

# Reclamation Manual

## Directives and Standards



### 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, LM  
Assistant Secretary

From: Commissioner Aldon D. Nielsen

Subject: Policy on Computing 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 or 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 bettered, 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.

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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

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## Directives and Standards



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

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IN REPLY REFER TO: 727

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 G. 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, alem 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/c of attachment to each)

# Reclamation Manual

Directives and Standards



IN REPLY  
REFER TO: 740

## United States Department of the Interior

BUREAU OF RECLAMATION  
WASHINGTON, D.C. 20240

FEB 17 1984

Memorandum

To: Regional Director, PN, MP, LC, JC, SW, UM, LM

From: ~~ASST~~ 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

cc: EBR Center, D-400, D-600, D-700  
W.O. Codes 300, 400, 600

WBR:DPorter:na:2/09/84:343-5501  
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To: Regional Director, PN, MP, LC, UC, SW, UM, LM

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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, 600  
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

## Reclamation Manual

### Directives and Standards

Example of 10-Year Construction Period with Interest at 10 Percent  
Compound Interest Beginning with FY84 Expenditures

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	TOTAL
1 Expenditure <sup>1/</sup>	20000	40000	40000	60000	100000	100000	-	-	-	-	360000
2 Interest Bearing Expenditure <sup>2/</sup>	10000	40000	80000	130000	210000	310000	360000	360000	360000	360000	NA
3 IDC @ 10%	1000	4000	8000	13000	21000	31000	36000	36000	36000	36000	222000
4 Subtotal Cost <sup>3/</sup>	21000	44000	48000	730000	121000	131000	36000	36000	36000	36000	582000
5 Expenditure <sup>4/</sup>	-	-	-	-	-	-	80000	60000	40000	20000	200000
6 Interest Bearing Expenditure <sup>5/</sup>	-	-	-	-	-	-	40000	114000	175400	222940	NA
7 IDC @ 10%	-	-	-	-	-	-	4000	11400	17540	22294	55234
8 Subtotal Cost <sup>6/</sup>							84000	71400	57540	42294	255234 <sup>7/</sup>
9 Total Cost	210000	44000	48000	730000	121000	131000	120000	107400	93540	78294	837234
10 Total Expenditures (1978-1987)	560000										
11 Total IDC	277234										
12 Total Cost	837234										

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).



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Directives and Standards



**United States Department of the Interior**

BUREAU OF RECLAMATION  
WASHINGTON, D.C. 20240

IN REPLY REFER TO: 702

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Planning Instruction No. 86-01 (7116)  
(Supersedes PI 85-07 (7116))

Memorandum

To: Regional Director, PN, MP, LC, UC, SW, UM, LM  
Attn: 360, 400, 600, 700  
Chief, Division of Planning Technical Services, E&R Center  
ACTING

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

Subject: Compound Interest for Repayment of Power Functions

This instruction, and attached example, supersede 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



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To: Regional Director, PN, MP, LC, UC, SW, UM, LM  
Attn: 360, 400, 600, 700  
Chief, Division of Planning Technical Services, E&R Center

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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 776-8388.

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, 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  
(w/c of attachment to each)

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Example of 10-Year Construction Period with Interest at 10 Percent  
Compound Interest Beginning with FY84 Expenditures

	1978	1979	1980	1981	1982	1983	1984 <sup>1/</sup>	1985	1986	1987	TOTAL
Expenditure	20000	40000	40000	60000	100000	100000	80000	60000	40000	20000	560000
Interest Bearing Expenditure <sup>2/</sup>	10000	40000	80000	130000	210000	310000	478000	595800	705380	805918	N.A.
IDC @ 10%	1000	4000	8000	13000	21000	31000	47800	59580	70538	80592	336510
Total Cost <sup>3/</sup>	21000	44000	48000	73000	121000	131000	127800	119580	110538	100592	896510
<hr/>											
Total Expenditures (1978-1987)	560000										
Total IDC	<u>336510</u>										
Total Cost	<u>896510</u>										

<sup>1/</sup> Beginning of compound interest computations.

<sup>2/</sup> 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,  $40,000 + 360,000 + 78,000 = 478,000$ . For 1985 it is one-half of line 1 plus all previous construction expenditures plus cumulative IDC through the previous year:  $30,000 + 440,000 + [78,000 + 47,800] = 595,800$ .

<sup>3/</sup> Annual expenditure plus annual IDC.