United States Department of the Interior
WATER AND POWER RESOURCES SERVICE
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 440/365
832.

NOV 10 1980
Planning Instruction No. 80-45 (71-16)
Memorandum

To: Regional Director, PN, MP, UC, LC, SW, UM, LN

From: Commissioner Alden D. Nielsen

Subject: Policy on Computation of Interest During Construction for Repayment Purposes

The final rule on "Procedures for Evaluation of National Economic Development (NED) Benefits and Costs in Water Resources Planning (Level C)," as printed in the Federal Register on December 14, 1979, requires NED cost evaluation procedures to utilize compound interest during construction (IDC). Section 713.2007 of this rule requires that for planning purposes, compound interest at the applicable project rate will be added to construction costs from the date costs are incurred to the date the project is completed and ready for service. Therefore, we are changing our current policy on computation of IDC for repayment and accounting purposes from the use of simple interest to the use of compound interest at the applicable interest rate. There will be no modification in the method of determining the applicable interest rate.

In order to ensure orderly transition from the former method of computation to use of compound interest, the following guidelines should be observed.

1. Repayment of water rates in any contract which stems from an adopted planning report utilizing simple IDC for evaluative purposes also shall be based on simple IDC. Simple IDC also will be used in the accounts.

2. Repayment under amendatory or supplemental contracts shall be based on the IDC computation method used for the original or master contract except when the contract is being amended or supplemented for new construction that was not included in the original planning analysis. The compound interest method will be used to compute IDC for this type of new construction unless the planning analysis for this new construction utilized simple interest.

3. Simple IDC will be used for all loan repayment contracts where the potential contractor has filed a notice of intent prior to the date of this memorandum. Otherwise, compound IDC will be utilized for new loan application reports and new loan repayment contracts. Under the Rehabilitation and Betterment Act program, if a Small Reclamation Project will be rehabilitated or battered, then compound IDC will be used for repayment and accounting purposes. This applies to all rehabilitation and betterment repayment contracts which are based on reports initiated after the date of this memorandum.
4. Unless covered by the transition guidelines above, all new contracts should be based on compound IDC when IDC is a factor in repayment.

This memorandum should be inserted into section VII of the loose-leaf repayment policy book sent to your office on February 26, 1980. Water and Power Instructions Part 499.1 will be modified accordingly.

cc: Chief, Division of O&M Technical Services, E&R Center  
Chief, Division of Planning Technical Services, E&R Center
United States Department of the Interior
BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

MAR 19 1984

Planning Instruction No. 84-03 (7116)
(Amends Planning Instruction 80-45)

Memorandum

To: Regional Director, PN, MP, LC, UC, SW, UM, LM
Attention: 400 and 700
Chief, Division of Planning Technical Services

From: Acting Chief, Division of Planning

Subject: Policy on Computing Interest During Construction For Power Repayment

Attached is a copy of the subject policy transmitted to the regions on February 17, 1984. Since this policy is now adopted Bureauwide, it should be maintained in the Planning Policy and Technical Instructions Notebook.

(Sgd) John Q. Anderson

Attachment

cc: Commissioner, Attention: 720
Chief, Division of Water and Land Technical Services, E&R Center
Guam Study Coordinator, Agana, Guam
Project Manager, Saline Water Transport and Use Office, ERC-190
Chief, Salem Planning Field Branch, Salem, Oregon
Project Manager, Carson City, Nevada
Project Manager, Phoenix, Arizona, Attention: 700
Projects Manager, Durango, Colorado, Attention: 700
Projects Manager, Grand Junction, Colorado, Attention: 700
Project Manager, Provo, Utah, Attention: 700
Project Manager, Grand Island, Nebraska, Attention: 700
(w/t of attachment to each)
FIN 07-21
Appendix B

Reclamation Manual
Directives and Standards

United States Department of the Interior
Bureau of Reclamation
Washington, D.C. 20240

FEB 17 1984

Memorandum

To: Regional Director, PN, XP, LC, UC, SW, UM, LM

From: Acting Commissioner

Subject: Policy on Computing Interest During Construction for Power Repayment

The Power Marketing Agencies, including Western, are desirous of using compound interest for computing interest during construction (IDC) for power on all projects currently under construction and all future projects effective on October 1, 1983. This means that starting with fiscal year 1984, IDC would be compounded annually. Projects in construction status on October 1, 1983 would have interest during construction computed on a simple interest basis prior to that date and on a compound interest basis thereafter.

In an effort to maintain a cooperative stance with Western and uniformity in our accounts, you are directed to immediately implement the above policy for the power purpose. If this creates any significant problems, please contact this office as soon as possible with the details.

Adoption of the above policy represents a change from policy stated in our memorandum of November 10, 1980. If possible, this change should be made for all interest-bearing purposes. Computation of interest during construction for purposes other than power, will continue to be done in accordance with the November 10, 1980 policy if repayment contracts provide, directly or indirectly, that IDC will be computed on a simple interest basis.

(Sgd) R. A. Olson

bc: EIR, Contract, D-400, D-800, D-700
    N.O. Codes 300, 400, 400

WEB: DPorter: na: 1/09/84: 343-5501
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FIN 07-21
Appendix B

Reclamation Manual
Directives and Standards

United States Department of the Interior
BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

D-740 Planning Instruction No. 85-07 (7116)

Memorandum

To: Regional Director, PN, MP, LC, UC, SN, UM, LM
Attention: 350, 400, 600, 700

Chief, Division of Planning Technical Services
Acting

From: Assistant Commissioner - Planning and Operations

Subject: Compound Interest for Repayment of Power Function

This instruction is intended to supplement the February 17, 1984 policy letter from the Commissioner to the Regional Directors regarding the computation of IDC (interest during construction) for power repayment. The Bureau has entered into agreements with the various power marketing agencies, including Western, to begin charging compound interest on all power expenditures occurring on or after October 1, 1983. To provide more specific information in carrying out the terms of the policy, the following information is being provided for use by regional and field personnel:

1. Compound IDC shall be computed for repayment purposes only, and should not be used in the cost allocations of any projects under construction that were previously computed on a simple interest basis. To do so would provide an inequitable sharing of costs between project functions. Simple interest should continue to be used for those projects except compound interest will have to be computed independently for repayment of the power function after cost allocations are complete.

2. The power expenditures subject to the compound interest computation are those spent on or after October 1, 1983; previous expenditures will continue to accrue simple interest, even if their accompanying features have not been put into service. Additionally, all interest associated with the simple interest expenditures shall not be subject to the compound interest provision.

3. The computations for power IDC require a dual system of accounting for projects currently under construction. The first would follow our normal procedures for computation of IDC and allocation of costs, and the second would require a method of separating expenditures into new and old categories. This would apply to joint costs as well as separable costs, so detailed comparisons will have to be made with previous cost allocation plans to measure the differences in expenditures. Once identified, compound interest computations would have to be made for the new expenditures and assigned for repayment.
To: Regional Director, PN, NW, LC, UC, SW, WM, LM

Attached is an example of one method that could be used to track new expenditures.

For further information, contact the E&R Center, D-740, at FTS 776-8403.

Attachment

cc: W.O. Codes 360, 400, 500
E&R Center, Codes D-360, D-400, D-600
Guam Study Coordinator, Agana, Guam
Chief, Salem Planning Field Branch, Salem, Oregon
Project Manager, Carson City, Nevada
Project Manager, Phoenix, Arizona, Attention: 700
Projects Manager, Durango, Colorado, Attention: 700
Projects Manager, Grand Junction, Colorado, Attention: 700
Projects Manager, Provo, Utah, Attention: 700
Project Manager, Grand Island, Nebraska, Attention: 700
(with copy of attachment to each)

bc: W.O. Codes 700, 720, 727, 730
E&R Center, Codes D-700, D-715, D-720, D-730, D-740, D-750, D-700 (Reid)
(with copy of attachment to each)

DIPayton: sah
11-20-84
rml: 4/15/85: 343-5275
Example of 10-Year Construction Period with Interest at 10 Percent Compound Interest Beginning with FY84 Expenditures

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<td>5 Expenditure</td>
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<tr>
<td>6 Interest Bearing Expenditure</td>
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<td>40000</td>
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<td>-</td>
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<td>4000</td>
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1/ Simple interest expenditures.
2/ Principal (for 1978-83 - it is one-half of line 1 plus all previous construction expenditures; for 1984-87 - it is the sum of 1978-1983 construction expenditures).
3/ Annual expenditure plus annual simple interest.
4/ Expenditures subject to compound interest.
5/ Principal (for 1984 - it is one-half of the annual expenditure for that year); (for 1985 - it is line 8 for 1984 plus one-half the annual expenditure for 1985); (for 1986 - it is line 8 for 1984 and 1985 plus one-half the annual expenditure for 1986); (for 1987 - it is line 8 for 1984, 1985 and 1986 plus one-half the annual expenditure for 1987).
6/ Annual expenditure plus annual interest.
7/ Cumulative amount owed at end of 1987 (sum of annual expenditures plus cumulative compound interest).
Planning Instruction No. 86-01 (7116)
(Supersedes PI 85-07 (7116))

Memorandum

To: Regional Director, PN, MF, LC, UC, SW, UM, LM
Attn: 300, 400, 600, 700

From: Assistant Commissioner - Planning and Operations [James E. Cook]

Subject: Compound Interest for Repayment of Power Functions

This instruction, and attached example, supersedes Planning Instruction 85-07 (7116), dated April 15, 1985, regarding the computation of IDC (interest during construction) for power repayment. The Bureau had entered into agreements with the various power marketing agencies, including Western, to begin charging compound interest on all power expenditures occurring on or after October 1, 1983. This agreement was announced in a policy letter dated February 17, 1984, (subsequently labelled as P.I. 84-03 on March 19, 1984).

There was a question as to whether the IDC previously calculated on a simple interest basis should be accumulated and added to the interest-bearing expenditure beginning in fiscal year (FY) 1984. In the attached example, this accumulated IDC would be $78,000. When added to the cumulative expenditures, $360,000, and half the FY 1984 expenditure, $40,000, this would result in an interest-bearing expenditure of $478,000 for FY 1984 and IDC of $47,800 for FY 1984.

Under P.I. 85-07, pre FY 1984 simple interest based past IDC would not have been included in the computation of interest-bearing expenditure. Compound IDC would have been accumulated on expenditures beginning in FY 1984. A separate, simple interest-bearing expenditure account for pre FY 1984 expenditures and a separate IDC account would have been established. Also, there would have been separate, compound interest-bearing expenditure and compound IDC accounts for FY 1984 and future expenditures.

If P.I. 85-07 were used for 1984, compound interest-bearing expenditures would have been $40,000 (half of the year's $80,000 outlay) and IDC on this would have been $4,000. The simple interest-bearing expenditure on pre 1984 outlays would have remained $360,000 and would have resulted each year in simple interest based IDC of $36,000. The total IDC charged for the year would have been $40,000 compared to the $47,800 calculated above. This difference in total annual IDC would grow larger each year.

The agreement with the power marketing agencies on compound interest is now being interpreted to mean that past simple interest based IDC should be added...
To: Regional Director, PN, XP, LC, UC, SW, UM, LM

Attn: 360, 400, 600, 700

Chief, Division of Planning Technical Services, E&R Center

to the interest-bearing expenditures as shown in the attached example. Planning Instruction 86-01 and attached example, now coincide with this interpretation.

Therefore, the following approach should be followed by regional and field personnel:

1. Compound interest shall be computed for repayment purposes only, and should not be used in the cost allocations of any projects under construction that were previously computed on a simple interest basis. To do so would provide an inequitable sharing of costs between project functions. Simple interest should continue to be used for those projects; compound interest will have to be computed independently for repayment of the power function after cost allocations are complete.

2. The revised method for computing interest for power repayment requires that all expenditures accrue compound interest beginning October 1, 1983. This includes expenditures made both before and after the above date. In addition, all previously accrued interest should be added to the balance so that future interest computations are consistent with those prepared by the Finance Branch (see RI Series 480 Part 499.1-3 A through C).

Attached is an illustration of the new computations.

For further information, contact the E&R Center, D-740, at FTS 776-8368.

This instruction should be used instead of my November 4, 1985, memorandum on the same subject. It was issued without a planning instruction number and may now be discarded.

Attachment

cc: W.O. Codes 360, 400, 600
E&R Center, Codes D-360, D-400, D-600
 Guam Study Coordinator, Agana, Guam
Chief, Sales Planning Field Branch, Salem, Oregon
Project Manager, Carson City, Nevada
Project Manager, Phoenix, Arizona, Attention: 700
Projects Manager, Durango, Colorado, Attention: 700
Projects Manager, Grand Junction, Colorado, Attention: 700
Projects Manager, Provo, Utah, Attention: 700
Project Manager, Grand Island, Nebraska, Attention: 700

(W/O of attachment to each)
### Reclamation Manual
Directives and Standards

#### Example of 10-Year Construction Period with Interest at 10 Percent

Compound Interest Beginning with FY94 Expenditures

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<td>60000</td>
<td>40000</td>
<td>20000</td>
<td>560000</td>
</tr>
<tr>
<td>Interest Bearing Expenditure 2/</td>
<td>10000</td>
<td>40000</td>
<td>80000</td>
<td>130000</td>
<td>210000</td>
<td>310000</td>
<td>478000</td>
<td>595800</td>
<td>705380</td>
<td>805910</td>
<td>N.A.</td>
</tr>
<tr>
<td>IDC @ 10x</td>
<td>1000</td>
<td>4000</td>
<td>8000</td>
<td>13000</td>
<td>21000</td>
<td>31000</td>
<td>47800</td>
<td>595800</td>
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<td>80592</td>
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<tr>
<td>Total Cost 3/</td>
<td>21000</td>
<td>44000</td>
<td>48000</td>
<td>73000</td>
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<td>119580</td>
<td>110538</td>
<td>100592</td>
<td>896510</td>
</tr>
</tbody>
</table>

| Total Expenditures (1978-1987) | 560000 |
| Total IDC | 336510 |
| Total Cost | 896510 |

1/ Beginning of compound interest computations.

2/ Principal. For 1978-83 it is one-half of line 1 plus all previous construction expenditures. For 1984 it is one-half of line 1 plus all previous construction expenditures plus cumulative IDC through the previous year: \( \frac{40,000 + 360,000 + 78,000}{2} = 47,800 \). For 1985 it is one-half of line 1 plus all previous construction expenditures plus cumulative IDC through the previous year: \( \frac{30,000 + 440,000 + (78,000 + 47,800)}{2} = 595,800 \).

3/ Annual expenditure plus annual IDC.