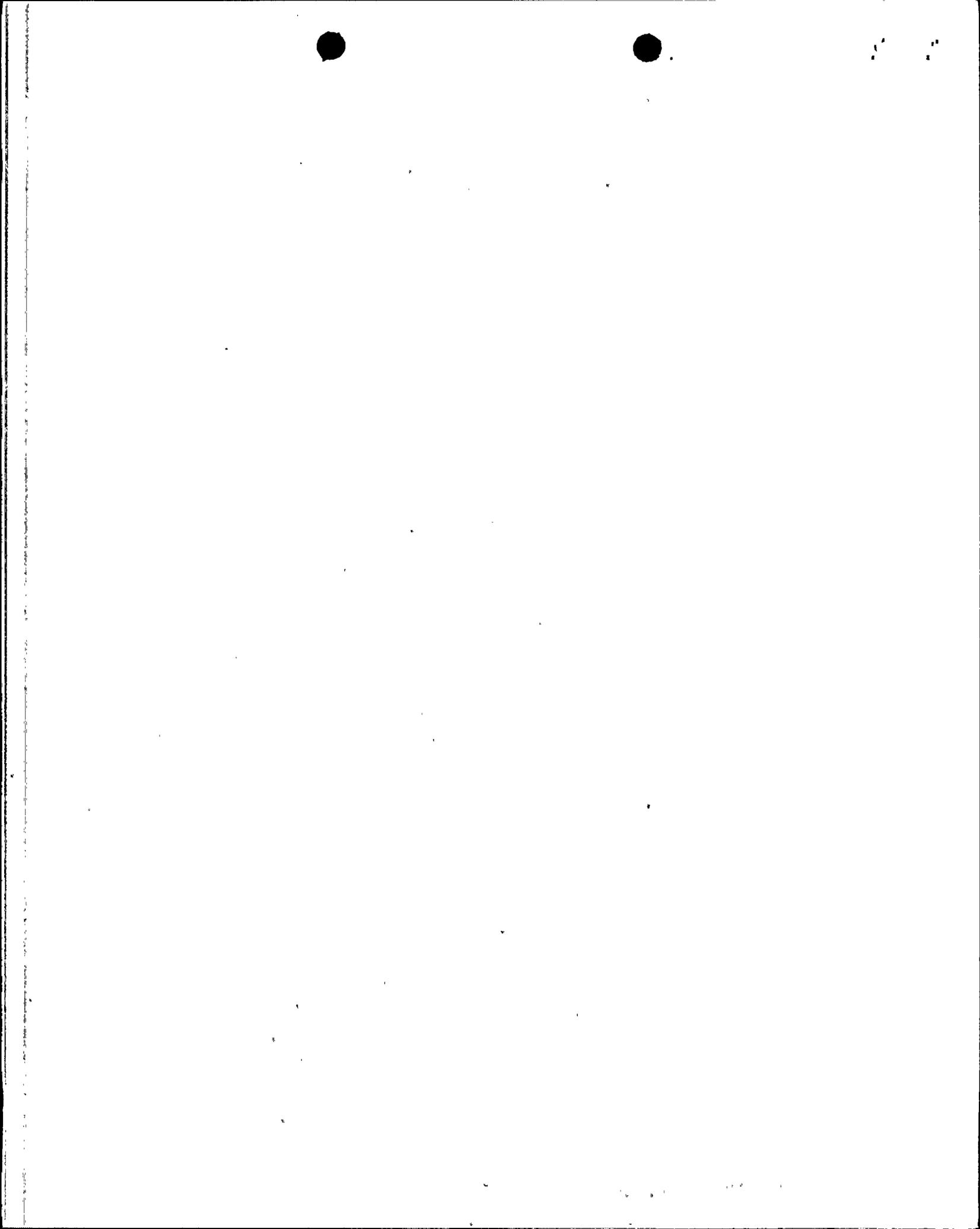


PALO VERDE NUCLEAR GENERATING STATION
UNITS 1 AND 2
* SIGNIFICANT CHANGE ANALYSIS

by

Phillip Nicholson
Antitrust Economist
Antitrust & Economic
Analysis Branch
Division of Engineering
Office of Nuclear Reactor Regulation

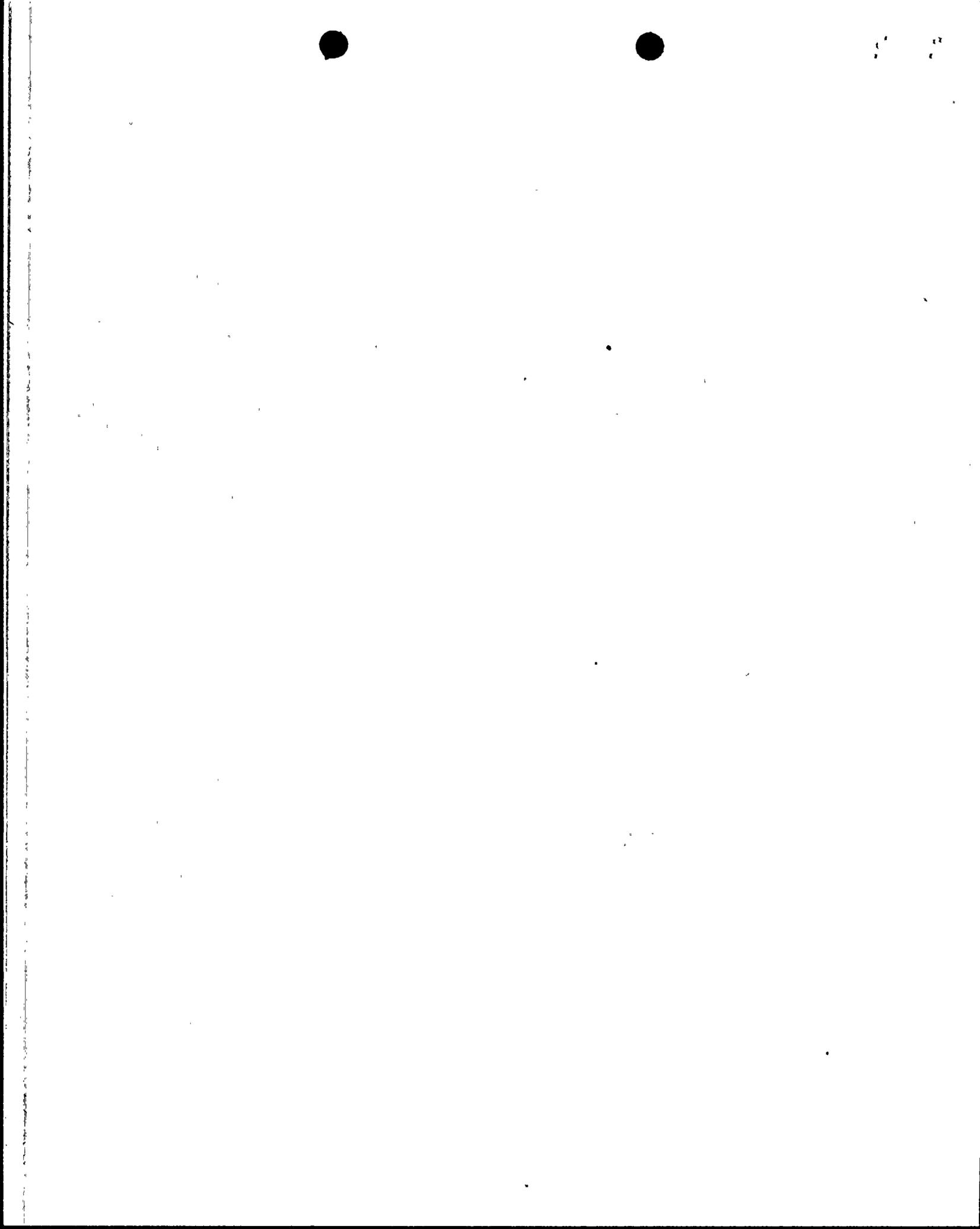
8302160488 830203
PDR ADOCK 05000528
M PDR



PALO VERDE NUCLEAR GENERATING STATION
UNITS 1 AND 2
SIGNIFICANT CHANGE ANALYSIS

TABLE OF CONTENTS

	Page
A. Introduction	1
B. Background	2
C. Arizona Public Service Company (APS)	5
1. Construction Permit Antitrust Review	5
2. Implementation of the CP License Conditions	6
3. Changes in Coordination and Wholesale Power Arrangements	8
a. Inland Power Pool	8
b. Other Changes	10
D. Salt River Project (SRP)	13
1. Construction Permit Antitrust Review	13
2. Implementation of the CP License Conditions	13
3. Changes in other Bulk Power Activities	15
a. Offer of Access to Palo Verde 1, 2 and 3	16
b. Coordination and Wholesale Power Arrangements	17
E. Public Service Company of New Mexico (PSNM)	19
1. Construction Permit Antitrust Review	19
2. Changes in Coordination and Wholesale Power Arrangements	19
a. Offers of Access to Coal-Fired Generation	19
b. Other Changes in Coordination and Wholesale Power Arrangements	21
1. Plains Electric Generation and Transmission Cooperative (PE)	21
2. Texas-New Mexico Power Company (TNMPC)	23
3. City of Farmington	24
4. Navajo Tribal Utility Authority (NTUA) and City of Gallup	25
F. El Paso Electric Company (EPE)	25
1. Construction Permit Antitrust Review	25
2. Offer of Access to Palo Verde 1, 2, and 3	26
3. Changes in Coordination and Wholesale Power Arrangements	27
G. Southern California Edison Company (SCE)	29
1. Construction Permit Antitrust Review	29
2. Changes Since the Construction Permit Review	30
a. Participation in Generating Units	31
b. Coordination	33
c. Transmission Service	33
H. Los Angeles Department of Water and Power (LADWP) and Southern California Public Power Authority (SCPPA)	35
I. Conclusion	37



PALO VERDE NUCLEAR GENERATING STATION

UNITS 1 AND 2

SIGNIFICANT CHANGE ANALYSIS

A. Introduction

Section 105c(2) of the Atomic Energy Act of 1954, as amended, provides for an antitrust review of an operating license (OL) application if significant changes in the licensee's activities or proposed activities have occurred since the construction permit (CP) antitrust review.

Authority to make the significant change determination was delegated to the, Director, Office of Nuclear Reactor Regulation (NRR) (for reactors) and to the Director, Office of Nuclear Material Safety and Safeguards (NMSS) (for production facilities), as appropriate. The Nuclear Regulatory Commission (Commission) in a Memorandum and Order (CLI-80-28) dated June 30, 1980,¹ set forth three criteria upon which to base a "significant change" determination as follows:

- (1) The change or changes must have occurred since the previous construction permit review;
- (2) The change or changes must be attributable to activities or proposed activities of the licensee; and
- (3) The changed situation must have antitrust implications which

¹ 11 NRC 817, 824 (1980). See also 13 NRC 862 (1981).



In connection with the Palo Verde Nuclear Generating Station (Palo Verde) operating license application the staff² has reviewed the activities and proposed activities of the applicants, Arizona Public Service Company (APS), Salt River Project Agricultural Improvement and Power District (SRP), Public Service Company of New Mexico (PSNM), El Paso Electric Company (EPE), Southern California Edison Company (SCE), Los Angeles Department of Water and Power (LADWP) and Southern California Public Power Authority (SCPPA), that have transpired since the previous construction permit antitrust reviews. It is the staff's conclusion that no "significant changes" have occurred subsequent to the CP reviews.

B. Background

On April 8, 1975, the Department of Justice advised the Commission of the results of its initial construction permit antitrust review for the Palo Verde plant.³ The applicants reviewed by the Department of Justice at that time consisted of APS, SRP, EPE, PSNM, Tucson Gas and Electric Company (now Tucson Electric Power Company (TEPCO)), and Arizona Electric Power Cooperative (AEPCO). TEPCO and AEPCO subsequently withdrew from the Palo Verde project.

² The Antitrust and Economic Analysis Branch, Division of Engineering, Office of Nuclear Reactor Regulation and the Antitrust Counsel of the Executive Legal Director in consultation with the Department of Justice. It should be stated that staff's OL antitrust analysis applies solely to Palo Verde 1 and 2. A separate OL analysis will be undertaken for Palo Verde 3 at a time substantially closer to expected issuance of the Palo Verde 3 OL.

³ Letter from Thomas E. Kauper, Assistant Attorney General, Department of Justice to Howard K. Shapar, Executive Legal Director, U.S. Nuclear Regulatory Commission, April 8, 1975 (hereafter referred to as DOJ advice letter).



4 4

In its CP review the Department of Justice noted that APS, SRP, PSNM, and EPE were among the largest electric utilities operating in the states of Arizona and New Mexico. As well as engaging in joint ownership of generating units with other utilities, each applicant also participated in joint ownership of transmission lines and/or reciprocal wheeling arrangements. The Department further observed that the presence of publicly-owned hydro-electric generating resources and transmission lines had contributed to various reciprocal bulk power arrangements and transmission services which included smaller utilities as well as the large systems. No evidence was obtained that any of the joint applicants had refused to provide coordinating services to the smaller systems. With regard specifically to Palo Verde, access was offered to all electric utilities in Arizona and New Mexico.

Only two potential problem areas were uncovered by the Department and both were resolved. First, a 1955 interconnection agreement between APS and SRP provided that neither would compete in the service area of the other. This feature of the 1955 agreement was recognized in contracts which APS later entered into with other large utilities in Arizona, New Mexico, Utah, and Nevada. APS and SRP removed, on their own volition, the anticompetitive provision from all of these agreements. Second, the power supply agreements between APS and SRP and certain of their respective wholesale customers contained provisions which, although affording transmission services to the customers, placed restrictions on the use or resale of the power transmitted. The Department of Justice viewed the restrictions as

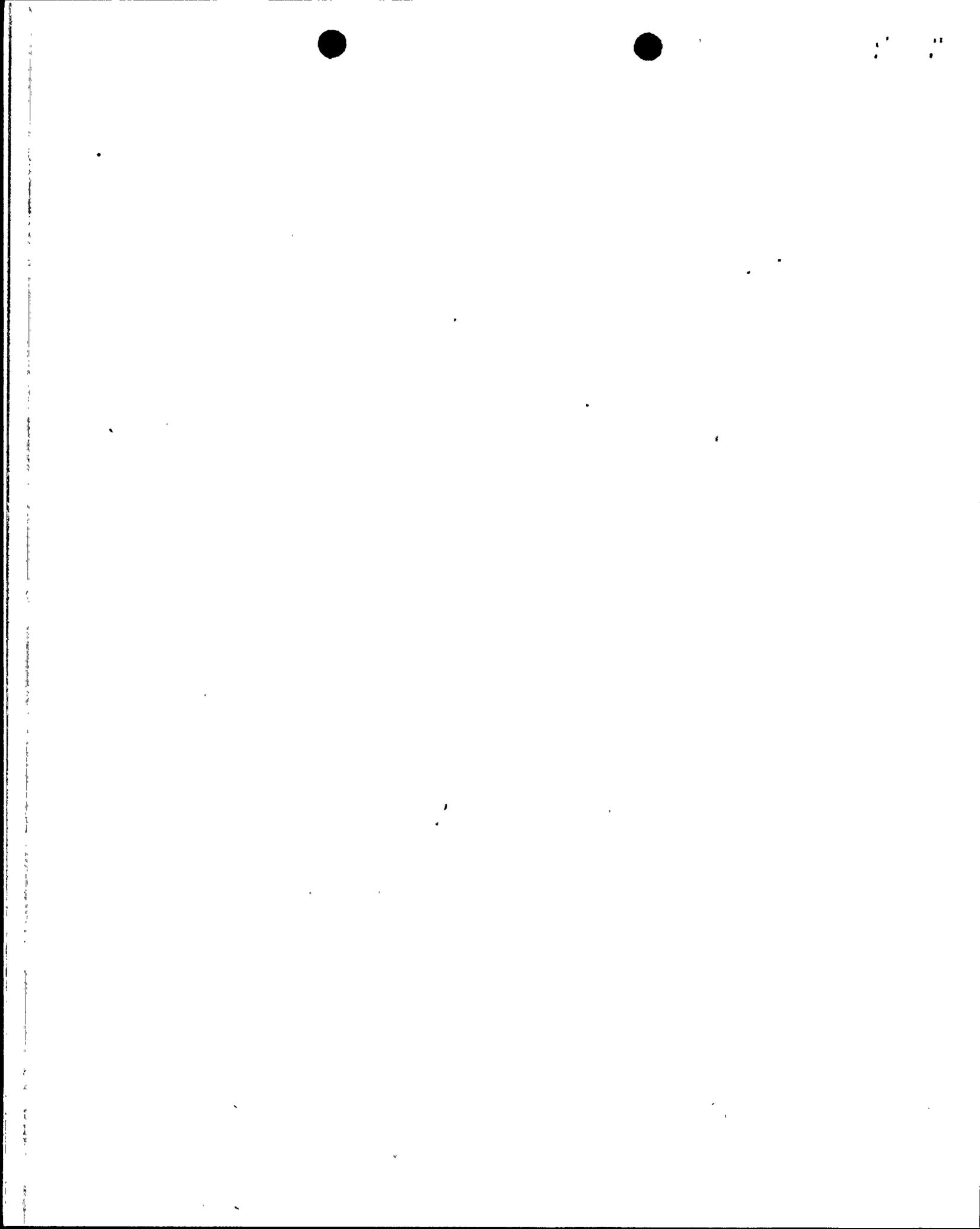


potentially affecting the ability of the wholesale customers to compete with APS and SRP. APS and SRP both agreed to a license condition obligating them to offer transmission service on a non-restrictive basis to all utilities with which they were, or would be in the future, interconnected.

Having resolved these two problems, the Department of Justice was able to conclude that none of the applicants were "using their market power to inhibit competition" and there was "no present reason to believe that licensing of the Palo Verde Nuclear Generating Station would have adverse antitrust aspects." Consequently, the Department recommended that an antitrust hearing on the CP application would not be necessary.

The Attorney General's advice letter was published in the Federal Register on April 18, 1975, and no petitions to intervene were received during the 30-day intervention period. Thus, the CP antitrust review for APS, SRP, PSNM, EPE, TEPCO and AEPCO effectively terminated May 19, 1975, although the CP itself was not issued until May 25, 1976.

Since the initial construction permit antitrust review, the ownership of Palo Verde has undergone several changes. In August, 1975, SCE acquired TEPCO's share of Palo Verde and in November, 1975, AEPCO transferred its share to SCE, APS, and SRP. Subsequent sales of ownership interests initiated in 1979 and 1981 by SRP have established as new owners the Los Angeles Department of Water and Power (LADWP) and Southern California Public Power Authority (SCPPA).



The Department of Justice recommended to the Commission in April, 1976, that an antitrust hearing with respect to SCE's participation in Palo Verde would be unnecessary and in February, 1982, likewise advised the Commission that the addition of LADWP and SCPPA as participants in Palo Verde did not require an antitrust hearing.⁴ It should also be pointed out that the M-S-R Public Power Agency (M-S-R), consisting of the Modesto Irrigation District and the Cities of Santa Clara and Redding, had tentatively acquired a 3.95 percent ownership in Palo Verde from EPE's share of the project. Since M-S-R was a de-minimis applicant (200 MW or less of generation capacity) under 10 CFR Section 50.33a, it was not required to file antitrust information and did not undergo a formal antitrust review by the Department of Justice. Subsequently, as a result of voter decisions in 1982, M-S-R was forced to withdraw its participation in Palo Verde and EPE reacquired the 3.95 percent share.

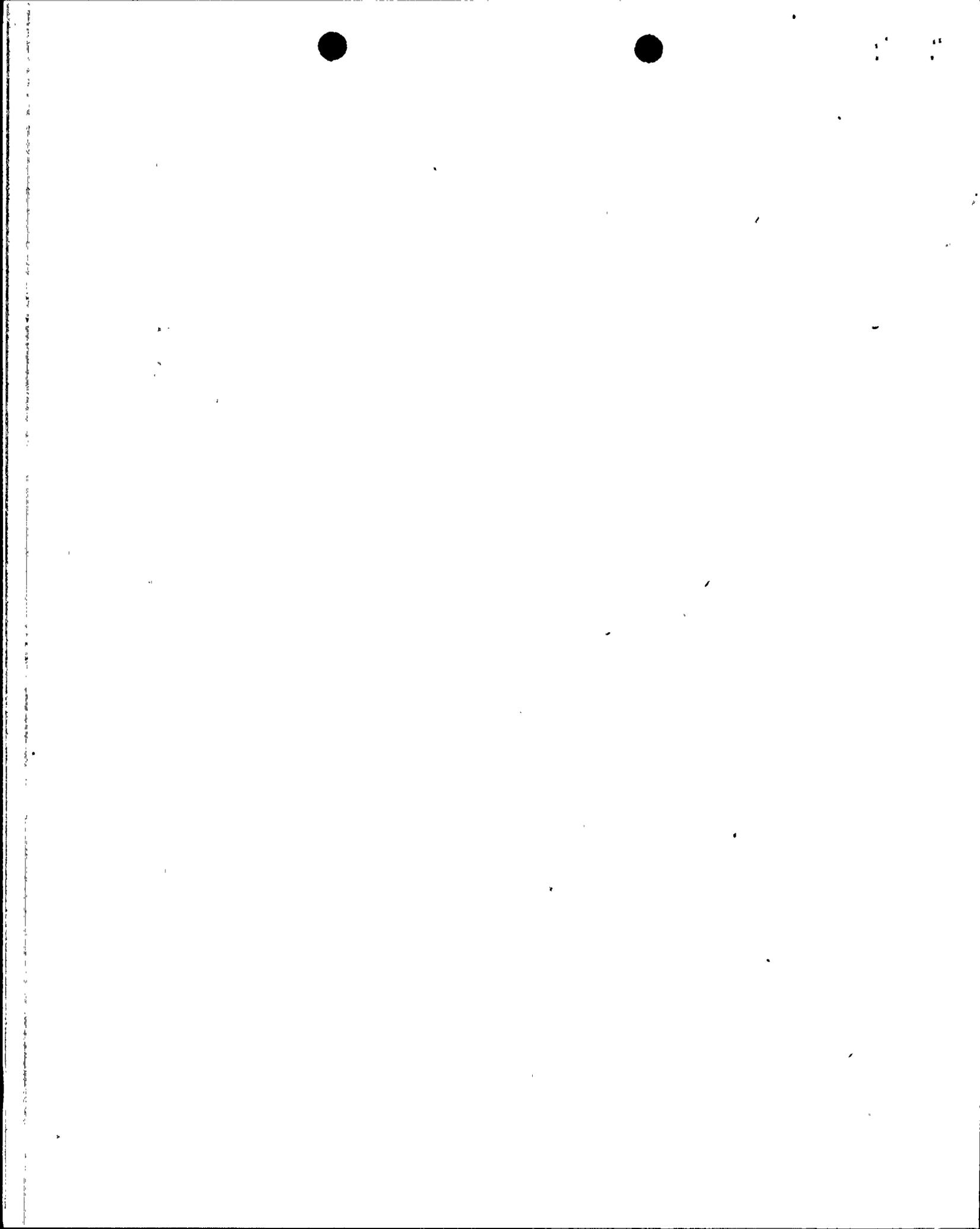
C. Arizona Public Service Company (APS)

1. Construction Permit Antitrust Review

At the construction permit stage, the Attorney General's antitrust review of APS and SRP disclosed two potential antitrust problems.

First, in their original 1955 interconnection agreement the two utilities had agreed not to compete in the service area of the other. This provision

⁴ Letter from Thomas E. Kauper, Assistant Attorney General, Department of Justice to Howard K. Shapar, Executive Legal Director, U.S. Nuclear Regulatory Commission, April 8, 1976; Letter from William F. Baxter, Assistant Attorney General, Department of Justice to Howard K. Shapar, Executive Legal Director, U.S. Nuclear Regulatory Commission, February 11, 1982.



was also contained in the contracts the utilities had with other utilities. Second, the contracts between APS and SRP and their respective wholesale customers contained restrictive provisions on the wheeling of power so as to inhibit competition from the wholesale customers for certain classes of retail customers. .

The first problem was resolved easily when APS and SRP on their own volition removed the provision not to compete in the service area of the other from their interconnection agreement and their contracts with other utilities. To eliminate potential anticompetitive effects of the second problem, APS and SRP each agreed to a construction permit license condition requiring wheeling without restriction on the resale of the power transmitted. With the resolution of these two problems, the Department of Justice was able to conclude that APS and SRP (as well as PSNM and EPE) were not "using their market power to inhibit competition."⁵

2. Implementation of the CP License Conditions

Staff's review of transmission arrangements entered into by APS since issuance of the Palo Verde CP suggests that APS has generally complied with the wheeling license condition. The most notable example of APS's compliance arises from its dealings with Plains Electric Generation and Transmission Cooperative (PGT), a G & T cooperative operating primarily in New Mexico, and with Navopache Electric Cooperative (Navopache), a distribution cooperative operating in Arizona. Under the terms of a

⁵ DOJ advice letter, p. 7.



wholesale power agreement executed in 1962,⁶ APS served as the full-requirements supplier for Navopache until 1980. At that time Navopache elected to obtain its power supply from PGT, but because the two utilities were not directly connected, wheeling by APS (and SRP) would be necessary. Thus, in April, 1980, APS executed the "Power Coordination Agreement," affording, among other services, wheeling of up to 75 MW of power for 20 years.⁷

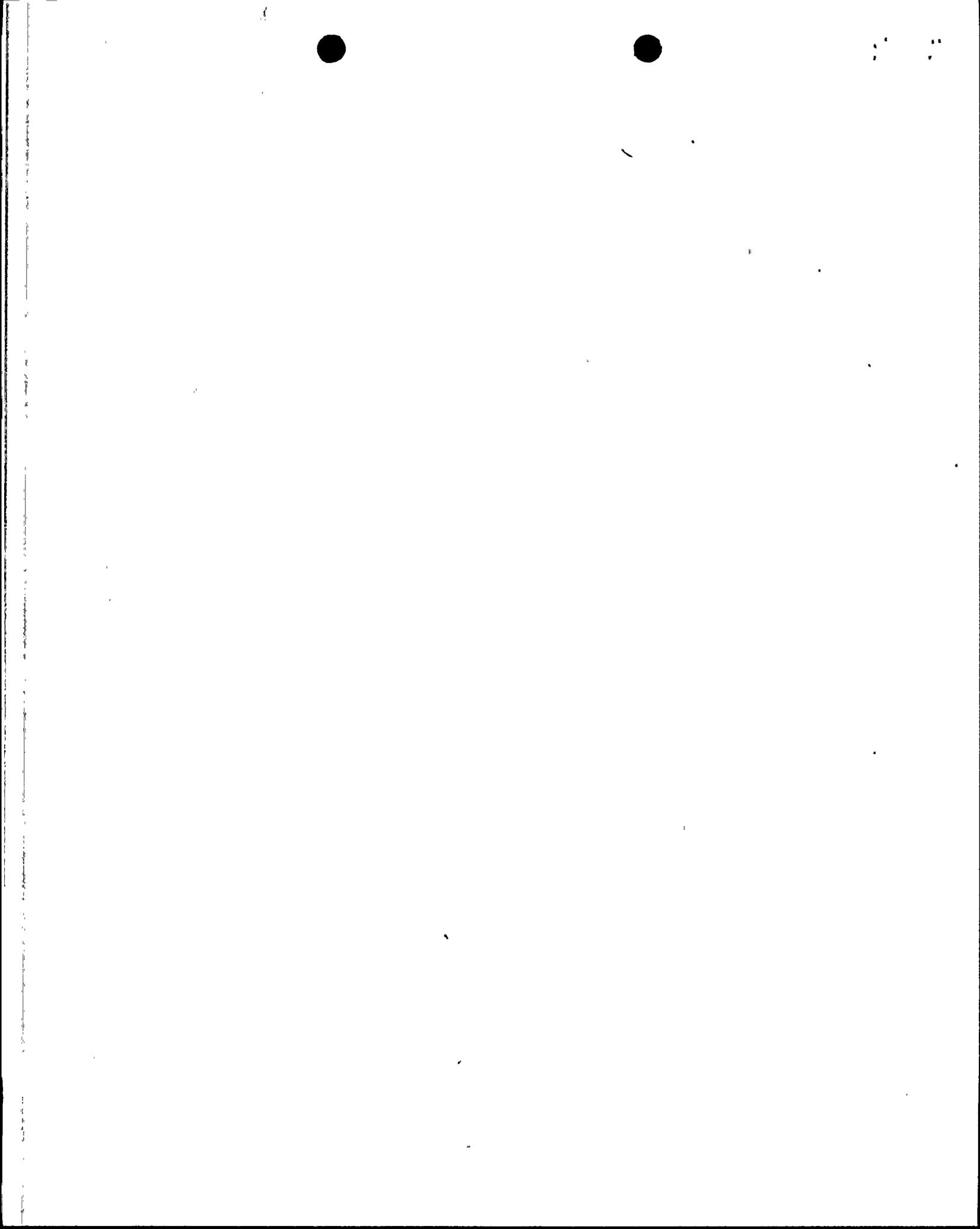
APS has further complied with the wheeling license condition through a power coordination agreement originally executed with Tucson Electric Power Company (TEPCO) in 1962.⁸ On at least two occasions, in the period 1975-77 and beginning in 1979, APS has entered into transmission service arrangements for delivery of TEPCO power representing TEPCO's participation in Four Corners and Navajo generating station units. APS has also recently agreed to provide both firm and interruptible transmission service to TEPCO through at least 1988.⁹

⁶ APS FERC Rate Schedule #17.

⁷ APS FERC Rate Schedule #82.

⁸ APS FERC Rate Schedule #32.

⁹ APS FERC Rate Schedule #91, #92.



Even prior to the completion of its CP antitrust review, APS was wheeling power for Arizona Electric Power Cooperative (AEPCO) so that AEPCO could serve a member distribution cooperative.¹⁰ Since then APS has complied with a request by AEPCO to increase the amount of power transmitted.

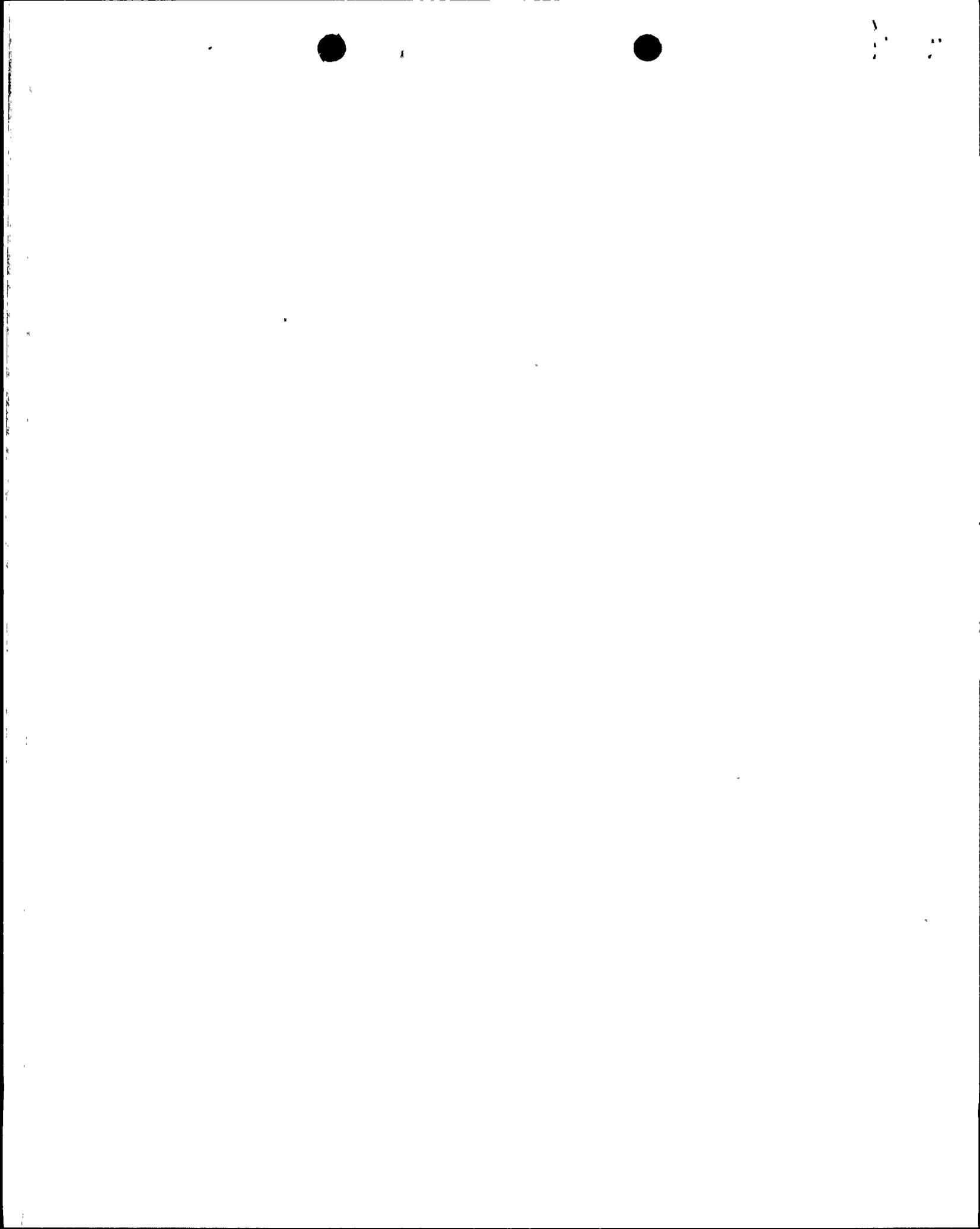
This apparent willingness of APS to provide transmission service, coupled with an absence of information to the contrary, indicates APS is adhering to its CP antitrust license conditions. The transmission arrangements entered into by APS may be viewed as pro-competitive in that they have allowed the requesting utility to acquire new wholesale customers or other sources of generating capacity.

3. Changes in Coordination and Wholesale Power Arrangements
a. Inland Power Pool

APS and the other three remaining original participants in Palo Verde, SRP, PSNM and EPE, had discussed with other southwestern utilities the possible formation of a power pool, tentatively called the Cactus Power Pool. Failing to agree on a method of reserve determination, the utilities terminated the Cactus discussions and subsequently most of the utilities turned to the Inland Power Pool (IPP). SRR, WAPA, Public Service Company of Colorado and other Colorado Utilites originally established IPP

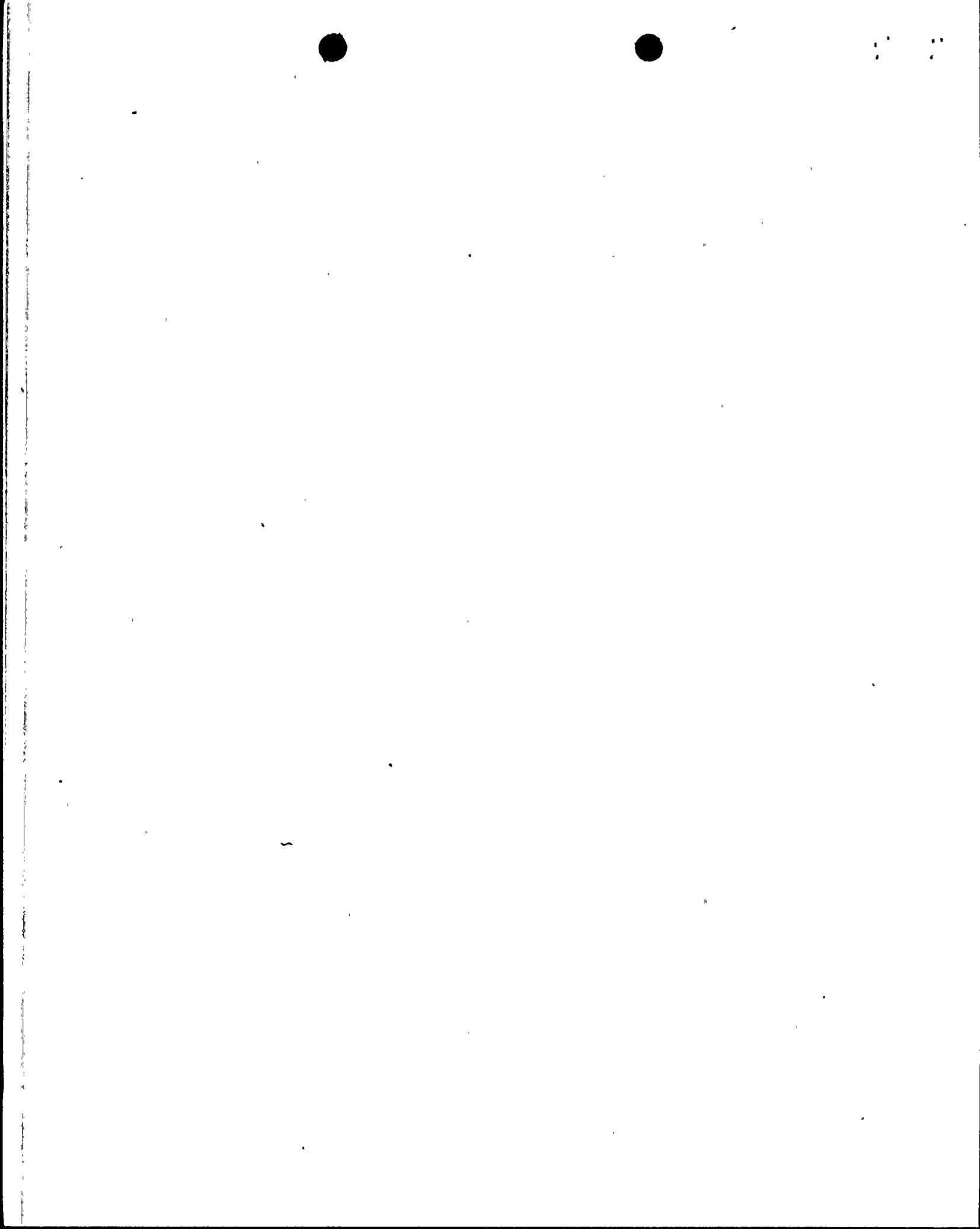
¹⁰ APS FERC Rate Schedule #62.

¹¹ Public Service Company of Colorado FERC Rate Schedule #16.



in May, 1974, and APS, PSNM and EPE have since joined in the last three years.¹¹ A brief discussion of the pool follows. IPP consists of electric utilities represented by investor-owned utilities, cooperatives, municipals and government agencies primarily centered in the Colorado area but extending into Arizona, Nevada, New Mexico, Nebraska, Wyoming, and Utah. The pool's members operate in synchronism, share operating reserves and provide emergency and maintenance assistance to one another for their mutual benefit. The pool has detailed procedures for coordinated operation of the member's electrical systems, including under-frequency load shedding and the equitable sharing of the costs and benefits resulting from the coordination.

The IPP agreement appears to contain no unnecessarily restrictive provisions in terms of membership requirements. Any electric utility electrically interconnected with an existing member of IPP may join, provided it does not add to any other party's operating reserve requirement or replacement capacity obligation. Since the inception of IPP, several utilities of diverse size and ownership mix have joined. In Arizona and New Mexico, these systems include Tucson Electric Power Company (TEPCO), Plains Electric Generation and Transmission Cooperative (PGT), Arizona Electric Power Cooperative (AEPCO), and the city of Farmington, New Mexico. It appears that most of the Arizona and New Mexico utilities owning generation and transmission, for which IPP may be expected to be more valuable



as opposed to distribution-only systems, are now IPP members. Thus, the change in activities occasioned by membership of the Palo Verde applicants, APS, SRP, PSNM, AND EPE, in IPP does not, in staff's view, represent a "significant change" under Section 105c(2). In fact, IPP, spread over several states, appears to expand the range of potential power exchanges available to southwestern utilities.

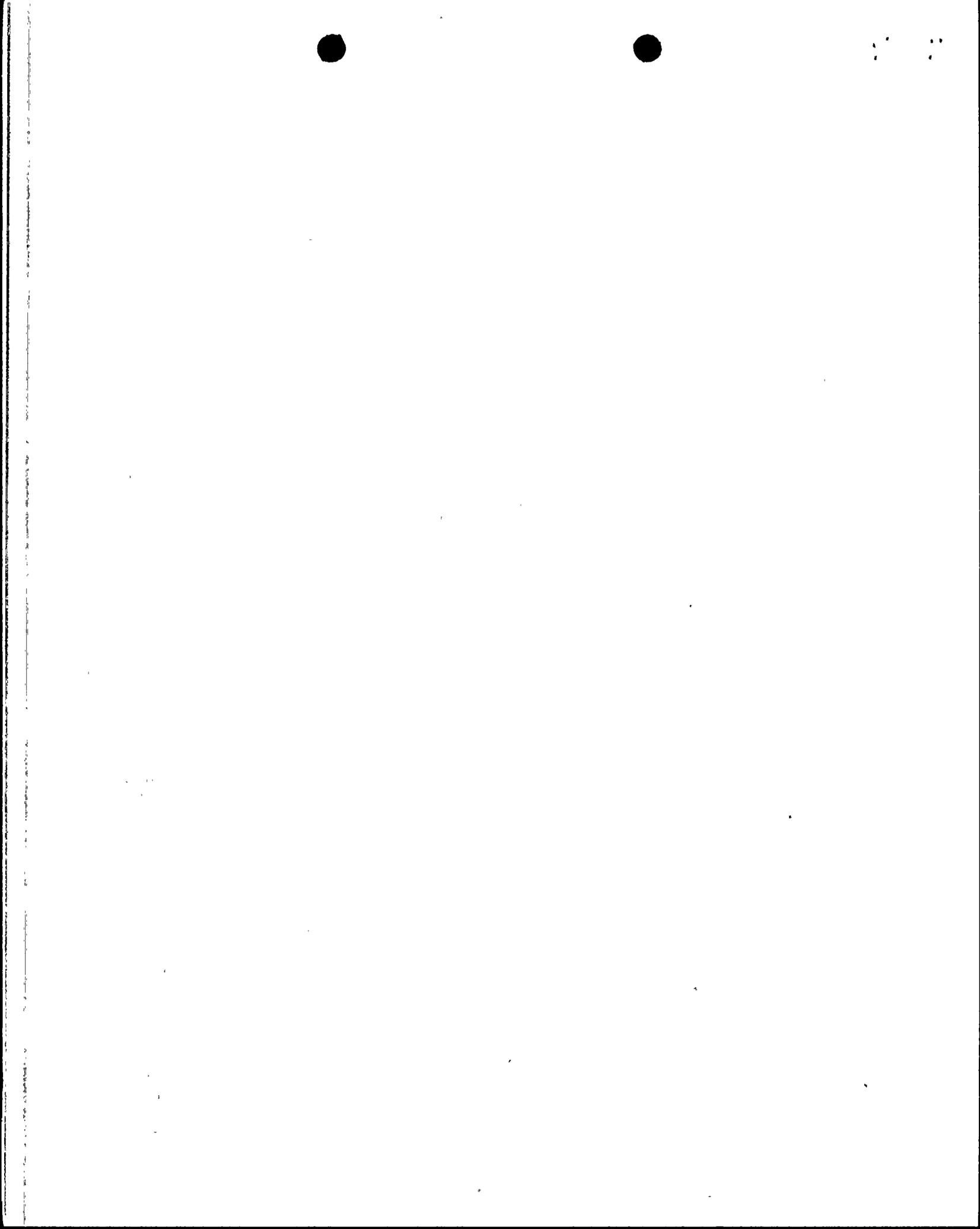
b. Other Changes in Coordination and Wholesale Power Arrangements

In addition to joining the Inland Power Pool since its construction permit review was conducted, APS has both modified existing coordination arrangements and entered into new coordination arrangements with other utilities. Among the new interconnection agreements is the "Power Coordination Agreement", executed with PGT in April, 1980.¹² In this agreement, APS and PGT agree to coordinate their interconnected transmission systems, exchange economy energy and provide emergency and maintenance service on a mutual basis. This agreement also contains a transmission service schedule, through which the aforementioned wheeling of power to Navopache Electric Cooperative takes place.

APS has further modified its original 1962 "Power Coordination Agreement" with TEPCO.¹³ That agreement had provided for a direct interconnection between the two systems and permitted exchanges of various bulk power

¹² APS FERC Rate Schedule #82.

¹³ APS FERC Rate Schedule #32.



services. A 1969 amendment established a transmission route for TEPCO's share of the Four Corners plant over APS lines. Effective December, 1975, APS agreed to accept delivery of TEPCO power from others and to deliver power to others from TEPCO at two additional points of interconnection.

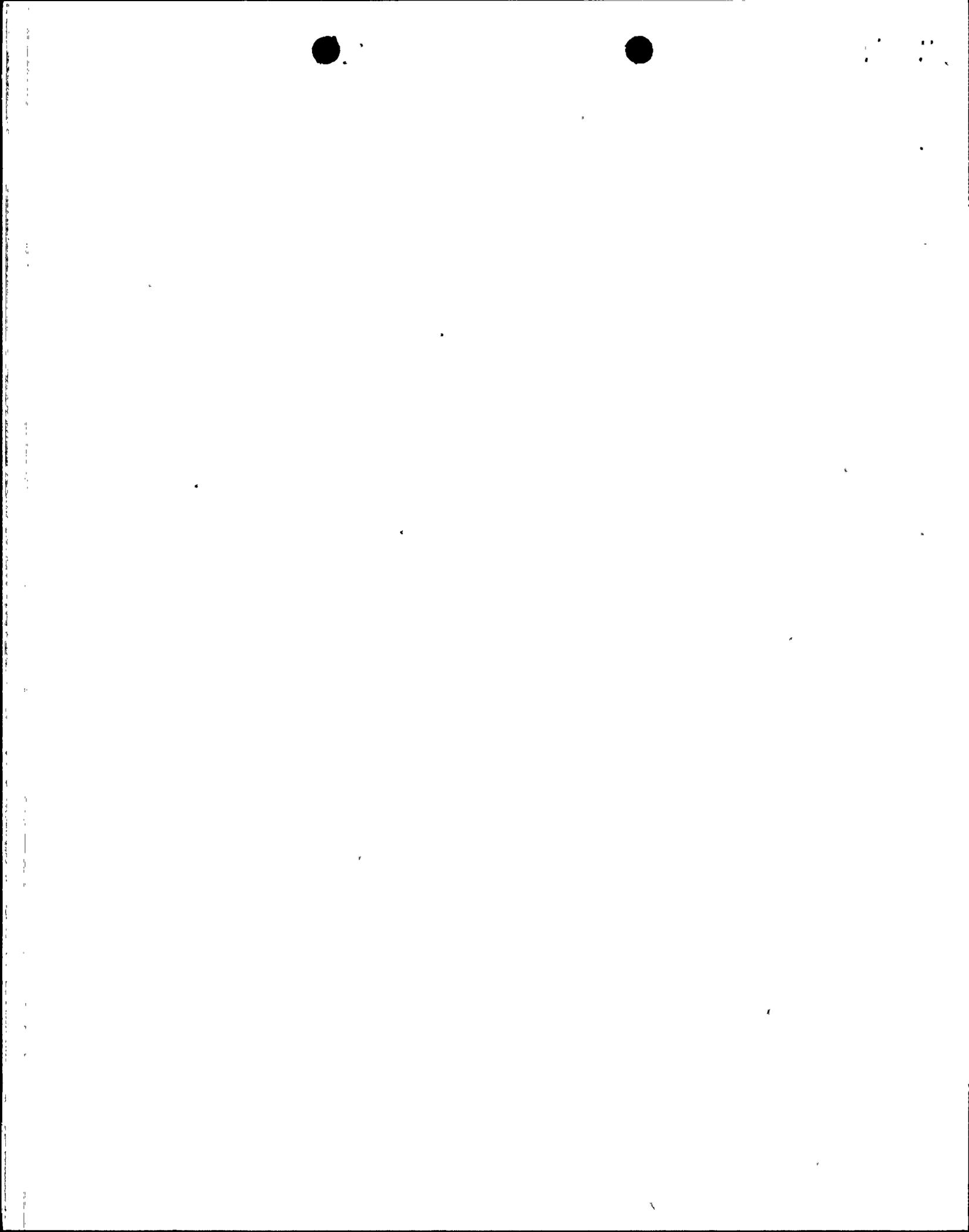
APS has also extended the geographic scope of its operational coordination services by entering into energy interchange agreements with several smaller utilities, including Arizona Electric Power Cooperative (AEPCC) and the California cities of Anaheim, Burbank and Riverside.¹⁴ These economy energy-type agreements are consistent with recent efforts to establish an energy broker network among the members of the Western Systems Coordination Council.

With regard to wholesale power service, APS has not acquired any new long-term wholesale customers and, in fact, has lost one customer, Navopache, as discussed earlier. On a short-term basis, through 1984, APS has agreed to sell limited amounts of wholesale power to Navopache's new wholesale supplier, PGT.¹⁵ APS has also amended its wholesale power agreements with a number of other utilities resulting in changes in the amounts of power supplied, the means of delivery and other service modifications. With the Colorado River and San Carlos Indian Irrigation Projects, APS agreed in 1976 to sell additional amounts of wholesale power.¹⁶ Transmission of the

¹⁴ APS FERC Rate Schedules # 76, #87, #88 and #89.

¹⁵ APS FERC Rate Schedule #83.

¹⁶ APS FERC Rate Schedules #65 and #66.



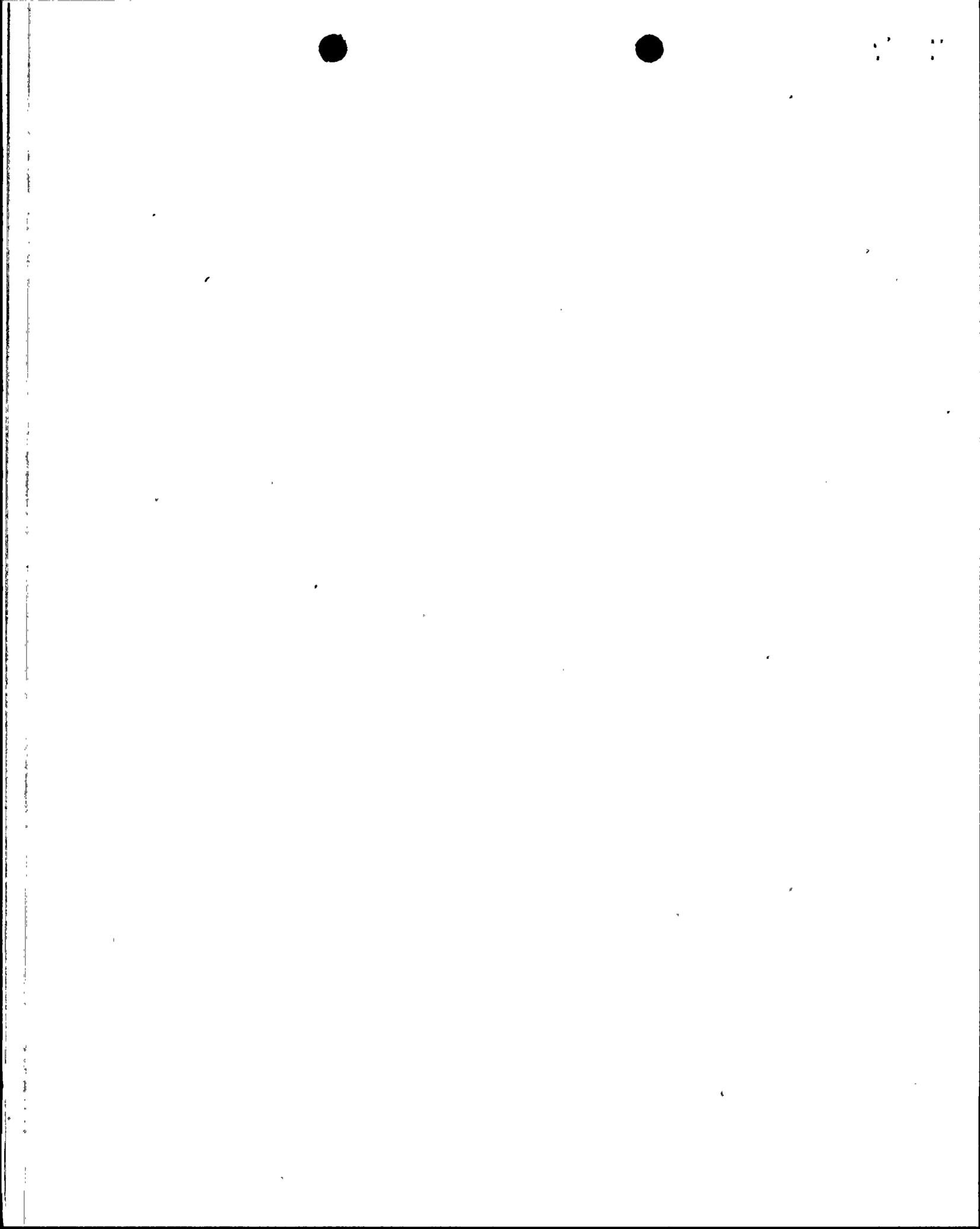
power was arranged with WAPA and the Arizona Power Authority (APA). APS has also modified its 1974 wholesale power supply with APA to increase the amount supplied.¹⁷ A 1974 agreement with the Wellton-Mohawk Irrigation and Drainage District has been supplemented twice to reduce the maximum demands charged to the customer.¹⁸ APS has further modified its wholesale power agreement with AEPCO in 1977 to permit transmission of the power by WAPA, rather than APS.¹⁹

None of the changes in coordination and wholesale power activities represent, in staff's opinion, a "significant change." Indeed, a comparison of the bulk power arrangements conducted by APS today with the situation existing in 1975 would suggest that opportunities for alternative sources of bulk power supply have, if anything, become more prevalent since the completion of the CP antitrust review. Additionally, the staff's review has disclosed no information indicating that APS has arbitrarily refused to provide coordination services or wholesale power to requesting entities.

17 APS FERC Rate Schedule #59.

18 APS FERC Rate Schedule #58.

19 APS FERC Rate Schedule #57.



D. Salt River Project (SRP)

1. Construction Permit Antitrust Review

As was discussed earlier with APS, the Department of Justice's anti-trust review of SRP at the CP stage uncovered two potential problems, one dealing with an agreement of APS and SRP not to compete in the service area of the other and the other involving possible anticompetitive restrictions on the wheeling of power contained in contracts with wholesale customers. APS and SRP solved the first problem by removing the provision not to compete from their contract with each other and from contracts with other utilities. To resolve the second problem SRP and APS agreed to a license condition obligating them to offer transmission services absent anticompetitive restrictions.

As mentioned earlier, the Department of Justice advice letter incorporated the results of its CP review of SRP as well as of the other three original applicants. The advice letter including the proposed license condition was published in the Federal Register on April 18, 1975. The intervention period failed to produce any petitions to intervene, with the result that the CP antitrust review of SRP concluded on May 19, 1975.

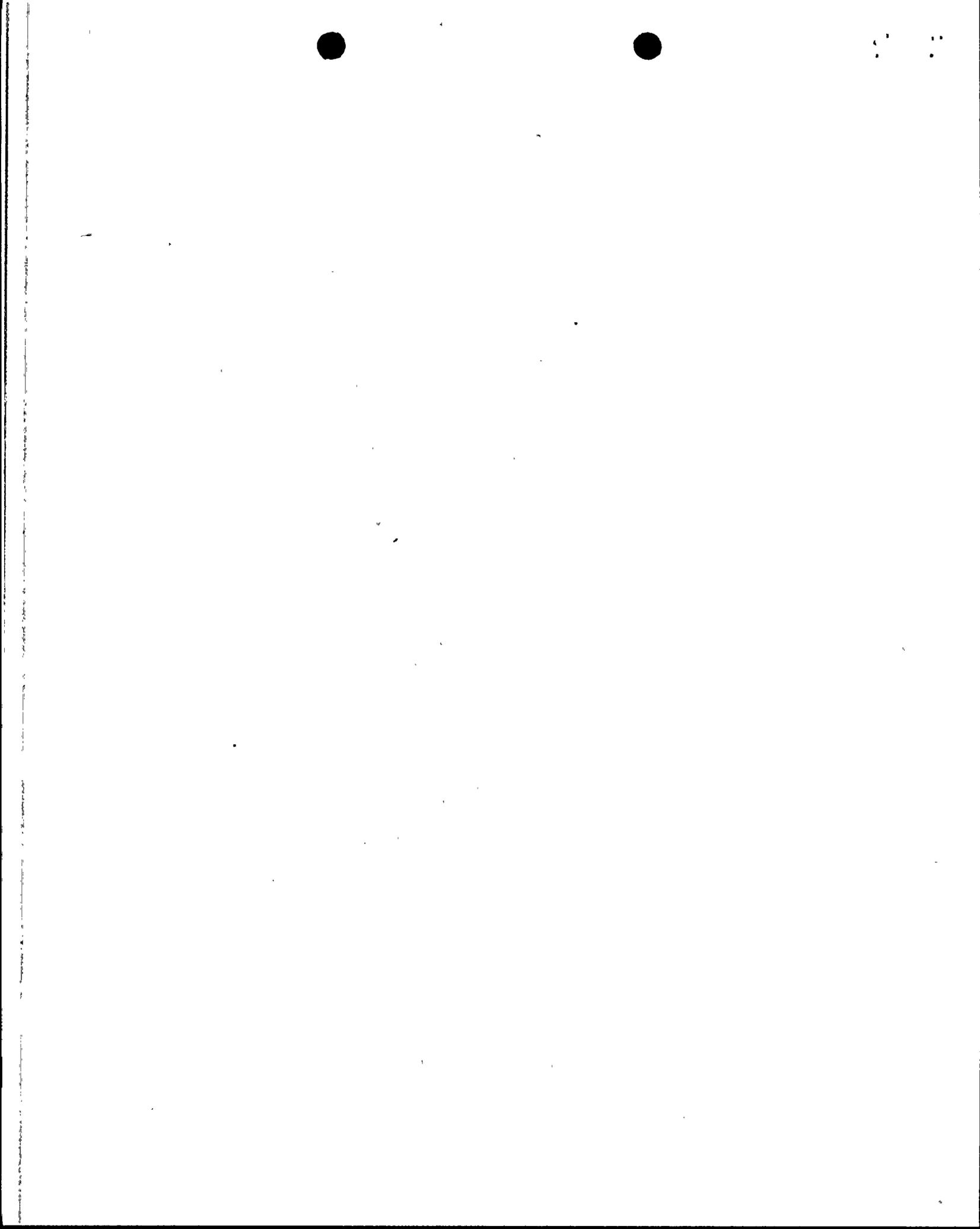
2. Implementation of the CP License Conditions

A natural starting point for analyzing changes in the activities of SRP since the completion of the CP antitrust review is an evaluation of

SRP's implementation of the wheeling license condition. SRP appears to have complied with the wheeling license condition included in the Palo Verde CP. In conjunction with APS, SRP has entered into interconnection and transmission arrangements with PGT, allowing the G & T cooperative to serve Navopache. The April, 1980, "Interconnection and Wheeling Agreement" provides for a sale of the Coronado 69 kV substation from SRP to PGT, establishes an interconnection between the SRP system and the Coronado substation, and permits bi-directional transmission service, initially of 45 MW of power, for PGT between Coronado and APS's Cholla substation on a 500 kV transmission line.²⁰

SRP has further facilitated the ownership participation of Southern California Public Power Authority (SCPPA) in Palo Verde by agreeing to wheel SCPPA's share of Palo Verde over its transmission system to Los Angeles Department of Water and Power (LADWP), acting as agent for SCPPA. The assignment agreement between SRP and SCPPA also notes that the parties and the Western Area Power Administration are discussing the principles for a direct-current transmission line from Phoenix, Arizona to Nevada, which would allow SCPPA to transmit its Palo Verde share.

²⁰ SRP is not required to file its contracts and agreements with other utilities with the Federal Energy Regulatory Commission (FERC). However, with the exception of the letter agreements cited directly below and some short-term power and economy energy agreements cited in Section D.3b., staff has available for review all other contracts noted in its review of SRP.



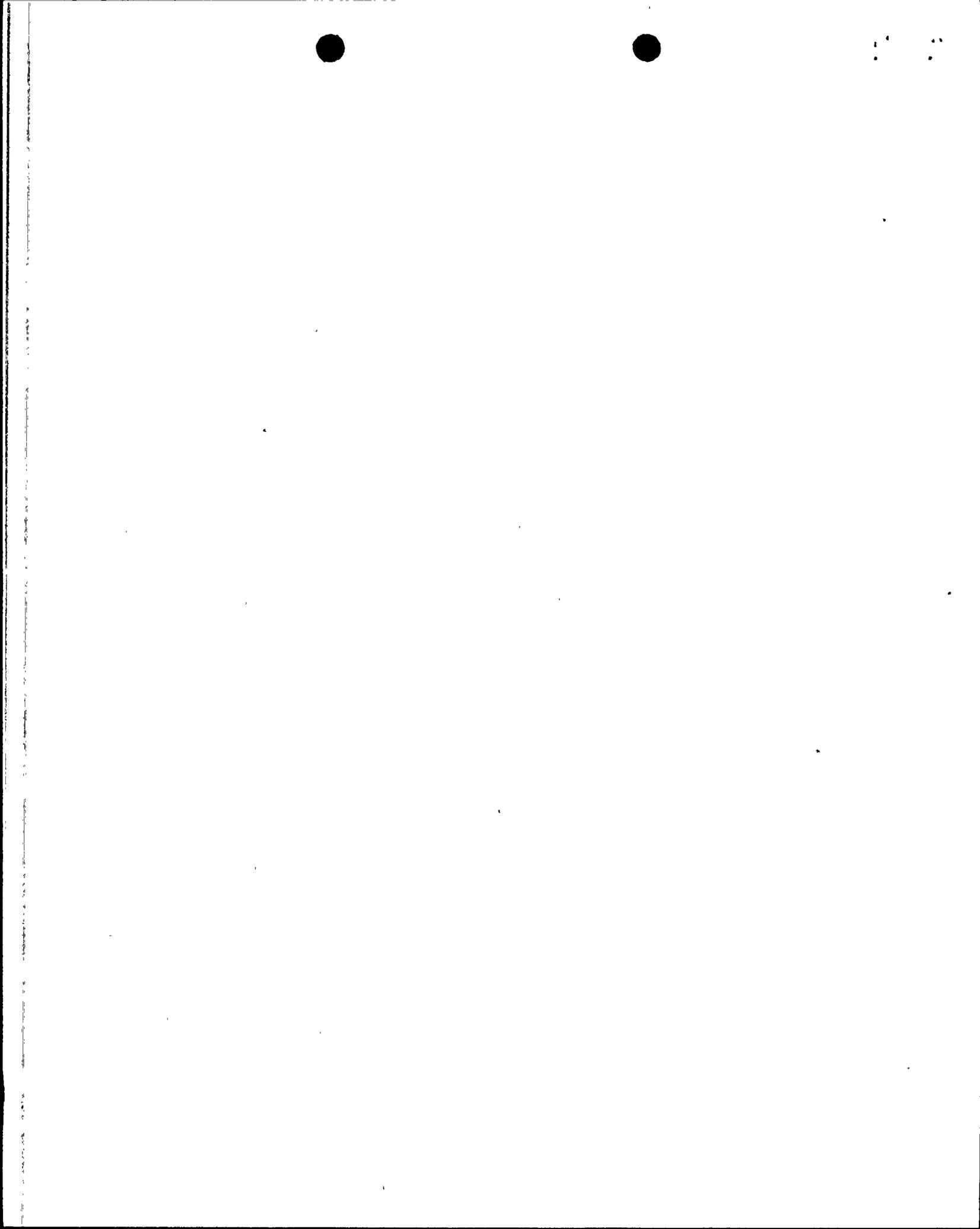
Finally, SRP has entered into transmission arrangements with Chandler Heights Citrus Irrigation District, Electrical District No. 5, Electrical District No. 6, Queen Creek Irrigation District and Santan Irrigation District. These letter agreements call for wheeling of excess energy made available at various times by the Colorado River Storage Project.²¹

Based on our review, the staff has concluded that the transmission services offered by SRP since the completion of the CP review comport with the intent of the CP license conditions. Each arrangement entered into by SRP has permitted a smaller utility to acquire other sources of bulk power, consistent with efforts to foster a competitively-structured bulk power market.

3. Changes in other Bulk Power Activities

In addition to its participation in the Inland Power Pool, discussed earlier, SRP has engaged in several other bulk activities involving other utilities since the completion of the CP review. The discussion of these activities which follows, though not exhaustive, is illustrative of the conduct which SRP has exhibited toward other utilities.

²¹ SRP response to information requested in Regulatory Guide 9.3.



a. Offer of Access to Palo Verde 1, 2, and 3

Originally, SRP had owned 28.1 percent of Palo Verde 1, 2, and 3 and had acquired an additional 1 percent when Arizona Electric Power Cooperative withdrew from the project. Subsequently, SRP concluded that its participation extended beyond its needs and decided to offer for sale over one-third of its Palo Verde share to other utilities in the southwest. The participation of nearly 60 utilities in six states was solicited by SRP, subject only to the criteria that the participant have access to the necessary transmission and possess the ability to finance its access. Southern California Public Power Authority (SCPPA), a group of California municipal electric systems, and Los Angeles Department of Water and Power (LADWP) met these criteria and have now become participants in Palo Verde in shares of 5.91 percent and 5.7 percent, respectively.

No information has been obtained by staff that any of the solicited utilities, which included 25 systems in Arizona and New Mexico, were unreasonably excluded from obtaining access to the Palo Verde share sold by SRP. This result is also consistent with the efforts of the original Palo Verde applicants to solicit the interests of all utilities in Arizona and New Mexico in ownership at the time Palo Verde was being planned.

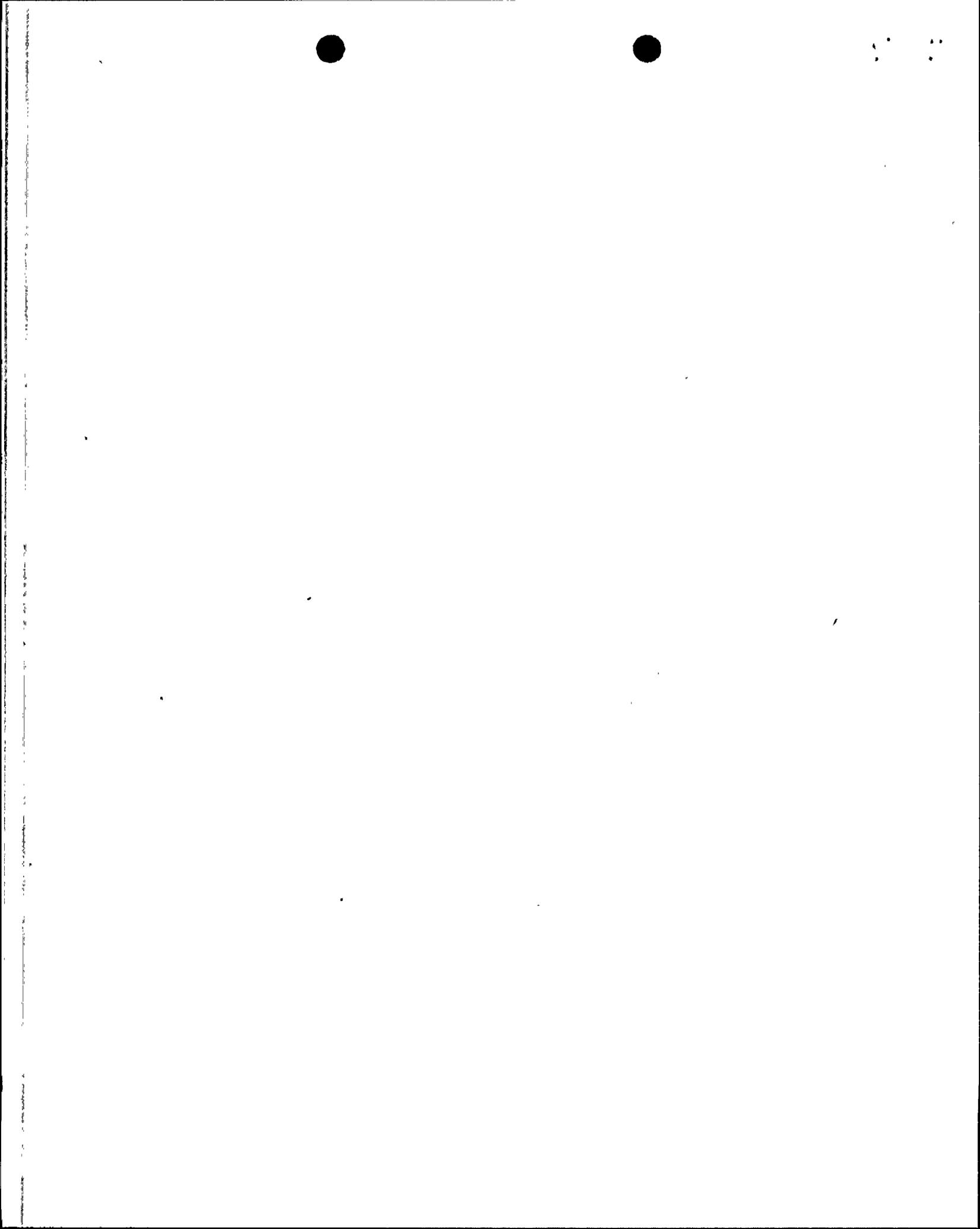


b. Coordination and Wholesale Power Arrangements

SRP has entered into various other coordination arrangements with utilities located in Arizona, New Mexico, California and other states. A detailed discussion of all such arrangements is impractical within the confines of this analysis, but those which are considered here are felt to be indicative of SRP's approach in dealing in bulk power supply arrangements with other utilities.

SRP entered into the "Coronado Project Participation Agreement" with LADWP in November, 1977. This agreement provided access to LADWP to 30 percent of the twin-unit 750 MW coal-fired plant and wheeling of that power over SRP lines to points of interconnection with the Western Area Power Administration (WAPA) and APS. SRP is able to reacquire the 30 percent interest effective with the operation of Palo Verde 1, at which time LADWP will begin receiving power from Palo Verde 1, reflecting its 5.7 percent interest. In addition, the agreement permits LADWP to purchase declining amounts of contingent power (from 100 MW to 35 MW) from Coronado 1 and 2 for periods coordinated with initial dates of operation of each Palo Verde unit.

As indicated previously, SRP has reached agreement with PGT on an interconnection and wheeling arrangement. As well as providing wheeling by SRP for PGT, the agreement calls for the sale of the Coronado 69 kV substation to PGT and the establishment of an interconnection point between SRP and PGT at the Coronado substation.



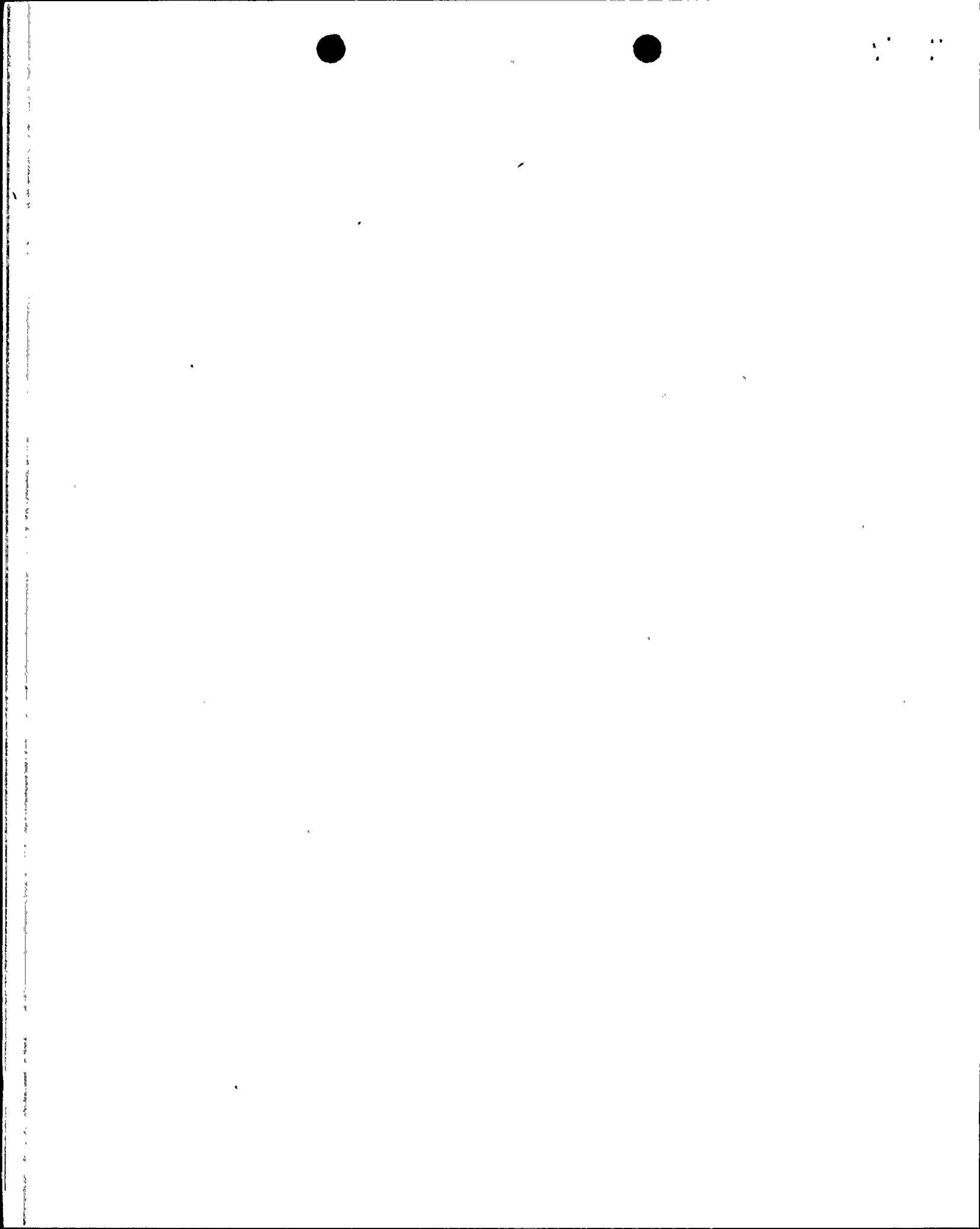
SRP has also engaged in operational coordination to a limited degree with several smaller utilities in the southwest, although not directly interconnected with all of them. For example, SRP has executed economy energy agreements with AEPCO, Cities of Burbank and Pasadena, California, PGT, and Tri-State Generation and Transmission Cooperative (Tri-State).²²

With regard to wholesale firm power SRP has, on a short-term basis, supplied power to a number of utilities in several states, including Tri-State and the City of Colorado Springs in Colorado and PGT in New Mexico.²³ Although SRP has obtained no new wholesale customers on a long-term basis, staff is aware of no instance in which SRP has failed to comply with requests for additional power by existing customers. In this connection, staff notes that SRP executed a 10-year power sales contract with the San Carlos Project, an existing customer, in April, 1976.

In summary, based on our review, the staff's opinion is that SRP's coordination and wholesale power arrangements are consistent with the promotion of a competitive environment in bulk power supply in the southwest. The staff has obtained no information indicating that SRP has acted unreasonably in regard to its coordination and wholesale power relationships with its smaller neighboring utilities. Thus, the changes in SRP's activities with regard to coordination and wholesale power services do not represent "significant changes" under the Commission's criteria.

²² SRP response to information requested in Regulatory Guide 9.3.

²³ Ibid.



E. Public Service Company of New Mexico (PSNM)

1. Construction Permit Antitrust Review

Unlike the reviews involving APS and SRP, the Department of Justice's review of PSNM at the CP stage expressed no antitrust concerns. No complaints were received and no other evidence was found of any refusal by PSNM to provide coordinating services to smaller systems. Thus, the construction permit review of PSNM with respect to Palo Verde 1, 2, and 3 was concluded, without intervention, on May 19, 1975.

2. Changes in Coordination and Wholesale Power Arrangements

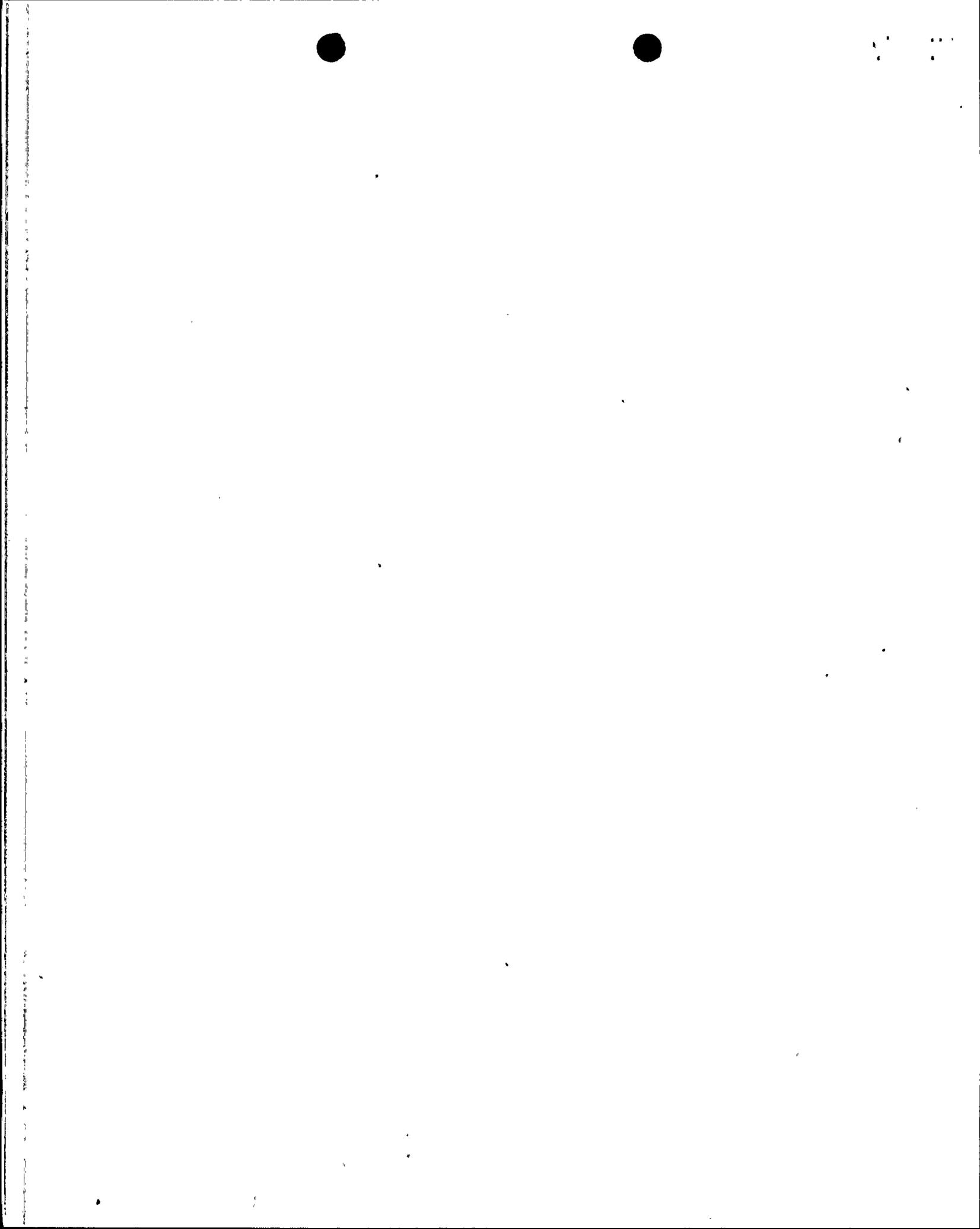
a. Offers of Access to Coal-Fired Generation

In July, 1969, PSNM and TEPCO had agreed to jointly construct and own on an equal basis a three or four-unit coal-fired generating station at San Juan, New Mexico.²⁴ Ultimately, San Juan 1, 2 and 3 were constructed and are now operating, with 50 percent participation each by TEPCO and PSNM.²⁵ As regards San Juan 4, set to operate in 1982 or 1983, TEPCO decided not to exercise its option to own 28 percent until, at the earliest, 1995.²⁶ PSNM then extended offers

²⁴ Information requested by the Attorney General for Antitrust Review of the Palo Verde Nuclear Generating Station, Response of Public Service Company of New Mexico, Exhibit I, filed February 27, 1974.

²⁵ Reply of Western Systems Coordination Council (WSCC) to Department of Energy Form EP-411(hereafter referred to as WSCC reply) April 1, 1982, p. 2A-21.

²⁶ Interview with PSNM personnel, December 15, 1981 (hereafter referred to as PSNM interview).



to participate in San Juan 4 to the Cities of Farmington and Gallup and to Los Alamos County. Farmington ultimately purchased 8.5 percent of San Juan 4, representing about 40 MW.²⁷ PSNM is also considering the construction of the New Mexico Station, four 500 MW coal-fired units complementing the San Juan Generating Station.²⁸ Although this project remains very much in the planning stage, consistent with its earlier announced intentions to negotiate with other utilities about joint participation in future generating units, PSNM has invited several utilities to participate, including PGT, EPE, Community Public Service Company, now called the Texas-New Mexico Power Company (TNMPC), Navajo Tribal Utility Authority (NTUA), and Farmington.²⁹ Tentative ownership commitments have been made to NTUA and Farmington.³⁰

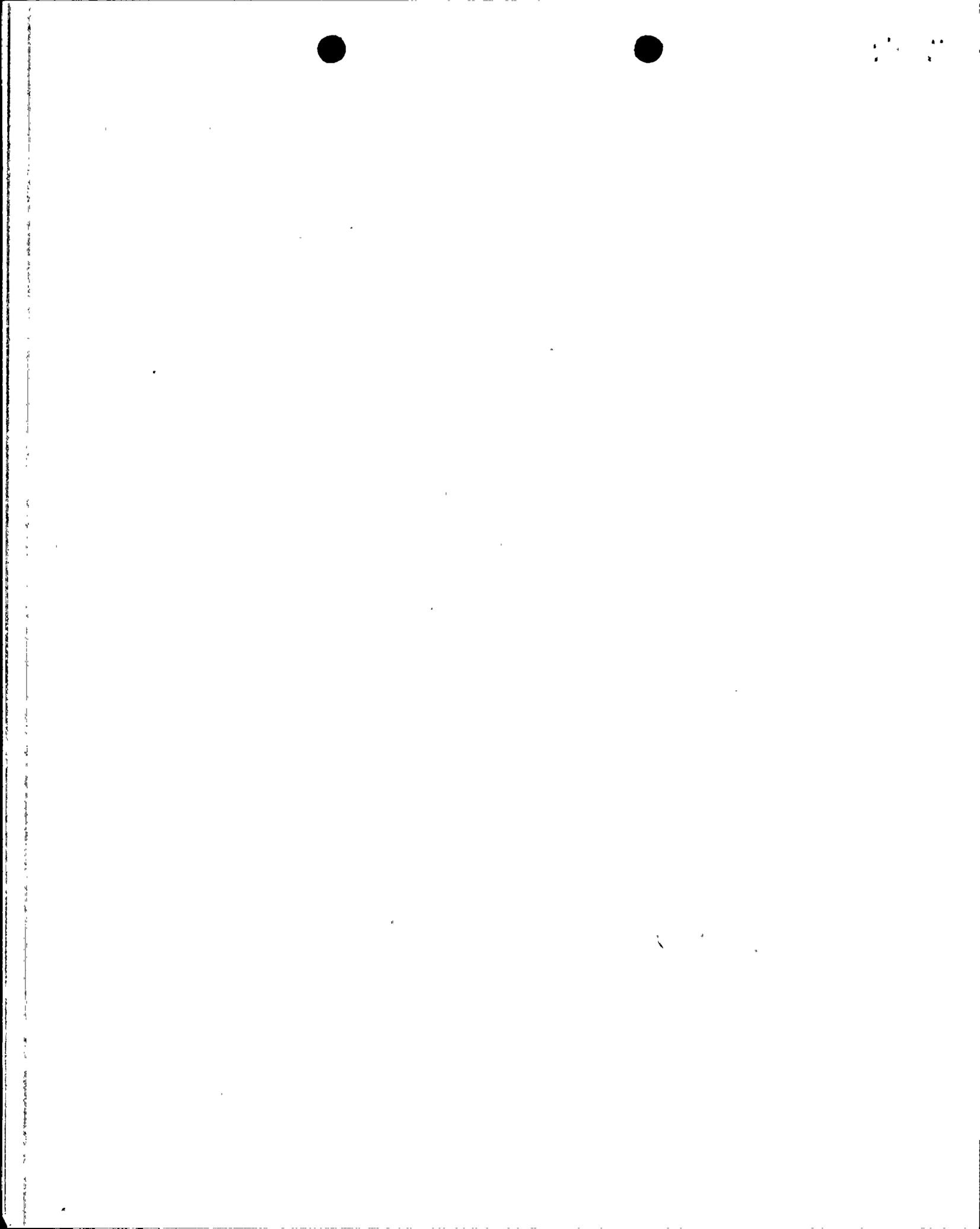
This apparent willingness of PSNM to engage in joint generating projects with other smaller utilities, regardless of ownership type, promotes opportunities in bulk power supply for its neighboring systems. Thus, in staff's view, this change is not considered to be a "significant change" with anticompetitive effects in the activities of PSNM.

27 WSCC reply, p. 2B-15.

28 PSNM response to information requested in Regulatory Guide 9.3.

29 Ibid.

30 PSNM interview.



b. Other Changes in Coordination and Wholesale Power Arrangements

In addition to participation in the Inland Power Pool, PSNM has both modified existing bulk power relationships and entered into new relationships with several utilities since the completion of its CP antitrust review. These changes are discussed according to the other party involved in the arrangements.³¹

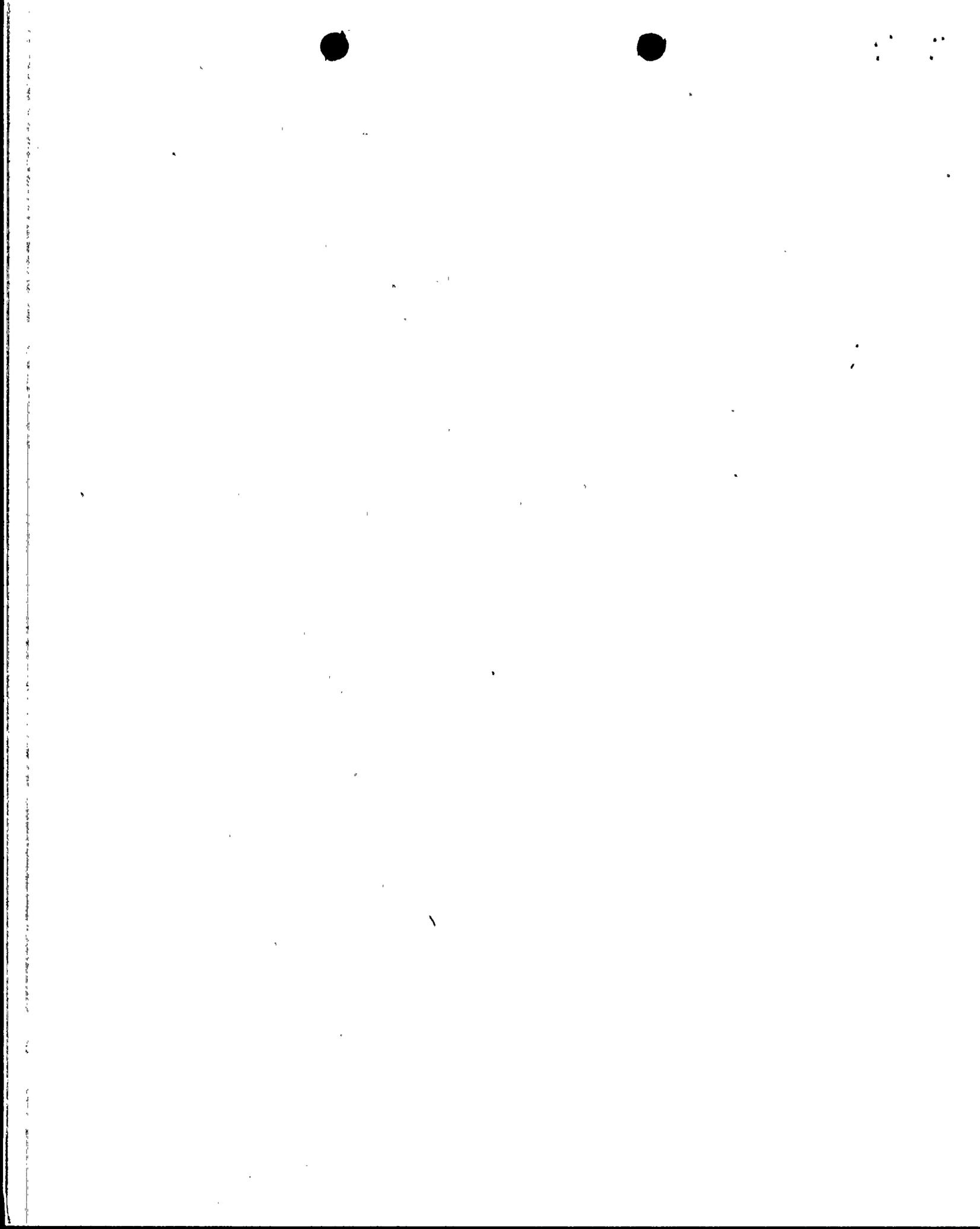
(1) Plains Electric Generation and Transmission Cooperative (PGT)

In June, 1975, PSNM and PGT signed the "Master Interconnection Agreement,"³² which organized the piecemeal contractual arrangements³³ which has developed between the two systems. The agreement provides a structure for (a) coordinating generation and transmission planning, (b) studying joint participation and operation of generation and transmission projects, (c) engaging in economy sales and other interchanges, (d) providing mutual assistance and (e) wheeling power and energy. In one form or another most of these features have been implemented by PSNM and PGT. Under the agreement PSNM is providing limited-term supplemental power to PGT to satisfy PGT needs for the period of time until PGT can otherwise obtain long-term capacity (most likely its Escalante Generating Station). In 1977 the two utilities executed a service schedule for mutual

³¹Staff has not provided an exhaustive discussion of all such arrangements with every other utility, but has focused on the primary agreements PSNM has reached with several of its small neighbors.

³²PSNM FERC Rate Schedule #31.

³³PSNM FERC Rate Schedules #12, #25, #30, and #36.



wheeling over specified transmission routes and PSNM also agreed to provide additional wheeling of up to 20 MW to PGT over a different transmission line. PSNM further agreed to engage in economy energy interchange and to provide interruptible wheeling service.

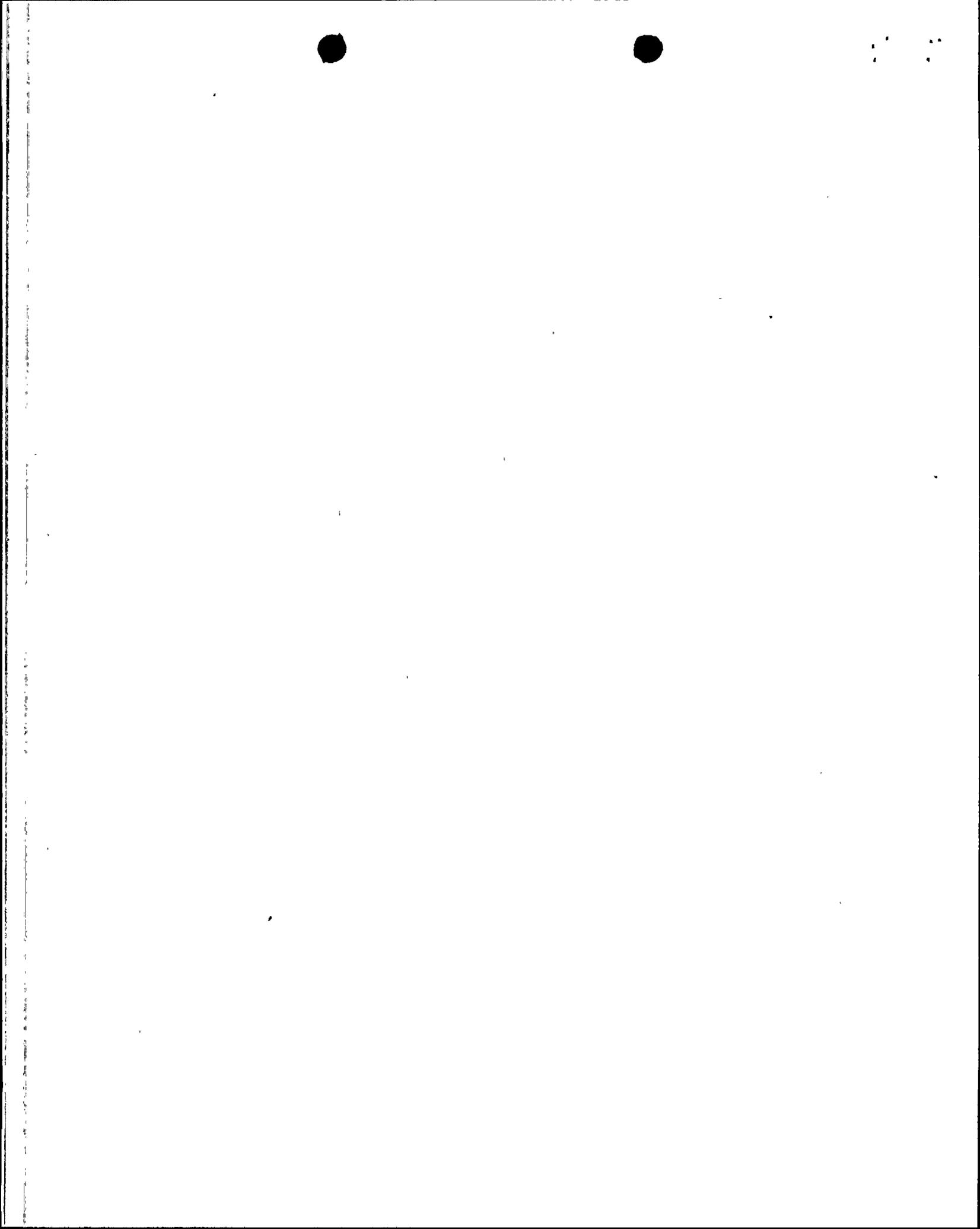
In still other arrangements with PGT, PSNM is presently negotiating the terms of an interconnection at PGT's Escalante Station, planned for the spring of 1984, and giving PGT an alternative route for delivering and backing up the station's capacity.³⁴ The two utilities are also discussing participation in the Colorado-New Mexico Intertie, a proposed 91-mile 230 kV line linking the two states.³⁵ PSNM has previously entered into joint participation with PGT (and EPE) in a 500 kV line linking Four Corners, Ambrosia and Albuquerque, which went into service in 1980.³⁶

All of these actual and contemplated arrangements between PSNM and PGT are assisting PGT in its transition from a power supply cooperative almost completely dependent on purchased power to a full-fledged generating and transmission cooperative now able to acquire power from several sources. The changes in activities by PSNM thus do not represent a "significant change."

34 PSNM interview.

35 PSNM response to information requested in Regulatory Guide 9.3.

36 PSNM interview.



(2) Texas-New Mexico Power Company (TNMPC)

PSNM had previously entered into a "Contract for Electric Service" with TNMPC, executed in 1974.³⁷ This contract called for (1) the supply of firm power to TNMPC by PSNM, (2) mutual emergency and maintenance support and (3) the exchange of economy energy. Under this agreement TNMPC has scheduled the purchase of increasing amounts of firm power, up to 72 MW, from 1976 to 1988 and thereafter. Subsequent amendments have raised the maximum demand to 87 MW. Additionally, PSNM and TNMPC along with EPE have entered into a letter agreement of November 13, 1974, that establishes principles under which a major transmission line in southwestern New Mexico will be built.³⁸ PSNM has also agreed to provide interruptible transmission service to TNMPC.³⁹

PSNM appears to have made available to TNMPC a variety of bulk power services, including the aforementioned opportunity to participate in the contemplated New Mexico Station. Thus, these changes in activities on the part of PSNM do not, in staff's view, represent a "significant change" with adverse effects on competition.

³⁷ PSNM FERC Rate Schedule #32.

³⁸ PSNM response to information requested in Regulatory Guide 9.3.

³⁹ PSNM interview.

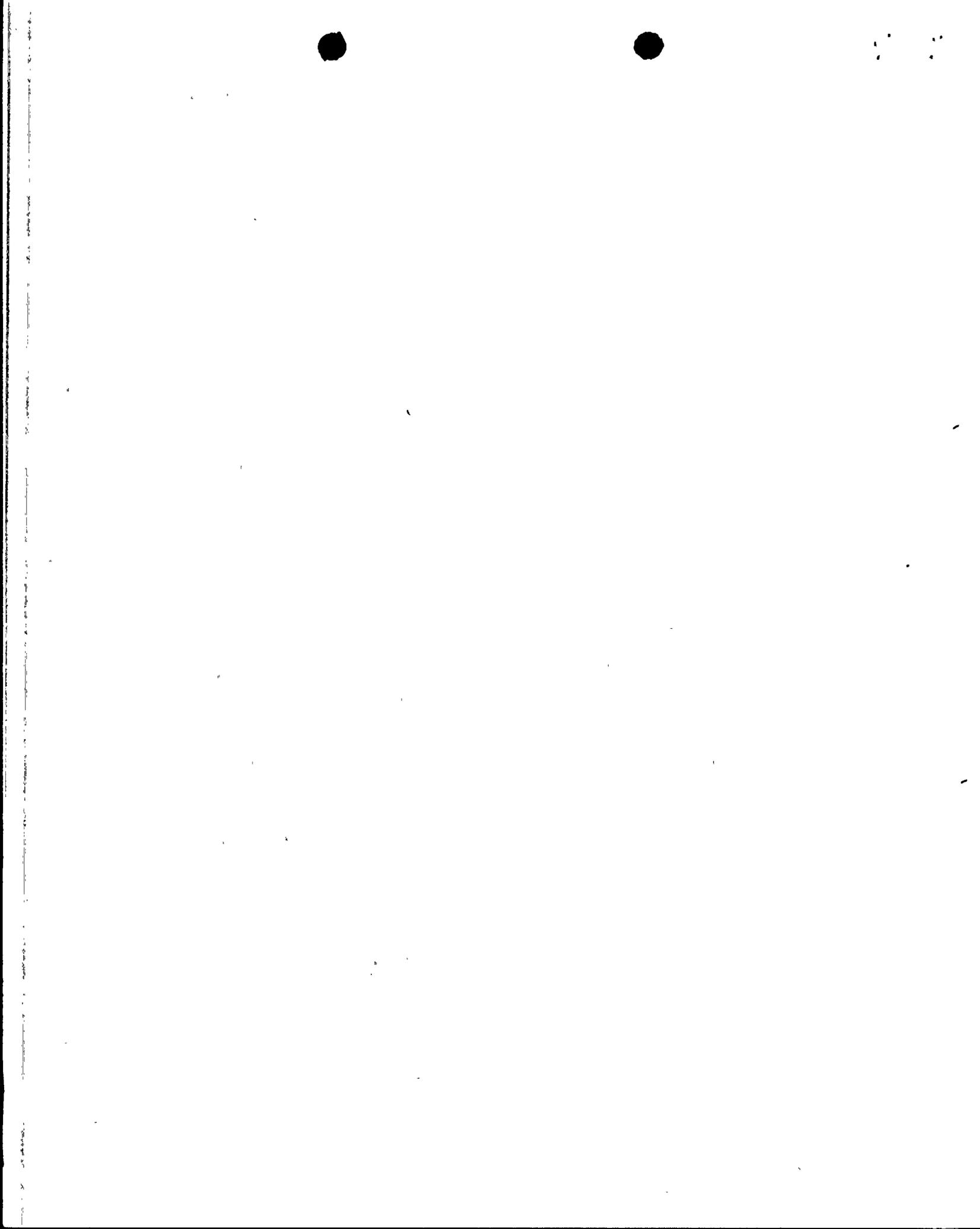


(3) City of Farmington

In July, 1977, PSNM reached agreement with Farmington on a contract offering several bulk power services.⁴⁰ Apart from allowing for the supply of emergency power, the coordination of maintenance, and the exchange of economy energy, the agreement provides for transmission service in certain circumstances. The contract also permits the purchase of up to 35 MW of supplemental power by Farmington from PSNM for 30 years and assists the municipal utility in fulfilling the terms of its contract with WAPA for the purchase of peaking and firm capacity. Further, Farmington's purchases from PSNM can be reduced through participation in future generating units. As previously mentioned, PSNM has afforded Farmington participation in San Juan 4 and tentative participation in the future New Mexico Station.

Similar to its relationships with PGT and TNMPC, PSNM's recent activities involving Farmington have tended to promote availability of options for bulk power supply. As such, these changes in activities are not deemed to constitute a "significant change."

⁴⁰ PSNM FERC Rate Schedule #35.



(4) Navajo Tribal Utility Authority (NTUA) and the City of Gallup

In October, 1974 PSNM and NTUA entered into an agreement for the wheeling of NTUA's power requirements from APS.⁴¹ This agreement gave NTUA the option to increase its reservation of transmission capacity. An amendment exercising that option was executed in March, 1981.

PSNM and Gallup had executed a power supply contract in October, 1962, calling for a maximum of 30 MW to be delivered to three delivery points.⁴² In September, 1976, Gallup requested the addition of a fourth delivery point and PSNM has complied with that request.

The additional wheeling and wholesale service rendered by PSNM appears consistent with its previous practices in this area. Thus, the changes in activities of PSNM with respect to NTUA and Gallup do not, in staff's view, represent a "significant change."

F. El Paso Electric Company (EPE)

1. Construction Permit Antitrust Review

As was the case with PSNM, the Department of Justice's antitrust review of EPE at the CP stage disclosed no anticompetitive problems associated

⁴¹ PSNM FERC Rate Schedule #27.

⁴² PSNM FERC Rate Schedule #2.



with EPE's application to participate in Palo Verde. At the time, in 1974-75, EPE was a participant in the New Mexico Power Pool, a joint owner of several generating units and a partial requirements supplier to two wholesale customers, Rio Grande Electric Cooperative (Rio Grande) and Community Public Service Company, now called the Texas-New Mexico Power Company (TNMPC). No other electric utility sought to intervene against EPE's application and, thus, the construction permit review of EPE closed coincident with the reviews of the other three original applicants, APS, SRP and PSNM, on May 19, 1975. In a subsequent advice letter of September 13, 1978, relating partly to EPE's participation in the proposed Palo Verde 4 and 5 generating units (this application was later cancelled), the Department of Justice again expressed no antitrust concerns and, again, no utility petitioned to intervene.

2. Offer of Access to Palo Verde 1,2, and 3

At the time of the CP review EPE planned to own about 15.8 percent of Palo Verde. Over the period of time since then, the municipal regulatory authority in the city of El Paso, to which EPE is partially subject, increasingly felt that EPE was or would become "overbuilt" and placed pressure on EPE to reduce its allocation of Palo Verde.⁴³ At about the same time, plans were being developed for the establishment of a direct current tie to Southwestern Public Service Company (SWPS), through which EPE now expects to purchase coal-fired energy (not capacity) from

⁴³ Interview with EPE personnel, December 14, 1981 (hereafter referred to as EPE interview).



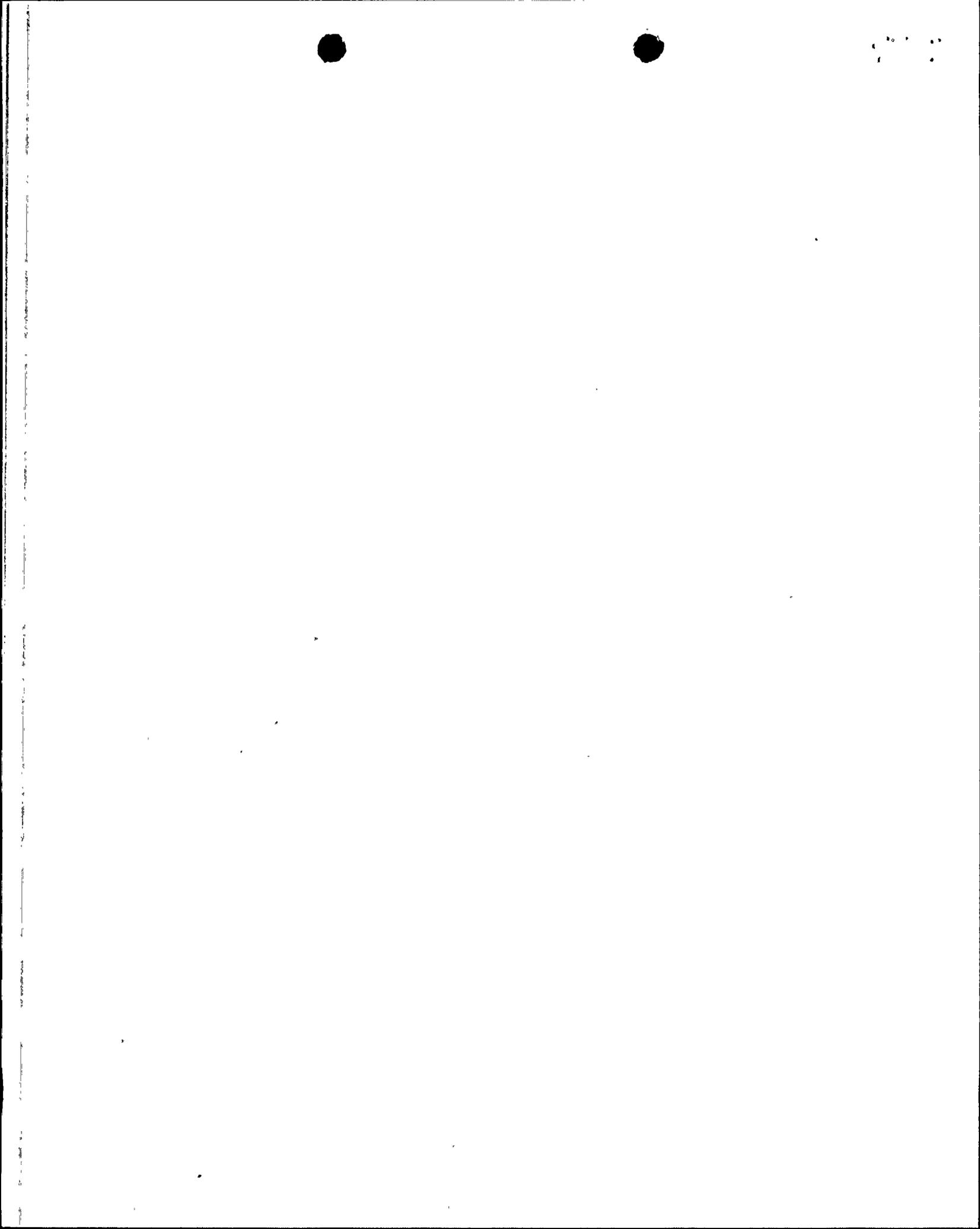
SWPS. Thus, EPE felt it could comply with the request of the El Paso municipal regulatory authority by offering for sale part of its Palo Verde participation share. EPE solicited 21 utilities in seven states and eventually concluded a sale of 3.95 percent of Palo Verde to the M-S-R Public Power Agency (M-S-R) in California.⁴⁴ As indicated previously, however, voter decisions in 1982 forced M-S-R to cancel its participation in Palo Verde and EPE reacquired the 3.95 ownership interest.

Staff's review has provided no indication that EPE acted unreasonably in seeking to divest itself of part of its Palo Verde ownership to M-S-R. Although EPE contacted most of the major investor-owned utilities in seven states about the Palo Verde access, it also solicited the interest of TNMPC, one of its wholesale customers, the two major generation and transmission cooperatives in Arizona and New Mexico, AEPCO and PGT, and a large municipal utility in New Mexico, the city of Farmington. Thus, staff does not view the offers of interest in Palo Verde to M-S-R and other southwestern utilities as a "significant change" in the activities of EPE.

3. Changes in Coordination and Wholesale Power Arrangements

In addition to its entrance into the Inland Power Pool since the completion of its CP review in 1975, EPE has entered into interchange agreements with Arizona Electric Power Cooperative (AEPCO) and TNMPC. The AEPCO interchange agreement executed in October, 1981 promotes the

⁴⁴ EPE interview.



exchange of capacity and energy between AEPCO and EPE at the Four Corners point of interconnection between Tucson Electric Power Company and EPE and contains service schedules for emergency assistance and economy energy.⁴⁵ With TNMPC, EPE executed in December, 1981, an interchange agreement involving four different services: emergency, economy energy, wheeling and maintenance.⁴⁶

At the wholesale level, EPE has been engaging in short-term power transactions with PGT under the terms of the New Mexico Power Pool agreement and in 1978 PGT had sought interest from EPE in supplying PGT load requirements in New Mexico.⁴⁷ Although a number of proposals were exchanged, no firm agreement was reached and the two utilities have continued to deal with each other through the New Mexico Power Pool.

EPE has complied with requests from its two main wholesale customers, Rio Grande and TNMPC, for additional service. In 1976 Rio Grande asked EPE to increase the capability of a part of its transmission system from 24 kV to 69 kV to serve additional load in Rio Grande's service area.⁴⁸ EPE provided the new service in 1977. Also in 1976, EPE and TNMPC reached agreement on the supply of power to meet TNMPC's Alamogordo requirements.⁴⁹ Later, in 1981, EPE agreed to supply the full requirements for TNMPC's Silver City, New Mexico load, except for

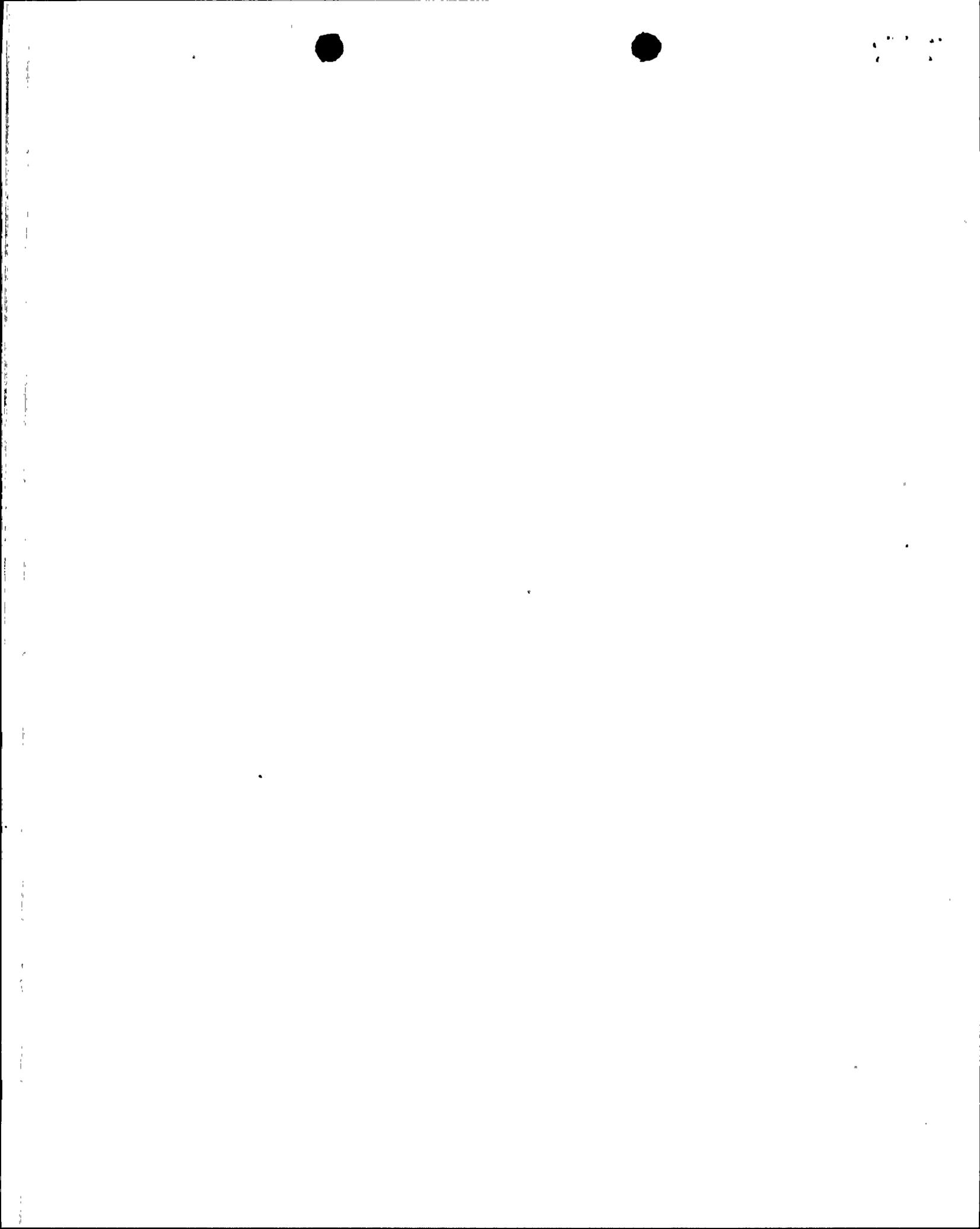
45 EPE FERC Rate Schedule #33

46 EPE FERC Rate Schedule #36.

47 EPE response to information requested in Regulatory Guide 9.3.

48 Ibid.

49 EPE FERC Rate Schedule #17.



peaking power available from TNMPC's generation capacity in Lordsburg and for firm power purchased by TNMPC from Southwestern Public Service and wheeled to Silver City by EPE.

Staff's review of the coordination and wholesale power arrangements executed by EPE since the completion of the CP review suggests that no changes in EPE's activities have occurred which would represent a "significant change." In fact, the bulk power relationships entered into by EPE since 1975 indicate a continued willingness to deal with adjacent, and, sometimes, non-contiguous utility systems in a non-restrictive manner as apparently existed at the time of the CP review.

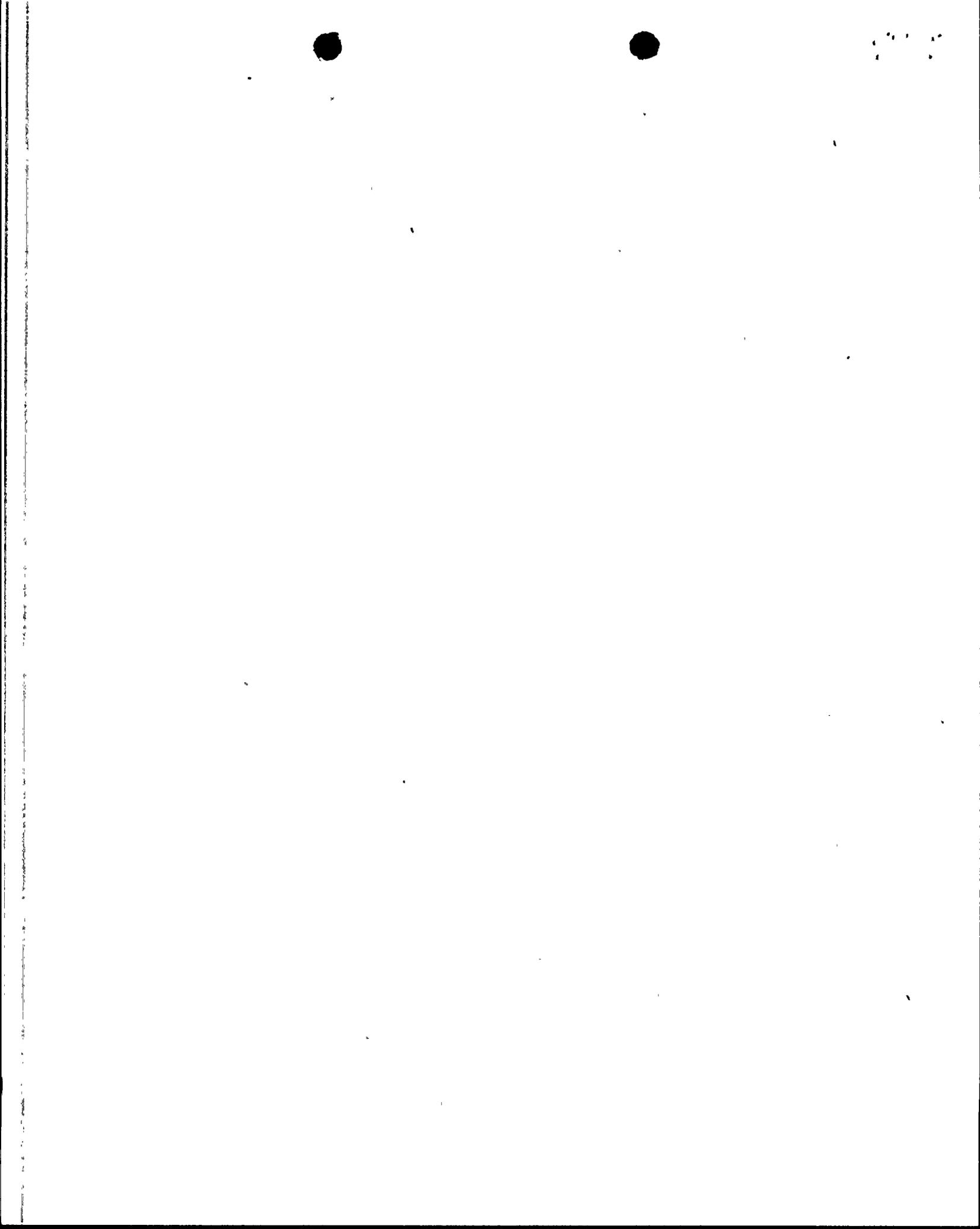
G. Southern California Edison Company (SCE)

1. Construction Permit Antitrust Review

Effective as of August 28, 1975, Southern California Edison Company (SCE) purchased Tucson Gas and Electric Company's 15.4 percent share of the Palo Verde project. The Attorney General rendered antitrust advice on April 6, 1976 stating:

"Given the present applicability of the procompetitive San Onofre license conditions and the absence of any information to the contrary of which we have become aware in the course of this antitrust review, the Department believes no antitrust hearing will be necessary as a result of the addition of Southern California Edison Company as a 15.4 percent owner in the proposed Palo Verde Nuclear Generating Station."

The Attorney General's advice was published in the Federal Register on April 12, 1976. No petitions to intervene were received by the May 12,



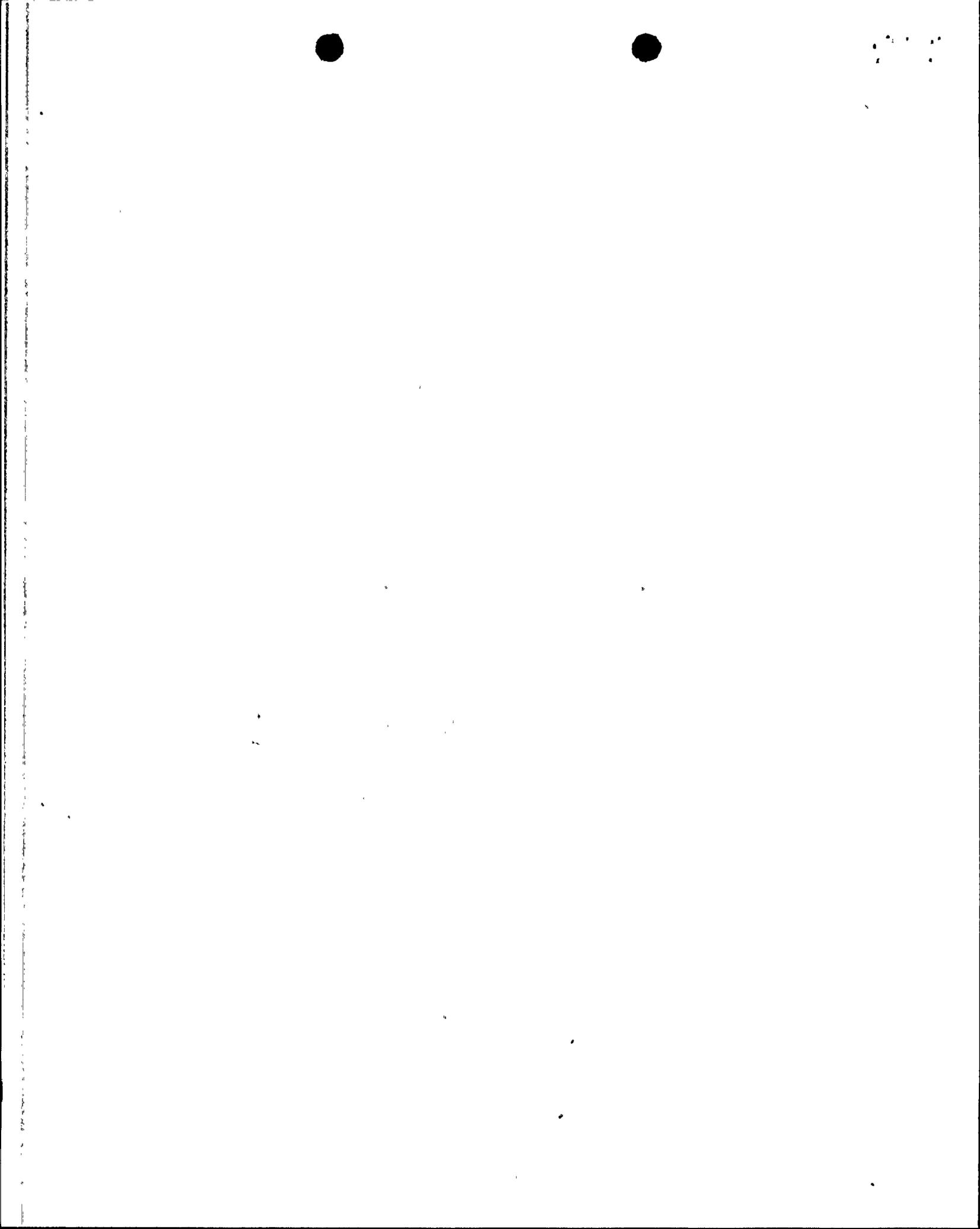
1976 deadline, thus ending the construction permit antitrust review for SCE as of that date.

2. Changes Since the Construction Permit Review

By transmittal letter dated October 1, 1979, Arizona Public Service Company as lead applicant transmitted, in connection with its operating license application, antitrust information for SCE responsive to Regulatory Guide 9.3 regarding changes in SCE's activities subsequent to the CP antitrust review. During the time period from October 1, 1979 to April 30, 1981, SCE was simultaneously undergoing a review for significant changes in connection with its San Onofre 2 and 3 operating license application. Based on that review, the NRC staff was principally concerned that SCE's activities pertaining to transmission services were to a limited degree foreclosing SCE's wholesale customers from bulk power supply alternatives.⁵⁰ Nevertheless, no significant change finding was recommended primarily because Riverside and Anaheim, the entities that were being principally affected by SCE's transmission policies, stated that the issues were being fully aired and litigated before other agencies, including the Federal Energy Regulatory Commission and the District Court.

The Regulatory Guide 9.3 information of SCE changes since the Palo Verde CP antitrust review are similar to those reviewed with respect to the San Onofre 2 and 3 OL application. The major changes of competitive significance are those pertaining to participation in

⁵⁰ Federal Register/Vol. 46, No. 83/ Thursday April 30, 1981, 24339.



new generating units or involving coordination or transmission service. These items are discussed separately below:

a. Participation in Generating Units

SCE and Portland General Electric Company (PGE) entered into a power exchange agreement in October of 1978. During the period from October 15, 1978, through January 15, 1979, SCE made available to PGE up to 225 MW of firm capacity and associated energy. During the period from June 1, 1981, through September 30, 1981, PGE made available to SCE up to 225 MW of firm capacity and associated energy. This arrangement permitted staggered construction of generation for the two parties and was of mutual benefit. There were no negative antitrust implications from this arrangement.

Anaheim and Riverside inquired of SCE regarding participation in Nevada Power Company's proposed Allen and Warner power plants consisting of 4 - 500 MW and 2 - 250 MW units respectively. SCE suggested they contact Nevada Power Company directly. With respect to transmission from the project, SCE advised Anaheim that if Anaheim was offered an opportunity to participate in the project, Anaheim would be involved in discussions regarding the transmission arrangements for delivery of the power.

Subsequent to the initial plans for the Allen and Warner Plants, the Warner project has been cancelled and two of the main participants, SCE and Pacific Gas and Electric Company, (PG&E), have decided not participate in the Allen project. As a result, the project is under reconsideration.



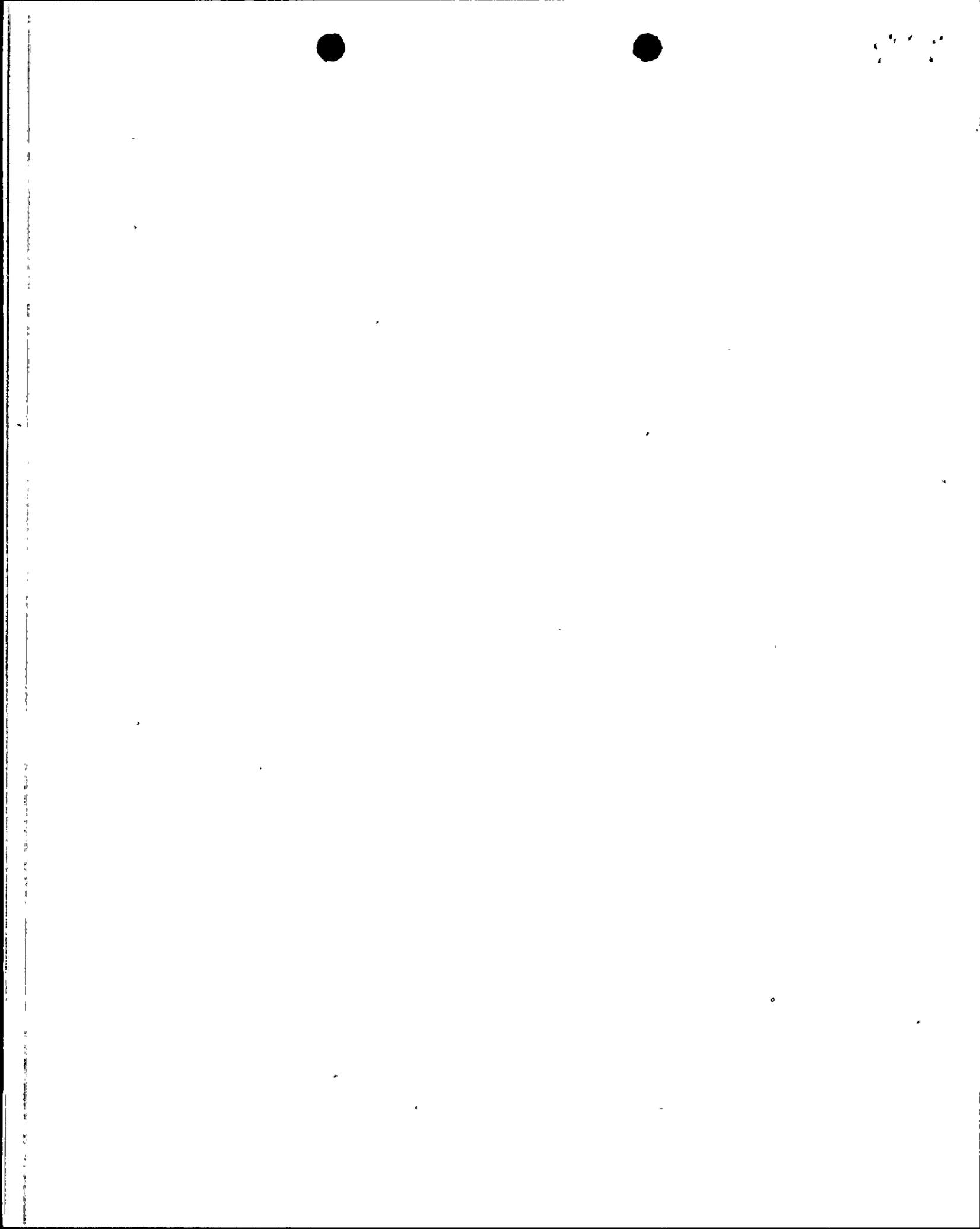
Prior to the pull out of SCE and PG&E, the following other California utilities were considering participation in the project:

Turlock Irrigation District
Southern California Public Power Agency
Northern California Power Agency
Modesto Irrigation District, and
Sacramento Municipal Utility District

Two 500 kV transmission lines from Nevada to Southern California were planned to deliver the power to that area.

SCE has initiated the California Coal Project consisting of 3 - 500 MW coal-fired generating units. Fifty percent of the project was offered to numerous entities in the Southwest. Requests for participation initially exceeded the 750 MW that was available and the requesting parties were requested to negotiate a proper division among themselves. The application for certification before the California Energy Commission has been deferred and will be reconsidered in the Spring of 1983. At the time of deferral, Colton, Glendale, Pasadena, Burbank, and Riverside were to be participants in the project. If a decision is made to proceed with the project in whole or in part, solicitation of offers to participate will be reopened.

SCE initiated a Combined Cycle Project consisting of 3 - 430 MW units and a 140 MW hydroelectric project. SCE, in response to



inquiries, has declined to offer participation in these projects. Such a refusal in offering participation in generating projects in which SCE is the sole owner is not inconsistent with previous license commitments and understandings between SCE and the Department of Justice and therefore do not represent a significant change.

b. Coordination

SCE has entered into "Integrated Operation Agreements" with Riverside and Anaheim which have been accepted by the Federal Energy Regulatory Commission. SCE has offered similar agreements to Azusa, Banning and Colton. The agreement provides for full integration of SCE's generation resources with the other party, including dispatching of other's generation in conjunction with SCE's generation, transmission service, partial requirements firm power service, non-firm energy and other types of capacity and energy exchanges.

c. Transmission Service

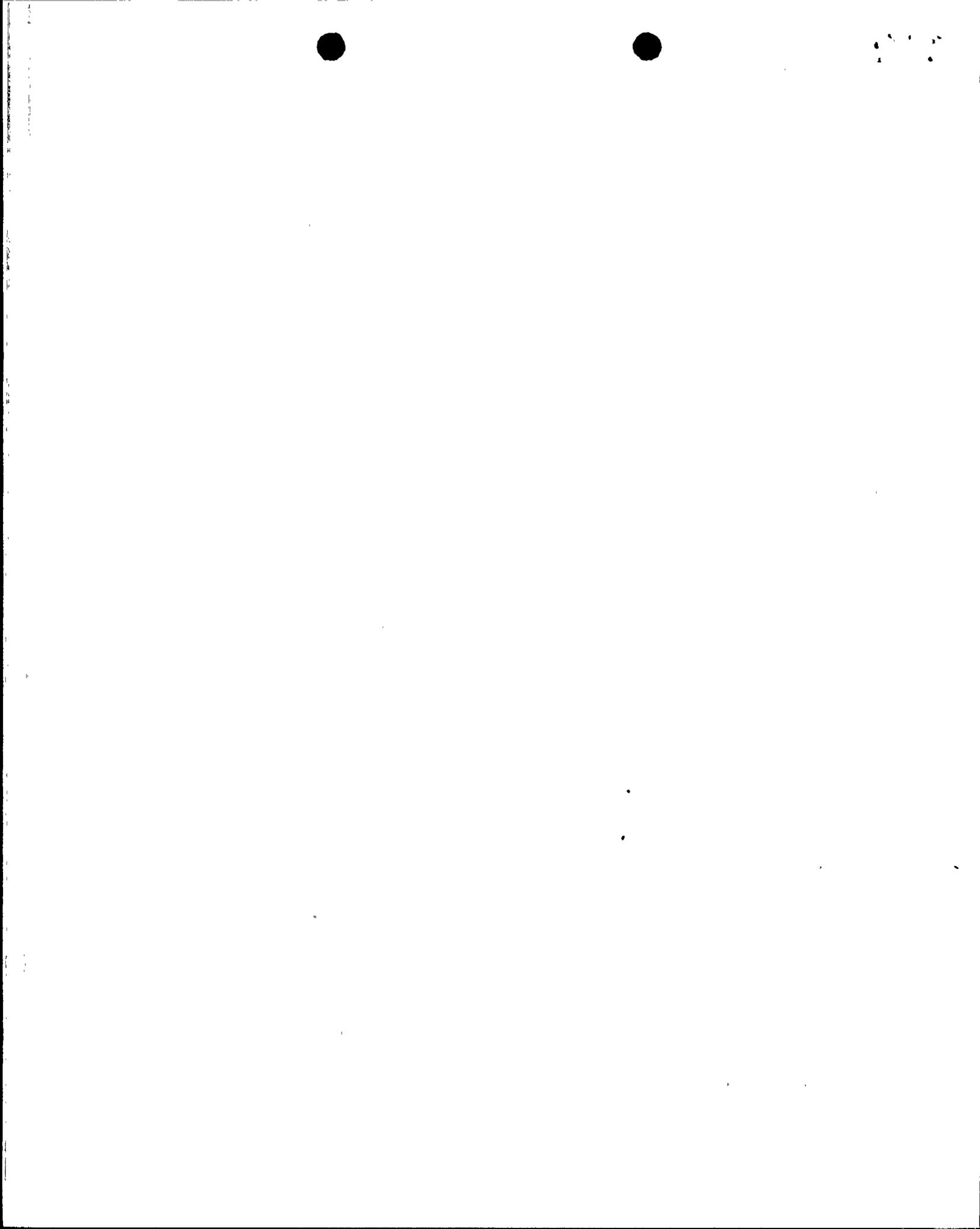
Anaheim and Riverside requested SCE to provide firm transmission service capacity of 90 MW and 60 MW, respectively, from Arizona Public Service Company's proposed Cholla Power Plant. SCE responded that it could provide non-firm service until 1985 and firm service thereafter. In addition, SCE was studying the capability of the transmission system prior to 1985. The matter became moot

subsequently when the Cholla units were no longer available for purchase. Similar requests by Anaheim, Riverside and Pacific Gas and Electric for firm transmission service from Four Corners for delivery of power from New Mexico's San Juan proposed generating station became moot when New Mexico accepted San Diego Gas and Electric's proposal for purchasing power.

In response to a request by Salt River Project (SRP) to provide service between SCE and the California - Oregon Border to facilitate a seasonal diversity capacity exchange between SRP and Pudget Sound, SCE declined to provide firm transmission service on the basis that it needed its entire entitlement in the transmission facilities at times.

San Diego Gas and Electric inquired as to the availability of short term firm transmission service by SCE from Palo Verde from 1979 through 1981. SCE responded that while it was willing to provide non-firm transmission, it did not have excess capacity on a firm basis beyond its own needs.

SCE offered for sale up to 300 MW of firm transmission capacity in its 525 kV Palo Verde - Devers transmission lines for the period 1982 to 1986 to numerous entities throughout the southwest. Expressions of interest in the available capacity exceeded 300 MW. The interested parties thereafter negotiated a division of the full 300 MW of capacity.



SCE's policies with respect to providing firm transmission service outside of its service territory has consistently been that it will only provide such service for those periods of time that it has excess capacity. In essence, this means it will not plan and install any transmission facilities to meet the needs of others. Although this can exert a hardship on smaller electric utilities that cannot on their own economically install economy of scale transmission, this policy is not inconsistent with the original license commitments that SCE worked out with the Department of Justice in connection with San Onofre, and which the Department has affirmed in subsequent antitrust advice letters including Palo Verde.

H. Los Angeles Department of Water and Power (LADWP) and Southern California Public Power Authority (SCPPA)

Arizona Public Service Company announced by letter dated October 1, 1979 that Salt River Project (SRP) had reached an agreement with LADWP on August 18, 1977 to transfer a 5.7% ownership interest in Palo Verde to LADWP. This announcement was followed by an application dated July 31, 1981, for amendment to the Palo Verde construction permits to reflect this transfer. The amendment application also requested a transfer of a 5.91% ownership interest from SRP to the Southern California Public Power Authority (SCPPA). The 5.91% ownership in Palo Verde was to be divided among members of SCPPA as follows:

Los Angeles Department of Water & Power	62%
City of Burbank	4%

69 25
20 20

City of Glendale	4%
City of Pasadena	4%
City of Riverside	5%
City of Anaheim	7.5%
City of Colton	1%
City of Azusa	1%
City of Banning	1%
City of Vernon	4.5%
Imperial Irrigation District	6%

Included with the amendment application was antitrust information responsive to Appendix L of 10 CFR Part 50.33a for both LADWP and SCPPA. In response to a request from the NRC, the Attorney General rendered antitrust advice for LADWP and SCPPA by letter dated February 11, 1982. In that letter the Attorney General stated that LADWP had previously been reviewed with respect to its proposed participation in the San Joaquin Nuclear Project, the Sundesert Nuclear Plant and most recently in Palo Verde Units 4 and 5. Similarly, some of the members of SCPPA were reviewed with respect to the above nuclear plants and also San Onofre Units 2 and 3. In each instance, the Attorney General had found no reason to recommend a hearing. The advice letter concluded with the following statement:

"Our review of the information submitted in connection with the current application, as well as other relevant information, has disclosed no evidence that would warrant a change of our earlier advice with respect to LADWP, or the members of SCPPA that were the subject of prior antitrust review. We are not

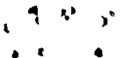
100

aware of any evidence that the other members of SCPPA have engaged in any conduct that might warrant further antitrust scrutiny. Accordingly, it is the Department's view that no antitrust hearing is necessary with respect to the proposed transfer of ownership."

The advice letter was published in the Federal Register on March 10, 1982. No petitions for a hearing were received during the 30-day period for intervention requests, thus effectively ending the CP antitrust review. Staff has not received any indications that there have been any changes in the activities of LADWP or SCPPA since that time that would lead toward a significant change determination.

I. Conclusion

The staff has applied the Commission's "significant change" criteria in examining the antitrust implications of the activities and proposed activities of all of the applicants for the Palo Verde 1 and 2 operating licenses subsequent to the Commission's previous construction permit antitrust reviews. Arizona Public Service Company (APS) and Salt River Project Agricultural and Improvement District (SRP), two of the four remaining original applicants for the Palo Verde construction permit, had agreed to the inclusion of a wheeling license condition in the construction permit so as to mitigate potential anticompetitive problems arising from contracts with smaller utilities. In the period since the construction permit review, both APS and SRP have provided, in staff's view, wheeling services consistent with the intent of the license condition. Further, APS and SRP have continued to provide other types of bulk power



services to smaller utilities not dissimilar to those offered prior to the completion of the construction permit review. Public Service Company of New Mexico (PSNM) and El Paso Electric Company (EPE), the other two remaining original Palo Verde applicants, were not subjected to any license conditions at the construction permit stage. Nonetheless, PSNM and EPE have continued to offer and provide to smaller utilities wholesale power service, wheeling service and various other coordination services on a scale comparable to, and perhaps even larger than, that undertaken prior to the construction permit review.

Subsequent to the filing of the original CP application, Southern California Edison Company (SCE), Los Angeles Department of Water and Power (LADWP) and Southern California Public Power Authority (SCPPA) became participants and the M-S-R Public Power Agency became a tentative participant in Palo Verde. The construction permit review of SCE, completed in 1976, did not reveal a need to impose license conditions on SCE's participation in Palo Verde. Still later, in 1981, an examination by staff of SCE's activities since the issuance of the San Onofre 2 and 3 construction permits resulted in a staff finding that no "significant changes" in SCE's activities had occurred with respect to the San Onofre 2 and 3 operating license application. In the brief time period since the issuance of the San Onofre 2 and 3 operating license finding, the staff has not obtained any information that would suggest a contrary

finding of "significant change" with respect to the Palo Verde 1 and 2 operating license. LADWP and SCPPA became owners of Palo Verde in 1981. The construction permit review of LADWP and SCPPA which terminated on April 8, 1982, disclosed no antitrust problems and M-S-R recently withdrew its participation as a result of voter decisions. In the extremely brief period of time since the completion of the construction permit reviews of LADWP and SCPPA the staff has not become aware of any actual or potential antitrust problems.

Based on the foregoing analysis, the staff has concluded that the changes in the applicants' activities since the completion of the Palo Verde construction permit antitrust reviews do not have any antitrust implications and, thus, do not require a further, formal antitrust review at the operating license stage with respect to Palo Verde 1 and 2.

1520-01
10.10