However, the score of this site would rise significantly if the zoning could be changed, and the "park" eliminated. This site does offer some advantages regarding location of a plant away from existing residences. A negative, however, is the shape of the property, and the need to find 5 acres of contiguous space.

APPENDIX A
RANKING AND SITE SCORES

City Of Anaheim Siting Analysis
Ranking Analysis

jah 6/30/03

I Summary of Final Results, Highest Score is Most Prefered Site

Criteria	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrel	Site 6 Dowling	Site 7 Lewis
Zoning Consistency	120	96	0	60	96	120	120
Surrounding Compatibility	0	144	72	96	192	144	0
Visual	120	120	0	120	200	120	100
Transmission Connection	60	0	49	53	30	60	41
Buildable Acreage	140	140	70	140	140	0	140
Gas Connection	37	70	58	0	66	53	15
Reclaim Connection	0	84	19	10	73	100	31
SARI Connection	26	70	70	0	9	43	42
TOTALS	503	724	338	479	806	640	490

II Weighting of Criteria

Criteria	Weighting
Zoning Consistency	12
Surrounding Compatibility	24
Visual	20
Transmission Connection	6
Buildable Acreage	14
Gas Connection	7
Reclaim Connection	10
SARI Connection	7

III Ranking

Criteria	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrel	Site 6 Dowling	Site 7 Lewis
Zoning Consistency (1)	10	8	0	5	8	10	10
Surrounding Compatibility (2)	0	6	3	4	8	6	0
Visual (3)	6	6	0	6	10	6	5
Transmission Connection (5)	10	0	8	9	5	10	7
Buildable Acreage (4)	10	10	5	10	10	0	10
Gas Connection (5)	5	10	8	0	9	8	2
Reclaim Connection (5)	0	8	2	1	7	10	3
SARI Connection (5)	4	10	10	0	1	6	6

IV Normalized Distance to Linear Connections

Linear	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrel	Site 6 Dowling	Site 7 Lewis
Transmission	10	0	8	9	5	10	7
Gas	5	10	8	0	9	8	2
ReClaim	0	8	2	1	7	10	3
SARI	4	10	10	0	1	6	6

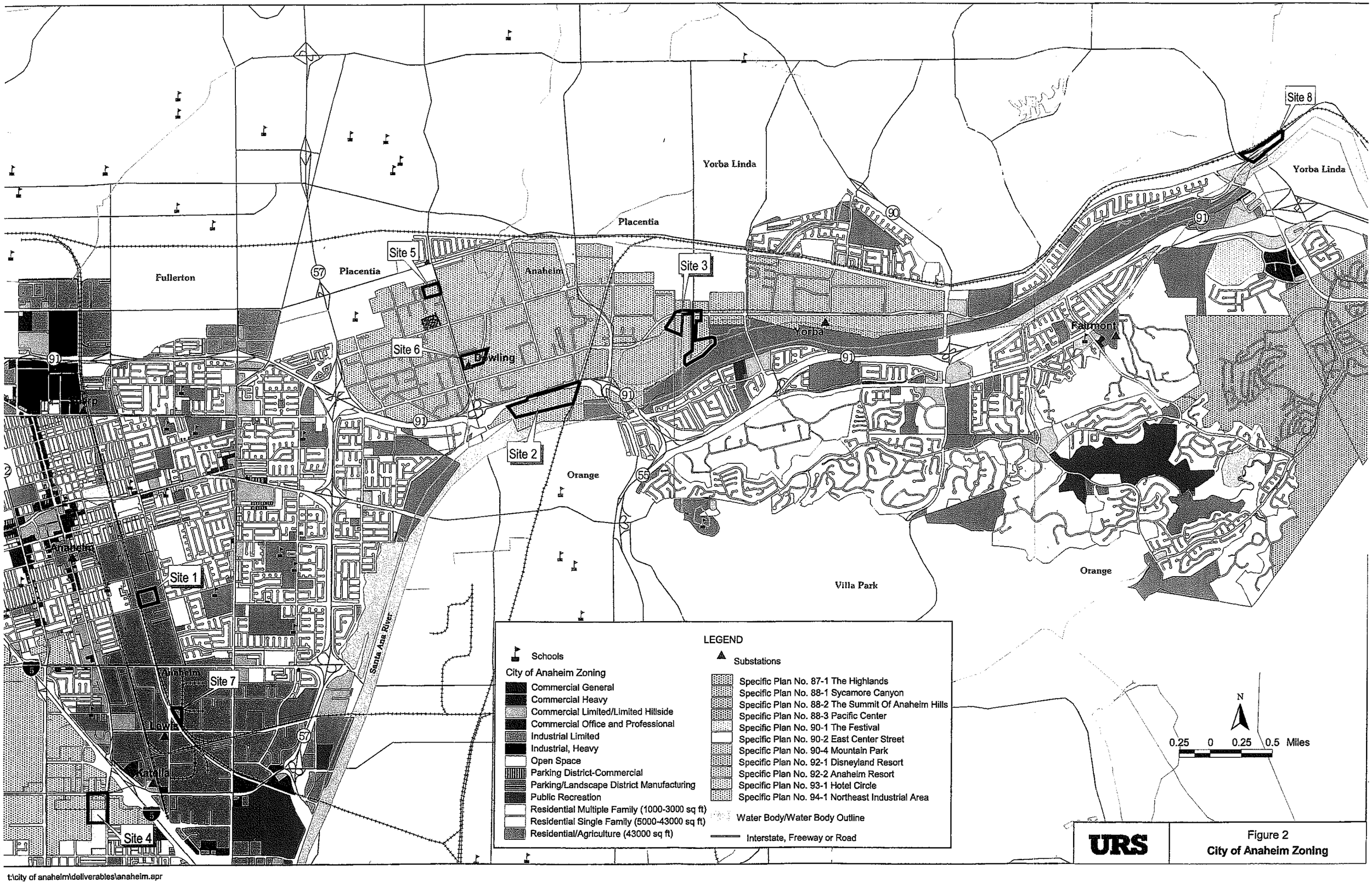
V. Distance to Linears

Linear	Site 1 Yard	Site 2 Metal	Site 3 OCWD	Site 4 Disney	Site 5 San Farrel	Site 6 Dowling	Site 7 Lewis	Maximum Distance
Transmission	0	0.32	0.06	0.04	0.16	0	0.1	0.32
Gas	1.48	0	0.53	3.13	0.17	0.78	2.45	3.13
ReClaim	1.96	0.32	1.58	1.76	0.53	0	1.35	1.96
SARI	0.63	0	0	1	0.87	0.38	0.4	1

VI Ranking Quantification

	Rank	Criteria
(1) Zoning	10	Energy
	8	Industrial
	5	Commercial
	0	Park/Open Space
(2) Surrounding Compatibility	10	Heavy Industrial
	8	Dense Commercial
	6	Mix of Industrial/Commercial
	4	Hotels
	3	Housing Development, Open Space
	0	Sensitive Receptors-Schools, Hospitals
(3) Visual	10	Blocked or limited view
	6	Partial Limited views
	0	Clearly Visible to Public
(4) Buildable Acreage		
	10	Sufficent and Contiguous
	5	Discontinuous
	0	Limited Acreage

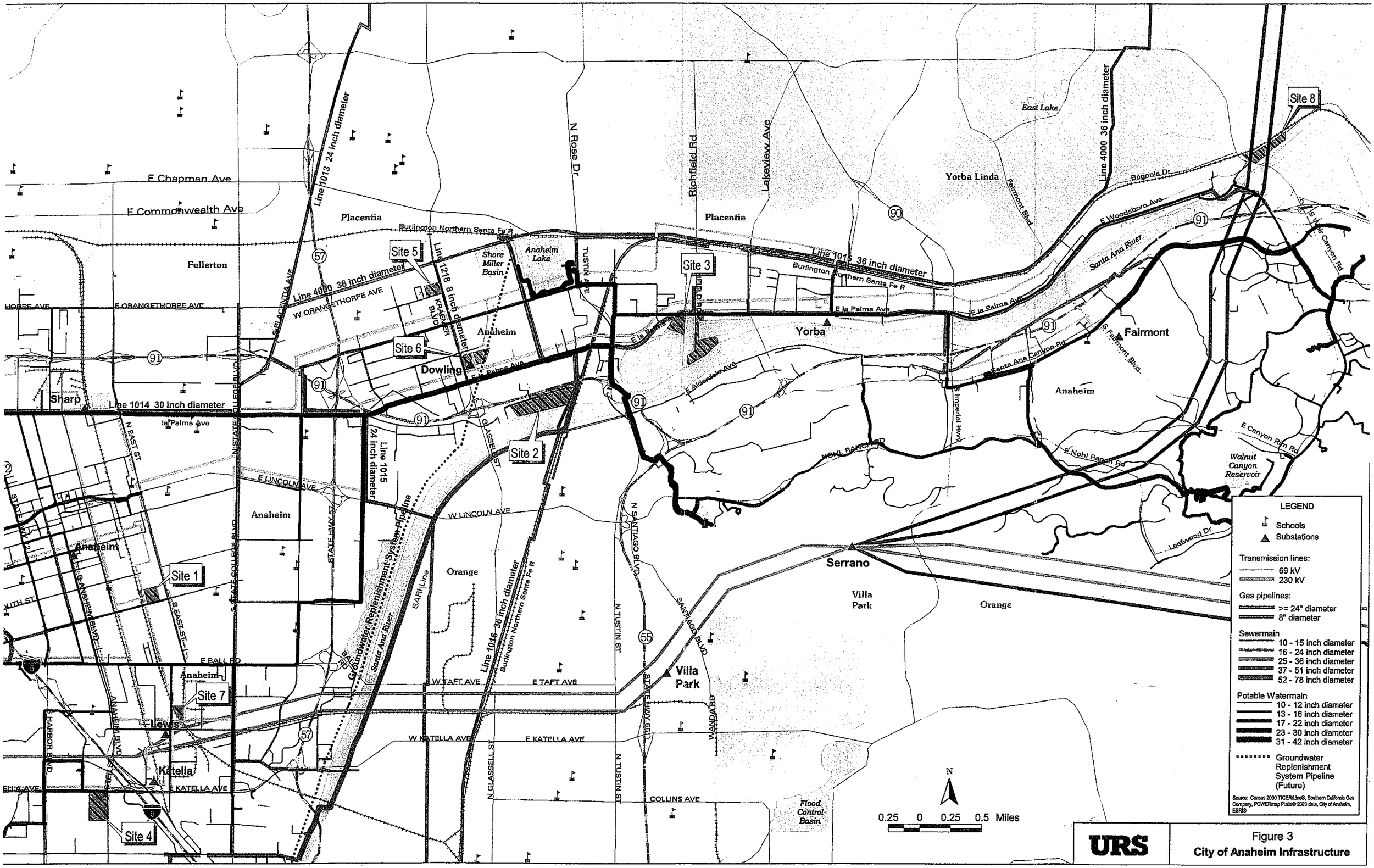
(5) Linear Ranking Normalized to Longest Linear, 0 longest, 10 shortest



URS

Figure 2
City of Anaheim Zoning

t:\city of anaheim\deliverables\anaheim.apr



URS

Figure 3
City of Anaheim Infrastructure

t:\city of anaheim\deliverables\anaheim.apr

TVLaddVAnaheimSitingStudy\603-150

Anaheim Siting Study

Site 1-Maintenance Yard

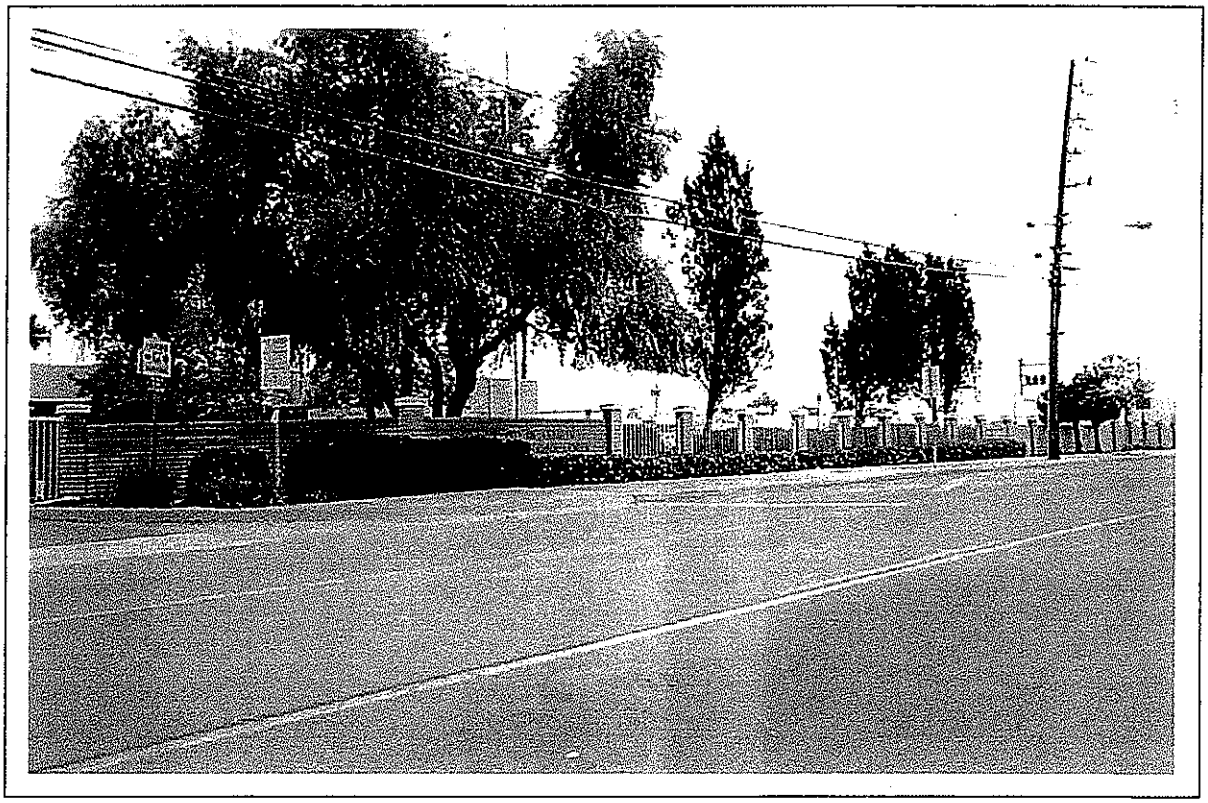


Figure 1-1. Front of the site, looking north

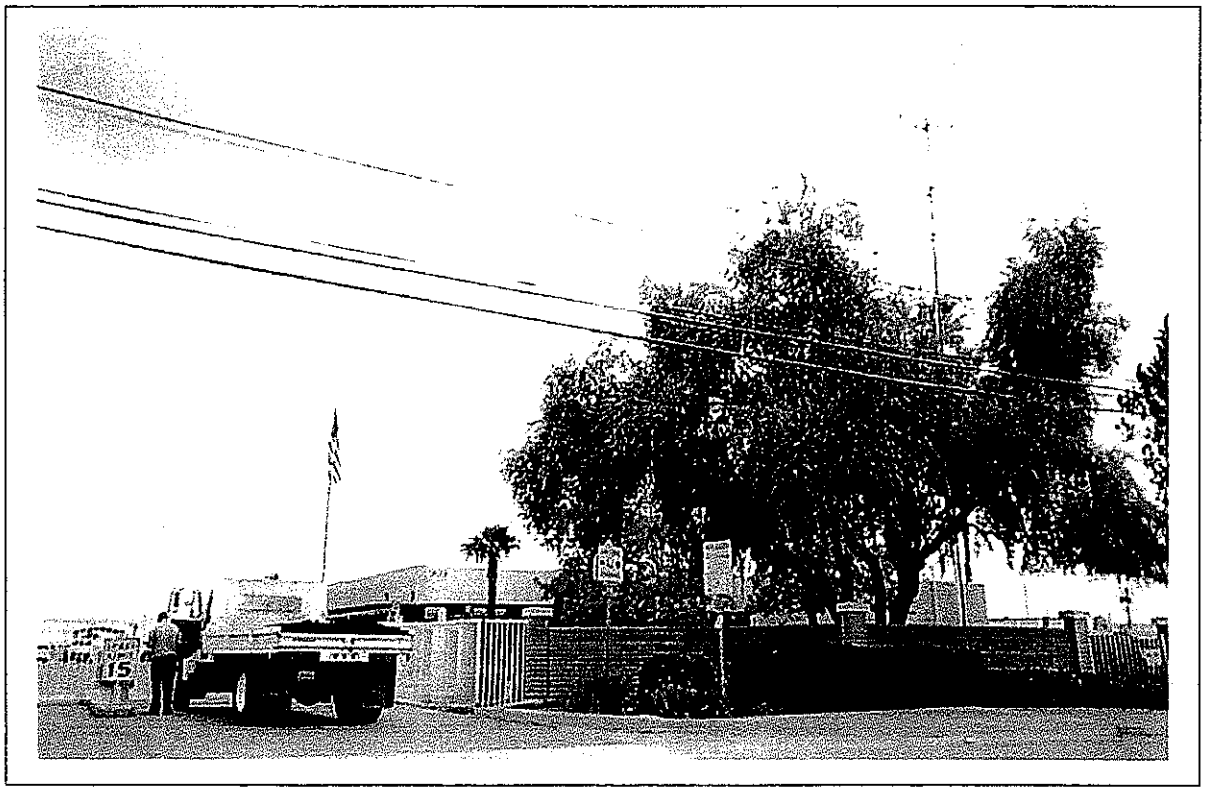


Figure 1-2. Current entrance to the site, looking north

URS

Figure 1-3. Inside the facility fence, looking northwest

Figure 1-4. Inside the facility fence, looking northeast

Anaheim Siting Study
Site 2-Metal Yard

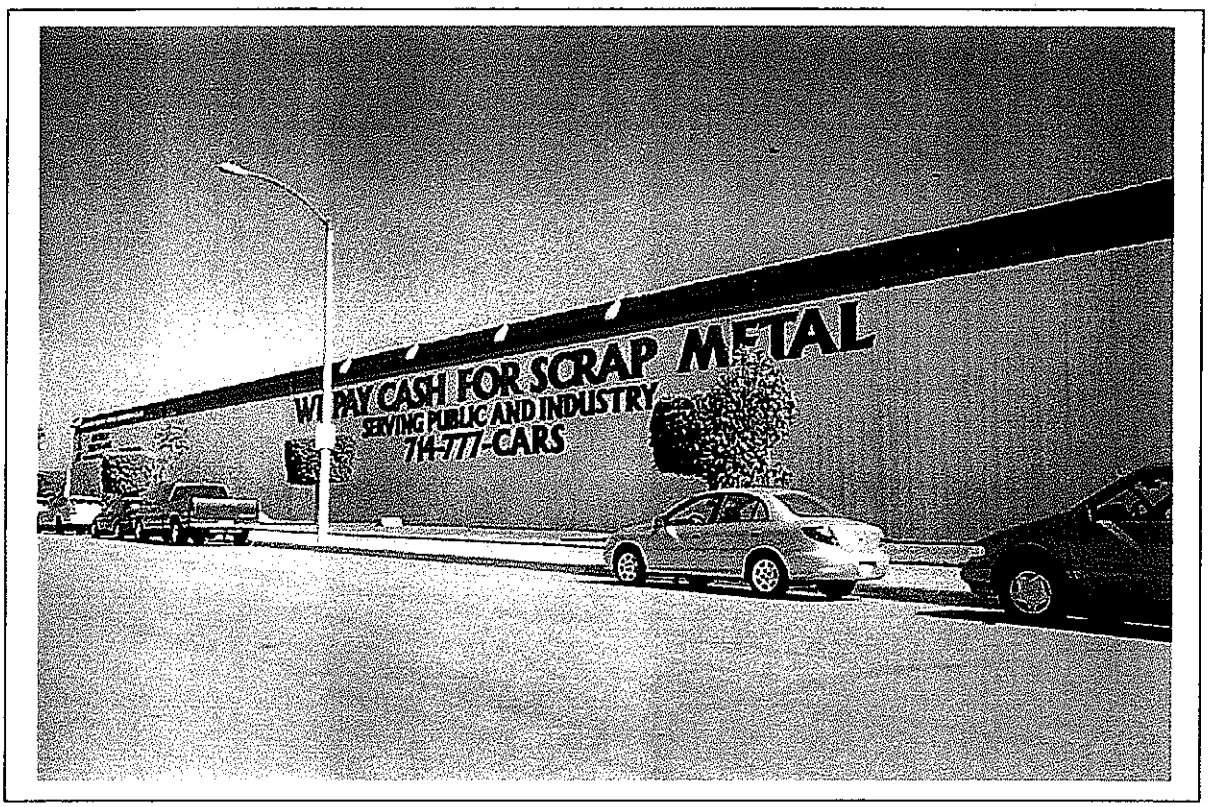


Figure 2-1. In front of the site, looking south

Figure 2-2. In front of site, looking southeast. Note hotel at the eastern end of photo.

URS

Figure 2-3. In front of the site, looking south

Figure 2-4. On the east side of the site, looking north towards 91 Freeway and recreational area

Anaheim Siting Study
Site 3-OCWD Site

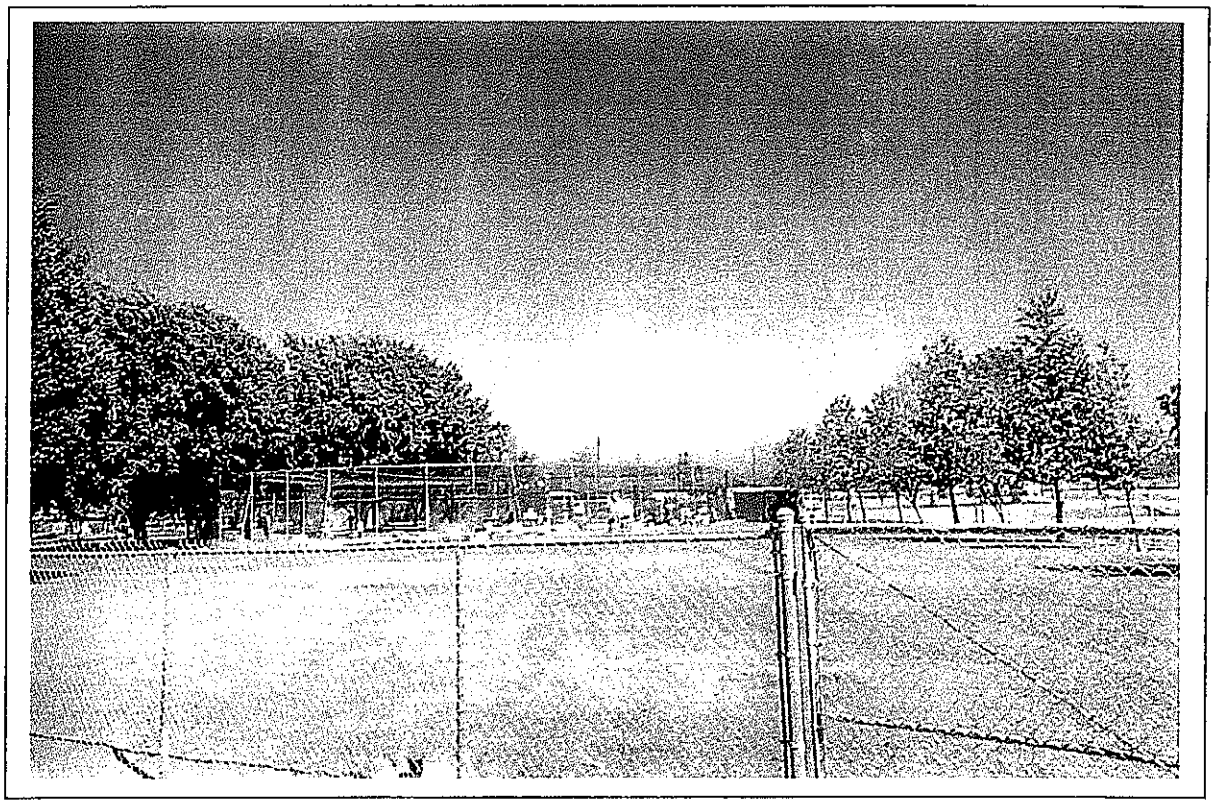


Figure 3-1. Approaching site, looking east

Figure 3-2. Onsite site, looking northwest

URS

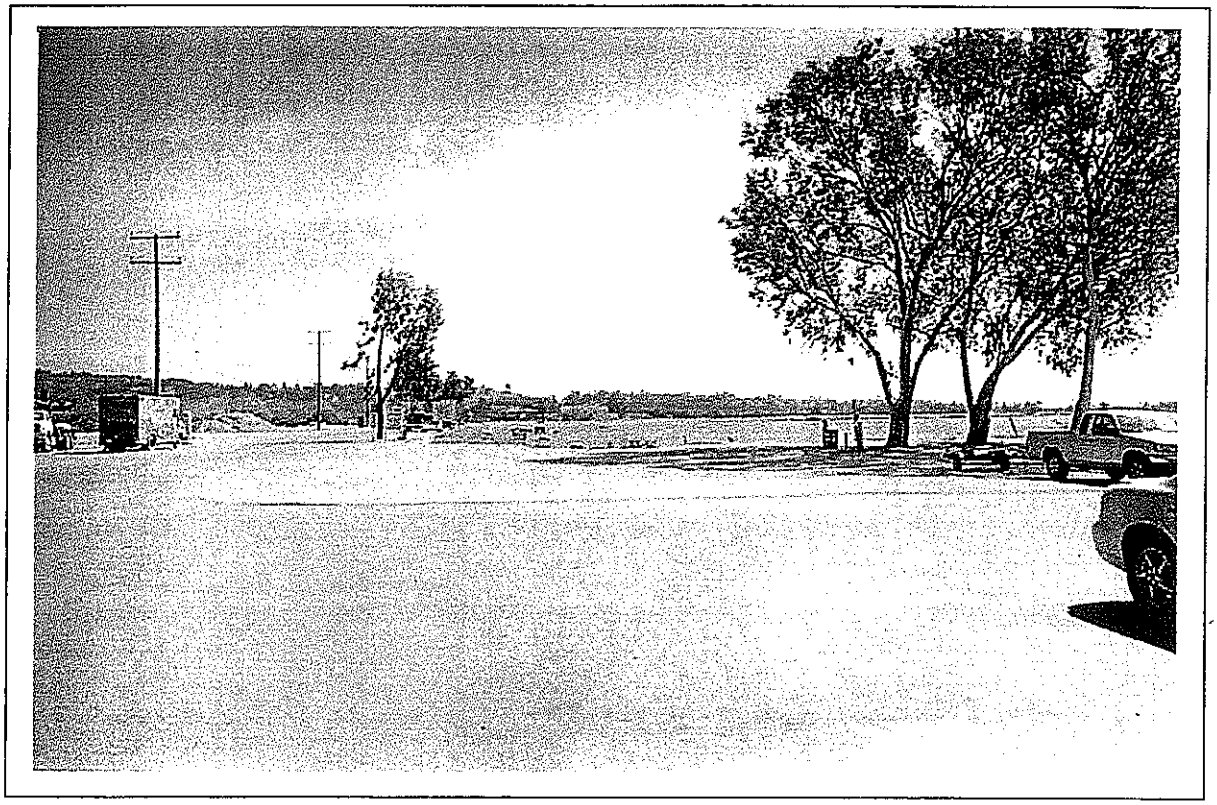


Figure 3-3. Onsite, looking south

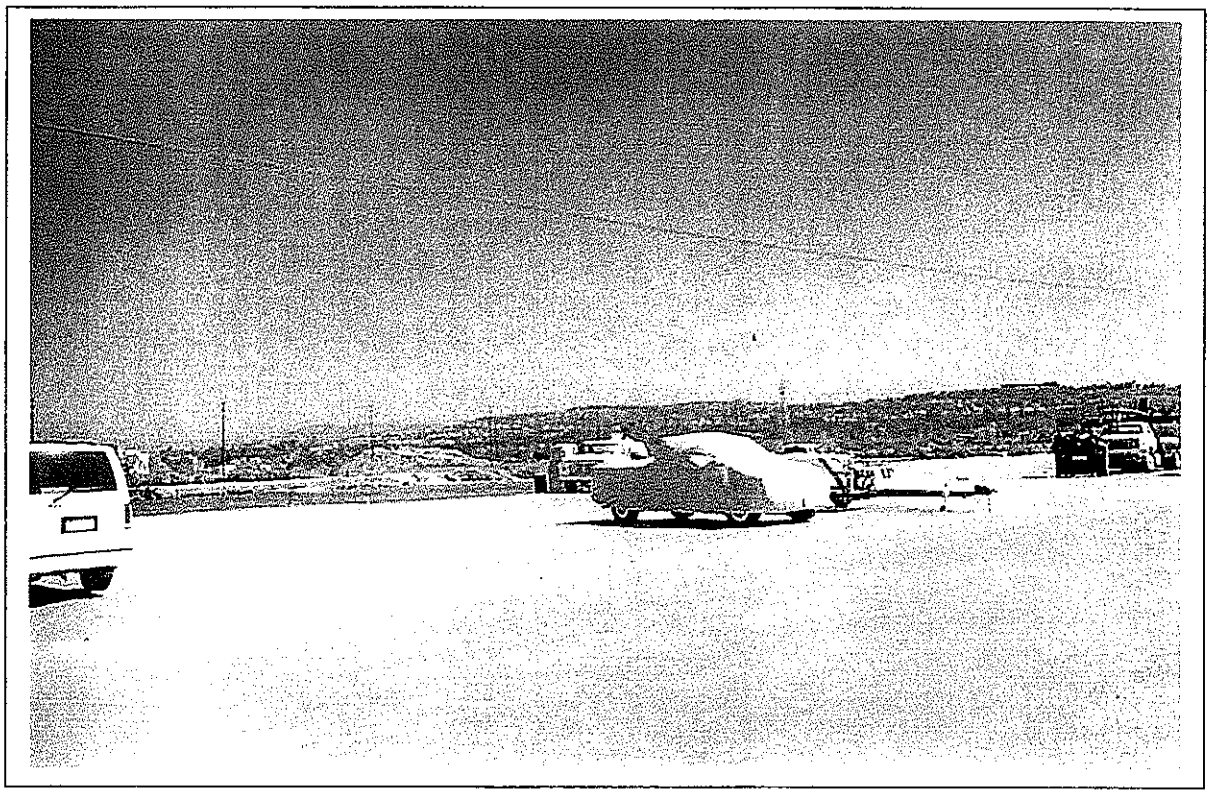


Figure 3-4. Onsite, looking southwest. Note homes on hillside to the south.

Anaheim Siting Study
Site 4-Disney Lot

Figure 4-1. Approaching site, located behind the hotel looking southwest

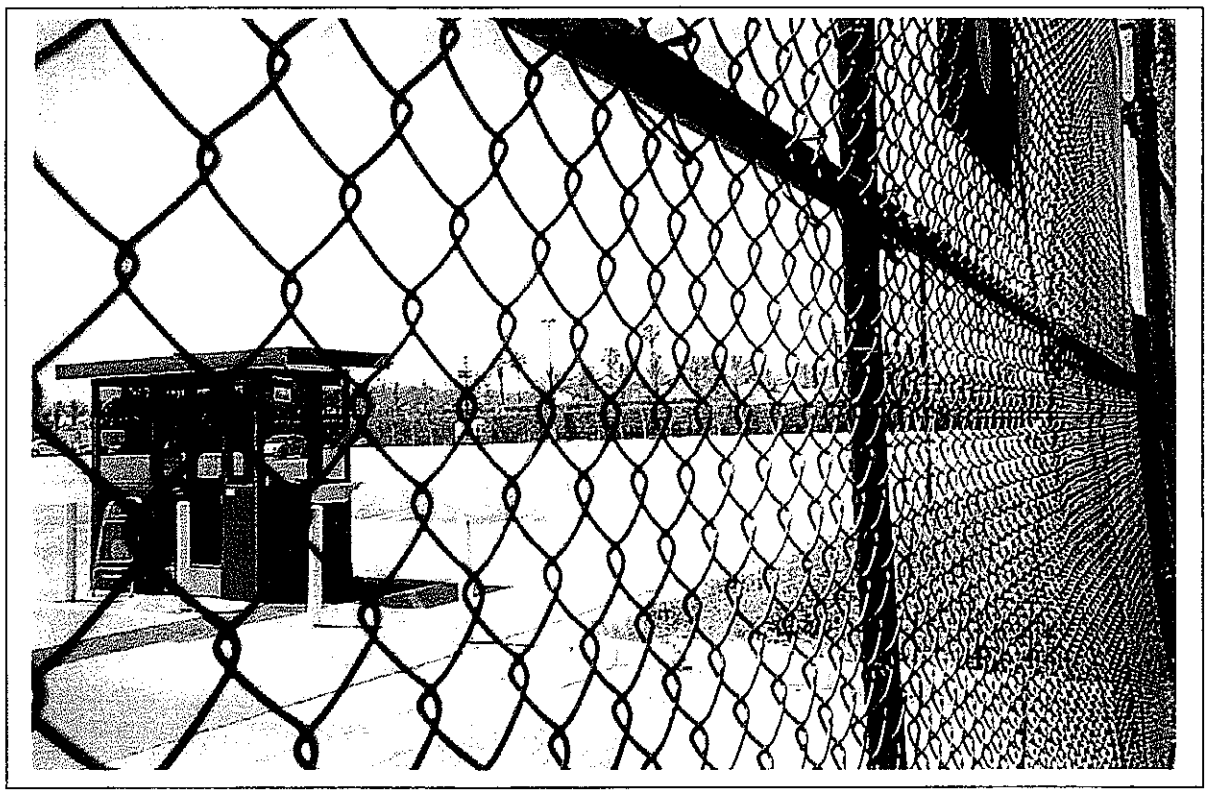


Figure 4-2. On the east side of site, looking northeast

Anaheim Siting Study

Site 4-Disney Lot

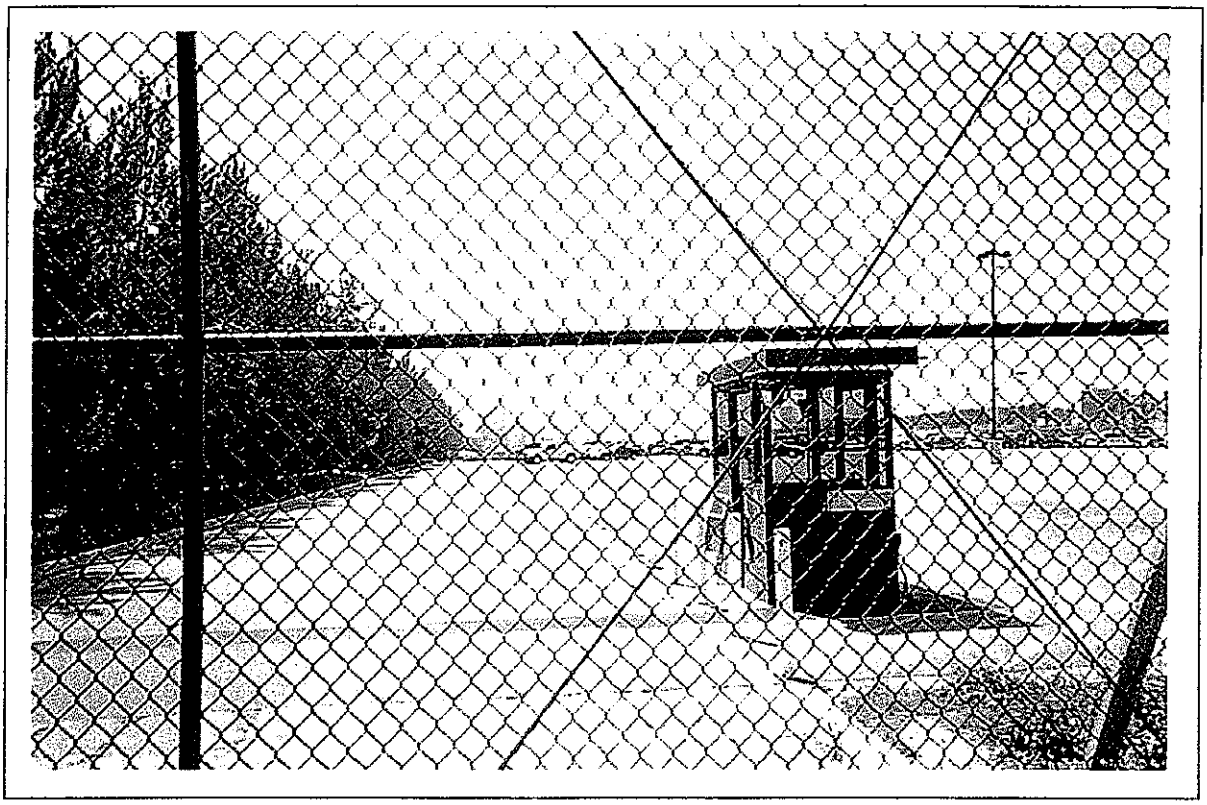


Figure 4-3. On the east side of site, looking southeast. Homes are located behind trees.

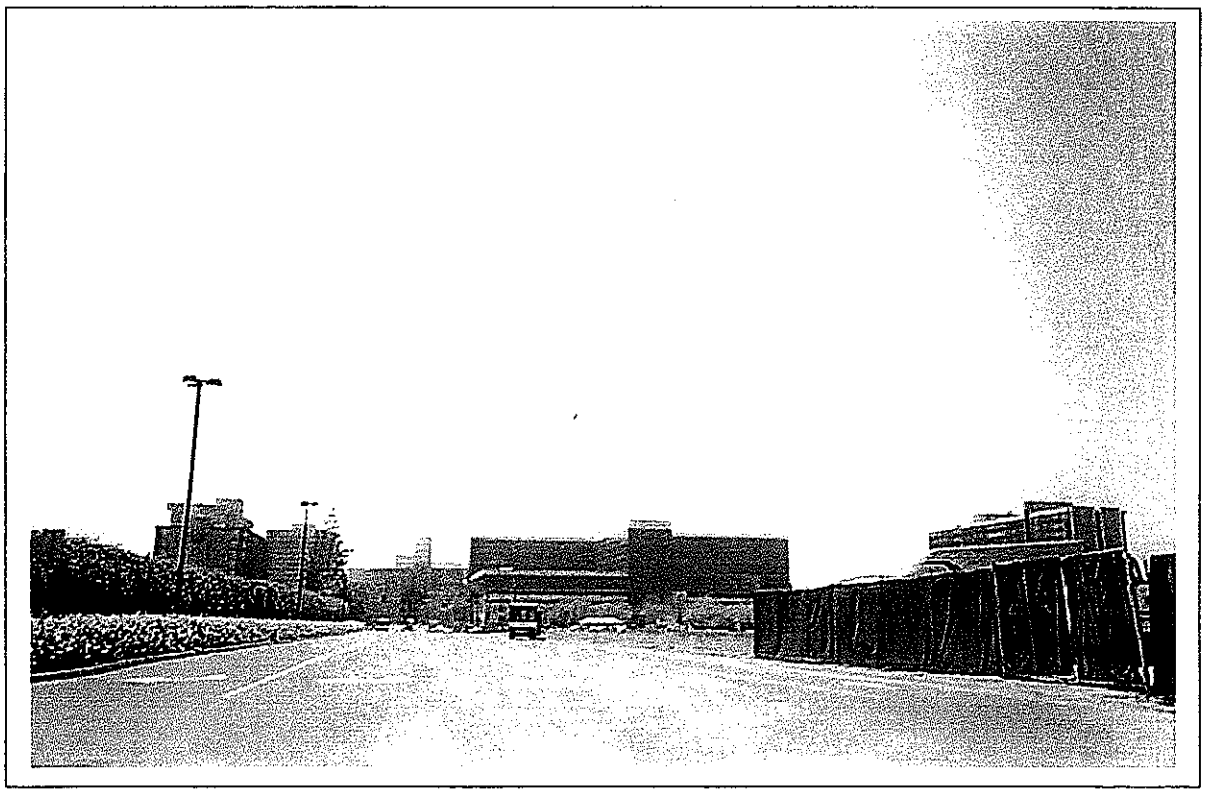


Figure 4-4. On the west side of site, looking west

URS

TVLadd\AnaheimSitingStudy\603-150

Anaheim Siting Study

Site 5-San Farrel

Figure 5-1. Front of site, looking south

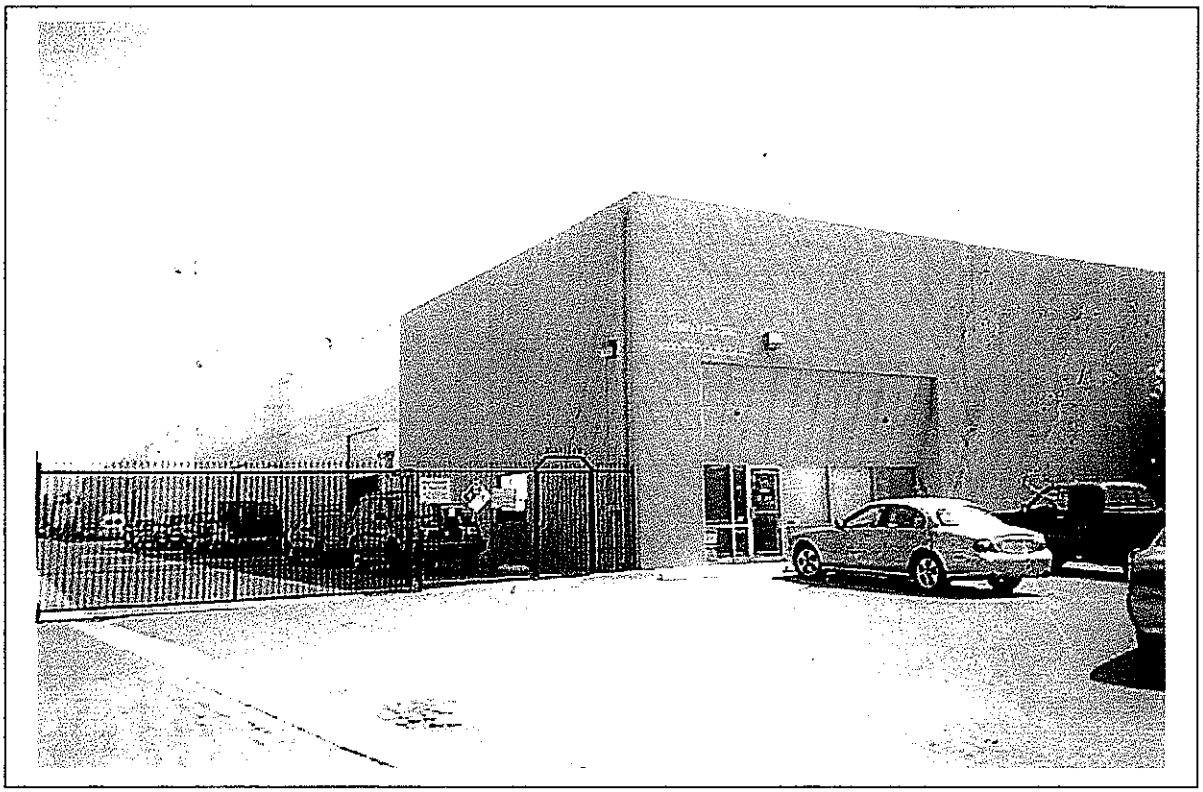


Figure 5-2. Northeast corner of site, looking south. Note communication tower at

URS

33246

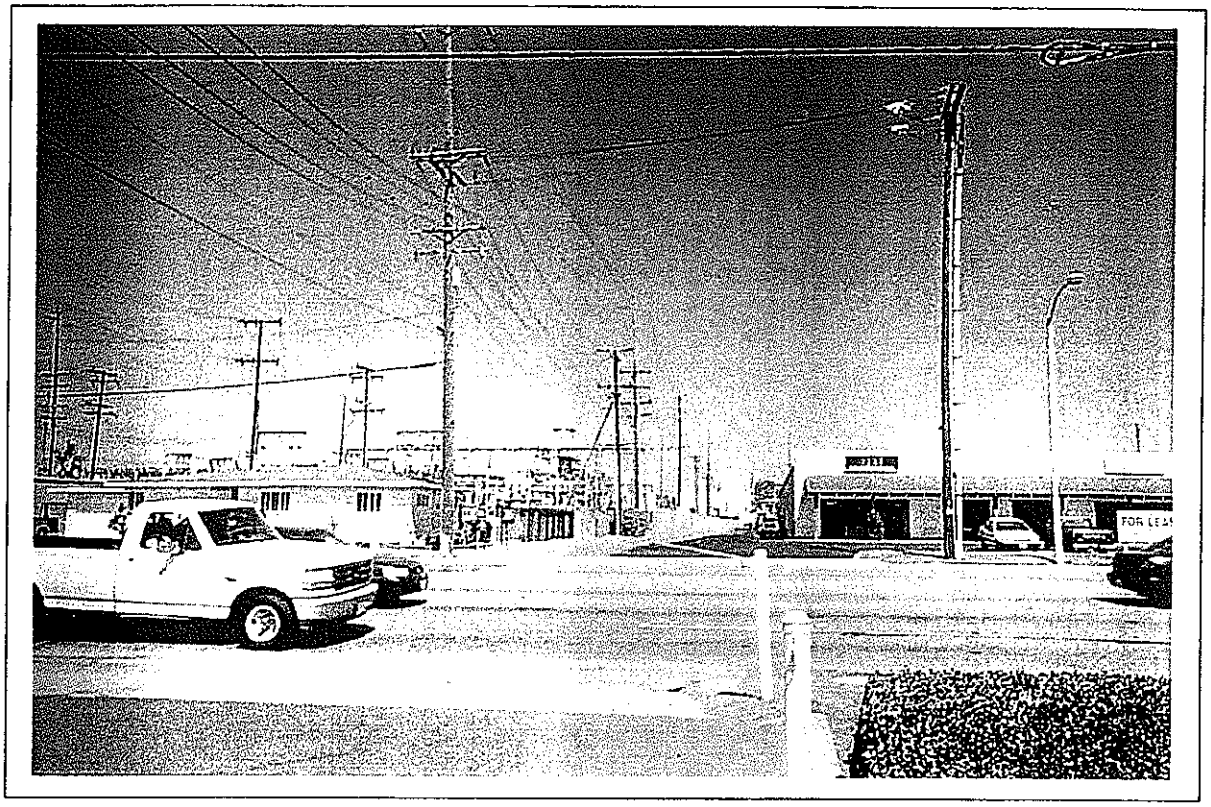


Figure 6-1. In front of site, looking east. House in foreground would need to be removed.

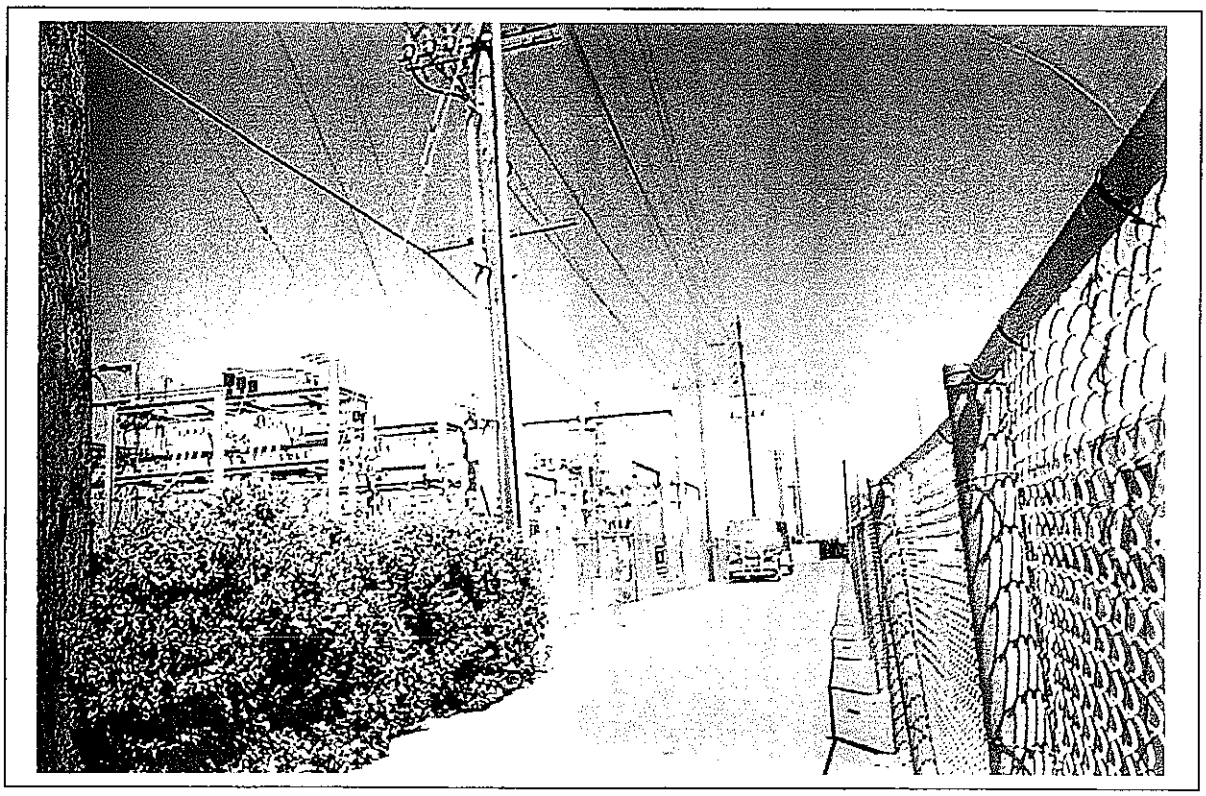


Figure 6-2. Approaching substation, looking north

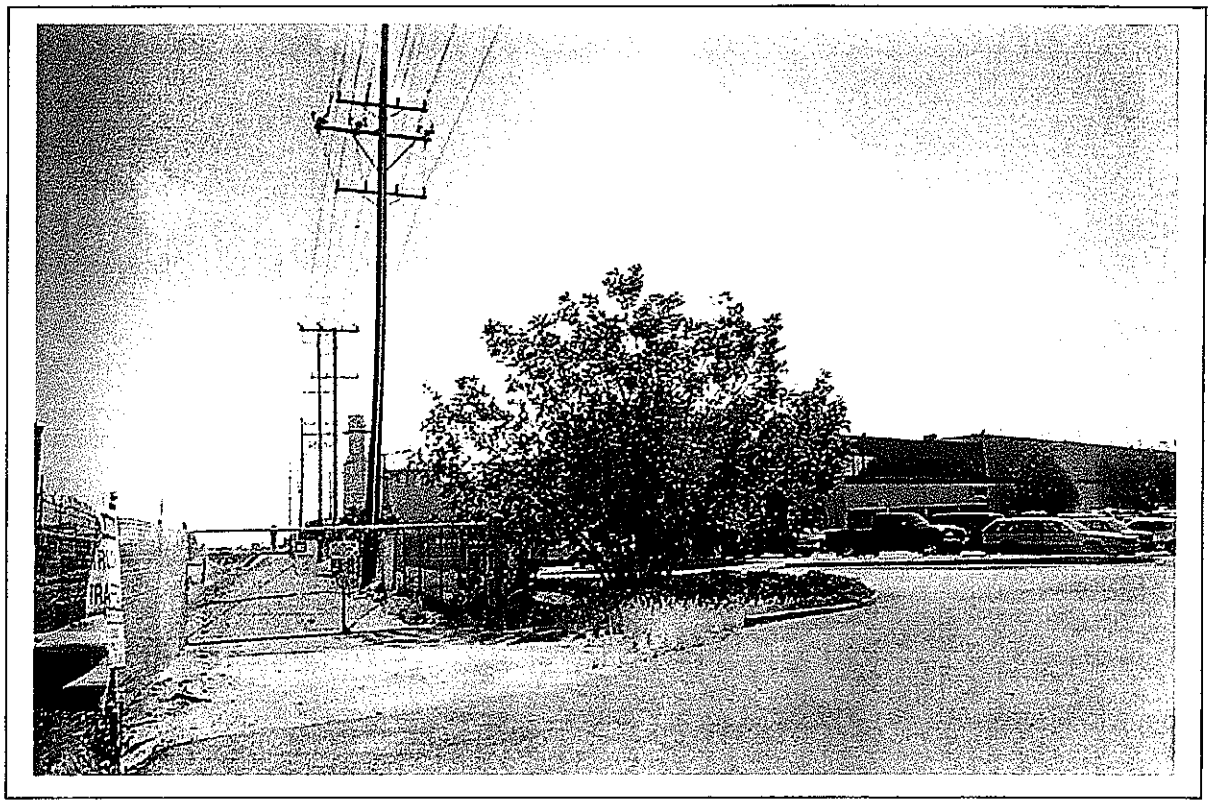


Figure 6-3. Northeast corner of the site, looking south

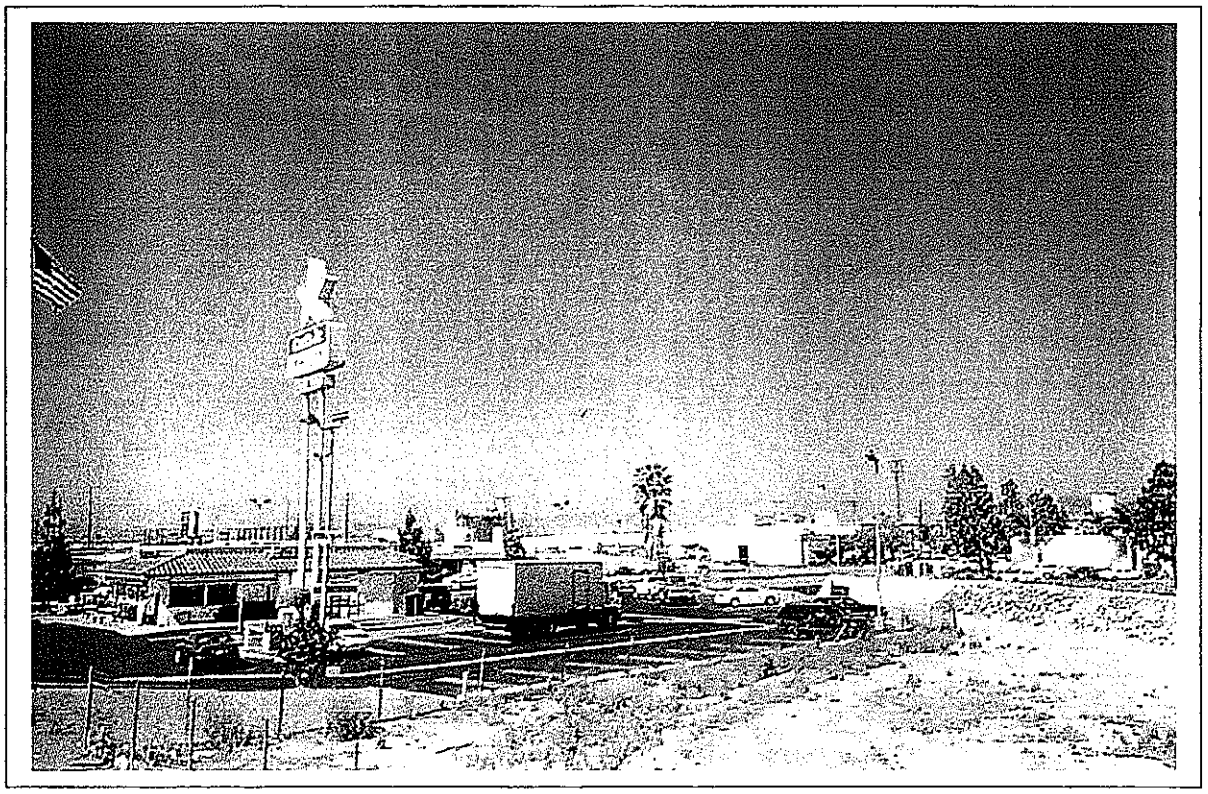


Figure 6-4. 91 Freeway Kraemer Overpass, looking northeast at site

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE *CANYON POWER PLANT PROJECT*

Docket No. 07-AFC-9

PROOF OF SERVICE
(Revised 2/25/2009)

APPLICANT

Southern California Public Power Authority
(SCPPA)
c/o City of Anaheim
Public Utilities Department
Steve Sciortino, Project Manager
201 S. Anaheim Blvd, Suite 802
Anaheim, CA 92805
ssciortino@anaheim.net
swilson@anaheim.net

APPLICANT CONSULTANT

URS Corporation
Cindy Poire, Project Manager
130 Robin Hill Road, Suite 100
Santa Barbara, CA 93117
cindy_poire@urscorp.com

COUNSEL FOR APPLICANT

***Scott Galati**
Galati & Blek, LLP
455 Capitol Mall, Suite 350
Sacramento, CA 95814
sgalati@gb-llp.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

INTERVENORS

ENERGY COMMISSION

JEFFREY D. BYRON
Commissioner and Presiding Member
jbyron@energy.state.ca.us

ARTHUR H. ROSENFELD
Commissioner and Associate Member
arosenfe@energy.state.ca.us

Paul Kramer
Hearing Officer
Pkramer@energy.state.ca.us

Eric Solorio
Project Manager
esolorio@energy.state.ca.us

Deborah Dyer
Staff Counsel
ddyer@energy.state.ca.us

Elena Miller
Public Adviser
publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, Ashley Y Garner, declare that on April 1, 2009, I served and filed copies of the attached **CRITICAL ISSUES ASSESSMENT ANAHEIM PEAKING POWER SITING STUDIES** dated September 2003 and October 2006 . The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[www.energy.ca.gov/sitingcases/lodi]**. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

__X__ sent electronically to all email addresses on the Proof of Service list;

__X__ by personal delivery or by depositing in the United States mail at with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

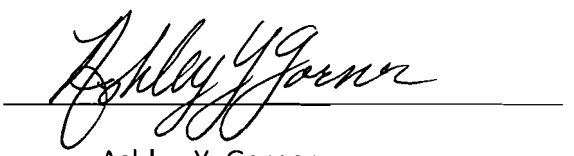
__X__ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. **08-AFC-10**
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.



Ashley Y. Garner