

CHAPTER 6

ALTERNATIVES

6.1 OVERVIEW

In accordance with CEQA and the *CEQA Guidelines* (Section 15126.6(a)), an EIR must describe a range of reasonable 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. The range of alternatives required in an EIR is governed by the “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR is required to discuss only feasible alternatives, that is, alternatives that could feasibly attain most of the project’s basic objectives. Statutes and regulations governing CEQA generally define “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological and legal factors. Factors generally taken into account in determining whether an alternative is feasible also include, but are not limited to, site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and an ability to acquire, control or access an alternative site. While the EIR must discuss alternatives that may feasibly attain most of the project’s basic objectives, the Lead Agency may ultimately reject any alternatives deemed to be infeasible based on factors such as those listed above.

This chapter addresses alternatives to the project, describes the rationale for including them in the EIR, discusses the environmental impacts associated with each alternative, compares the impacts of each alternative relative to those of the project and each of the other alternatives, and discusses the relationship of each alternative to the project objectives.

6.2 FACTORS IN SELECTION OF ALTERNATIVES

The *CEQA Guidelines* suggest, but do not explicitly require, that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency’s determination (*CEQA Guidelines*, Section 15126.6(c)).

The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the project (see *Project Objectives* below);

- The extent to which the alternative would avoid or lessen any of the identified significant environmental effects of the project;
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations; and
- The appropriateness of the alternative in contributing to a “reasonable range” of alternatives necessary to permit a reasoned choice.

Sempra Communications’ Project Objectives for the Telecommunications Program are as follows:

1. Fill a need, in a cost-effective manner, for interstate fiber optics communication capacity throughout California in an extremely competitive telecommunications market;
2. Develop a program that allows the flexibility for subsequent actions to result in the least number of environmental impacts, to be cost-effective, and to be feasible and buildable in a timely manner;
3. Avoid or mitigate to “less than significant levels” project impacts to California’s environment;
4. Create positive competitive pressures on existing telecommunications carriers; and
5. Promote opportunities for economic growth in California as businesses shift their focus to information services and technology.

6.3 ALTERNATIVES SELECTED FOR CONSIDERATION

The project description includes multiple installation methods for development of telecommunications infrastructure and the Program EIR provides an impacts analysis and applies appropriate mitigation measures to address those impacts identified for each method of construction. The project additionally proposes flexibility to utilize multiple methods of installation depending on several influencing factors including governing authority requirements and/or restrictions, density and location of existing buried utilities, soil or environmental conditions, surface conditions, vehicular traffic, and installation costs. The proposed project contemplates Sempra Communications choosing installation methods for a specific location based on a number of factors including engineering feasibility, rights-of-way availability, environmental effects, cost, and construction time factors.

This chapter addresses five alternatives to the proposed project: (1) a No Project Alternative; (2) Reduction of the Project Area Alternative; (3) Aerial Installation Only Alternative; (4) Underground Installation Only Alternative; and (5) Use of Existing Infrastructure Only Alternative. These alternatives are described below, followed by a discussion of their impacts and how they would differ from those of the proposed project.

These alternatives would not introduce additional impacts to those identified and mitigated in the EIR for the proposed project, but would instead use the impacts analysis for the project to determine the extent of those impacts for each method of installation if they were used exclusively. Therefore, the analysis of the potential significant effects for each alternative is generally discussed in this chapter and utilizes by reference the impacts analysis for the project as a basis for investigating the effects of each alternative.

ALTERNATIVE 1: NO PROJECT ALTERNATIVE

The No Project alternative is the circumstance under which the proposed Telecommunications Program is not approved, and therefore, fiber-optic facilities installation and operation by Sempra Communications would not be occur.

Environmental Effects of No Project Alternative

Under the No Project Alternative, none of the potentially significant impacts identified as resulting from the proposed project would occur. Specifically, there would be no impacts related to aesthetics, agricultural resources, air quality, biology, cultural resources, hydrology/surface water quality, land use, noise, recreation, or traffic/circulation. Even so, all of these potentially significant, yet temporary, impacts could be mitigated to less-than-significant levels as detailed in this EIR.

In general, the No Project alternative has no impact on the environment; however, it does not meet the project objective to implement a Telecommunications Program and provide fiber optic facilities for future customers.

The telecommunications market is constantly changing as new technology is introduced, and there are corresponding changes in regulations, supply, and demand. Given the increasing number of users of telecommunications services and the greater number of available devices (internet, digital television, and video conferences), the demand for additional telecommunications capacity will continue to increase whether or not the proposed project is implemented. Consequently, the changes to the environment from the proposed project would foreseeably occur regardless if the project were not approved.

ALTERNATIVE 2: REDUCTION OF THE PROJECT AREA

Determining whether to evaluate alternative locations must be based in part on whether any of the significant environmental effects of the project would be avoided or substantially lessened by putting the project in another location. The proposed project location encompasses multiple counties, and portions thereof, throughout California in which subsequent activities would be carried out. Therefore, instead of reviewing specific alternative locations, the CPUC considered changes in the size or scope of the project area. Viewing the geographic scope of the project area as a whole, including all or portions of the 15 counties in California within which the project is proposed, the analysis considered whether reducing the size of the project area by removing from the scope one or more counties would lessen the overall potential impacts of the project. This

alternative would reduce the geographic scope by removing locations of higher concentrations of sensitive resources primarily in rural and coastal areas, including southern portions of Santa Clara County (Gilroy, San Martin, Morgan Hill), coastal portions of western San Mateo County (Pacifica, Montara, Moss Beach, Half Moon Bay), and all of Santa Cruz, Fresno and Imperial Counties.

Environmental Effects of Alternative 2

Reducing the size of the project area may diminish the number of places throughout the state that may be impacted at any one time, but would not decrease the magnitude of impacts that would occur at any one place. Impacts on resources that may result in significant adverse effects would be specific to the geography under which the activities would occur. For example, implementation of the project in the rural or coastal areas may result in potentially significant impacts to resources of a biological and cultural nature due to less disturbance from development in those areas. Additionally, rural and coastal areas throughout California are more highly concentrated with agricultural resources than the more urbanized and developed regions, and the project would therefore potentially affect those resources as well. Removing these areas from the geographic scope of the project could incrementally lessen overall impacts to these resources. However, impacts could still occur in the more urbanized and developed areas that were not excluded from the project area such as San Francisco and Los Angeles counties where the impacts are potentially greater related to air quality, traffic/circulation, noise, surface water quality and land use, but not likely to impact biological or agricultural resources.

A reduction in the geographical scope of the project as identified in this alternative would have fewer, and in totality, less severe impacts. Consequently, the extent of potential significant effects would be decreased. The degree to which the effects would be decreased, however, is difficult to qualify at this time.

The overall impacts of the project would be incrementally reduced by lessening the total area encompassed by the project, and therefore, the alternative could be considered environmentally superior over the proposed project. Although the alternative may be environmentally superior to the proposed project, all impacts identified for the proposed project can be mitigated to a level of insignificance. Reducing the scope of the project area would also not meet the project objectives to fill a need for interstate fiber optic communication capacity throughout California.

ALTERNATIVE 3: AERIAL INSTALLATION ONLY

Alternative 3 considers the limitation of telecommunications infrastructure development by utilizing only aerial installation techniques. This alternative would not allow for any flexibility for installation of fiber optic facilities except for utilizing existing electric utility transmission line towers or existing distribution poles. Both of these installation methods are proposed as part of the project, however, this alternative was analyzed to determine whether or not utilizing only aerial installation techniques would lessen the environmental impacts while still obtaining the objectives of the project.

Environmental Effects of Alternative 3

Aerial installation methods generally have environmental impacts that are construction-related and thus temporary. Potentially significant impacts that were identified for the proposed project for aerial installation would be applicable to this alternative including impacts related to aesthetics, air quality, land use, noise, recreation, or traffic/circulation. However, because aerial installation results in no significant ground disturbance, impacts related to agricultural resources, biology, cultural resources, hydrology/surface water quality, would still occur but be greatly reduced, and therefore no longer significant. Although potentially significant impacts may result from implementation of this alternative, these impacts could be reduced to a level of insignificance by implementation of mitigation as described throughout Chapter 4 of this Program EIR.

Although use of existing transmission towers is an environmentally superior alternative, the disadvantage of this aerial installation method is the lack of flexibility to install fiber optic cable facilities. Transmission towers and corridors are typically only accessible if Sempra Communications holds agreements with the utility company with ownership of the corridor. The utility company must also have legal authority from the CPUC to lease its utility structures for fiber optic facilities. Moreover, multiple jurisdictions' rules throughout the project area are currently placing all existing aerial facilities underground or disallowing additional attachments to existing facilities. Compliance with these local jurisdictions could become an issue in those areas where transmission towers may only be available for use to a substation, however, connection between the substation and the building or customer would not be obtained through aerial installation due to local jurisdiction limitations or lack of availability of existing structures. This alternative would not allow Sempra Communications to meet its project objective to create a program that allows flexibility or create positive competitive pressures on existing telecommunications carriers.

ALTERNATIVE 4: UNDERGROUND INSTALLATION ONLY

Similar to Alternative 3, Alternative 4 considers the limitation of fiber optic cable facility implementation by utilizing only underground installation techniques. This alternative would not allow any flexibility for installation of fiber optic facilities except for underground in existing railroad rights of way, public road rights of way, and/or existing electric utility rights of way. Each of these installation methods are proposed as part of the project, however, this alternative was analyzed to determine whether or not utilizing only underground installation techniques would lessen the environmental impacts meanwhile still obtaining the objectives of the project.

Environmental Effects of Alternative 4

Underground installation methods generally have environmental impacts that are temporary and construction-related. Following installation, the fiber optic facilities installed using underground construction methods are minimally visible and therefore result in no permanent impacts. Potentially significant impacts that were identified for the proposed project would be applicable in total to this alternative. Temporary impacts associated with underground installation may result

in the greatest level of overall potentially significant impacts, as such construction methods that are utilized to cross sensitive resources, such as stream crossings, often provide the highest risk for potential impacts. In particular, streams are commonly traversed by the directional boring technique to avoid direct impacts to biological resources and surface water quality from trenching, accidental drilling fluid releases (described in detail in the Project Description) are nearly unavoidable and unpredictable even when implementing strict prevention methods and monitoring. Besides the increased risk for impacts to biological resources and surface water quality, cultural resources may also be impacted in areas where alternative methods of installation may not be employed, as ground disturbance can impact unanticipated cultural resources or previously recorded sites.

Impacts related to aesthetics, agricultural resources, air quality, land use, noise, recreation, and traffic/circulation that were identified for the proposed project may also result from this alternative. There is a much higher probability for significant impacts occurring from this alternative because the mitigation(s) to offset the identified impacts that may result from trenching are often implementation of alternative methods of installation (i.e., aerially spanning a waterway to avoid direct impacts to biological resources and water quality).

This alternative would not be considered environmentally superior to the proposed project as all the potential impacts that result from underground construction are neither less nor as readily avoidable as Alternative 4. Unlike with the project, this alternative does not allow for the flexibility of determining the least impacting and most economical method for installation, and more importantly, lack of flexibility from this alternative limits the methods under which facilities may be installed thereby reducing potential avoidance techniques (particularly related to impacts to biological and cultural resources). This alternative would not obtain the project objectives to fill the need for interstate fiber optics communication capacity throughout California in those areas where Sempra Communications.

ALTERNATIVE 5: USE OF EXISTING INFRASTRUCTURE ONLY

As Alternatives 3 and 4 limit the project to aerial or underground facility installation, respectively, Alternative 5 limits the project to use of existing infrastructure only, with no need for ground disturbance or installation of new facilities with the exception of handhole/manhole installation to maintain access to its facilities. Existing facilities include utilizing idle petroleum and natural gas pipelines and existing underground conduit in public rights of way.

Environmental Effects of Alternative 5

As Alternative 5 utilizes existing facilities, no additional construction would be required with the possible exception of minimal excavation for handhole/manhole installation. The potentially significant impacts identified for the proposed project resulting from ground disturbance during construction would not occur for this alternative include impacts to aesthetics, agricultural resources, air quality, biology, cultural resources, hydrology/surface water quality, land use, noise and recreation. Potential impacts could also occur to traffic/circulation when access to the existing facilities require installation equipment within roadways, however, due to the temporary

nature of the impact and the required coordination with the local authorities, it would not be considered significant.

Using existing underground ducts within roadways or other rights of way can be an environmentally benign alternative. If an existing underground duct has available room for the proposed fiber optic cable, there are negligible environmental impacts associated with opening the duct and installing the cable. Most of these facilities are located under city streets where project construction causes only short term, and minor vehicle traffic disruption while the optical fibers are pulled through the ducts and connected to existing facilities. This alternative greatly reduces the number of impacts identified for the proposed project, and is therefore considered environmentally superior.

Although environmentally superior to the proposed project, a substantial limitation of this alternative is that existing underground duct facilities are absent in large stretches of rural and undeveloped lands throughout the project area. Underground ducts are most prevalent in developed urban areas, however the demand by others in the telecommunications market can make availability difficult. Moreover, the use of existing infrastructure is extremely limiting to reach potential customers because connections to those customers could only occur where existing infrastructure is present. In many cases, no infrastructure now exists which could be used to reach residential and commercial consumers.

The cost effectiveness of this option is dependent upon the owner of the unutilized space and the willingness of the owner to allow use of the space. Where the applicant owns unused capacity in existing underground ducts, this construction method is the most preferable as it is cost-effective, buildable in a timely manner, and avoid or mitigates project impacts to less than significant levels. However, because the applicant owns very few of these types of rights, this method of installation would not be feasible as the primary installation method.