## U.S. Department of Energy Washington, D.C.

# ORDER

RA 6120.2

9-20-79

### SUBJECT: POWER MARKETING ADMINISTRATION FINANCIAL REPORTING

- 1. <u>PURPOSE</u>. To establish financial reporting policies, procedures, and methodology for all Department of Energy (DOE) power marketing administrations (PMAs) except where deviations, therefrom are specifically approved by the Secretary, authorized by statute, or identified and explained in a transmittal memorandum or in the footnotes to the reports.
- 2. <u>CANCELLATION</u>. Paragraph IV. F of INTERIM MANAGEMENT DIRECTIVE 1701, PRICING OF DEPARTMENTAL SERVICES AND PRODUCTS, OF 9-28-77.
- 3. <u>SCOPE</u>. The provisions of this order apply to the PMAs reporting to the Assistant Secretary for Resource Applications.
- 4. <u>REFERENCES</u>. Proposed procedures for adjustments in power and transmission rates of the PMAs, 44 F.R. 39184 (July 5, 1979), or such finally adopted procedures.
- 5. <u>AUTHORITY</u>. This order is issued pursuant to the authority of the Secretary of Energy under the Department of Energy Organization Act, Public Law 95-91, 42 U.S.C. 7101; the Reclamation laws, particularly Section 9(c) of the Reclamation Project Act of 1939, 53 Stat. 1194, 43 U.S.C. 485h(c); Section 5 of the Flood Control Act of 1944, 58 Stat. 890, 16 U.S.C. 825s; the Bonneville Project Act, 50 Stat. 731, as amended, 16 U.S.C. 832 et seq.; the Federal Columbia River Transmission System Act, Public Law 93-454, 16 U.S.C. 838 et seq.; the Eklutna Project Act, 64 Stat. 382, as amended; Section 204 of the Flood Control Act of 1962, 76 Stat. 1193 (Snettisham Project); Reorganization Plan No. 3 of 1950, 64 Stat. 1262; Section 2 of the Act of June 14, 1966, Public Law 89-448, 80 Stat. 200, as amended; Section 303 of the Federal Power Act, 49 Stat. 855, 16 U.S.C. 825b; and related laws.
- 6. <u>POLICY</u>.
  - a. It is DOE policy to encourage sound businesslike financial management and accounting practices in routine accounting and the preparation of power system financial statements. Power system financial statements will be prepared in

accordance with generally accepted accounting principles as prescribed by the American Institute of Certified Public Accountants, the Financial Accounting Standards Board, the General Accounting Office, and the Office of Management and Budget, as appropriate. To the extent practicable, the PMAs will maintain their accounts in accordance with the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission for public utilities.

b. It is also DOE policy that power repayment studies will be prepared annually using sound and consistent financial forecasting techniques. These forecasts should be designed to approximate as closely as possible the results expected to be achieved in the historical power system financial statements.

#### 7. DEFINITIONS.

- a. <u>Assisted Irrigation Investment</u>. "Assisted irrigation investment" means the portion of construction costs of Federal Reclamation projects which are allocated to the irrigation purpose and are assigned pursuant to legal authorization for repayment from the revenues of the power system.
- b. <u>Cost Evaluation Period</u>. "Cost evaluation period" means a period of time during which estimates of future costs and revenues may be modified to reflect changing conditions, normally 5 years.
- c. <u>Cost Recovery Criteria</u>. "Cost recovery criteria" means the criteria set forth in paragraph 12, beginning on page 13.
- d. <u>Investment or Power Investment</u>. "Investment" or "power investment" means unless otherwise indicated in the context, investment allocated to be repaid from power revenues.
- e. <u>Power Marketing Administration</u>. "Power marketing administration" means the Alaska Power Administration, the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, or the Western Area Power Administration.
- f. <u>Power Repayment Study</u>. "Power repayment study" means a study (previously referred to as an average rate and repayment study or repayment study) portraying the annual repayment of power production and transmission costs of a power system through the application of revenues over the repayment period of the power system. The study shows, among other items, estimated revenues and expenses, year by year, over the remainder of the power system's repayment period (based upon conditions prevailing over the cost evaluation period), the estimated amount of Federal investment amortized during each year, and the total estimated amount of Federal investment remaining to be

amortized. The study does not deal with rate design. Power repayment studies may take two forms as described below:

- (1) <u>Current Power Repayment Study</u>. A power repayment study that utilizes currently established rates for estimating future revenues. The study reflects the same basic power system included at the time rates were approved.
- (2) <u>Revised Power Repayment Study</u>. A study that utilizes, in whole or in part, proposed or assumed rates for estimating future revenues. Typically, it is designed to demonstrate that potential revenue levels will satisfy the cost recovery criteria over the remainder of the power system's repayment period.
- g. <u>Power System</u>. A system comprised of one project or more than one project hydraulically and/or electrically integrated and therefore treated as one unit for the purpose of establishing rates.
- h. <u>Power System's Repayment Period</u>. A period extending to the final year allowed under the cost recovery criteria for amortization of the original investment in all projects included in the power repayment study.
- i. <u>Secretary</u>. The Secretary of Energy.
- 8. THE ACCOUNTING SYSTEM.
  - a. <u>The Books of Account</u>. The books of account of all the PMAs will be kept in accordance with accounting systems that are approved by the General Accounting Office and any additional guidelines promulgated by the Secretary. The PMAs shall maintain their power systems accounts in accordance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission for public utilities and licensees to the extent practicable. Supporting detailed information shall be maintained in a manner that facilitates a ready retrieval, analysis, and verification of pertinent facts. Books of account shall be kept on a monthly basis and closed at the end of each fiscal year.
  - b. <u>Accounting Concepts</u>. Accounting concepts for PMAs shall be developed around, but not limited to, the following generally accepted principles:
    - (1) <u>Period Cutoff Accounting</u>. There must be proper cutoff accounting at the beginning and end of the period to ensure that revenues and expenses are not overstated or understated.

- (2) <u>Expenses Matched to Period Revenues</u>. Expenses shall be appropriately matched against the periodic revenues.
- (3) <u>Current and Fixed Assets</u>. Assets shall be accounted for in a meaningful manner to assure fair presentation of the financial position. Current assets are to be carried at cost or market value, whichever is less; fixed assets are to be carried at cost of acquisition or construction; appropriate charges shall be made for depreciation of fixed assets.
- (4) Liabilities. All known liabilities shall be recorded.
- c. <u>Specific Power System Accounting Matters</u>. Specific accounting matters which are pertinent to PMA practices include, but are not necessarily limited to, the following:
  - (1) <u>Interest Rates</u>. Interest expense on the power investment shall be a required portion of the costs to be recovered by power revenues. Rates to be used in computing interest shall be those rates officially established by law, or for all investment with no rate established by law made through 1-29-70, the rate established administratively for such investment, or for all investment made after 1-29-70, the rate established pursuant to paragraph 11, beginning at page 12, and related implementation guidelines.
  - (2) <u>Unpaid or Deferred Annual Expense</u>. Deficits (or unrecovered expenses) which occur in any year in which revenues fail to recover operation and maintenance, purchased and exchanged power, transmission service and other expenses, and interest expense shall be accrued on the balance sheet as a liability with interest at the rate prescribed in paragraph 11, beginning at page 12, for investment made in the fiscal year in which the loss was incurred.
  - (3) <u>Priority of Revenue Application</u>. Annual revenues will be first applied to the following recovery of costs during the year in which they are incurred: operation and maintenance (O&M), purchased and exchange power, transmission service and other, and interest expense and any appropriation amortization of revenue bonds. Remaining revenues are available for amortization and shall be applied first to unpaid or deferred annual expense, if any, and then to the Federal investment. To the extent possible, while still complying with the repayment periods established for each increment of investment and unless otherwise indicated by legislation, amortization of the investment first.

#### 9. FINANCIAL STATEMENTS.

- a. Power System Financial Statements. Power system financial statements shall, to the extent practical, be prepared in accordance with generally accepted accounting principles and concepts. Power system financial results shall be disclosed in a clear, concise, and complete manner. Annual financial statements, accompanied by explanatory footnotes and supporting schedules, shall fairly present the financial position for each PMA power system. Power system reporting requirements shall generally conform to any appropriate standards promulgated by the American Institute of Certified Public Accountants. the Financial Accounting Standards Board, the Federal Energy Regulatory Commission, and the General Accounting Office and shall include, but not necessarily be limited to (1) Statement of Revenues and Expenses or Income Statement: (2) Statement of Assets and Liabilities or Balance Sheet: (3) Statement of Source and Application of Funds or Statement of Changes in Financial Position; (4) Statement of Changes in Proprietary Capital (this statement may be incorporated in either the Statement of Revenues and Expenses or the Statement of Assets and Liabilities); and (5) the appropriate notes to financial statements.
- b. <u>Statement of Revenues and Expenses (Income Statement)</u>. The results of operations shall be clearly and fairly reported on a comparative basis for the current and preceding fiscal periods. Net Revenues (or Deficit) presents the results of power system operations on a normal accrual accounting basis for the reporting period, after depreciation expense and interest on the unpaid Federal investment.
- c. <u>Statement of Assets and Liabilities (Balance Sheet)</u>. The financial position of the power system for the current and preceding periods shall present the Federal investment in the power system on a cumulative basis and include a schedule of accumulated net revenues.
- d. <u>Statement of Changes in Financial Position (Statement of Source and Application of Funds)</u>. A statement of changes in financial position shall be prepared on a comparative basis for the current and preceding fiscal periods to clearly describe the flow of funds of the power system for the reporting period. All power system funds shall be reported according to major source and disposition in a format which is appropriate to conventional regulated-company financial reporting.
- e. <u>Notes to the Financial Statements and Supporting Tables</u>. Power system financial statements shall satisfy professional requirements for adequate, informative disclosure. Notes to the financial statements for each power system

shall address, as a minimum, the following reporting matters (unless this information is provided elsewhere):

- (1) <u>Summary of Significant Accounting Policies</u>. A description of all significant accounting policies of the power system. Policy disclosures shall include, at a minimum: (a) the basis of consolidation, (b) depreciation methods employed, (c) status of allocation of cost varying purposes on multi-purpose projects, and (d) amortization and repayment ; requirements related to the Federal power investment.
- (2) <u>Subsequent Events</u>. Disclosure of material events and transactions occurring subsequent to the financial reporting period shall be included if necessary for proper interpretation of the financial statements.
- (3) <u>Interest Rates</u>. Current policy regarding interest rates applicable to the reporting power system.
- (4) <u>Non-depreciable Assets</u>. The amortization and reporting treatment of the Federal investment in land and other non-depreciable assets.
- (5) <u>Contingent Liabilities</u>. A discussion of known major contingent liabilities.
- f. <u>Auditor's Opinion</u>. The financial statements and accompanying notes to the financial statements of each power system shall be examined periodically, with the period not to exceed 2 years, by independent auditors, the General Accounting Office, Inspector General, or other acceptable audit organization. The results of this examination shall be reported in a letter which describes the scope of the examination and expresses an opinion on the financial statements.

#### 10. POWER REPAYMENT STUDIES.

a. <u>General Requirements</u>. Each PMA will prepare and publish annually a power repayment study for each power system. Each power repayment study consists of two parts, historical data and future data (forecasts). The development of future data requires the forecast of revenues, expenses and investment. The annual power repayment study will use sound and consistent forecasting techniques. Those forecasting techniques will be explained in a memorandum included with each forecast. The forecasts will utilize, to the extent possible, the accounting concepts set forth on page 4, paragraph 8. The power repayment study is updated annually to test the continuing adequacy of the existing rates. The annual study is called a <u>Current Power Repayment Study</u>. It reflects the same basic power system included at the time rates were approved, but forecasts current operating results and updated estimates of revenues and costs for the remaining years of the repayment study.

- b. <u>Rate Adjustment Plan</u>. Whenever the current power repayment study shows that repayment requirements are not being met, action will be taken by the PMA to prepare and recommend a plan to be implemented at the next practicable time to satisfy the repayment requirements (or to explain why such requirements cannot be met). Such plan may include increasing rates, decreasing costs, changing contracts, or any other viable means for meeting cost recovery criteria. This plan will be supported by a Revised Power Repayment Study which will meet the cost recovery criteria. The plan will be submitted to the Assistant Secretary for Resource Applications through the Office of Power Marketing Coordination for review and further action. In certain situations the plan could recommend that no action be taken to meet repayment requirements. While a revised power repayment study must be prepared at a minimum when a current power repayment study shows that repayment requirements are not being met, preparation is not limited to that situation.
- c. <u>Cost Evaluation Period</u>. A period of time during which future estimates of costs and revenues may be modified to reflect changing conditions, such as additions to the power systems or inflation. This period of time is normally 5 years. Revenue and cost estimates for the remaining years of the power system's repayment period should reflect price levels, rate levels, and contractual commitments consistent with conditions anticipated during the cost evaluation period.
- d. <u>Allowable Unamortized Investment</u>. Each increment of investment shall be carried as allowable unamortized investment for its repayment period in accordance with the following principles:
  - (1) <u>Duration of Repayment Period</u>. Unless otherwise prescribed by law, each dollar of investment is to be repaid with interest within a period not-to-exceed 50 years. Repayment periods of less than 50 years may be established when the facilities involved have useful life expectancies of less than 50 years. Such shorter repayment periods are appropriate for (a) replacement of power facilities and (b) transmission facilities which are developed and managed as transmission systems rather than as adjuncts to generating projects. In such cases, the expected useful life of the facility involved generally will be used as the repayment period. Such repayment periods may be adjusted from time to time, within the 50-year maximum, if changed conditions indicate a different estimated useful life expectancy.
  - (2) <u>Start of the Repayment Period</u>. The first year of the repayment period for both specific and joint investment cost shall be the fiscal year following the fiscal year in which the investment goes into commercial service. After each portion of allocated repayable power investment goes into commercial service, the total joint investment costs for a power generating facility shall,

on a pro rata basis, be associated with the specific investment costs incurred in the initial stage of project development (the initial stage of development includes all power units which are initially constructed in a continuous sequence without a time lag or more than 5 years between generating units).

- e. <u>Revenues</u>.
  - (1) Power revenues shall be those expected through the power system's repayment period, based on contractual commitments for sales of power and energy that are expected to exist during the cost evaluation period.
  - (2) In the absence of specific contractual provisions for increased power sales, the revenue forecast will rely heavily on the past trends of actual customer load growth rates. Where contractual payments for power and/or quantities of such power and energy sales are defined, these shall form the basis for revenue determination.
  - (3) Power quantities for forecasting future revenues shall also include purchased and exchange power quantities which are consistent with contractual commitments that are estimated to exist during the cost evaluation period, and only to the extent that related costs are also projected. The revenue forecast shall also consider capacity increases resulting from facility additions which are projected to be commercially operational within the cost evaluation period. A schedule comparing revenue estimates for the previous period with actual revenue realized should be included with the annual submission. Miscellaneous revenues shall be included where appropriate, as well as headwater benefit payments to be made to the Treasury for power benefits to non-Federally owned utility hydroplants.
  - (4) Power quantities used for estimating revenues, unless defined by contract, are determined by theoretical reservoir operation studies based on historical stream flows. In preparing these operational studies, hydrological data, current to within 5 years if possible, and available engineering data will be used, recognizing restrictions imposed by other project functions. Input data will be revised and updated whenever new information indicates that a significant change in the forecast can be expected in the future where there is a significant variance between the forecasted and actual results, but in any event not less frequently than once every 5 years unless an accepted explanation is provided concerning why this is not necessary.
- f. <u>Operation and Maintenance Costs</u>. Estimates of O&M costs shall be developed with heavy reliance placed on historical cost trends and actual project costs in

the past. The use of various cost indices, developed from and supported by project history is recommended in developing the forecast and testing its reliability. In preparing the estimate, actual costs will be compared to past forecasts to identify sources of variance and previous projection errors. A schedule showing these comparisons will be included with the annual power repayment update. The forecast shall take into account known factors which are expected to affect the future level of such costs during the cost evaluation period.

- g. <u>Purchase and Exchange Power Costs</u>. All costs of planned purchased power during the cost evaluation period shall be included in the power repayment study.
- <u>Transmission Service and Other Costs</u>. These costs, to be estimated for the cost evaluation period, include payments to others required by legislation, "wheeling" payments for use of transmission capacity, rental payments for the use of electrical facilities, payments for detriment caused by project facilities or operation, payments for increased benefits furnished by others, credit payments under certain contracts, and interconnection costs for which a payment is made based on contractual commitments.
- i. <u>Interest Rates</u>. Interest rates shall be established as set forth on page 4, paragraph 8c(1) for historical and current rates. Forecasts will utilize the rate established in paragraph 11, beginning on page 12, and related implementation guidelines for the latest available year for all future years.
- j. <u>Interest Expense</u>. Interest expense for each of the years of the study will be the sum of the amounts determined by: (1) applying the applicable interest rate to each estimated unamortized power investment at the beginning of the year; plus (2) applying one-half the applicable interest rate to power investments (i.e., additions and replacements) expected to be added and in service during the year; plus (3) applying the applicable interest rate to capitalized unpaid or deferred annual expense, if any. If the interest credit concept is utilized by the PMA, the interest credit should be offset against interest expense.
- k. <u>Investment Costs</u>. The power repayment studies will include all investment cost allocated to power for the existing systems. Additionally, the allocated power investment costs of all authorized power system facilities for which Congress has appropriated funds for construction and which will be in service within the cost evaluation period will be included. The investment cost will include construction cost of the project as well as interest during construction, computed using the same rate as determined in paragraph 10i.
- I. <u>Replacements</u>. Future replacement costs will be included in repayment studies by adding the estimated capital cost of replacement to the unpaid Federal

investment in the year each replacement is estimated to go into service, and adding it to the allowable unamortized investment. The capital costs of each replacement is determined by estimating the cost at current price levels of the new unit of property, less salvage, if any, at the end of the service life of the unit replaced. The allowable unamortized investment is developed by adding each year's investment as it goes into service and then deducting each increment of investment at the end of its allowable repayment period. Replacements should be accounted for separately from the original investment.

- m. <u>Status of Repayment</u>. For any year of a power system study, the status of repayment can be determined by comparing the allowable unamortized investment with the unamortized investment. For every year that the unamortized investment is equal to or less than the allowable unamortized investment, repayment is on or ahead of schedule. If for any year the unamortized investment exceeds the allowable, the cost recovery criteria are not being met.
- n. <u>Content and Format of Power Repayment Study</u>. Power repayment studies for all power systems shall be accompanied by a statement of pertinent assumptions used in preparing the studies. Further, there should be submitted a schedule which will show significant changes as compared with the previous study and a comparison of the previous forecast to actual performance for the same period. The format of the power repayment studies prepared by the PMAs will be expected to vary to some extent due to differences in conditions among PMAs, e.g., some have transmission systems, while others do not.

#### 11. INTEREST RATE FORMULA.

- a. Except as otherwise provided by law, the interest rate to be used for computing interest during construction and interest on the unpaid balance of the costs of Federal power facilities, the construction of which is initiated after September 30, 1983, which are financed with appropriations and the cost of which is properly allocated to commercial power development, shall be the yield rate, as hereinafter provided in subparagraph "b" of this paragraph, during the fiscal year in which construction is initiated. For purposes of this paragraph, the facilities for which a separate interest rate is established may be any of the following so long as repayment periods are established for them:
  - (1) A Federal reservoir or canal project which includes the generation of electric power that is marketed by a PMA and which may also include transmission facilities constructed during the same stage of construction;
  - (2) Any unit or separable power feature or groups of such units of features of such Federal reservoir or canal project;

- (3) Any separable features or groups of features of a Federal transmission system, including transmission lines, substations, and appurtenant facilities, which are under the administration of a PMA that are not considered a part of a Federal reservoir or canal project;
- (4) Annual increments of investment in separable features or groups of features of a Federal transmission system that are placed in service during the same year; or
- (5) Replacements of or additions or betterments to power facilities.
- b. Each fiscal year the Assistant Secretary for Conservation and Renewable Energy will request the Secretary of the Treasury to provide the computations made as of October 1 of the yield rate for the preceding fiscal year. For purposes of this paragraph, the yield rate is the average yield during the preceding fiscal year on interest-bearing marketable securities of the United States which, at the time the computation is made, have terms of 15 years or more remaining to maturity. The average yield shall be computed as the average during the fiscal year of the daily bid prices. Where the average yield so computed is not a multiple of one-eighth of one percent, the yield rate shall be the multiple of one-eighth of one percent nearest to such average yield.
- c. The Assistant Secretary shall annually notify the PMAs of the yield rate for the current fiscal year.
- 12. <u>COST RECOVERY CRITERIA</u>. The current rates for a power system will be adequate if, and only if, a power repayment study indicates that:
  - a. The expected revenues are at least sufficient to recover annually, except for a possible initial short transition period:
    - (1) All costs of operating and maintaining the power system during the year in which such costs are incurred; plus,
    - (2) The cost of acquiring power through purchase and/or exchange agreements, the costs for transmission services, and other costs during the year in which such costs are incurred; plus,
    - (3) Expensed interest on the unamortized investment in Federal power facilities in the year for which the interest charges are assessed, except that recovery of the annual interest expense may be deferred in unusual circumstances for short periods of time; plus,

- (4) Interest and amortization of revenue bonds where PMAs are authorized to issue such bonds.
- b. In addition to the recovery of the above costs on a year-by-year basis, the expected revenues are at least sufficient to recover:
  - Each dollar of power investment at Federal hydroelectric generating plants within 50 years after they become revenue producing, except as otherwise provided by law: plus,
  - (2) Each annual increment of Federal transmission investment within the average service life of such transmission facilities or within a maximum of 50 years, whichever is less; plus,
  - (3) The cost of each replacement of a unit of property of a Federal power system within its expected service life up to a maximum of 50 years; plus,
  - (4) Each dollar of assisted irrigation investment within the period established for the irrigation water users to repay their share of construction costs; plus,
  - (5) Other costs such as payments to basin funds, participating projects or States.
- 13. <u>SUBMISSION</u>. Power system financial statements and power repayment studies will be forwarded to the Assistant Secretary for Resource Applications and shall be accompanied by a statement from the PMA Administrator that the financial statements and power repayment studies are in compliance with this order. Any deviation therefrom shall be disclosed and justified. Copies of power system financial statements and power repayment studies will be provided for policy guidance, evaluation of methodology, and compliance review, and shall be delivered within 180 days of the close of the applicable fiscal year.

FOR THE SECRETARY OF ENERGY:

George S. McIsaac Assistant Secretary for Resource Applications