

CHAPTER 8

COLORADO RIVER STORAGE PROJECT

The Inspector General found that the Bureau of Reclamation had entered into a contract with the Central Utah Water Conservancy District that limited CUWCD's repayment obligation to \$156.8 million. The current construction cost estimates for the Bonneville Unit of the CRSP allocated to M&I water purposes have more than doubled since then. Instead of moving rapidly to negotiate a new repayment contract that would secure the needed repayment, the Bureau has subsequently taken two major actions intended to delay the need for a new contract. In 1981 the Bureau agreed to the deferment of a major portion of the M&I repayment obligation. In 1984, the Bureau proposed to reallocate costs from M&I to hydropower. Since January 1981, the Bureau has committed over \$220 million in additional funds for construction of the Bonneville Unit, and \$104 million has been requested from Congress for FY 1985. BuRec still has not entered into a new contract with CUWCD to insure repayment of hundreds of millions of dollars in costs now being incurred by the Federal government.

BACKGROUND

Description of the Project

The Colorado River Storage Project (CRSP), authorized in 1956 by Public Law 84-485, is a basin-wide program for development and use of the Upper Colorado River, encompassing parts of Wyoming, Utah, Colorado, Arizona, and New Mexico. Major purposes of CRSP include: storing water for consumptive use; making it possible for the states of the Upper Basin to utilize apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Basin Compact; providing irrigation water for the region's arid and semi-arid land; reducing flood damages; and generating hydroelectric power, as incident to the foregoing purposes.

Once commitments to the Lower Colorado River Basin and to Mexico have been met, remaining water is stored to serve the needs of farmers, municipalities, and industry in the upper basin. Delivery of this water to beneficiaries is accomplished through other Bureau of Reclamation (BuRec) projects referred to as participating projects.

CRSP currently includes four storage units, a transmission division, and 20 participating projects. Ten of the participating projects were authorized by Public Law 84-485, and the remaining ten participating projects were authorized by subsequent Acts of Congress. A listing of the storage units and participating projects is provided in Table 8-1.

TABLE 8-1

Colorado River Storage Project - Major Facilities

Storage Units

Curecanti (Aspinall) - Gunnison River, Colorado
Flaming Gorge - Green River, Utah
Glen Canyon - Colorado River, Arizona
Navajo - San Juan River, New Mexico

Participating Projects

Colorado -

Bostwick Park
Dallas Creek
Dolores
Florida
Fruitland Mesa
Paonia
San Miguel
Silt
Smith Fork
West Divide

Colorado and New Mexico -

Animas-La Plata
San Juan-Chama

Colorado and Wyoming -

Savery-Pot Hook

New Mexico -

Hammond
Navajo Indian Irrigation

Utah -

Central Utah Project
Emery County

Wyoming -

LaBarge
Lyman
Seedskaadee

Environmental Effects

BuRec has estimated that full development of CRSP would increase the salinity of the Colorado River as measured at Imperial Dam in Arizona by 147 milligrams/liter. The features which cause the majority of this increase are Glen Canyon Dam, Bonneville Unit of the Central Utah Project, Navajo Indian Irrigation Project, and San Juan-Chama. In addition to increasing Colorado River salinity, several CRSP developments threaten the habitat of two endangered species--the Colorado River squawfish and the humpback sucker. These fish are listed on the federal endangered species list and State of Colorado endangered species list, respectively.

Two important birds on the federal endangered species list, the bald eagle and the peregrine falcon, range in the region of the Bonneville Unit of the Central Utah Project (CUP), a focus of the Inspector General's audit. Construction and operation of Bonneville will result in the loss of a substantial amount of high quality fish and wildlife habitat. Bonneville's municipal and industrial water features alone will destroy approximately 3,500 acres of wildlife habitat. Finally, significant reductions in flows in about 100 miles of waterway will occur, sometimes dropping below minimums recommended for fishery maintenance.

Project Status at the Time of the Audit

At the time the audit work began in September 1977, CRSP storage units were 95% complete and the participating projects were 22% complete. CUP's Bonneville Unit was 18% complete.

Current Project Status

As of January 1984, the four storage units were complete and the participating projects were approximately 62% complete. The Bonneville Unit was 26% complete and BuRec anticipated completion of the unit in 1993.

Project Beneficiaries

Hydroelectric power from CRSP (6 billion kilowatt hours annually) is dedicated first to pumping project water. The remaining power is sold by the Western Area Power Administration (WAPA) to preference customers in Colorado, New Mexico, Utah, Wyoming, Arizona, and parts of Nevada and California. Table 8-2 contains a listing of the major purchasers of CRSP power.

The Central Utah Water Conservancy District (CUWCD), which has contracted for the water from the Bonneville Unit, will be the largest customer for water used to serve irrigators, municipalities, and industry in the four states of the upper basin.

TABLE 8-2

Major Purchasers of CRSP Power for FY 1983

<u>Municipalities</u>	<u>Energy (Millions of kWh)</u>
Colorado Springs, CO	197
Platte River Power Authority, CO	822
Farmington, NM	176
Intermountain Consumer Power Association, UT	203
Bountiful, UT	156
Logan, UT	101
Provo, UT	359
St. George, UT	<u>132</u>
	Subtotal
	2,146
<u>Rural Electric Cooperatives</u>	
Tri-State G&T Association, CO	1,105
Intermountain Rural Electric Association, CO	130
Dixie-Escalante REA, UT	106
Moon Lake E.A., UT	290
Mt. Wheeler Power Association, NV	102
Plains Electric G&T Cooperative, NM	932
Strawberry Water Users, UT	<u>114</u>
	Subtotal
	2,779
<u>Direct Customers</u>	
Colorado River Commission, NV	190
Salt River Agriculture, AZ	557
DOE - Albuquerque Operations, NM	142
Navajo Tribal Utility Authority, AZ, NM	<u>144</u>
	Subtotal
	1,033
<u>Irrigation Districts, AZ</u>	302
<u>Others</u>	<u>1,036</u>
Total energy sold in FY 1983	7,296

Source: Western Area Power Administration, 1983 Annual Report.

AUDIT

Time Period of the Audit

The last year covered by the audit was Fiscal Year 1977. The audit work was performed during 1978 and 1979.

Audit Findings

Inspector General June Gibbs Brown identified several problems with repayment provisions of CRSP. She considered the first two problems outlined below to be so serious that if left unresolved they "could materially affect the project's financial condition in future years."

(1) Bonneville Unit Repayment Contract

BuRec and CUWCD entered into a repayment contract in 1965 which explicitly limited CUWCD's obligation to repay the costs allocated to municipal and industrial (M&I) and irrigation water supply facilities to \$156.8 million. Based on BuRec's 1979 estimate to complete the M&I features of the project, this contract provision would preclude recovery of \$198 million of reimbursable costs above and beyond the \$156 million limitation. The Inspector General found that BuRec had forecast that Bonneville Unit construction expenditures would exceed the \$156.8 million obligation during Fiscal Year 1981, but had not taken any action to amend the repayment contract to provide for repayment of the project cost increases. Since the time of the audit, BuRec cost estimates have risen and the contract limitation now precludes the recovery of approximately \$228 million of reimbursable costs.*/

(2) Apportionment of Storage Project Revenues

CRSP's authorization provides that storage project revenues will be used to repay storage project investment costs, after which the remaining revenues will be credited to the upper basin states in the following manner: Colorado, 46%; Utah, 21.5%; New Mexico, 17%; Wyoming, 15.5%. These remaining storage project revenues are apportioned to the states to insure repayment of federal investment costs applicable to participating projects located in each state.**/

*/NWF staff computation (see Appendix V).

**/These revenues are not actually remitted to the states, but rather are just earmarked within the Upper Colorado River Basin Fund for payment to the general fund of the Treasury for the participating projects' costs.

Therefore, storage project power rates must be set at levels to produce sufficient total net revenues which, when credited to the states, will provide the amount of financial assistance required to repay the costs of participating projects in each respective state.

In September 1979 BuRec decided that the amount of funds needed to repay investment costs of power facilities installed in participating projects located in Wyoming and Utah (mostly Utah) should also be deducted from storage project revenues before such revenues are apportioned. The result of this decision to switch apportionment procedures is to allow power rates that are insufficient to repay the costs of participating projects in Utah. Inspector General Brown questioned whether this revised apportionment method, which BuRec used to determine proposed power rates, was in accord with CRSP's authorization. If the method is inappropriate, the proposed power rates would be inadequate and the result would be a \$234 million shortage of required revenue during the projects' repayment periods. However, by March 1982 when Inspector General Richard Mulberry considered the audit resolved, the proposed power rate had been reduced even further, resulting in a \$288 million shortage of required revenue.*/

(3) Repayment of Irrigation Costs

BuRec limits its water charges to irrigators to an amount based on "ability to pay." In 1978 BuRec decided that contracts would provide for recalculation and renegotiation of ability to pay every five years. BuRec indicated that this procedure applied to water service contracts and not to repayment contracts.**/

Inspector General Brown believed that this policy should apply to repayment contracts. The 1965 repayment contract with CUWCD set forth \$16.4 million as the irrigator's ability to pay. By 1978 the irrigator's ability to pay had risen to \$69 million, yet BuRec's policy prohibited adjustment of the repayment contract to reflect this change.

*/NWF staff computation (see Appendix VI).

**/A repayment contract establishes provisions for payment to the Treasury of construction costs connected with M&I and irrigation water features. This type of contract requires fixed annual payments over a given number of years with no renewal provisions. A water service contract establishes provisions for delivering water. This type of contract has a term of 40 years with provision for renewal and requires payments based on a charge for each acre-foot of water used.

(4) Interest Rate for Replacements and Additions

Inspector General Brown determined that BuRec understated interest costs on future replacements and additions to CRSP facilities by basing such costs on the project interest rate (§ 5(f) of the CRSP Act) rather than the rate formula set forth by Secretarial Order 2929 (January 29, 1970). In order to more closely reflect the current interest cost on government borrowings and establish a standard formula for fixing interest rates on new federal power projects and transmission facilities, the Secretary of the Interior issued Order 2929. However, on October 29, 1973, the BuRec Commissioner issued a directive entitled "Implementation of Uniform Power Repayment Procedures," exempting CRSP from the requirements of the Secretarial Order. Inspector General Brown questioned whether this directive conformed with Secretarial Order 2929, and whether it was a necessary interpretation of CRSP's authorization.

Shortfall as a Result of Inspector General's Findings

- (1) Shortfall due to Bonneville Unit repayment contract limitations: \$198 million at the time of the audit, has now risen to approximately \$228 million (initial cost).
- (2) Inadequate power revenues due to apportionment policy: \$234 million at the time of the audit, \$288 million at the time the audit was considered resolved (over the life of the project).
- (3) Failure to increase irrigator's ability to pay: \$52.6 million (over the life of the project).

Audit Recommendations

(1) BuRec should advise CUWCD of the date by which a repayment contract, which ensures full repayment by water users of federal investment costs, must be executed. BuRec should also outline the options for CUWCD and the most likely action that will be taken if contract terms are not agreed upon.

(2) The Solicitor (Dept. of Interior) should issue an opinion to determine if BuRec's method of apportioning storage project revenues complies with the requirements of the CRSP authorization. If found improper, BuRec should request WAPA to implement power rates which will produce sufficient revenues to repay participating project costs within the time period established by law.

(3) BuRec should require, in both repayment contracts and water service contracts, provisions for periodic rate adjustments based upon irrigators' ability to pay.

(4) The 1973 Commissioner's directive should be subjected to the Solicitor's review to ensure conformity with Secretarial Order 2929.

ADMINISTRATIVE RESPONSE

Bonneville Unit Repayment Contract

BuRec Commissioner Keith Higginson provided Interior Secretary Cecil Andrus with an outline of options and recommendations concerning the Bonneville Unit repayment contract on March 31, 1980.*/ Higginson stated, "The securing of an increased contractual repayment obligation is necessary to continue uninterrupted construction of the unit." However, whatever recommendation was made by Higginson, Secretary Andrus did not concur. Then on May 6, 1980, Assistant Secretary for Land and Water Resources Guy Martin provided Secretary Andrus with an update on the contract issue and suggested some possible solutions.*/

On August 12, 1980 Acting Assistant Secretary for Land and Water Resources Daniel Beard submitted comments on the draft audit report to Regional Audit Manager Gerald W. Hicks (Sacramento, CA). Beard stated that "some form of repayment contract will be executed prior to the further commitment of construction funds when the contract ceiling has been reached." A notice in the Federal Register on August 22, 1980 announced that BuRec would initiate negotiations with CUWCD for a supplemental repayment contract.

The availability of the draft supplemental repayment contract, which raised CUWCD's obligation by over \$350 million, was announced in the Federal Register on November 25, 1980. On December 2, 1980 Acting Assistant Secretary Beard notified Inspector General Brown of the availability of this contract. Beard said that the proposed contract would be sent to BuRec's Washington office in January 1981 for Departmental approval.

In a January 18, 1981 memorandum to Commissioner Higginson, Assistant Secretary Martin rejected the proposed supplemental contract. Martin found that several provisions of the contract were illegal and others not fiscally prudent. He also stated that "the contract masks costs of hundreds of millions of dollars from the clear view of the people who must pay for the

*/Portions of this item were denied NWF by the Department of the Interior.

project and the taxpaying public." Martin noted that full repayment under the terms of the contract would require the Bureau to charge "at a minimum, twice as much as the Service [BuRec] has ever charged for M&I water in its history" (emphasis in original).

In February 1981, shortly after he assumed office, Interior Secretary James Watt was given a briefing on the unresolved audits. On March 9, 1981 BuRec Commissioner Designate Robert Broadbent and Assistant Commissioner Cliff Barrett met with representatives of the Inspector General's office to discuss the same subject. A March 26, 1981 memorandum from Supervisory Auditor Catherine Burke to the Files documents this meeting. In regard to the CRSP audit, the only subject mentioned in the memorandum was the Bonneville Unit repayment contract. BuRec had reported, "A request for Secretarial approval of criteria and procedures for negotiation of the contract is being prepared."

By mid-June, 1981, BuRec Commissioner Broadbent was quoted in the Utah press as saying that spending on M&I portions of the Bonneville Unit had exceeded CUWCD's repayment obligation. Acting Assistant Commissioner William Klostermeyer was also quoted alluding to an OMB order that no further construction contracts for M&I features be signed until a supplemental repayment contract is signed.

By August, however, the Bureau and the district had come up with a different approach. In July, the BuRec regional office formulated some options for dealing with the problem which avoided the need for a new contract and the concurrent requirement for a new local election for the voters to confirm the repayment commitment. In an August 5, 1981 faxogram to BuRec Regional Director Nelson Plummer (Salt Lake City, UT), Acting Assistant BuRec Commissioner J. Orren Church announced that, "In discussing your proposals to allow continued construction of M&I facilities on the Bonneville Unit, it was decided our optimal course of action was to employ the provisions of the Water Supply Act of 1958." Church directed Plummer to contact CUWCD and request approval of a resolution specifying "(1) a recognition that use of the Water Supply Act will decrease the amount of water available to the district until a supplemental or amendatory contract is executed for the future-use supply and associated deferred costs; and (2) the district's intent to contract for the future-use supply and repay associated costs." On August 13, 1981 CUWCD's Board of Directors approved such a resolution, which reduced CUWCD's entitlement of water from 99,000 to 39,000 acre-feet and increased its obligation to repay the Federal government by \$10 million.

In an August 19, 1981 faxogram, Regional Director Plummer informed Commissioner Broadbent that CUWCD had approved the necessary resolution. Plummer recommended that BuRec "(1) defer the costs associated with 60,000 acre-feet [reduction in CUWCD's entitlement], (2) assign the \$38,000,000 of non-specific ad valorem tax reviews [sic] in the 1965 contract for repayment of the M&I obligation, and (3) accept the District's contribution [\$10 million] to enhance our ability to undertake all scheduled work for the next two years." Plummer advised that "construction activities on the Bonneville Collection System can continue on this basis until early 1983 ..." On August 25, 1981, Acting BuRec Commissioner Clifford Barrett informed Plummer that the proposal to defer certain M&I water supply costs and CUWCD's \$10 million contribution were acceptable, but a decision on the use of the ad valorem tax revenues had been deferred. Use of the ad valorem tax was later approved in a February 23, 1982 memorandum from Assistant Commissioner Eugene Hinds.

Commissioner Broadbent outlined the above-mentioned series of events for Inspector General Richard Mulberry on November 24, 1981. Broadbent concluded, "We believe we have conformed to the recommendation, and now consider the matter closed." On March 2, 1982 Regional Audit Manager Gerald Hicks informed Broadbent that he considered BuRec's action on the audit recommendations as "adequate" and would remove the audit from the follow-up system.

However, this issue of the Bonneville Unit repayment contract is still not resolved. The legality of the use of the Water Supply Act of 1958 is still in question, and despite Regional Director Plummer's warning that construction on Bonneville could continue only until early 1983, BuRec still has not negotiated a supplemental repayment contract. In January of 1984, BuRec reported that such a contract was not scheduled until December 1984.

Instead of initiating negotiations on a new contract at this time, the Bureau has developed a new strategy for postponing the day of reckoning. The Bureau has proposed to drastically redesign the Unit's Diamond Fork hydropower plant from a flow-through design of 133 megawatts to a pumped storage project of over 1,000 megawatts. Under the Bureau's cost allocation procedures, the share of total project costs allocated to power users goes up substantially, as might be expected. But it should also be noted that both the relative and absolute share of total costs allocated to M&I users goes down as well. By dramatically scaling up the size of power features and associated power benefits, a portion of joint costs previously allocated to M&I users is now allocated to power. On the strength of this revised Diamond Fork design, costs allocated to M&I dropped from \$486 million in January 1983 to \$388 million in February 1984. This lesser figure is now proposed as the target for reopening negotiations with CUWCD for a supplemental repayment contract.

Meanwhile, the Bureau expects that it will take 2 to 4 years to firm up the need for power from the revised Diamond Fork, as reflected in non-Federal financial commitments which the Bureau intends to seek. If the Diamond Fork enlargement falls through, however, the costs of M&I features will go back up, once again exceeding any lesser amount the CUWCD may agree later this year to repay on the basis of the current cost allocation.

In a February 29, 1984 memorandum to Commissioner Broadbent, Regional Director Clifford Barrett laid out these latest revisions to the repayment plan for the Bonneville Unit. Barrett explained the CUWCD's posture by saying:

They are terribly concerned about an election failing and frankly would like to avoid one, particularly since some counties have threatened to pull out of the Central Utah Project. The district's perception is that construction has been untimely, underfunded, at times badly managed, and sometimes overdesigned. These factors, they feel, entitle them to some relief from rising M&I costs. We believe they will aggressively pursue Congressional relief of a portion of the as-yet uncovered M&I costs, perhaps an amount as much as their remaining uncovered obligation. If they are successful on the Bonneville Unit, the M&I costs to be recovered by a new repayment arrangement with the CUWCD would be lower or the need negated.

Thus, local willingness to repay the full share of reimbursable costs of the Bonneville Unit is now known by the Bureau to be shakier than ever. Nevertheless, the Bureau continues to commit even greater sums of Federal dollars into the project. Since January 1981, over \$220 million has been allocated for construction on the Bonneville Unit. In addition, BuRec has requested \$104 million from Congress for construction funds for Fiscal Year 1985.

Apportionment of Storage Project Revenues

In the above-mentioned August 12, 1980 comments, Acting Assistant Secretary Beard remarked that BuRec would obtain an opinion from the Solicitor's office on the question of the apportionment method. However, Beard also stated that BuRec believed its "reversion to the pre-1973 method of handling the apportionment of surplus project revenues complies with the requirements of the CRSP act." On October 6, 1980 BuRec

*/Portions of this item were denied NWF by the Interior Department.

Commissioner Higginson requested Solicitor Leo Krulitz to issue an opinion on this question, and in the above-mentioned December 2, 1980 memorandum, Acting Assistant Secretary Beard informed Inspector General Brown that such an opinion had been requested.

On December 17, 1980 Associate Solicitor for Energy and Resources John R. Little, Jr. determined that the method of revenue apportionment BuRec adopted in 1979 "does comply with the requirements of the CRSP Act." On January 3, 1981 Acting Assistant Secretary Beard informed Inspector General Brown of the Associate Solicitor's opinion and of BuRec's intention to continue using this apportionment method.

Repayment of Irrigation Costs

In the above-mentioned August 12, 1980 comments, Acting Assistant Secretary Beard reaffirmed BuRec's position limiting periodic rate adjustments only to water service contracts. BuRec excluded repayment contracts because of "possible legal constraints contained in Reclamation law, varying State requirements limiting potential debt ceilings for a given contracting entity, and the practical uncertainties created by voter approval and State endorsements." Beard added, though, that BuRec "recognized that in some instances a dramatic increase in irrigators' ability to pay demonstrates possible inequities to other project beneficiaries such as power users." Beard said that BuRec either had instituted or was currently reviewing several options for reducing these possible inequities, and listed the following items:

"(1) using a water service and fixed repayment combination contracting form which would allow periodic review and adjustment of the water service charges; (2) utilizing 100% of irrigators' ability to pay in new or amendatory contracting actions by excluding contingency allowances in payment capacity determinations for all irrigation contracting programs; and (3) requiring repayment terms to be renegotiated at every feasible opportunity."

In the above-mentioned December 2, 1980 memorandum to Inspector General Brown, Beard reported that BuRec anticipated publication of its instructions entitled "Water Service, Repayment, and Related Contracts" during 1981, which would set forth procedures for implementing the policies expressed in his August 12 memorandum.

As of March 1984, more than three years later, these instructions still were not final and publication was not anticipated until July 1984.

It should be noted that in January 1979 when BuRec reported irrigators' ability to pay had increased to \$69 million, BuRec explained that the basis for the increase was "new agricultural economic studies." However, following publication of the audit, BuRec dropped irrigators' ability to pay back to \$16.4 million without explanation.

Interest Rate for Replacements and Additions

In the above-mentioned August 12, 1980 comments, Acting Assistant Secretary Beard agreed that a Solicitor's review was needed. In his October 6, 1980 memorandum to Solicitor Krulitz, Commissioner Higginson requested an opinion on this issue.

On December 16, 1980 Associate Solicitor Little informed Commissioner Higginson of his determination that Secretarial Order 2929 did not apply to CRSP. Little concluded that "...the interest rate applicable to CRSP replacements and additions must be in accordance with section 5(f) of the CRSP Act..."

CONCLUSION

BuRec has refused to accept any of the Inspector General's recommendations -- it has yet to secure a supplemental repayment contract for the Bonneville Unit with the Central Utah Water Conservancy District and has continued its method of apportioning storage project revenues.

Inspector General Brown had stated that the failure to correct these actions could affect CRSP's future financial condition -- to the tune of \$432 million. Since the time of the audit this has risen to at least \$472 million. In addition, the failure of BuRec to adjust irrigators' ability to pay for Bonneville adds another \$52.6 million to the CRSP underpayment statistics.

With full knowledge that local interests are unwilling to repay the full amount of reimbursable costs, the Bureau, with the concurrence of the Secretary, is now seeking to increase its rate of spending on the \$2 billion Bonneville Unit. Under such circumstances, the Congress may have to reduce or eliminate further funding for construction of the Bonneville Unit, to impress upon both the Bureau and the district the critical need to secure repayment commitments.

APPENDIX I

Chronological Listing of Official Documents and References

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Colorado River Storage Project

March 31, 1980 memorandum from BuRec Commissioner Keith Higginson to Interior Secretary Cecil Andrus.

May 6, 1980 memorandum from Assistant Secretary for Land and Water Resources Guy Martin to Secretary Andrus.

August 12, 1980 memorandum from Acting Assistant Secretary for Land and Water Resources Daniel Beard to Regional Audit Manager Gerald W. Hicks (Sacramento, CA).

August 22, 1980 Federal Register notice (45 FR 56199).

September 1980 Inspector General June Gibbs Brown Audit Report on the Colorado River Storage Project.

September 1980 Inspector General Brown's Semi-annual Report.

Colorado River Storage Project (continued)

October 6, 1980 memorandum from Commissioner Higginson to Solicitor Leo Krulitz.

November 25, 1980 Federal Register notice (45 FR 78240).

December 2, 1980 memorandum from Acting Assistant Secretary Beard to Inspector General Brown.

December 16, 1980 memorandum from Associate Solicitor for Energy and Resources John R. Little, Jr. to Commissioner Higginson.

December 17, 1980 memorandum from Associate Solicitor Little to Commissioner Higginson.

January 8, 1981 memorandum from Acting Assistant Secretary Beard to Inspector General Brown.

January 18, 1981 memorandum from Assistant Secretary Martin to Commissioner Higginson.

March 26, 1981 memorandum from Supervisory Auditor Catherine Burke to the Files.

March 1981 Inspector General Brown's Semi-annual Report.

July 16, 1981 memorandum from Regional Director Plummer to BuRec Commissioner Robert Broadbent

August 5, 1981 faxogram from Acting Assistant BuRec Commissioner J. Orren Church to Regional Director Nelson Plummer (Salt Lake City, UT).

August 13, 1981 Central Utah Water Conservancy District Resolution.

August 19, 1981 faxogram from Regional Director Plummer to BuRec Commissioner Robert Broadbent.

August 25, 1981 faxogram from Acting BuRec Commissioner Clifford Barrett to Regional Director Plummer.

September 18, 1981 memorandum from Regional Director Plummer to BuRec Commissioner Robert Broadbent

September 1981 Inspector General Richard Mulberry's Semi-annual Report.

November 24, 1981 memorandum from Commissioner Broadbent to Inspector General Mulberry.

Colorado River Storage Project (continued)

February 23, 1982 memorandum from Assistant Commissioner Eugene Hinds to Regional Director Plummer.

March 2, 1982 memorandum from Regional Audit Manager Hicks to Commissioner Broadbent.

March 1982 Inspector General Mulberry's Semi-annual Report.

January 26, 1983 Federal Register notice (48 FR 3661).

April 26, 1983 Federal Register notice (48 FR 18907).

October 31, 1983 Federal Register notice (48 FR 50176).

February 29, 1984 memorandum from Regional Director Barrett (Salt Lake City, UT) to Commissioner Broadbent.

APPENDIX V

Bonneville Unit (Central Utah Project) Repayment Contract
Limitation

The terms of the repayment contract between BuRec and the Central Utah Water Conservancy District limit the District's obligation to \$156,807,600. To calculate the effect this limitation has on recovery of costs, Inspector General Brown relied on the following BuRec information for Bonneville:

Irrigation repayment	\$69,000,000
M&I repayment	\$163,323,000
Ad valorem taxes	\$122,141,000
Total	<u>\$354,464,000</u>

Using this 1979 data, the Inspector General determined that the contract limitation would preclude the recovery of approximately \$198 million of reimbursable costs (\$354,464,000 - \$156,807,600 = \$197,656,400).

NWF staff have updated this estimate by using the following BuRec January 1984 information:

Irrigation repayment	\$16,400,000
M&I repayment	\$249,524,000
Ad valorem taxes	\$128,542,000
Total	<u>\$394,466,000</u>

The shortfall has therefore risen to \$227,658,400 since the time of the audit (\$394,466,000 - \$156,807,600 - \$10,000,000 = \$227,658,400).

This shortfall would actually be greater except that between January 1983 and January 1984 BuRec decreased the costs allocated to M&I water features. In 1983 BuRec had allocated \$485,869,000 to M&I, but allocated only \$388,224,000 to M&I in 1984 -- a reduction of \$97,645,000. BuRec reported that the decrease was due to "reduction in specific costs, changes in the Diamond Fork Power System plan, and changes in the Irrigation and Drainage System." During 1983, BuRec changed the design of the Diamond Fork Power System (a feature of the Bonneville Unit) from a flow-through to a pumped-storage power facility. This change "increased power benefits and brought an increased share of joint costs to power facilities thereby decreasing the share of joint costs to other purposes"

APPENDIX VI

Power Rates and Revenue Apportionment, Colorado River Storage Project

Inspector General Brown's audit report contains very little information regarding CRSP power rates and resulting revenues. Therefore, NWF has had to reconstruct the figures reported by the Inspector General.

Inspector General Brown related BuRec's estimate that WAPA's March 1979 power rate increase proposal (38%) would produce total net revenues of \$648 million. In September 1979, WAPA adjusted its rate increase proposal (23.8%) and BuRec estimated that this change would reduce total net revenue production to \$414 million.

NWF solved the following simultaneous equations in order to determine the base of BuRec's calculations (g = gross revenues; c = constant):

$$\begin{aligned} \text{I.} & \quad 1.38(g) - c = 648 \\ \text{II.} & \quad 1.238(g) - c = 414 \end{aligned}$$

$$\begin{aligned} \text{II.} & \quad -c = 414 - 1.238g \\ \text{II.} & \quad c = 1.238g - 414 \end{aligned}$$

$$\begin{aligned} \text{I.} & \quad 1.38g - (1.238g - 414) = 648 \\ \text{I.} & \quad 1.38g - 1.238g + 414 = 648 \\ \text{I.} & \quad (1.38 - 1.238)g = 234 \\ \text{I.} & \quad .142g = 234 \\ \text{I.} & \quad g = 1648 \end{aligned}$$

$$\begin{aligned} \text{I.} & \quad 1.38(1648) - c = 648 \\ \text{II.} & \quad 1.238(1648) - c = 414 \end{aligned}$$

$$\begin{aligned} \text{I.} & \quad 2274 - 648 = c \\ \text{II.} & \quad 2040 - 414 = c \end{aligned}$$

$$\begin{aligned} \text{I.} & \quad 1626 = c \\ \text{II.} & \quad 1626 = c \end{aligned}$$

BuRec's formula, then, is: $[(\% \text{ change in power rate}) \times (1648)] - 1626 = \text{net revenues.}$

NWF staff used the above information to determine the net revenues which would be produced by WAPA's subsequent rate increase proposals. The December 31, 1980 rate increase of 20.5% would produce net revenues of \$360 million or \$288 million less than the original March 1979 proposal $(1.205(1648) - 1626 = 360)$. Finally, the May 3, 1983 rate increase proposal of 51.5% would produce net revenues of \$871 million or \$223 million greater than the original March 1979 proposal $(1.515(1648) - 1626 = 871)$.