



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

MINIDOKA PROJECT OFFICE
1359 HANSEN AVENUE, BURLEY, IDAHO

March 13, 1964

IN REPLY
REFER TO: 400

Watermaster District 36
P.O. Box 697
Idaho Falls, Idaho

Dear Henry:

Enclosed is a copy of "Summary of Principles and Procedures Governing Water Regulation and Power Production for the Boise, Minidoka and Palisades Projects.

One of the purposes of this summary is to very clearly define that the control of the reservoirs and power plants involved remains in the hands of the Bureau of Reclamation and the Watermasters involved.

There may be some points you will want to discuss. We feel that there is no change in working plans between your office and ours.

Very truly yours,

Project Superintendent

Enclosure

February 1964

U. S. Bureau of Reclamation
Region I

SUMMARY OF PRINCIPLES AND PROCEDURES
GOVERNING WATER REGULATION & POWER PRODUCTION
FOR THE BOISE, MINIDOKA & PALISADES PROJECTS

I. Water management

Water management at Bureau of Reclamation dams and reservoirs will be under the direction at all times of the Superintendents of the Central Snake Projects Office (CSPO) for the Boise and Owyhee Projects and the Minidoka Area Projects Office for the Minidoka and Palisades Projects. This direction is coordinated with needs of the storage contractors and the plans of the respective State Watermasters for Districts 12-A and 36.

In general, water releases will be planned and ordered as much in advance as circumstances permit. Frequently, changes are required on short notice and procedures are included herein to provide current information to the BPA Scheduling Group. If BPA considers changes in water release orders to be desirable, they will inform the Bureau and every consideration will be given such requests. The final determination with respect to all water releases and management will rest with the Bureau. Procedures are outlined in the following paragraphs to insure compliance with the water release and management orders issued by the Bureau of Reclamation or by the State Watermasters when so authorized.

II. Procedures and forms for water and power management

The following procedures and forms are grouped under general headings. However, it is not entirely possible to segregate them into groups and some multipurpose forms will be discussed under several headings.

A. Forecasts and plans

The responsible parties in the Bureau shall estimate future water releases, reserved energy requirements, and power generation capabilities, both on a short and long term basis as information permits. BPA load scheduling group shall be kept currently informed as these plans and estimates change. The primary form used to collect and disseminate this information is the weekly, "Water Release and Power Operating Forecast" (see attached Exhibit A). This forecast will reflect the joint plans and estimates of the Bureau Project Offices and the BPA load scheduling group. It is not a commitment to make the water releases estimated nor to generate the energy.

In preparing the forecast, the lines of responsibility and communication will be as follows:

(1) The CSPO will furnish to the Power Division (Burley) the reservoir elevation, water release, and potential power generation estimates for the Boise Project. It will also furnish estimates of the reserved power and energy requirements for the Boise and Owyhee Projects.

(2) The River Control and Storage Division (Burley) will furnish to the Power Division (Burley) the reservoir elevation, and water release estimates for the Minidoka and Palisades Projects.

(3) The Power Division (Burley) will estimate the reserved power and energy requirements for the several Bureau irrigation projects in the Minidoka-Palisades Area, and will estimate the average and peak potential generation at each Bureau powerplant.

(4) The Power Division (Burley) will consolidate the USBR information on the Water Release & Power Operating Forecast (Exhibit A) and furnish it to the BPA Scheduling Group.

(5) BPA Scheduling Group will complete the form by entering information on their loads and generation planned for the USBR plants. The form will be returned to the Power Division (Burley) for issuance to the USBR interested offices. If adjustments are desired by the BPA Scheduling Group, the Power Division (Burley) will act as liaison with other USBR groups in determining whether adjustments can be made.

B. Water Release Orders and controls

Water releases at Bureau-operated reservoirs will be made only as authorized by written Water Release Orders (See Exhibit B1 and B2), issued by the responsible Bureau of Reclamation official or his delegated representative. At times, urgency will require these be made verbally by phone or radio but a written confirmation shall be furnished to the reservoir operating personnel with copies to the Power Division (Burley) and the BPA Scheduling Group. When unexpected changes are necessary which affect established generation schedules, the BPA Scheduling Group and the Burley Power Division shall be advised as soon as possible.

When appropriate, the water release order may include a statement that the powerplant operators may use the power generating schedule to determine water releases required. The water release order should cover as long a period as practical and may specify cfs or acre feet over a period of time. BPA Scheduling Group and Burley Power Division should be kept currently informed through the Water Release Orders of any special conditions.

Controls are required to insure that water releases are in fact complying with the orders issued by the responsible parties. The following procedures should provide such assurance:

(1) Reservoir operators will compare written Water Release Orders with actual releases being made. Any discrepancy shall be immediately reported to the responsible Project Superintendent.

(2) Reports of river elevations and flows will be checked against Water Release Orders by the responsible project.

(3) Project division in charge of powerplant operations will check proposed generation schedules on Water Release & Power Operating Forecast and generation schedules on the BPA daily schedule sheet against Water Release Orders.

C. Power and energy reporting, and controls on generation scheduling

USBR must provide current information of its reserved energy requirements to the BPA Scheduling Group. BPA advises that it is only necessary to provide a daily total energy requirement for the various points of delivery; an hourly breakdown is not required. Attached is a proposed "USBR Southern Idaho Scheduled Loads" form (Exhibit C) for reporting this data on a daily basis and to accumulate it for a monthly period for ready reference. Following is a step-by-step outline of its proposed use:

(1) Each work day CSPO enters on a sepia the estimated daily total megawatthours for each CSPO point of delivery and the estimated daily generation at Black Canyon and Boise Division Powerplants. A print is mailed to Burley Power Division.

(2) Burley Power Division collects load data for Minidoka Area points of delivery as described later and enters these amounts on a master sepia. The amounts for CSPO is added to this master sepia and totals are computed. Prints from master sepia are furnished each work day to BPA Scheduling Group and other interested offices.

(3) Each Friday afternoon, when necessary, Burley Power Division will phone North Side Pumping Division and Burley Irrigation District to discuss expected weekend operations. BPA will be advised verbally of any significant trends.

(4) BPA Scheduling Group will adjust USBR power estimates to correct for previous variations and to reflect most recent information (written or verbal), and current weather conditions.

(5) BPA Scheduling Group mails prints of their daily schedule sheet (Exhibit E) to the Regional office, CSPO and Minidoka Projects office. These will be used to check compliance with load scheduling and water release orders.

Sample Time Schedule: CSPO prepares sheet on Monday, showing Wednesday expected loads. Burley Power Division receives sheet Tuesday a.m. and adds data received same morning from Minidoka Area customers (showing Monday actual operations as expected loads for Wednesday). BPA receives prints before noon Tuesday for use in preparing Wednesday schedule.

Notes on use of USBR scheduled loads report:

a. CSPO should project weekend loads on report mailed Thursday; if not shown, BPA will project on basis of last day shown.

b. BID and MID loads are delivered directly from Government facilities. Their effect on load variations is minimized because BPA load scheduling for Minidoka 34.5 kv system is based upon phone reports of the loading of the two 138 kv interconnections.

c. Monthly totals from the scheduled load report will be used by BPA Area Office, to pro-rate wheeling charges.

d. Meter readings on USBR irrigation loads will be taken on or about the 15th day and last day of month. The use calculated from the readings will be furnished to BPA Scheduling Group for guidance in minimizing load variations.

Controls on generation scheduling consist of review by plant operating personnel to insure plant criteria is not violated, and review of BPA daily generation schedules by respective projects.

D. Miscellaneous reporting

Other reports and controls will need to be continued or expanded but shall be reviewed for need.

(1) Power Situation Statement -- This is a monthly report describing current status and expected developments. Its purpose is to keep all Bureau offices in the Region currently advised. Burley Power Division will collect data and prepare this report. This will require a statement from BPA Scheduling Group concerning their tentative generation pattern.

(2) Powerplant daily log summary or plant log -- BPA Scheduling Group has requested the Black Canyon and Anderson Ranch reports be mailed directly to them by plant personnel. BPA receives daily phoned information

from Minidoka and Palisades plants so they are not concerned about the delay caused by transmittal through the Project Office of the written reports.

III. Communications and Responsibility

Usually BPA Scheduling Group will phone generation schedules to Palisades and Minidoka plants, and to CSPO. When CSPO is closed BPA will phone direct to Anderson Ranch Powerplant. Burley Power Division will collect and consolidate hydrological and load data from other offices for transmittal to BPA.

Responsibility for insuring compliance with Powerplant Operating Criteria rests with plant operating personnel. Responsibility for insuring compliance with Water Release Orders rests in the respective River Control Division. Responsibility for the collection and dissemination of USBR data to BPA rests with the Burley Power Division.

IV. Powerplant Operating Criteria

Excepting periods required for inspection, test, maintenance and repair, the Bureau power generating facilities will be available for normal operation. For guidance of the BPA Scheduling Group, some of the general operating criteria and limitations are stated in the Exhibits D1, D2, D3, D4, and D5, attached.