

IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

This section describes irreversible and irretrievable commitments of resources associated with the implementation of the action alternatives analyzed in this EIS. A resource commitment is considered *irreversible* when primary or secondary impacts from its use limit future use options. Irreversible commitment applies primarily to nonrenewable resources, such as minerals or cultural resources, and to those resources that are renewable only over long time spans, such as soil productivity. A resource commitment is considered *irretrievable* when the use or consumption of the resource is neither renewable nor recoverable for use by future generations. Irretrievable commitment applies to the loss of production, harvest, or natural resources.

6.1 LAND

The construction and operation of the proposed transmission line would require the commitment of land for the placement of 3 to 5 lattice towers (or monopoles), and a new access road. This commitment would be irreversible for the life of the transmission line. While it is possible that these structures and roads could be removed and the natural landscape renewed, this is unlikely in the foreseeable future. The action alternatives would involve the same kind of irreversible land use but would vary slightly in the amount of land permanently disturbed. The 230-kV Route alternative would result in the permanent disturbance of 9.35 acres (3.78 hectares) while the 500-kV Route alternative would permanently disturb 10.40 acres (4.21 hectares).

6.2 WATER

Limited amounts of water would be irretrievably consumed in the construction of the proposed transmission line and access road. ESJ-U.S. estimates that 780,000 gallons (2.4 acre-feet or 2,950 cubic m) of water would be required during construction of the 230-kV Route for dust abatement, cleaning construction equipment, and concrete production for tower foundations. Based on the estimated volume of water (2.4 acre-feet or 2,950 cubic m) that would be required during short-term construction of the transmission line in comparison to the annual recharge, the County of San Diego has determined that the project would not impact the locally available water supply.

6.3 CONSTRUCTION MATERIALS

Construction of the transmission line would also result in both the irreversible and irretrievable use of common construction materials. The materials used for constructing the towers (or monopoles) and the concrete for their anchors are ultimately recyclable but would remain an irreversible commitment of resources for the life of the transmission line. Both the 230-kV Route alternative and 500-kV Route alternative would require the construction of 3 to 5 steel lattice towers or steel monopoles.

Small quantities of fossil fuels would also be irretrievably consumed during the construction and maintenance of the transmission line. Diesel fuel and gasoline would be consumed by construction and maintenance equipment along the transmission line; however, the consumption of fuel during the construction phase would be of relatively short duration. These procedures would require the consumption of a relatively small amount of fuel that would not constitute a long-term drain on local resources.

6.4 BIOLOGICAL AND CULTURAL RESOURCES

The construction and operation of the transmission lines would result in limited irreversible and irretrievable commitments of natural and cultural resources. The areas occupied by the footings or anchors for towers or monopoles, as well as the access road, would be irreversibly removed from natural habitat for the life of the transmission lines. In addition, some of the desert soil surfaces disturbed in areas of temporary construction activity, such as work areas, pull sites, lay-down areas, and trenches, could result in changes that would be irreversible over the long-term. Although some sensitive species might be disturbed by construction (e.g., by temporary increases in ambient noise), it is unlikely that threatened or endangered species would be harmed since biological surveys did not observe the presence of any such species within the proposed rights-of-way.

Cultural resources, such as archaeological sites, are nonrenewable resources. Their loss is irreversible. A cultural survey of the alternative corridors resulted in the discovery of nine sites and seven isolates, none of which had been previously recorded. The project has been designed to avoid impacts to these sites; therefore, no impacts are anticipated.