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Decision 91-08-015 August 7, 1991

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Poppyfields Lighting District,
Los Angeles County,
Department of Public Works,
Complainant,

ORIGINAL

Case 91-03-023

(Filed March 6, 1991)

Southern California Edison
Company (U-338-E),
Defendant.

Paul Hanson, Attorney at Law, for complainant.
Frank Cooley, Attorney at Law, for defendant.

OPINION

Poppyfields Lighting District (District) seeks a deviation from Southern California Edison Company's (Edison) Tariff Schedule LS-1 so that Edison might install incandescent street lights in the District rather than high pressure sodium vapor (HPSV) lamps.

In 1987, Edison entered into an agreement with Los Angeles County (the County), whereby Edison would assume ownership of County-owned street lighting facilities. This amounted to 9,517 lights, constituting most of the County-owned and maintained street lighting system and approximately ten percent of the street lights within the County's jurisdiction. The County would remain Edison's customer, but in essence Edison would be providing a street lighting service as opposed to simply providing electricity to operate those street lights. Street lights owned by the customer (the County) are provided service under Tariff Schedule LS-2.

Street lights owned by the company (Edison) are provided service under Tariff Schedule LS-1. The lights were to be transferred to Edison over a period of five years. Most of the existing facilities were deemed obsolete by both parties. Therefore, pursuant to the agreement and Tariff Schedule LS-1, Edison was to replace the facilities with modern, energy efficient, Edison-owned HPSV street lights at no cost to the County. Edison had seven years to replace the systems.

The first transfer of approximately 1,600 lights occurred on June 1, 1988. Included in this transfer were 159 incandescent lights in the District, an unincorporated area in Altadena, which are the subject of this complaint. The existing Poppyfields Lighting District incandescent system is over 60 years old, highly inefficient, expensive to maintain, and severely deteriorated. Consequently, it must be replaced. Because of the controversy underlying this complaint, Edison transferred the system back to the County, subject to Edison's agreement to take the system back once the HPSV light dispute is resolved.

Edison asserts that it cannot comply with the District's request because the Commission has prohibited Edison from installing new incandescent street lights. On December 12, 1978, the Commission ordered Edison to discontinue use of incandescent street lamps "because they are significantly less energy efficient than other available lamps."¹ In compliance with this decision, Edison revised Schedule LS-1, "Lighting - Street and Highway, Utility-Owned System," to prohibit Edison from installing new incandescent street lights.²

1 Decision 89711, p. 185, Finding 47.

2 Advice Letter 478-E, effective January 1, 1979.

A public hearing was held before Administrative Law Judge Robert Barnett. Complainant's Evidence:

Complainant presented the assistant deputy director in charge of the traffic and lighting division for the Los Angeles County Department of Public Works. The witness testified:

The residents of the District, occupying over 410 assessable housing units, request a deviation from Edison's rules to allow Edison to build a new incandescent street lighting system. The residents are concerned with the yellowish color lights should Edison build an HPSV system. They prefer the white light of the incandescent system which the County presently owns. This lighting system is very expensive to maintain and is rapidly approaching the time that it will not be maintainable because replacement parts will not be available. The residents desire that Edison, if it obtains a deviation, build an incandescent system and maintain it. The residents are agreeable to paying any additional energy costs to run the system. This incandescent system would be less energy efficient than the high pressure sodium vapor system that Edison would install if there was no deviation granted. A new incandescent system of 180 lights would cost approximately \$18,000 a year more to operate than a new high pressure sodium system with the same number of lights. That is fifty percent more costly than the costs of a high pressure system. These additional costs would be approximately \$40 a year per assessable unit.

Los Angeles County supports the principal of energy conservation, but in this instance because the Los Angeles County supervisor in whose district Poppyfields lies supports the application, and the residents of Poppyfields are willing to pay for the extra energy costs, the County filed this complaint. The deviation requested is contrary to the general policy of energy conservation that the County has followed with respect to its operations and particularly to its own lighting operations. The

County uses high pressure sodium lights almost exclusively for street lighting. If a deviation is granted, prior to requesting Edison to construct an incandescent lighting system, the District would poll its residents to determine if they were willing to pay the added costs of the incandescent system. The cost of the system built by Edison would be paid through increased rates over the life of the system.

If the deviation is not granted, the County has the ability to keep ownership of the system, build a new incandescent system, and charge the entire cost of the new construction immediately to the property owners of Poppyfields through an assessment. If the County builds the system, there would be an initial cost of approximately \$1,100 per assessable housing unit.

The senior deputy to supervisor Mike Antonovich testified as follows:

The residents of the Poppyfields Lighting District are within supervisor Antonovich's district. Those residents desire this deviation and supervisor Antonovich supports the residents. The supervisor has requested the Los Angeles Department of Public Works to initiate this complaint. She knows of no residents who oppose the requested deviation. If the deviation is granted, but before construction by Edison, the residents of the District would be polled to determine whether they are willing to pay the increased costs caused by a new incandescent street lighting system. She believes a two thirds vote of the residents would be required to approve this increased cost.

A resident of the Poppyfields District testified as follows:

The residents of the District desire to maintain the current type of lighting as opposed to either a bright yellow or orange type of lighting that results from high pressure sodium vapor lighting. The District is in Altadena which is in the foothills in the mountains behind Pasadena. The present

incandescent lighting system does not disturb wildlife in the neighborhood. It is difficult driving under orange or yellow light and it is not aesthetically beautiful in a rural area; the high pressure vapor light would diminish the enjoyment of the use of her property and also the value of her property. She said that the color and intensity of the street lights directly impact the quality of living in this quiet, residential, rural community, not only for the residents but also for wildlife, whose habitat is expected to be adversely affected by a change of lights. The homeowners in the District are willing to pay the additional charges that would be required if Edison built an incandescent system should the Commission grant the deviation. If the Commission were to deny the deviation, she would pay whatever it cost to have the County construct an incandescent lighting system and she believes that the residents of the District would pay the assessment.

Two other residents of the District said that they support this witness's testimony.

Another resident of the District testified as follows: She spoke to over 250 residents of the District, almost all of whom did not want HPSV lights, mostly because of their appearance. Nice white little lamps were more compatible with this rural neighborhood than the HPSV lamps would be. Over 400 persons signed petitions to keep an incandescent system operating in the District. She recognized that the District would have to pay for a new lighting system in either event and they would prefer to pay for a lighting system that they desire, even if it costs more money to install and operate. In her opinion the deviation, if granted, would benefit the District and if denied would be a detriment to the District.

She presented a letter from a person whom she considers to be an expert on the environment. The statements in the letter supported complainant's position that there would be adverse

environmental effects by using HPSV lamps in place of incandescent lamps. She testified that there was one other area near the Poppyfields District that has an incandescent street lighting system and that area would like to retain its system. However, all the rest of the surrounding communities have HPSV systems.

Defendant's Evidence

The street and outdoor administrator of Edison testified that he has been involved with the issue of street lighting for the District since about 1986. He testified that he has spoken with numerous residents of the District regarding street lighting and that of 36 or so residents that he spoke to only half a dozen were really concerned about the light source option. The others were concerned with placement of poles and height of poles. He said that Edison has done an environmental review of the issues raised by the District and concluded that the environmental claims of the District are not valid. A change in lights will not adversely affect wildlife. In fact the incandescent system has a more adverse environmental impact than a sodium vapor system. Two of the major differences are that the incandescent lamp has about a 2,000-hour lamp life, which means it fails about every six months. The HPSV lamps have about a 30,000-hour lamp life, which is about a seven-year lamp life. With an incandescent system, the owner is replacing lamps more often and incurring substantially higher maintenance costs, plus the considerable problem of disposing of the used lamps. Another major benefit of the HPSV lamp is that it will provide about 95 lumens per watt compared to 13 lumens per watt provided by an incandescent lamp. (A lumen is a measurement of light output.) Incandescent lamps use significantly more energy than HPSV lamps, thus causing adverse environmental and societal impacts which result from increased energy use. There is an eight-time gain in efficiency by the use of the HPSV lamp.

The witness testified that Edison has approximately 470,000 street lights on its system that it owns and maintains, of

which only 1,200 are incandescent lights. The industry standard in the United States is to convert incandescent lighting systems to more energy-saving systems. All of the remaining incandescent street lights will be converted over time. He said that in the County of Los Angeles there are approximately 200,000 city and county-owned lights. Of those approximately 12,000 are incandescent.

In the witness's opinion any deviation from the current Commission policy would encourage other lighting districts to seek the same deviation and thus undermine the Commission's policy regarding conservation. The residents of the District have been informed that they have the option of having the County retain ownership of the system, rebuild it at the residents' cost, and own and maintain it. Edison would serve them under the IS-2 rate schedule.

He said that for Edison to build a new system using incandescent lights the cost would be approximately \$350,000. The cost of an HPSV system would be approximately the same. He testified that the added cost for energy and maintenance alone of a new incandescent system, as compared to a new HPSV system, would be \$40 per housing unit per year. However, should Edison construct the new system, whether HPSV or incandescent, construction costs would be amortized over time and the payments would be low enough so that the existing tax assessment would cover them. The County would not have to go back to the residents and ask for a tax increase to cover a new system. If Edison builds the system, the cost of the system would be borne by the County through the District's taxes already in place.

Discussion

Although couched in environmental terms, this complaint does not concern the environment; it concerns construction costs and how to pay for them. The residents of the District, if they truly desire a white-light incandescent lamp street lighting

system, can build it themselves through the County and have the County maintain it. The cost to build the system is the same whether the County builds it or Edison builds it. The only difference is the method of payment for the costs of construction. If Edison builds the system, Edison will pay for it and recover its costs, plus return, through rates charged to the County (and passed through to the District) over the life of the system. If the County builds the system, the County will require an immediate assessment of costs to the District of about \$1,100 per household. It is a choice of pay now or pay later. Because the District, through the County, has the option to build and maintain the system, we see no reason to grant a deviation from our requirement that Edison install only energy saving street lights (D.89711). This Commission is committed to conservation, and no facts have been presented which would cause us to deviate from that commitment.

Findings of Fact:

1. The existing Poppyfields Lighting District incandescent street lighting system is over 60 years old, highly inefficient, expensive to maintain, and severely deteriorated. It must be replaced.
2. There are in excess of 410 assessable housing units in the District.
3. The Los Angeles County Department of Public Works presently owns and operates the street lighting system within the District.
4. It will cost in excess of \$350,000 to construct a new incandescent street lighting systems within the District, whether Edison builds it or the County builds it.
5. A new incandescent street lighting system, if constructed by Edison, would be paid for by Edison whose costs would then be recovered from the County (and passed through to the District) over the life of the system. The same system, if constructed by the County,

County, would require an immediate assessment of approximately \$1,100 per District household to pay for the construction.

6. An incandescent street lighting system for the District would be less energy efficient than an HPSV system, would require substantially higher maintenance costs, and would create a problem of disposing of the used incandescent lamps.

7. The change from an incandescent system to an HPSV system will not have any adverse effects on the environment except, perhaps, for those who prefer the aesthetics of white street lights rather than yellow street lights. No change in the habitat of wildlife will occur.

Conclusion of Law

The Commission concludes that a deviation from Edison's Tariff Schedule IS-1 so that Edison might install incandescent street lights in the District rather than HPSV lamps should not be granted.

ORDER

IT IS ORDERED that the relief requested in the complaint is denied.

This order becomes effective 30 days from today.

Dated August 7, 1991, at San Francisco, California.

PATRICIA M. ECKERT
President
G. MITCHELL WILK
JOHN B. OHANIAN
NORMAN D. SHUMWAY
Commissioners

Commissioner Daniel Wm. Fessler,
being necessarily absent, did
not participate.

I CERTIFY THAT THIS DECISION
WAS APPROVED BY THE ABOVE
COMMISSIONERS TODAY