

ORIGINAL

Decision No. 87874 SEP 20 1977

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application
 of SOUTHERN CALIFORNIA EDISON
 COMPANY for an order of the
 Public Utilities Commission of
 the State of California autho-
 rizing applicant to make effective
 a Water Use Surcharge applicable
 to billings for water service on
 Santa Catalina Island to offset
 the added costs attributable to
 the acquisition, production,
 transportation, and distribution
 of additional fresh water supplies.

Application No. 57314
 (Filed May 16, 1977)

Rollin E. Woodbury, William E. Marx and William
 T. Elston, by William T. Elston, Attorney
 at Law, for applicant.
Burkett Cree, for himself, protestant.
Dennis F. Reiting, for himself, Island Baggage
 Service, and Catalina Island Tramway; and
Rudy Pilch, Mayor, Mary L. Walker, Assistant
 City Attorney, and Charles Wagner, City Manager,
 for the City of Avalon; Interested parties.
Jasper Williams, Attorney at Law, John Reader,
 and Joseph F. Young, for the Commission staff.

O P I N I O N

Background

Southern California Edison Company, a California corpora-
 tion, (Edison) is a public utility whose principal business is
 serving electricity in the Southern California area. In 1962 Edison
 acquired and has subsequently operated separate electric, gas, and
 water utility facilities serving customers on Santa Catalina Island
 (SCI). This decision deals with Edison's water system operations
 on SCI.

Edison's water supplies are obtained principally from impounded surface water and from wells on the island. A combination of increased water supply demands and below normal rainfall has seriously depleted the water available for meeting the needs of Edison's customers for human consumption, sanitation, and fire protection. At the time the application was filed Edison anticipated that its current fresh water surface supply could be exhausted by the end of 1977, if consumption equaled that experienced during 1976.

On March 31, 1977 Edison conducted public hearings, pursuant to Sections 350 to 358 of the California Water Code, on SCI, for the purpose of gathering evidence which would establish whether a water shortage emergency condition prevailed on SCI. By resolution dated April 21, 1977 Edison's Board of Directors concluded that a water emergency condition prevailed on SCI.

In order to conserve the available fresh water supply Edison filed an SCI Fresh Water Rationing Plan with the Commission, by Advice Letter 16-W dated April 25, 1977, which requested the Commission to authorize its rationing plan on less than statutory notice. The Commission authorized implementation of the rationing plan on May 17, 1977, by Resolution No. W-2122.

This application requests that a provision be included in Edison's tariffs which would permit it to offset all costs of barging water to SCI through a water use surcharge if insufficient water is available from natural sources on SCI for human consumption, sanitation, and fire protection. Edison estimated that the cost for barging water to the island would be \$20.60 per thousand gallons. Average delivered costs would vary with the mix of barged water and natural supplies developed on SCI. Present rates for general metered fresh water service are \$2.08 per 1,000 gallons for the 1st 1,000 gallons or less and \$1.75 per 1,000 gallons over 1,000 gallons between May and September and \$1.50 per 1,000 gallons over the 1st 1,000 gallons

between October and April. Edison also provides a limited general metered fresh water service schedule with lower rates than the general metered schedule for premises being served continuously since November 25, 1962. This schedule requires continuous occupancy of a premise by a given customer.

Hearings

After notice to the public, which included notice by publication, notice by posting, and by bill inserts to its customers, hearings were held on SCI in the city of Avalon before Commissioner Richard Gravelle and Administrative Law Judge Jerry Levander on June 30, July 1, and August 2, 1977.

Issues at the hearing included the basis of the water use surcharge, the reasonableness of a surcharge, consideration of alternative measures to barging, and alternative rationing proposals. Edison's customers were advised that "The public will also have the opportunity at this hearing to question the application of the mandatory rationing plan and support any objections to this plan which became effective for SCI on May 17, 1977. The application also contains provisions relating to penalties for noncompliance with the rationing program."

At the August 2 hearing, Edison moved that its application for a water use surcharge be dismissed because it did not consider that barging would be necessary in the immediate future due to a substantial reduction in water consumption by its customers. A ruling on Edison's motion was deferred and additional testimony was presented on alternatives to Edison's rationing plan, on requests for deviations from the rationing plan by certain customers who contend that they would suffer undue hardship without additional water, and on alternate potential sources of water for SCI.

Edison stated that it recognized its responsibility to provide adequate quantities of water for its customers; that it wished to explore various alternative possibilities for possible

augmentation of its water supplies;^{1/} and that it would deal with the issue of pricing for any augmented supply in a general rate increase application for its water system operations on SCI.

Edison's motion for dismissal of its request for a water use surcharge to offset the added cost attributable to the acquisition, production, transportation, and distribution of additional fresh water supplies should be granted. However, absent an authorized charge for such added costs Edison would have to absorb these costs if procurement of additional supplies is required.

Changes Affecting Edison's Operations

Edison increased the height of the dam on its main storage facility, the Middle Ranch Reservoir (MRR), in 1965. This increased the storage capacity of the reservoir from approximately 200^{2/} acre feet (AF) to approximately 1,050 AF. During the construction period, Edison operated a used desalinization plant to produce approximately 67.5 AF of distilled water from seawater which was blended with local water sources on SCI. Desalinization then cost approximately \$4.25 per 1,000 gallons for operating expenses. Edison estimated comparable costs of approximately \$12 per 1,000 gallons in 1976 due to increases in fuel costs.

1/ Exhibit 28, received on August 22, showed relationships between normal annual precipitation (14 to 15 inches), runoff, and storage. Exhibit 28-A showed these relationships using recent deficient rainfall data (9.59 inches and 6.5 inches).

2/ The 300 AF reservoir was partially filled with silt.

The reservoir subsequently filled and water was discharged over the dam spillway in 1969 and 1970. The MRR supply declined from 1050 AF in April 1970 to approximately 480 AF in October 1972, increased to approximately 730 AF in May 1974, and declined to 150 AF on July 29, 1977.

In 1967 Edison advised the city of Avalon (Avalon) that it was in a position to provide fresh water for toilet flushing if Avalon repealed its ordinance requiring a connection to Avalon's salt water system for toilet flushing. Edison also put Avalon on notice that future rate increases might be needed if it had to operate its desalinization plant due to increased water use.

Water Reclamation Proposal

Edison reevaluated the safe annual yield of its water production facilities on SCI in 1974, scaled down its estimated safe yield from 630 AF to 30 AF per year, advised Avalon that contemplated major developments could increase demands on its system up to its safe annual yield, and warned of further potential demands of 100 AF per year if existing salt water flushing customers (2/3 of the customers in Avalon) converted to fresh water flushing. Edison suggested an agreement in which Avalon would: (1) supply it with the effluent from a sewage treatment plant being constructed by Avalon; (2) convey the salt water system used as the sanitary flushing supply to it; and (3) reenact an ordinance requiring separate flushing systems on new construction. Edison in turn would further treat the sewage effluent and sell the treated water for flushing and irrigation uses. This water

would be less corrosive than salt water. Edison advised Avalon that if it had to develop an additional watershed at a cost of \$2,000,000 to \$4,000,000 its rates might double.

By letter dated December 16, 1976 (Exhibit 7) Edison confirmed its October 29, 1976 oral position withdrawing its offer to purchase the salt water utility from Avalon. Edison considered Avalon's counteroffers to be a rejection of its bid. Edison further stated:

"Upon re-evaluation of the entire reclamation project, it has become apparent to this Company's management that to enter into it now would be an imprudent business decision. While it looked advantageous when it was first proposed in 1974, the uncertainty of obtaining a major reclaimed water user, changing indicators as to future growth that may take place on the Island, unknowns concerning the availability of fresh water to purge the system, new requirements to obtain an additional permit from the Coastal Commission and other considerations have caused the project to lose its attractiveness. Therefore, Southern California Edison Company does not intend to participate in any further negotiations for the purchase of the City's salt water system and is completely halting any further activity on the construction and design of the reclamation system. We will continue to evaluate activities on Catalina Island and the impact such activities will have on the feasibility of this Company reactivating a reclaimed water program."

Existing Rationing Plan

The existing four-phase rationing plan uses the customers recorded water consumption billed for each monthly billing period between May 1976 and April 1977 as a base period, provides for estimates for comparable uses where no use history exists, and provides for consideration of prior-to-base-period conservation efforts. Customers using salt water sanitary flushing would have to reduce their consumption by 85 percent of the reductions

required for phases two, three, and four. The restrictions described in the following paragraphs are additive or more stringent restrictions than in prior phases.

Under Phase One of the existing rationing plan outdoor fresh water washing uses are prohibited except for washing using a three-gallon bucket or container, fresh water hydrant use is restricted to fire suppression, fresh water soil compaction is prohibited, and outside watering of plants, except with a three-gallon bucket, is restricted to certain two hour periods during morning and evening hours. Phase One would be in effect when storage in MRR is less than 600 AF.

Phase Two would be in effect when storage in MRR is less than 300 AF. Each customer would be required to cut consumption to 75 percent of the volume billed for the comparable month in the base period. Outside watering of plants would be limited to Tuesdays and Fridays and restricted to one hour in the evening, except for watering with a three-gallon bucket. Additional restrictions prohibit swimming pool consumptive use and prohibit any additional service connections or main extensions without Commission authorization.

Phase Three is now in effect since storage in MRR is below 200 AF. Allowed consumption is cut to 50 percent of the base period billing, outdoor watering of plants is further limited to Tuesdays.

Phase Four would go into effect if storage in MRR drops below 50 AF. Allowable consumption would be cut to 25 percent of the base period billing and outdoor uses would be prohibited.

Notice of changes in phases is by mail at least seven days before the changes become effective. A customer is given written notice of excessive use or of using water for a prohibited use upon the first violation of the plan and is warned that a further violation may result in the installation of a water flow restriction device at the meter.

If a second violation occurs and the company installs the restrictor, a \$15 non-refundable charge is assessed. When the restrictor is removed, after approximately 72 hours, a \$15 non-refundable charge plus any other charges due are payable. The customer is notified that if a flow restriction device is installed for a third violation the device shall remain in place until a less restrictive rationing phase goes into effect.

If a third violation occurs the company may take the above noted actions and charge \$15 for installation and \$15 for removal of the flow restrictor.

The company may disconnect service after a fourth violation (or pursuant to its Tariff Rule 11). The dismissal of this application eliminates Edison's request for an excessive water use reconnection charge based upon 10 times the latest billing or 10 times the average monthly billing for the last year whichever is greater.

The rationing plan has provisions for applying to Edison for variances by submitting a detailed, written explanation of grounds for a variance, and for appeals of Edison's decision to the Commission. The Commission review of an appeal, which may include a request for interim relief, includes an informal review by staff. A customer not satisfied with the staff conclusion can communicate by letter with the Executive Director of the Commission and the customer would then have the right to file a formal complaint with the Commission, which may include a request for interim relief.

Edison's SCI manager testified that the following conservation efforts were made by Edison in April and May 1976: (1) free distribution of shower restriction devices, plastic displacement bottles for toilets, dye tablets to detect leaks, and distribution to hotels and restaurants of cards and bathroom stickers indicating that Avalon had a limited water supply;

(2) mailing a conservation oriented brochure; (3) making a new offer to supply conservation kits, and direct contacts with some of the large users on conservation practices and with people requesting variances, including cutting the flow to wash basins or of cutting off water completely for several hours; and (4) showing a conservation oriented film.

He testified that Edison had granted most of the variances requested; that most of Edison's customers were meeting or exceeding the 50 percent cutback in consumption; that the discussions with customers were not part of a systematic education program regarding conservation; and that no follow up had been made regarding customers carrying out conservation programs.

Most of the residents of SCI live in Avalon. There are several other smaller population centers including camps and developments in cove areas. The economy of SCI is heavily dependent on summer tourists.

The procedures followed by Edison have resolved many but not all of the problems of its customers in staying within their prescribed allotments. (For example, many of the local residents and commercial establishments are using the local laundries to a greater extent to meet their own water allotments.)

Edison was directed to prepare an alternate rationing program giving consideration to per capita allowances for residential use including rentals. Other parties were requested to discuss or to suggest alternate rationing plans which could include penalty pricing for excess water use. The penalty issue is moot in this proceeding.

The staff was directed to review requests for deviation and to submit its recommendations on those requests.

Edison's alternate plan for residential customers or customers with seasonal rentals permits the filing of an application requesting a water allotment on a per-capita basis. The application

would contain a declaration by the customer of the number of full-time occupants residing in a single family residence and a statement indicating that the customer has implemented responsible conservation measures. Hostelries per-capita allotments would be based upon the number of occupant-days. The following tabulation shows the per capita allotments proposed by Edison.

Occupancy	Rationing Phase		
	2	3	4
Per capita allotments ^{a/} in gallons per day			
Single family or rental	60	40	35
Single family or rental on salt water system	40	30	25
Hostelries	30	30	15
Hostelries on salt water system	20	20	10

a/ The maximum per capita allotments for rental homes would be for five people. Hostelries' allotments would be based on occupant-days.

The staff recommends (Exhibit 34) that the alternate plan prepared by Edison be adopted with certain modifications including the addition of the following paragraph "The per capita allowances for residential customers and the per occupant allowances for camps, hotels,^{3/} and resorts are available on request, otherwise the percent of base conservation in each phase is applicable. Requests for change will not be entertained more often than once per year." The staff also recommends giving camps^{4/} the same

3/ This should read hostelries for consistency.

4/ Resorts should be added for consistency.

per-occupant allowances as hosteli-ries. The staff recommended certain deviations from the above-mentioned alternate rationing plan.

We find that the staff recommendations are reasonable with the following exceptions:

1. Notice requirements for changes in rationing phase should be consistent. Absent a catastrophic change, fifteen days' notice should be given if more stringent rationing is required.
2. A per-occupant allowance would be the appropriate additional allotment for a residential customer regularly allowing a boat occupant to use his facilities. (See Exhibit 23.) The overall household limitation should still govern the upper limit of a rental allotment.

In hardship cases alternate irrigation watering times designed to reduce evaporation losses should be authorized.

Edison should prepare a check list of potential conservation measures. Every future applicant requesting a deviation, per-capita, or a per-occupant day allowance should fill out a check list and provide a satisfactory explanation for his inability to carry out applicable conservation measures as a precondition for granting his request. This check list should include all of the conservation mentioned herein except for cutting off water and should also include the posting of signs or of mirror stickers explaining the need for conservation.

If the changes in allocations authorized herein result in an increased allowance to a customer, Edison should defer leaving a flow-restriction device in place during the third phase of the plan from the third to the fourth violation. This should be a one-time action.

In the event that water-flow restriction devices have been installed for second or third violations under the existing plan and these customers would not be in violation under this revised rationing plan, it is the intent of this order that all such restriction devices be removed.

A \$15 charge is reasonable for the discontinuance of service for violations of the rationing plan. After making a satisfactory declaration setting forth the measures to be taken to comply with the rationing plan in the future a customer may apply for restoration of service. A \$15 payment is a reasonable charge for such restoration of service.

Edison has been overly optimistic about the safe yield of its existing water sources. No additional water service connections should be made to the SCI system without further order of the Commission.

Alternate Sources of Supply

Edison's SCI manager estimated that barging water for six months to supply 63.5 AF would cost approximately \$401,000 at a cost of 2.06¢ per gallon; that preparation of the barge and installation of necessary equipment could take 7 or 8 weeks; that termination costs would be approximately \$242,000 even if no water was barged; and that if the supply continued to decline an adequate time margin should be allowed to commence barging water. He would recommend barging when MRR storage dropped to 100 AF.

Edison considers that the cost, \$24,100,000 in 1977 or \$29,900,000 in 1980 dollars, for constructing a dam and related facilities in Cottonwood Canyon to develop a safe annual yield of 372 AF per year would not be practical for serving approximately 1300 customers on SCI.

Beginning in 1976, Edison reviewed prior groundwater and hydrologic studies, made geologic field reconnaissance of several canyons, measured spring flows in five canyons, made environmental studies, drilled 12 exploratory holes at potential well sites, and cased an exploratory hole in each of three canyons prior to performing short-term pump tests to obtain preliminary potential groundwater production estimates.

Edison also drilled two wells to attempt to replace lost production from a polluted well. These wells will be test pumped. Edison estimates its costs at \$74,000, through June 1977. Edison may develop those of the wells which can most economically be connected to its system.

The following table shows Edison's preliminary well production estimates and the costs for constructing the facilities necessary to make the supplies available to its system. Edison would make more extensive tests before utilizing any of these wells.

Well	Production		Cost to develop & equip well and to connect to system
	Rate in gpm	Annual in AF	
Bullrush	15	24.2	\$ 134,000
Sweetwater	10	16.1	38,000
Little Springs	10	16.1	85,000
Howlands Landing	20 ^{a/}	32.3	49,000
Silver Canyon	60 ^{a/}	96.9	1,120,000

^{a/} No pump tests performed

Edison's "golf links well" is not being used in the SCI system because mineralization in the water exceeds applicable standards. Edison should prepare a study to determine how this supply could be blended with other sources and utilized in its potable system if implementation of phase four of the rationing plan appears necessary.

An Edison witness, a chemical engineer working in the company's Water Quality Licensing and Engineering Group, checked out seawater desalinization processes to supply or supplement the potable water needs of SCI in a reliable manner. He reviewed vapor compression evaporation (VCE), multistage flash evaporation (MSF), and reverse osmosis (RO) processes. He concluded that VCE & MSF are reliable, proven, and costly technologies; that an RO plant is

less expensive to operate and has a lower capital cost than comparably sized VCE or MSF plants; that RO desalinization plants are moving from a pilot plant stage to a full scale operational stage; that operational problems affecting the reliability of RO units exist; that if Edison decided upon the need for an RO unit he would recommend leasing the plant with a minimum production guarantee to place the risk on the manufacturer; and that the RO manufacturer suggested by Avalon would not offer a minimum production guarantee or supply certain information required for his cost study.

Edison anticipates that if barging becomes necessary it would be required for a limited period of time based upon past rainfall and water supply data; that if a 100,000-gallon per day^{5/} desalinization unit was leased for 5 years the annual revenue requirements^{6/} would range from approximately \$371,000 with minimal use to approximately \$454,000 at a 90 percent capacity factor. It is also evaluating a "black box"^{7/} proposal from a new firm offering to supply one AF per day of desalted water for \$18,000 per month (\$1.85 per 1,000 gallons).

^{5/} Edison estimated two 375,000-gallon barge trips per week, an average in excess of 107,000 gallons per day.

^{6/} The basis of these estimates could not be fully tested on this record.

^{7/} The process involved is proprietary. It may be difficult to obtain a patent for the process.

Avalon sponsored the testimony of the marketing manager of a manufacturer of water treatment systems and components who estimated that a 100,000-gallon per day desalinization unit using a RO membrane could produce water meeting United States Public Health Service Drinking Water Standards, at a capital cost of \$400,000 f.o.b. San Diego, California, which excludes transport costs, site preparation, installation of utilities, for \$4.16 per 1000 gallons excluding depreciation^{8/} and return on investment. He testified that the plant would have a 20-year life; and that a three-year performance guarantee covered the RO membrane and a 12-month standard warranty covered the hardware portion of the plant. The requested detail of production cost estimates was not received.

Other testimony

Avalon's witnesses, Mayor Piltch and Councilman Smith, testified that barging water was a costly stop-gap measure for meeting the immediate water shortage, that a long-term solution was needed; that Avalon recommended installation of a seawater desalinization unit by Edison; that while Edison considered the water reclamation project, from 1974 to 1976, water storage dropped from 450 AF to 240 AF; that in 1976 Edison successfully opposed ordinances regulating the domestic use of water because they would put a damper on the economy, were counterproductive, and unnecessary; that 8 months later Edison's Board of Directors declared that a water emergency existed on SCI which resulted in the institution of a four phase rationing program starting in phase three, requiring a 50 percent reduction in use; and that Edison should bear the costs of barging until a desalinization unit was in service.

There was an extraordinarily large public turnout for the hearings in this application. Public witnesses generally opposed the proposed surcharge. Several accused Edison of mismanagement in

8/ Membrane replacements may be included in the estimate.

encouraging growth in demand. Some of the public witnesses supported positions taken by Avalon. Proposals were made to modify the rationing plan, including using a per-capita basis for residences, utilizing escalating surcharges for excessive water use, and for special treatment for certain commercial establishments. Other witnesses questioned whether Edison was using all potential water sources on SCI.

Further Discussion

The modified rationing plan described above should be implemented. Edison customers should receive a copy of the modified rationing plan. Customers denied variances under the modified plan should be advised about the appeals procedure.

An average long-term safe yield of 530 AF on SCI is of academic interest absent sufficient surface and/or ground water storage to carry the system over prolonged periods of below normal rainfall. Edison should consider its recent experience in evaluating its resources. Its phase three goal is to cut the 1976 sales level of 366 AF to 183 AF in order to be able to supply water to its customers.

Late filed Exhibit 28-A contains Edison's estimate of 400 AF^{9/} of surface run-off from July 1977 to May 1978 based upon the 9.59 inches of rainfall recorded for the MRR watershed during the water year of October 1, 1975 to September 30, 1976. The study minimized certain variables and included allowances for infiltration, evaporation, and transpiration losses. However, the tabular footnote states that the reservoir level does not include an allowance for evaporation or transpiration losses. Edison estimates that its MRR storage would fall to 86 AF in October 1977 at 1976 sales levels and to 120 AF in September 1977 with the rationing program

^{9/} The study presumed no runoff between June and September. There was unusually heavy rainfall on SCI in May and August of 1977, which should contribute to runoff.

in effect. The exhibit indicates that three inches of rainfall in September 1976 was unusual and that with 6.5 inches of rainfall (6.39 inches of rain fell in the first 6 months of 1976), storage would drop to 81 AF in September 1977 at 1976 sales levels and to 120 AF in September 1977 with rationing. The comparable minimum storage estimates with normal rainfall of 14 to 15 inches are 90 AF at 1976 sales levels and 120 AF with rationing, in September 1977.

Edison's existing water resources are not adequate to meet the potential demands of existing customers. No further customer growth should be permitted until Edison has sufficiently augmented its water supply. We will require Edison to periodically report on the development of additional sources of supply, to supply relevant cost data, and to evaluate its water supply resources and potential demands on its system. The alternate sanitary flushing system should be kept in operation.

Edison's manager stated that 1976 SCI revenues were \$207,393, that related expenses, excluding negative income taxes were \$491,855; that he believed Edison's 1976 rate base was approximately \$3,977,000 and that the company would seek a substantial rate increase in the near future even without considering the huge costs involved in developing new water resources. Edison may propose a mechanism to spread extraordinary water supply costs in lieu of the massive surcharge proposed in the subject application.

Councilman Smith stated that Edison advised Avalon that it had spent \$1,000,000 on the discontinued sewer reclamation project. The record does not disclose if Edison's sewer reclamation expenditures were expensed or capitalized. Edison should fully set out and explain the basis for any amounts expensed, capitalized, or being amortized related to this project if these amounts are utilized in determining its revenue requirements in a rate case.

Findings

1. Below normal rainfall coupled with growth in demand have seriously depleted Edison's SCI water supply.
2. Edison declared a water emergency on SCI.
3. The Commission authorized a four-phase water rationing plan, which is in effect.
4. Modifications to the water rationing plan, including an alternate per-capita or per-occupant allowance, as described herein, should be adopted.
5. Special water allotments as described herein should be adopted.
6. The modified rationing plan appeals procedure and a one time adjustment to the penalty procedure should be implemented as described herein.
7. Edison's existing SCI water resources are not adequate to meet the potential demands of existing customers. No further customer growth should be permitted until Edison has sufficiently augmented its water supply.
8. Edison should file a plan for developing additional water supplies and a timetable for implementation of the plan.
9. Edison should file quarterly reports on the development of additional sources of supply together with relevant operating and capital cost data.
10. Edison should file an evaluation of its water supply resources and potential demands on its SCI system.
11. The alternate sanitary system should be kept in operation and if possible expanded to reduce demands on Edison's potable water system.
12. Edison believes that existing conservation measures have lessened the potential need for barging water to SCI. Edison moved to withdraw its request for authorization of a surcharge to offset barged water expenses.

13. Edison's motion to withdraw its request for a surcharge should be granted.

14. The modified rationing plan should be implemented on an expedited basis.

Conclusions

1. Edison's motion to withdraw its request for a surcharge should be granted.

2. The existing rationing plan should be modified.

3. Edison needs additional water supplies for SCI.

O R D E R

IT IS ORDERED that:

1. Southern California Edison Company's (Edison) motion to withdraw its request for authorization of a water surcharge is granted.

2. The modifications to Edison's rationing plan described in Findings 4, 5, and 6 are authorized. Edison shall file a revised preliminary statement incorporating these changes. Such filing shall be made within five days after the effective date of this order in accordance with General Order No. 96-A and shall be effective on the date of filing. A copy of the revised plan shall be sent to each of Edison's Santa Catalina Island water customers.

3. Edison shall file a plan for developing additional water supplies for its Santa Catalina Island system and a timetable for implementing the plan, within ninety days after the effective date of this order.

4. Edison shall file quarterly reports on the development of alternate sources of supply together with relevant operating and capital cost data. Any revision to its development plan shall accompany the quarterly reports.

5. Edison shall file an evaluation of its Santa Catalina Island water supply resources and of potential system demands within ninety days after the effective date of this order. Any revised study shall accompany the above-mentioned quarterly reports.

6. Edison is authorized to file an application requesting removal of the customer restriction after it has developed a sufficient water supply to enable it to serve additional customers.

7. Edison shall submit two copies of the filings made pursuant to Ordering Paragraphs 3, 4, and 5, one of which shall be sent to the Hydraulic Branch of the Commission's Utilities Division.

Because of the critical nature of the water shortage and the need for prompt relief the effective date of this order is the date hereof.

Dated at San Francisco, California, this 20th
day of SEPTEMBER, 1977.

Robert Bateman
President
William Symon, Jr.
Vernon L. Sturgeon
Richard D. Givelle
Clair L. Schick
Commissioners