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# REPORT TO THE CONGRESS

## Assurances Needed That Cost Of The Celilo-Mead<sup>47</sup> Transmission Line Project<sup>43</sup> Will Be Recovered<sup>43</sup> B-164064

Department of the Interior<sup>6</sup>

BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

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AUG 5, 1970



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON D C 20548

B-164064

To the President of the Senate and the  
Speaker of the House of Representatives

This is our report on the assurances needed that the cost of the Celilo-Mead transmission line project will be recovered by the Department of the Interior

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67)

Copies of this report are being sent to the Director, Bureau of the Budget, the Secretary of the Interior, and the Chairman of the Federal Power Commission

A handwritten signature in cursive script that reads "James B. Stewart".

Comptroller General  
of the United States

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D I G E S T

WHY THE REVIEW WAS MADE

In 1964 the Congress approved construction of the Celilo-Mead project, a part of the Pacific Northwest-Southwest Intertie program, to connect the electrical systems of nine western States. The Celilo-Mead project, estimated to cost \$185 million, will consist of a 750-kilovolt, direct-current 840-mile transmission line between a point near The Dalles Dam, Oregon (Celilo), and a point near the Hoover Dam, on the Arizona-Nevada boundary (Mead), and related facilities.

The Secretary of the Interior reported to the Congress that the project would be financially feasible and self-liquidating over 50 years.

Because of subsequent indications that power from the project would not be used by customers (utilities) in the amount necessary to make the project self-liquidating as anticipated by the Department of the Interior, the General Accounting Office (GAO) reviewed the project from its inception through fiscal year 1969.

FINDINGS AND CONCLUSIONS

Background

- 1964 June --The Secretary of the Interior recommended to the Appropriations Committees of the Congress that the Celilo-Mead project be built as a part of the Intertie program. His report indicated that completion of this project by 1971 was necessary to assist public and private utilities to meet increasing demands for power (See p 8 )
- August --The Senate Appropriations Committee directed the Interior Secretary to review the potential use of the project and determine whether it would be financially feasible and self-liquidating (See p 10 )
- August --The Congress approved construction of the project (See p. 8.)
- October --The Secretary reported to the Appropriations Committees that he found the project would be financially feasible and self-liquidating within 50 years. (See p 10 )

1965

--Work started on the Celilo-Mead project (See p 9.)

Postponements

--The proposed 1971 completion date was postponed to 1972 because of relatively small need for power from the project in the Southwest during that period. (See p. 9.)

--The proposed 1972 completion date was postponed to 1973 because of high costs and a question of availability of sufficient funds. (See p 9.)

--The proposed 1973 completion date was postponed to 1974 (in late 1968) because sufficient funds had not been provided in the budget (See p. 9.)

--The proposed 1974 completion date was postponed by the Department for several years. The Department said that it planned to reexamine certain aspects of the project before deciding whether to complete construction. (See p. 9.)

Developments

1966

--The Department of Interior had information that the demand for power from the Celilo-Mead project might not develop as rapidly as forecast (See p 11 )

1967

--Late this year and early in 1968, GAO obtained estimates of power needs and resources to meet these needs from potential customers in areas to be served by the project. This information indicated that most customers planned to meet their needs from generating facilities being built or planned. (See p 10.)

1968 May

--GAO advised the Secretary of the Interior of the series of factors which might deter customers from using power from the project as rapidly as anticipated. GAO told the Secretary that this information posed the question of whether the project should be completed as planned. (See p. 12.)

1969 January

--The Department replied to GAO that the project would be fully used on a timely basis provided that firm and realistic completion schedules could be maintained. A new study made available by the Department reaffirmed that the project would be self-liquidating over a 50-year period. (See p. 13 )

March

--GAO examined the new study, met with potential users, and concluded that the projected demand for power was overstated significantly (See p 14 )

May --The Department postponed the fourth completion date indefinitely and said that it would reexamine the need for the project at some future date (See p. 17 )

GAO COMMENTS

Although \$47 million had been spent on the project as of June 30, 1969, the Department's action delayed and possibly avoided spending an additional \$138 million. If the project is never completed, facilities costing \$37 million probably could be used in the Department's normal electric power operations. Some portion of the other facilities costing \$10 million may be of little value even if the project is completed (See p 17 )

RECOMMENDATIONS OR SUGGESTIONS

GAO is recommending that the Secretary of the Interior, in evaluating the need to complete the project, attempt to obtain from the potential users commitments for the use they would make of the project. This would be based upon the project being in service by a specific date.

If commitments cannot be obtained, the Secretary should advise the Congress of the problem so it can reconsider authorization of the project. (See p 23.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

The Department expressed general disagreement with GAO. (See p 29 )

The Department said:

--Lack of appropriated funds caused the postponement of the project and made it impossible to set a firm in-service date. GAO found that, except for a 5-percent cut in fiscal year 1969, the Congress provided funds as requested by the Department. (See p 19 )

--Reconsideration of the authorization of the project is not necessary since construction will depend upon future appropriations. Although there may be no need to reconsider the project's authorization if sufficient commitments are obtained prior to the time appropriations are requested, GAO believes that problems, if encountered in obtaining commitments from the potential users, should be made known to the Congress so that it may reconsider the authorization. (See p 22 )

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report does not contain recommendations to the Congress but provides information which indicates that there is a need for the Department to obtain more complete data in determining the feasibility of the Celilo-Mead project should the Department believe that the project should be completed at some future time.

## CHAPTER 1

### INTRODUCTION

The General Accounting Office has examined into the financial feasibility of a transmission line project of the Pacific Northwest-Southwest Intertie transmission line program. If it is completed, the project will extend from a point near The Dalles Dam, Oregon, to a point near Phoenix, Arizona. The scope of our review is described on page 25.

The purpose of the Pacific Northwest-Southwest Intertie program is to connect the electrical systems of the Pacific Northwest with those of the Pacific Southwest. Construction is being financed by public and private utilities and the Federal Government.

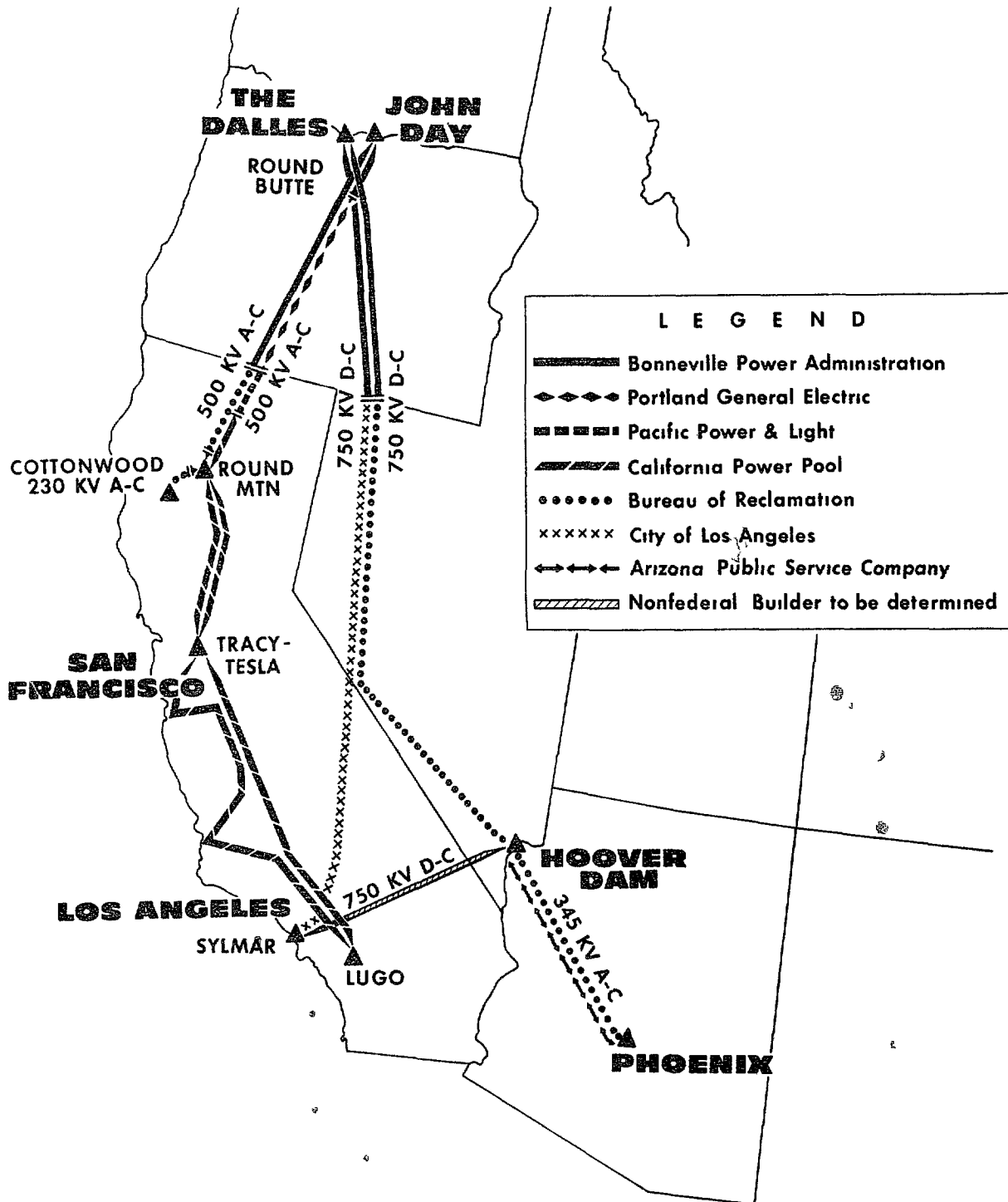
The principal Intertie transmission lines (see map on p. 6) are two 500-kilovolt, alternating-current lines and two 750-kilovolt, direct-current lines. Generally, these lines will permit (1) surplus power in the Northwest to be sold in the Southwest and (2) exchanges of Northwest summertime surplus power for Southwest wintertime surplus power.

The transmission line project, hereinafter referred to as the Celilo-Mead project, consists of (1) an 840-mile-long, 750-kilovolt, direct-current transmission line with a capacity of about 1,300 megawatts between a point near The Dalles Dam, Oregon (Celilo), and a point near Hoover Dam on the Arizona-Nevada boundary (Mead), (2) a converter station (terminal) at each end of the direct-current transmission line, and (3) a 345-kilovolt, alternating-current line between Mead and a point near Phoenix, Arizona.

The Bonneville Power Administration, Department of the Interior, is responsible for the construction of the Oregon portion of the Celilo-Mead project which consists of about 265 miles of direct-current transmission line and the terminal at Celilo. The Bureau of Reclamation (Bureau), Department of the Interior, is responsible for the construction of the remaining portion of the Celilo-Mead project consisting of about 575 miles of direct-current transmission line, the terminal at Mead, and the 345-kilovolt,



# PACIFIC NORTHWEST - SOUTHWEST INTERTIE



Map as contained in Department of the Interior's October 1964 Report on the Feasibility of the Celilo-Mead Project.

alternating-current line from Mead to a point near Phoenix, Arizona. Work on the project was begun in 1965. The estimated cost of the project is about \$185 million of which about \$47.4 million had been spent or obligated at June 30, 1969.

The area to be served by the Celilo-Mead project includes the States of Oregon, Washington, Idaho, Montana, Wyoming, Utah, Nevada, Arizona, and California.

The principal management officials of the Department of the Interior responsible for the activities discussed in this report are listed in appendix II.

## CHAPTER 2

### COMMITMENTS NEEDED FOR USE OF PROJECT

#### POWER TO ENSURE RECOVERY OF PROJECT COSTS

In the feasibility report submitted to the Congress for the Celilo-Mead project, the Department estimated that the project would be self-liquidating within 50 years.

Our review showed that information was available to the Department as early as 1966 which indicated that the demand for power from the project might not materialize as forecast by the Department in its feasibility report and that the project might not be self-liquidating within 50 years. We believe that the Department did not act on a timely basis to postpone construction of the project when this information became available to it. Construction of the project was postponed by the Department in May 1969.

The following sections of the report set forth in detail our findings, conclusions, and recommendations.

#### AUTHORIZATION, ESTIMATED COST, AND STATUS OF THE CELILO-MEAD PROJECT

In June 1964 the Secretary of the Interior, in a report to the Appropriations Committees of the Congress, recommended that the Celilo-Mead project be built as a part of the Intertie program between the electrical systems of the Pacific Northwest and those of the Pacific Southwest. The report and the Secretary's testimony before the Subcommittee on Public Works of the Senate Committee on Appropriations indicated that construction of this project by 1971 was necessary to assist the public and private utilities as well as Federal power marketing agencies in meeting estimated increased consumer demands in the Arizona-Nevada area and the Pacific Northwest and thus enable them to defer construction of additional generating plants. On August 31, 1964, the Congress approved construction of the Celilo-Mead project (78 Stat. 756) which in April 1969 was estimated to cost about \$185 million.

Work on the project was started in 1965. Officials of the Bonneville Power Administration and the Bureau advised us that, as of June 30, 1969, about \$10.4 million had been spent or obligated for construction of the direct-current line and terminal facilities and that about \$37 million had been spent or obligated for closely associated alternating-current facilities.

Since construction started, the project's scheduled completion date has been postponed four times. The completion date was first postponed from January 1971 to January 1972 because the Department recognized that there would be a relatively small need in the Southwest for power from the project during that period. Department officials advised us that the completion date was later postponed to January 1973 because it was decided that, in view of priority commitments of the Government, (1) the project was too costly to be continued at the time and (2) the availability of sufficient funds in future years to complete the project was extremely uncertain. It was postponed for the third time in late 1968 to 1974 because of budgetary restraints.

In May 1969 the Department postponed completion of the project for several years and announced that it would reexamine the need for the direct-current line prior to deciding whether to complete the construction.

## QUESTIONABLE NEED FOR DIRECT-CURRENT LINE

In considering the Department's appropriation request for fiscal year 1965, the Senate Appropriations Committee, in its report dated August 5, 1964, on the Public Works Appropriation Bill, directed the Secretary of the Interior to review the potential use to be made of the Celilo-Mead project and to determine whether the project would be financially feasible and self-liquidating. In October 1964 the Secretary submitted a report to the Appropriations Committees of the Congress in which he advised the Committees that he had reviewed the potential use to be made of the power from the Celilo-Mead project and had found it to be financially feasible and self-liquidating within 50 years.

The Secretary's October 1964 report showed an estimated power use of 200 megawatts for the last half of fiscal year 1971 and of 600 megawatts, 900 megawatts, and eventually 1,300 megawatts for fiscal years 1972, 1973, and 1978, respectively; 1,300 megawatts is the capacity of the line. The report also stated that the Government's investment would be repaid in 50 years and that a substantial surplus would be accumulated at the end of its estimated 75-year service life.

In late 1967 and early 1968, we obtained, for the period 1972 through 1975 and for 1980, estimates of power needs and of resources to meet these needs from officials of utilities and governmental organizations in the market areas, including organizations which the Department had assumed, according to the October 1964 report, would use power from the Celilo-Mead project. These officials advised us of their plans for purchasing, selling, or exchanging power which would be transmitted over the Celilo-Mead project. The information obtained indicated to us that potential users of power from the project, for the most part, planned to meet their anticipated power needs from generating facilities which they <sup>themselves</sup> were building or planning to build as their power needs developed.

Of the organizations contacted, only the Bonneville Power Administration, the Bureau, and one Southwestern utility company stated with certainty that they planned to

use power from the Celilo-Mead project. Three other utility companies provided us with estimates of the amount of power they might need and indicated that they would consider using power from the project <sup>only</sup> if it were beneficial to their operations. Most of the other utilities we contacted indicated that they had no plans to use power from the project.

Based on the forecast power needs and resource data furnished us, including the estimates by officials of the three utility companies who indicated that the companies might use power from the project, the tentative maximum use which we believe could reasonably have been assumed for the project following completion of construction (which was estimated to be 1973 at that time) ~~was~~ as follows 1973--150 megawatts, 1974--300 megawatts, 1975--585 megawatts, and 1980--700 megawatts. These figures were significantly less than those estimated in the Department's October 1964 report. (See p. 10.)

In addition to the information obtained from the potential power users, we found other evidence which indicated that the project would not be used as anticipated by the Department. For example, in an August 1966 report, the Federal Power Commission stated that the Bureau's Colorado River Storage project had estimated in February 1965 that it would need 300 megawatts of power from the Celilo-Mead project by 1975 to permit it to sell power to customers in Colorado, Wyoming, and Utah. 7

The Federal Power Commission report stated, however, that it appeared that the Colorado River Storage project would not require any power from the Celilo-Mead project through 1975 because, among other things, certain customers had not materialized. The report stated also that utilities in the southwest had plans to construct generating facilities in Arizona, New Mexico, Nevada, and Utah which were capable of producing 2,500 megawatts of power by 1972 and that some of these facilities could be in competition with the Celilo-Mead project.

The Federal Power Commission report stated further that the use of power from the Celilo-Mead project might

not materialize as anticipated by the Department because, under principles of operation of the Intertie system, each user would be required to have a reserve of generating capacity, or power sales that could be immediately interrupted, at least equivalent to the amount of power being taken from the project. This requirement would be troublesome to meet for certain users because of the limited amounts of reserve generating capacity in Arizona and Nevada.

In summary, the Federal Power Commission concluded that the indicated use of power from the project might not reach 50 percent of its design capacity by 1975 and estimated that peak use would be 100 megawatts, 150 megawatts, 300 megawatts, 450 megawatts, and 600 megawatts in 1972, 1973, 1974, 1975, and 1976, respectively. The Department's October 1964 feasibility report showed an estimated use of 600 megawatts, 900 megawatts, 1,000 megawatts, 1,100 megawatts, and 1,200 megawatts for these same years. Therefore, the Federal Power Commission's estimate of peak use of power ranged from 17 to 50 percent of the use estimated by the Department.

Furthermore, in mid-1966, the Bureau's Chief Engineer and the Acting Regional Director of Region 3 each reported to the Commissioner of Reclamation the results of their repayment analyses of the Bureau's portion of the Celilo-Mead project. Both analyses, which were based on revised data on the use to be made of power from the project, indicated that repayment of project costs would take about 70 years, or 20 years longer than the 50-year period stated in the feasibility report submitted to the Congress in October 1964.

In a letter dated May 8, 1968, we advised the Secretary of the Interior that the following factors might act as deterrents to using power from the project as rapidly as anticipated:

1. Power might be available from the large thermal plants which the utilities in the Southwest were planning to construct at costs that might be less than the costs that the companies assumed would be charged for power from the project.

2. The requirement for potential users to maintain reserves equal to the amount of power obtained from the project might require the users to construct additional generating facilities, thus lessening the desirability of obtaining power from the project.
3. Potential customers were uncertain as to the cost of obtaining power from the project and the date that the project would be placed in service.

We advised the Secretary that, in our opinion, the reduction in the anticipated use of power from the Celilo-Mead project posed a reasonable question as to whether construction of the project should be completed as planned. We requested the Secretary's views concerning (1) the need to reevaluate the desirability of constructing the project, (2) the consideration that would be given to the apparent reduced demand for use of power from the project, and (3) the practicability of establishing a firm in-service date and user rates to facilitate the negotiation of marketing contracts for the project and ensure sufficient revenues to repay the Federal investment.

In response to our letter of May 8, 1968, the Assistant Secretary of the Interior, Water and Power Development, advised us by letter dated January 17, 1969, that a new study of the project's feasibility had been made and provided us with a resume of the study's findings and conclusions.

The Assistant Secretary stated that the Department was confident that, with a reasonably early construction start, the Celilo-Mead 750-kilovolt, direct-current transmission line would be fully used on a timely basis and that the use would be in accordance with its originally planned purpose. The new study indicated that the project would be self-liquidating over a 50-year period. He said, however, that the Department was most concerned with its ability to establish a firm in-service date for the project and that the establishment of a date would be dependent on having sufficient construction funds available which the Department had been unable to secure. He explained that, lacking



a firm and realistic in-service date for the project, the potential users would undoubtedly evaluate alternate sources in their overall planning for future power needs; and, at some point in time, they would be required to make commitments to use those alternatives if the Department was unable to establish a firm in-service date.

The Assistant Secretary also provided a schedule which showed the estimated use of power from the project by the potential users for the period that would extend from the winter of 1972-73 through the winter of 1979-80. This schedule showed that California utilities and three utilities in Arizona and Nevada would use a significant quantity of power from the project. For example, the total estimated use of power for this period totaled 7,300 megawatts of which (1) the California utilities would use 1,250 megawatts, or 17 percent, and (2) the three utilities in Arizona and Nevada would use 3,550 megawatts, or 49 percent.

Based on information obtained during our field review in 1967 and 1968 from the Bureau, the Bonneville Power Administration, and the utilities in the Southwest, the Department's projected use of project power appeared significantly overstated. For example, we contacted the three utilities in Arizona and Nevada during our field review (see p. 10) and, although one of the three stated that it had definite plans to use power from the project, the other two indicated that they might use power from the project if it were beneficial to their operations. We also contacted, at the time, the California utilities who advised us that they had no plans for using power from the project. Officials of the Bureau and the Bonneville Power Administration subsequently advised us that the power use forecast for the California utilities was based on the Bureau's and the Bonneville Power Administration's best judgment and was not supported by any documentary evidence.

To determine whether the three Arizona and Nevada utilities had changed their plans after we had contacted them previously, we arranged to meet with their representatives and with officials of the Department of the Interior. At that meeting on March 14, 1969, the utilities' representatives stated that they were not interested in using power from the Celilo-Mead project to meet their additional

future power requirements until at least 1977. They stated that the Department's estimates of power they would take from the project, ranging from 100 megawatts in the winter of 1973-74 to 900 megawatts in the summer of 1979, represented the estimated increased power requirements for which they would have to acquire power--not necessarily the amount of power that they would take from the project.

During the meeting, an official of one of the utilities stated that use of power from the Celilo-Mead project had been under consideration, together with other possible sources, as a means of meeting future power requirements. He stated, however, that, when the Bureau and the Bonneville Power Administration budgets for fiscal year 1970 did not include requests for construction funds for the project, the utilities concentrated on other possible sources for meeting their future power requirements and deferred consideration of the Celilo-Mead project as a source of power to meet requirements.

The official stated that his utility company must have guaranteed sources to meet its power requirements beginning in 1974 and that, because of the uncertainty of obtaining power from the Celilo-Mead project, his company had committed itself to obtaining power from other sources. He stated also that his company--in conjunction with other utility companies, including the two represented at the meeting--was working on the details of an agreement to build as many as six 800-megawatt plants at two locations--Navajo, near Page, Arizona, and Four Corners, near Farmington, New Mexico--and to share in the output of these plants.

The representatives of the utilities advised us and officials of the Department that the three utilities were definitely not interested in the Celilo-Mead project as a source of power until after 1977 at the earliest; and, because they were locked in on the Navajo-Four Corners plants as a source of power to meet their projected needs through 1977, the utilities would not change their decision even if the Government could put the project into operation by January 1973.

The representatives of the three companies stated explicitly that, if the Celilo-Mead project were built

sometime in the future, its use would be dependent upon, among other things, the price to be charged, a guaranteed in-service date, reserve requirements, and other factors which might have a significant bearing on their systems and systems of their interconnected pool members. The representative of one utility stated that the utility, as well as other Southwestern utilities, had questioned whether the Celilo-Mead project would be a dependable source of power because its great length would expose it to many risks which could cause power failures and, if such failures occurred, their reserves might not be adequate to meet their power needs.

## CONSTRUCTION OF PROJECT POSTPONED

As a result of the information received at the March 14, 1969, meeting, which was attended by Bureau and Bonneville Power Administration officials, the Department postponed completion of the project.

The Assistant Secretary of the Interior for Water and Power Development announced in May 1969 that (1) the request to the Congress for funds to complete the construction of the Celilo-Mead project was being postponed because some of the potential users had indicated that they could not use the facilities until 1977 and (2) the contract for construction of the Mead converter facilities was being terminated for the convenience of the Government. He indicated that the Department would reexamine the need for completing the construction of the Mead converter facilities as well as the 750-kilovolt, direct-current line from The Dalles Dam to Hoover Dam prior to the time a decision must be made (by about 1974) to complete the facilities to place them in service by 1977.

Department officials estimated the cost of the Celilo-Mead project at \$185 million, of which about \$47.4 million had been spent or obligated through fiscal year 1969. This amount includes the cost of the 345-kilovolt, alternating-current line from Mead to a point near Phoenix, Arizona.

Although the Southwestern utilities indicated that they were not interested in using power from the Celilo-Mead project until after 1977, Bureau officials advised us that certain utilities were interested in using the 345-kilovolt line between Mead and Phoenix in their current operations. For example, Bureau officials informed us that the Bureau had already contracted with one utility to use 160 megawatts of capacity of the alternating-current transmission line between Mead and Phoenix and was negotiating a similar contract with another utility to use 40 megawatts of capacity.

Bureau officials further advised us that, if a decision were made not to complete construction of the Celilo-Mead project, facilities that had been constructed at a cost of about \$37 million at June 30, 1969, probably could be utilized in the Bureau's normal operations. Most of the

estimated costs of \$37 million were for the construction of the alternating-current transmission line between Mead and Phoenix. The remaining costs of \$10.4 million were for the construction of the direct-current line and converter facilities. In the event that the Celilo-Mead project is not completed, the Department probably will not be able to make any use of these facilities in its other operations. )

Moreover, even if the project is completed, some of the direct-current line and converter facilities may be of little value to the Department. For example, about \$3.8 million represents (1) progress payments for work partially completed in constructing the converter at Mead when the contract was terminated in May 1969 and (2) a contract option that was extended for 2 years giving the Government the right to purchase a second converter for Celilo. According to Bureau officials, the contractor had not developed any equipment to the stage which would justify the additional expenditures necessary to fully develop the equipment and deliver it to the Government.

COMMENTS OF THE DEPARTMENT OF THE INTERIOR  
AND POTENTIAL USERS AND OUR EVALUATION

A draft of this report was submitted for comment to the Department of the Interior and to the three utilities in Arizona and Nevada.

In our draft report, we proposed that, prior to further action to complete the project, the Secretary of the Interior

- establish a firm in-service date for using the project,
- secure [long-term] commitments for power from interested non-Federal utilities that will ensure the feasibility of the project,
- advise the Congress of the annual level of funding that ~~would~~<sup>will</sup> be necessary to have the project in-service by the date specified, and
- if [long-term] commitments for power can not be secured, advise the Congress of the problems involved so that it may reconsider its authorization of the project.

In a letter dated January 23, 1970 (see app. I), the Deputy Director of Survey and Review, in commenting for the Department, stated that our report (1) was based primarily on information gathered after the completion of the Celilo-Mead project had been postponed for the third time, to 1974 or beyond, and (2) did not state that the lack of appropriated funds caused the postponements, which made it impossible for the Department to set and maintain a firm in-service date.

We disagree with the statement that the information presented in our report was based primarily on information gathered after it had become evident in late 1968 that completion of the project would be postponed to 1974. As stated on pages 10 and 11 of this report, we obtained load and resource data from the potential users in 1967 and 1968 and, on the basis of that data, we advised the Secretary of the Interior in May 1968 that, in view of the

reduction in the anticipated use of power from the project, a reasonable question existed as to whether construction of the project should be completed as planned.

With regard to the Deputy Director's comment that the lack of appropriated funds caused the Department to postpone completing the project, our review showed that, except for a 5-percent cut in fiscal year 1969, the Congress had provided appropriations for the project in the amounts requested by the Department. We noted that, during the Senate Public Works Appropriation hearings for fiscal year 1970, the Commissioner of the Bureau of Reclamation stated that sufficient money to meet the Department's completion schedule for the project had not been included in the budget requests.

? The Deputy Director also advised us that the Department had taken appropriate action to accomplish essentially the objectives of our report since construction of the project had been stopped and that it planned to reexamine the project's feasibility.

Regarding our proposal to establish a firm in-service date and to advise the Congress of the annual level of funding which would be needed to meet that date, the Deputy Director stated:

"This is a process which is followed for all projects. Staff members of the Congressional Appropriation Subcommittee have been furnished the projected annual funding to complete various projects for many years. The supporting material for the budget documents normally shows projected expenditures and appropriations required for each fiscal year during the construction period."

With regard to our proposal to secure long-term commitments to ensure the feasibility of the project, the Deputy Director stated:

"\*\*\* it should be recognized that the electric industry is a vibrant, ever-changing, growing operation where long-term commitments are not

made until availability of facilities is assured. The normal procedure in the industry, including the power marketing agencies of the Department of the Interior, is to determine if a need for the facility exists; if so, the facility should be built. All studies indicated the need of the Celilo-Mead line by 1971. Most certainly, if the line had been built on schedule, it would have been used."

We believe that the problems associated with constructing and placing the Celilo-Mead project in operation on a self-liquidating basis are somewhat unique. The unique problems associated with the project are evidenced by the reservations that the potential users have with respect to whether the project would provide a dependable source of power due to the great length of the line and the requirement that they maintain reserve generating capacity equal to the amount of power taken from the project. Accordingly, we do not believe that an in-service date for the project should be established or that appropriations should be requested to complete the construction of the project on the basis that estimates show a future need for the project. We believe that the Department should further determine whether the potential users will enter into commitments to use power from the project to meet their needs or will make other arrangements.

Regarding the Deputy Director's statement that all studies indicated the need for the Celilo-Mead line by 1971, the Federal Power Commission, in an August 1966 report, stated that use of the project might not materialize as rapidly as expected by the Department. In addition, studies by the Bureau in 1966 indicated that repayment of the cost of the project would not be achieved within the 50-year period as stated in the feasibility report submitted to the Congress.

Also, during the fiscal year 1968 appropriation hearings before the Subcommittee on Public Works, House Committee on Appropriations, officials of the Department advised the Subcommittee that completion of the project had been rescheduled from 1971 to 1972. The officials stated that



recent estimates indicated that use of power from the project would not be as great in 1971 as had been anticipated in earlier studies.

Therefore, information was available to the Department as early as 1966 which indicated that the demand might not materialize as rapidly as anticipated.

Regarding our proposal that the Congress be advised of any problems involved in obtaining commitments to use power from the project so that it could reconsider the authorization of the project, the Deputy Director expressed the belief that reconsideration of the authorization is not necessary since the Secretary's ability to construct the project will be dependent upon future congressional appropriations.

Although there may be no need to reconsider the project's authorization if sufficient commitments are obtained prior to the time appropriations are requested, we believe that problems, if encountered by the Bureau in obtaining long-term commitments from the potential users, should be made known to the Congress so that it may reconsider the authorization of the project.

In commenting on our draft report, one of the Arizona and Nevada utilities stated that it had reviewed the report and had no comments to offer. A second utility advised us that the report clearly set forth the history of the Celilo-Mead project and the items discussed at the March 14, 1969, meeting.

The third utility advised us that, since the meeting, it had experienced unprecedented growth and that current estimates showed a need for additional power by 1973. The utility stated that this power could be obtained from the Celilo-Mead project if it was constructed but that it had to be certain of its availability. Although the utility did not provide us with information relative to the power it would take from the project in 1973, it does not appear, on the basis of the Department's estimates, that this utility's use of power from the project would justify its

completion by 1973 unless some of the other utilities would agree to use power from the project.

The utility also advised us that the plan discussed during the March 14, 1969, meeting which involved the construction of as many as six 800-megawatt plants at Navajo-Four Corners had subsequently been revised. It stated that the revised plan was for the construction of three plants with less than 50 percent of the capacity of the 800-megawatt plants.

### CONCLUSIONS

We believe that the Department did not act on a timely basis to postpone the completion of construction of the project when information became available, as early as 1966, which indicated that the demand for power from the project might not materialize and the project might not be self-liquidating within 50 years.

The Department did, as a result of the information received at the March 14, 1969, meeting, postpone completion of the project which resulted in delaying and possibly avoiding the expenditure of about \$138 million. The Department also indicated that in the future it would reexamine the need for completing the project.

We believe that, in reexamining the need for the project and before additional appropriations are requested, the Department should attempt to obtain from the potential users commitments for the use of power from the project, contingent upon the Department's having the project in service by a specific date. Such commitments, in our opinion, would show whether there is a need for the project and whether it will be self-liquidating over a 50-year period.

### RECOMMENDATIONS

We recommend that the Secretary, in evaluating the need to complete the project, attempt to obtain from the potential users commitments for the use they would make of the project, contingent upon the Department's having the project in service by a specific date. If commitments cannot

be obtained from the potential users, we recommend that the Secretary advise the Congress of the problems involved so that it can reconsider the authorization of the project.

## CHAPTER 3

### SCOPE OF REVIEW

Our review was conducted at the Bureau's Region 3 offices in Boulder City, Nevada; at the Bonneville Power Administration's offices in Portland, Oregon; and at the office of the Commissioner of Reclamation in Washington, D.C. Our review included an examination of pertinent legislation, congressional hearings, justifications for appropriations, and feasibility studies prepared by the Department for the Celilo-Mead project. We also contacted officials who represent public and private utilities in the Northwest and Southwest and obtained their electrical load and resource data and current estimates of the use they planned to make of the project.

**APPENDIXES**



# United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D C 20240

JAN 23 1970

Mr. A. T. Samuelson  
Director, Civil Division  
General Accounting Office  
Washington, D. C. 20548

Dear Mr. Samuelson.

Your draft report entitled "Need to Assure That the Celilo-Mead Transmission Line Project Will Be Financially Feasible and Self-Liquidating Before Completing its Construction, Department of the Interior," is based primarily on information gathered after it had become evident that completion of the Celilo-Mead 750-kv d-c transmission line would be postponed for the third time, to 1974 or beyond. The draft does not recite that lack of appropriated funds caused postponements and made it impossible for the Department of the Interior to set and maintain a firm in-service date. As a result the demand for and utilization of d-c facilities by potential non-Federal utilities prior to 1977 dwindled to estimated loadings compiled in 1969 as cited in the GAO draft.

Construction of the project has been stopped, and we plan to re-examine its feasibility. Therefore, we believe the Department has already taken appropriate action to accomplish essentially the objectives of the GAO report.

The supplemental report by Bonneville Power Administration and the Bureau of Reclamation, dated October 1968, used a load growth table which was derived from estimated requirements furnished by the interested power entities in the Southwest. Requirements were gathered by the Hoover Intertie Committee in mid-1968. The supplemental report was based on an in-service date no later than January 1, 1973. In both the 1964 report and supplemental report, the project was found to be feasible and paid out in 50 years for both Reclamation's and BPA's portions of the line.

Admittedly, there are intangibles and imponderables in long-range planning. These often result in both additions and deletions from the estimate. Such additions and deletions could easily offset each other over the life of the project. One unanticipated benefit that would have been provided by the Celilo-Mead Line if it had been constructed on schedule is the possible elimination of the deficiency in firm power supply for the Pacific Northwest in 1973-74 of over 1,000 megawatts, which is facing us today.

The GAO report contains on page 18 five recommendations on steps to be taken by the Secretary of the Interior prior to taking further action to complete the d-c line. The first and fourth recommendations involve establishing a firm in-service date, and advising Congress of the funding level required to meet the date are most certainly related.

This is a process which is followed for all projects. Staff members of the Congressional Appropriation Subcommittee have been furnished the projected annual funding to complete various projects for many years. The supporting material for the budget documents normally shows projected expenditures and appropriations required for each fiscal year during the construction period.

In regard to the third recommendation--securing long-term agreements to assure the feasibility of the project--it should be recognized that the electric industry is a vibrant, ever-changing, growing operation where long-term commitments are not made until availability of facilities is assured. The normal procedure in the industry, including the power marketing agencies of the Department of the Interior, is to determine if a need for the facility exists, if so, the facility should be built. All studies indicated the need of the Celilo-Mead line by 1971. Most certainly, if the line had been built on schedule, it would have been used.

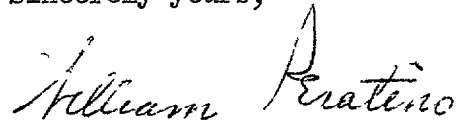
In regard to the fifth recommendation on reconsidering authorization, which would be applicable only if the Secretary of the Interior takes future action to complete the line, we concur in the general idea that Congress should be kept currently informed of the status of negotiations and related efforts. It is not believed that Congressional reconsideration of the particular project authorization would be necessary or desirable, since the Secretary's ability to construct the d-c line

GAO note. The deleted comments relate to matters which were discussed in the draft report but omitted from the final report.

will be dependent only on future Congressional appropriations specifically for this line. Circumstances may develop which would indicate the desirability of completing the line, possibly as early as 1977. The Secretary's authority to construct the d-c line upon receipt of appropriations should remain in effect.

We appreciate the opportunity to comment on the report.

Sincerely yours,

A handwritten signature in cursive script that reads "William Peratino". The signature is written in dark ink and is positioned below the typed name.

Deputy Director of Survey and Review



PRINCIPAL MANAGEMENT OFFICIALS  
OF THE  
DEPARTMENT OF THE INTERIOR  
RESPONSIBLE FOR THE ACTIVITIES  
DISCUSSED IN THIS REPORT

Effective date  
of appointment

DEPARTMENT OF THE INTERIOR

SECRETARY OF THE INTERIOR:

Walter J. Hickel	Jan. 1969
Stewart L. Udall	Jan. 1961

ASSISTANT SECRETARY--WATER AND  
POWER DEVELOPMENT:

James R. Smith	Mar. 1969
Kenneth Holum	Jan. 1961

COMMISSIONER OF RECLAMATION:

Ellis L. Armstrong	Nov. 1969
Floyd E. Dominy	May 1959

ADMINISTRATOR--BONNEVILLE POWER  
ADMINISTRATION:

Henry R. Richmond	Sept. 1967
David S. Black	Sept. 1966
Charles F. Luce	Feb. 1961