

SECTION 3

APPROACH TO ENVIRONMENTAL ANALYSIS

In 1996, the CPUC initiated and then suspended preparation of a policy-level Environmental Impact Report (EIR) to study the environmental effects of the entire electric industry restructuring process. The enactment of Assembly Bill (AB) 1890 (Stats. 1996, Ch. 854) took precedence in planning the new electric market. This rendered an EIR on restructuring unnecessary since, with the enactment of AB 1890, the policy of introducing competition into California's electric generation sector in 1998 is now law, and the implementation of laws enacted by the Legislature is exempt from CEQA.

Although divestiture of the Edison facilities, the "project" considered in this environmental analysis, is not mandated by AB 1890, its implementation would facilitate the AB 1890 goal of a competitive market. Because of this, the CPUC's Preferred Policy divestiture by Investor Owned Utilities (IOUs), such as Edison, remains in effect. AB 1890 does mandate that these facilities must be market-valued before January 1, 2002, which can occur through divestiture.

This Initial Study considers whether Edison's proposed divestiture would likely lead to significant effects on the environment as a result of either (1) physical changes associated directly with the ownership transfer, or (2) distinguishable operational changes at the plants proposed for sale, that are different or greater than would occur solely due to restructuring. The types of changes that could produce environmental impacts are considered in the following bulleted items. The changes that are assumed to be reasonably foreseeable versus those that would be too speculative to consider at this time (i.e., a description of the changes being analyzed in this Initial Study) are then identified in the following section titled "Reasonably Foreseeable Project Future" .

- *Amounts of Energy Being Generated at Each Divested Plant and Other Developed and Undeveloped Sites in California and the Western Region.* The plants proposed to be divested have been operated in recent years at less than available capacity. With divestiture, a new buyer of such a power plant could likely have an economic incentive to operate the facility at higher levels, subject to permit requirements and applicable regulations. Many factors could cause the amount of energy generated at plants throughout California (not just the divested plants) to change. For example, a plant that is the primary income-generating (and energy-generating) asset of a new owner could be run very differently than when it was owned in common with the many other plants of Edison's integrated system, even if it were not retired or refurbished in some manner by the new owner. In addition, changes in fuel purchasing arrangements and the immediate availability of the "direct access" retail electricity sales market to new owners could tend to increase generation.

- *Amount and Timing of Construction, Refurbishment, Repowering, or Retirements of Divested Plants, or Other Developed or Undeveloped Sites in California and the Western Region.* A limited amount of new construction of fences, driveways and the like may be necessary to separate the power generating units, which would be divested, from on-site transmission and distribution equipment, ownership of which would be retained by the divesting utility. In addition, the sale of Edison's plants to new owners could affect operations, which in turn could affect resource planning decisions at the divested plants and at other plants throughout California and the western grid. The new owners of the divested plants, facing financial conditions different than Edison (e.g., different assets and liabilities), could then choose to retire or add capital to their new properties. Under California Energy Commission (CEC) rules, power generating capacity could be increased by up to 15% per generating unit as part of any refurbishment or repowering, and cumulatively increased by up to 49 MW at a given power plant site, without requiring CEC approval. With that exception, however, expansion or repowering of facilities at the plants would require issuance of new permits and accompanying environmental review. Changes in generation patterns may affect the scale or timing of certain marginal generation facilities elsewhere to be expanded, retired, or built.
- *Maintenance Practices at Each Divested Plant.* If plants were to change owners, the new owners would not have precisely the same operating experience, qualifications, financing, or corporate philosophy as Edison. A new company could implement measures at a plant that could change maintenance practices (e.g., replace several short duration planned outages with one long one, or reduce total duration of planned outages).
- *Pollution Control Technologies Employed or Installed by New Owners.* Within the restrictions imposed by air districts and permit conditions, new owners could potentially delay or eliminate pollution control measures planned by the previous utility owner (to the extent that there are any) since recovery of that investment would be more uncertain for new owners. Conversely, they could install additional pollution controls if they wanted to increase energy generation and therefore need to lower emissions to remain within permit limits or to lower emission credit costs.
- *Employment Levels and Related Factors.* As the divested plants are sold, repowered, expanded, retired, or operated as is, the employment levels at the plants could be affected. Although AB 1890 requires sold and operating plants to be operated and maintained by Edison for two years, no mandate exists that requires the plants to continue to operate after being sold unless they are "must-run" plants. Such changes could affect local employment levels, which might have secondary environmental effects.
- *Extent and Character of Land Use.* To the extent that a divested plant site is constrained by surrounding sensitive land uses (e.g., nearby residential areas), new construction at the plant site could increase potential conflicts with existing and potential future land uses.
- *Approach to Environmental Clean-Up.* The change in ownership could affect the clean-up of power plant sites. Selling a power plant to a new entity could change how the divesting utility approaches any ongoing environmental remediation activities at the site. Such changes could be beneficial. For example, clean-up could be accelerated to provide adequate room for both the new owner to upgrade the generating units and the divesting utility to retain access and provide upgrades to retained transmission and distribution facilities, or simply as part of the purchase and sale transaction. Issues associated with the liability for environmental clean-up are expected to be resolved contractually between each new owner and Edison.

- *Permit Transfers for Divested Plants.* Some regulatory requirements for the utility owned plants would cease to apply to plants sold to non-CPUC-regulated parties. However, appropriate rule changes to eliminate this loophole have recently been adopted by some jurisdictions and, in the remaining jurisdictions, are pending and are expected to be considered in the near future. No barriers to such changes are apparent.

Because the California electric system will be operated in a more integrated manner, with many interconnections between control areas, the above changes could have environmental effects at facilities in addition to those to be divested. For example, increasing generation at one in-state plant could decrease generation at other in-state facilities, out-of-state generation, net imports into the state, and loads on interstate transmission lines. This "re-mixing" of generation could create environmental impacts throughout California. However, as discussed below, to precisely predict the generation output of each power plant unit would be speculative.

REASONABLY FORESEEABLE PROJECT FUTURE

The manner in which the various factors discussed above would actually play themselves out will determine the environmental impacts of the project. The environmental analysis should be based upon the reasonably foreseeable changes that will result from divestiture, in terms of power plant operating characteristics, new construction, repowering or retirement of units, and employment levels. This section describes, based upon an initial economic and operational analysis of Edison's proposed plan for divestiture which is discussed in further detail in Attachment C, the projected changes likely to result from divestiture compared to the changes expected to stem from restructuring alone, without divestiture. This scenario forms the basis for the environmental analysis in this Initial Study. This section also describes potential changes under divestiture (discussed above) which are not reasonably foreseeable or cannot be reliably predicted; such speculative changes do not form the basis for the environmental analysis in this Initial Study.

This environmental analysis assumes that implementation of the project would not affect the type of fuel used to fire the twelve power plants. The new owners of the plants would continue to use natural gas as the primary fuel and fuel oil only as a back-up or emergency fuel (see Section 2.1). In comparison to fuel oil, natural gas is relatively inexpensive, reduces maintenance costs and is cleaner burning.

It can be reasonably foreseen that there will be a difference in how the twelve divested facilities will be operated by non-utility generators as opposed to how all of Edison's facilities would be operated without divestiture in a future restructured world. It would be expected that, if Edison did not divest, it would submit bid packages to the Power Exchange (PX) that would run the more efficient plants at high capacity levels and use the less efficient plants only when their capacity is needed. In contrast, new owners have incentives to operate their newly acquired plants in a more constant mode, particularly if they do not own any other plants in the region. Furthermore, new owners can immediately sell power directly to users in addition to the PX, unlike Edison, which is constrained to selling only to the PX prior to market valuation of the plants. Attachment C was

prepared primarily to answer the question whether new plant owners would tend to generate more electricity than would the existing utility owners in a restructured setting. The analysis in Attachment C in fact demonstrates that new owners would tend to operate at higher levels, particularly during the transition period prior to 2002, due to three factors: (1) the portfolio effect, which is the availability to utility owners of a portfolio of electricity-generating assets, (2) fuel procurement practices, and the possibility that new owners would purchase natural gas at a lower cost per unit or in a different fashion than would the existing utility owners, and (3) the ability of new owners immediately to participate in the direct access market while the utilities must initially sell all of their power through the PX.

There is, however, a great deal of uncertainty and interactive variables that make it infeasible to predict the increase in generation at any particular divested plant, or even whether generation would increase at any divested plant, as described below.

With restructuring and without divestiture of the twelve plants, the market value of the plants must, by some means, be established and approved by the CPUC no later than the end of 2001. Once market valuation occurs, the plants could be sold without CPUC approval. Thus, implementation of restructuring itself could result in plants being sold after their market value is established. Edison would not be required to sell its plants, and it is not certain that the plants would be sold. The evidence in the record does not establish whether Edison would retain or sell the twelve plants if the project were not approved. It is simply noteworthy that the plants could be sold, so that the physical and operational differences between restructuring with divestiture as currently proposed and without divestiture could, as a practical matter, be minimized or even eliminated, except in the period before market valuation of the plants.

Assuming that Edison would continue to own the twelve plants in the future if its divestiture application were not approved, the exercise of any potential market power by Edison would be monitored and regulated by the Federal Energy Regulatory Commission (FERC). It has not been determined what measures FERC would impose. While such measures might not be as effective in mitigating market power as the outright sales of the plants would be, the FERC-imposed measures could curtail to some extent Edison's ability to employ the portfolio effect to gain market advantage, thus bringing Edison's future operation of the twelve plants closer to the levels at which new owners would operate.

Since the utilities can participate in the direct access market as of 2002 (or sooner if their plants' market values are approved by the CPUC), the tendency of new owners to generate more than existing owners lessens after the transition period. Thus, impacts that may be associated with increased generation (to the extent that such generation flows from the ability to participate in the direct access market) would be temporary.

At the time of preparation of this Initial Study, the identities of the purchasers of the plants is not known. The greatest potential for increased generation at a plant would exist if the plant were

bought by a separate, independent entity that does not own other generation facilities within California. If a single entity buys several plants and/or owns other generating facilities (e.g., wind power, coal and/or hydroelectric plants), or to the extent that singly-owned plants are reconstituted into larger portfolios in the future, the tendency of such a new owner to operate the divested plants more than the existing utility owners would decline.

Also, it is presumed that demand for electricity within California will not substantially increase either with or without divestiture. While some increased generation within California could be offset by a decrease in electricity imports from out of state, it is also possible that increased generation at one plant to be sold would be offset by a decrease in generation at another divested plant, or a decrease at another plant retained by Edison.

This Initial Study assumes that each of the divested plants continues to operate within the parameters of its existing permits (e.g., water discharge permits and air emissions permits) because it is not reasonably foreseeable that operations would exceed those levels. Likewise, it is not foreseeable that particular units at the divested plants would be replaced (repowered) by new owners in a manner differently than by Edison under restructuring without divestiture over the next decade. Operations in excess of permitted levels or repowering would, in any event, require new discretionary permits and environmental review.

The current plant owners could in the future operate up to their existing permitted levels (i.e., to the level allowed by the most constraining permit) without any additional approvals or environmental review. The precise manner in which Edison would operate the twelve plants in the future restructured environment is difficult to predict. Under restructuring, the utilities may operate undivested facilities at higher levels than historical levels of operation, and could operate up to their permit limits. This means that increased generation at the plants proposed for divestiture could occur without divestiture. There are simply grounds for believing it is more likely to occur with divestiture.

As all of these elements indicate, it is highly uncertain at which plants generation would increase with divestiture as compared to without divestiture, or by how much generation would increase. The only conclusion that can be drawn is that overall there are incentives that create a tendency for the new owner of a divested plant to operate at higher levels than Edison would operate that plant in the future.

Table 3.1 presents reasonably foreseeable capacity factors (the percentage of total plant capacity) for operation of the twelve plants in a restructured setting if they were not sold, but were retained by Edison. These capacity factors are based on the SERASYM unit-specific, California-wide data set, which was processed by the SERASYM model to forecast plant operations in 1998. Table 3.1 also indicates the projected technically feasible maximum operating capacity factors

TABLE 3.1: CAPACITY FACTORS

Plant	Edison Operations Without Divestiture	Technically Feasible Maximum Operations
Alamitos	11.5%	64.3%
El Segundo	3.0%	59.8%
Ellwood	0.01%	2.3%
Etiwanda	3.8%	67.9%
Highgrove	0.2%	61.6%
Huntington Beach	5.5%	65.4%
Long Beach	5.8%	34.0%
Mandalay	32.2%	66.2%
Ormond Beach	15.6%	70.2%
San Bernardino	0.26%	85.4%
Cool Water	47.9%	78.9%
Redondo	15.3%	69.9%

for each plant (i.e., permitted levels minus forced outages minus planned and unplanned maintenance outages and de-rating outages). This Initial Study evaluates the impacts associated with the tendency of new owners of the divested plants to operate at higher levels than Edison would operate the plants under restructuring without divestiture. The maximum levels at which new owners could operate are those presented as the technically feasible maximum capacity factors. However, for the reasons discussed above, it is not expected that operations would reach these levels at each plant, and operations may not reach such levels at any particular plant. It is merely the possibility that operations could increase within this range of capacity factors that is evaluated in this Initial Study. Increases in operations could also result in a minimal increase in employment at the plants.

Construction activities that are expected as a result of divestiture would be minor (i.e., construction of fences to separate properties being sold or retained). Non-physical changes would include subdivision of the properties as necessary to complete the sales.