BPA F 2200.03e
(09-08)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE

Approved by Forms
Mgmt. 09/22/2008

1. Name of Procedure	2. Effective Date
Business Unit Cash Split Data Mart Validation	**10/01/15**

3. Preparers Name *(Employee name)*

█████████████ **(FTT)**

4. Procedures:

The purpose of the cash analysis is to assign actual cash transactional data from the accounting system to Power and Transmission. The accounting system records all cash inflows and outflows to one cash general ledger account in the Corporate business unit.

The BPA cash analysis or "cash split" is an estimated calculation. It is calculated monthly and used to 1) support a FERC separate business line accounting for rate-making[1]; 2) calculate the allocation percentage rates for the application of interest offset credit and investment income to Power and Transmission Services; and 3) determine year–end reserves for Power and Transmission.

Background

The original purpose of the cash split analysis was to support a reallocation of interest offset credit income to Power and Transmission per a request from Transmission. Revenue Requirements analysts were able to leverage this analysis and use it for the calculation of business unit reserves for rate case and separate accounting purposes beginning with data as of the end of FY 2004.

The interest offset credit had been applied as a 50-50 split between the Power Business Unit and Transmission Business Unit for fiscal years 2002 and 2003. Prior to that 100% of the interest income was credited to the Power Business Unit. During fiscal year 2003 the Transmission Business Line made a request for a fair allocation of the interest income credit between the Business Units (Power, Transmission and Corporate) based on actual cash receipts and disbursements. Since the beginning of FY 2004 the allocation of the monthly accrual of business unit interest offset credit has been updated monthly.

In FY 2015 Cash Flow by Business Unit Project was started to determine the feasibility of using system and process improvements to replicate the manual calculations from system data. The Business Unit split process was automated using the cash management data mart in EPM accessing BPA's financial data. This allowed for more accurate Business Unit cash reporting at month end. Parallel testing was done for the remainder of FY 2015. The Business Unit Cash Split from the data mart went live in FY 2016 starting with the cash balances for Power and Transmission calculated from the manual cash split model. The procedures that follow are used to verify the data used to calculate the Business Unit cash split and make corrections and adjustments as needed.

---

[1] In compliance with the Commission order, BPA developed a system that separately tracks generation and transmission revenues, costs, **and resulting surpluses/deficits**. *See* 25 FERC ¶ 61,140, at 61,375 (1983)**.** *See also* 20 FERC ¶61,142 (1982); 26 FERC ¶61,096 (1984); 28 FERC ¶61,325 (1984).

BPA F 2200.03e
(09-08)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE

Approved by Forms
Mgmt. 09/22/2008

Monthly Data Mart Verification Procedure

1. Open Cash Management Data Template – Summary.xls in W://Treasury/Cash, Interest & Reserves/Cash Management/BU Cash Split/Cash Management Data Mart/Production folder (**BU Cash Path**) and filter Accounting Period for current month.

2. Go to Query Manager in FMS and search public queries by Folder Name and begins with Cash Management. This search brings up list of queries used for the BU Cash Split verification process described in each step.

   a. Run public query BPA_CM_DM_CASH_BAL to verify grand total cash activity for month.

   b. If difference is noted, run JNL_LINE/JNL_HDR public query for cash account 131001 to check if any manual cash journal entry exist for the month. If found, go to section 11. in this document then follow the steps to manually allocate the CORPT amount via spreadsheet upload process. If no manual cash entry exists for the month, go through each transaction type in the Cash Management Data Template – Summary results for the month starting with step 2 below. Note what transaction type is different. Contact FC business analyst if there is a difference.

   c. Save and close.

3. Open Cash Management Data Template – AP in BU Cash Path folder and select current month in the Accounting Period box at top left on the AP_Summary tab.

   a. Open DIRECT tab and run BPA_CM_DM_AP_DIRECT and compare cash amounts per each business unit GL. Review the account level detail for each business unit for unusual transactions.

   b. Open POWER_DIRECT tab and compare to detail on DIRECT tab and specifically described CORPT accounts are attributed to Power.

   c. Open PCARD_ACCT_ALLOC tab and run BPA_CM_DM_AP_PCARD to verify **percentage rates** by business unit. Verify grand total on PCARD tab is equal to the CORPT account 184004 on the DIRECT tab.

   d. Open PREPAID_ACCT_ALLOC tab and verify work order/project ID's are valid reference for each voucher ID. Contact General Accounting (or validate in Asset Suite) for verification. If voucher does not have work order/project ID, contact General Accounting to have the COTR associate proper work order to contract in Asset Suite. Overnight process will update data for PREPAID_ACCT_ALLOC tab.

   e. Open POOLED_ALLOC tab and:

      i. Confirm accounts listed are for Capital and Expense only in first pivot table. If other accounts are listed contact FC business analyst.

      ii. Second pivot table is program level view but totals should match to first pivot table.

      iii. Third pivot table shows Power and Trans programs allocated by SOY CORPT G&A rate. Confirm SOY G&A rate by program. Grand total may also include CORPT Prepaid account amounts, if any, from PREPAID_ACCT_ALLOC tab. Due to rounding in allocation process totals may not match with first and second pivot tables which tie to Financials.

      iv. Fourth pivot table compare grand total with third pivot table. Sum prepaid expense accounts for Power and Trans and compare to PREPAID_ACCT_ALLOC tab total for CORPT total.

   f. Open GENERAL_ALLOC_RATE tab and confirm prepaid expense account, 165050, is zero. Confirm charge card clearing account, 184004, total matches CORPT portion of PCARD_ACCT_ALLOC tab.

   g. See section 12.b. in this document for GENERAL_ALLOC_RATE AP, AR, ARC calculation.

**U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE**

    h. After review is complete go to AP_Summary tab, confirm CORPT allocated amount is zero and General_Alloc_Rate totals for Power and Trans match the GENERAL_ALLOC_RATE tab, save and close.

4. Open Cash Management Data Template – AR (Accounts Receivable Non-Customers (Direct Journal entries)) in BU Cash Path folder and select current month in the Accounting Period box at top left on the AR_Summary tab.

    a. Open DIRECT tab and run BPA_CM_DM_AR_DIRECT and compare totals per each business unit GL. Review the account level detail for each business unit for unusual transactions.

    b. Open GENERAL_ALLOC_RATE tab and confirm grand total is equal to CORPT portion on DIRECT tab.

    c. See section 12.b. in this document for GENERAL_ALLOC_RATE AP, AR, ARC calculation.

    d. After review is complete go to AR_Summary tab, confirm CORPT allocated amount is zero and General_Alloc_Rate totals for Power and Trans match the GENERAL_ALLOC_RATE tab, save and close.

5. Open Cash Management Data Template – ARC (Accounts Receivable Customers) in BU Cash Path folder and select current month in the Accounting Period box at top left on the ARC_Summary tab.

    a. Open DIRECT tab and run BPA_CM_DM_ARC_DIRECT and compare totals per each business unit GL. Review the account level detail for each business unit for unusual transactions.

    b. Open GENERAL_ALLOC_RATE tab and confirm grand total is equal to CORPT portion on DIRECT tab.

    c. See section 12.b. in this document for GENERAL_ALLOC_RATE AP, AR, ARC calculation.

    d. After review is complete go to ARC_Summary tab, confirm CORPT allocated amount is zero and General_Alloc_Rate totals for Power and Trans match the GENERAL_ALLOC_RATE tab, save and close.

6. Open Cash Management Data Template – DM (Deal Management Debt) in BU Cash Path folder and select current month in the Accounting Period box at top left on the DM_Summary tab.

    a. Open DIRECT tab and run BPA_CM_DM_DM_DIRECT and compare total for CORPT business unit GL. Review the account level detail for each business unit for unusual transactions.

    b. Check bond and interest balances for month against bonds_bos.xls in W://Treasury/U.S. Treasury/Bonds-Treasury/, checking interest, bonds redeemed and bonds borrowed by business unit.

    c. After review is complete go to DM_Summary tab, check allocated totals with DIRECT tab for each business unit, save and close.

7. Open Cash Management Data Template – DMI (Investments) in BU Cash Path folder and select current month in the Accounting Period box at top left on the DMI_Summary tab.

    a. Open DIRECT tab and run BPA_CM_DM_DMI_DIRECT and compare total for CORPT business unit GL. Review the account level detail for each business unit for unusual transactions.

    b. Note: Investment activity for the month is ignored for cash purposes. This financial activity is considered in the Cash Reserves calculation.

    c. Open GENERAL_ALLOC_RATE tab and confirm grand total is equal to CORPT portion on DIRECT tab.

    d. See section 12.a. in this document for GENERAL_ALLOC_RATE Cash Split % calculation.

BPA F 2200.03e
(09-08)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE

Approved by Forms
Mgmt. 09/22/2008

   e. After review is complete go to DMI_Summary tab, confirm CORPT allocated amount is zero and General_Alloc_Rate totals for Power and Trans match the GENERAL_ALLOC_RATE tab, save and close.

8. Open Cash Management Data Template – HR (Payroll) in BU Cash Path folder and select current month in the Accounting Period box at top left on the HR_Summary tab.

   a. Open DIRECT tab and run BPA_CM_DM_HR_DIRECT and compare total for each business unit GL. Review the account level detail for each business unit for unusual transactions.

   b. Open DEPTID_P_TO_POWER tab which is the CORPT direct charges attributed to Power departments. Scan department column to ensure all begin with P.

   c. Open DEPTID_T_TO_POWER tab which is the CORPT direct charges attributed to Transmission departments. Scan department column to ensure all begin with T.

   d. Open LEAVE_BENEFITS_ALLOC tab which is the CORPT direct portion that is attributed to leave and benefit charges. Check totals to DIRECT tab for 184002 (Benefits) and 242001 (Leave) accounts under CORPT GL. Biweekly General Accounting runs the leave and benefit allocations which are applied based on employee timesheet entries. Data Mart methodology uses the same pool data to determine the percentages by business unit for timesheet entries then allocates the COPRT GL amounts in 184002 and 242001 accounts to each business unit based on the percentages. Run BPA_CM_DM_HR_LABOR to verify timesheet entry percentages by business unit. CORPT portion of leave and benefit amounts will be allocated later in process using the GENERAL_ALLOC_RATE Payroll.

   e. Open POOLED_ALLOC tab and:

      i. Confirm accounts listed are for Capital and Expense only in first pivot table. If other accounts are listed contact FC business analyst.

      ii. Second pivot table is program level view but totals should match.

      iii. Third pivot table shows Power and Trans by programs and is allocated by SOY CORPT G&A rate. Confirm SOY G&A rate by program. Due to rounding in allocation process totals may not match with first and second pivot tables which tie to Financials.

      iv. Fourth pivot table is account level detail after allocations. Compare grand total with third pivot table.

   f. Open GENERAL_ALLOC_RATE tab. CORPT portion of leave and benefits are included in table. Confirm 184002 and 242001 totals match LEAVE_BENEFIT_ALLOC tab totals for CORPT. Confirm other accounts in DIRECT tab for CORPT that are not included in the above allocation steps for payroll are included on GENERAL_ALLOC_RATE PAYROLL tab.

   g. See section 12.d. in this document for GENERAL_ALLOC_RATE Payroll calculation.

   h. After review is complete go to HR_Summary tab, confirm CORPT allocated amount is zero and allocated type amounts equal related tabs for each business unit, save and close.

9. Open Cash Management Data Template – HRJE (Payroll manual journal entries) in BU Cash Path folder and select current month in the Accounting Period box at top left on the HRJE_Summary tab.

   a. Open DIRECT tab and run BPA_CM_DM_HRJE_DIRECT and compare total for CORPT business unit GL. Review journal level detail for unusual transactions.

   b. Open GENERAL_ALLOC_RATE tab and total matches to DIRECT grand total.

   c. See section 11.d. in this document for GENERAL_ALLOC_RATE PAYROLL calculation. Make sure percentages used are the same for payroll.

    d. After review is complete go to HRJE_Summary tab, confirm CORPT allocated amount is zero and General_Alloc_Rate totals for Power and Trans match the GENERAL_ALLOC_RATE tab, save and close.

10. Open Cash Management Data Template – IPAC in BU Cash Path folder and select current month in the Accounting Period box at top left on the IPAC_Summary tab.

    a. Open DIRECT tab and run BPA_CM_DM_IPAC_DIRECT and compare total for CORPT business unit GL. Review journal level detail for unusual transactions.

    b. Open IPAC tab and confirm allocated business unit is all Power.

    c. After review is complete go to IPAC_Summary tab, confirm CORPT allocated amount is zero and IPAC total for Power matches IPAC tab, save and close.

11. Open Cash Management Data Template – JE in BU Cash Path folder and select current month in the Accounting Period box at top left on the JE_Summary tab. If JE_Summary tab total is $0 for CORPT check DIRECT tab for any amounts under $1.

    a. Open DIRECT tab and run BPA_CM_DM_JE_DIRECT and compare total for CORPT business unit GL. For CORPT amounts research and follow Spreadsheet Upload process. See CM DM Spreadsheet Upload Process Step by Step document at W://Treasury/Cash, Interest & Reserves/Cash Management/BU Cash Split/Upload/ folder.

    b. Radio Spectrum entries will be included in DIRECT tab total. Open RADIO_SPECTRUM_ALLOC tab and confirm total amount matches to DIRECT tab amount for Radio Spectrum entries. Confirm allocated business unit is TRANS in RADIO_SPECTRUM_ALLOC tab.

    c. After review is complete go to JE_Summary tab, confirm CORPT allocated amount is zero, check correction totals with CORRECTION tab after upload process is complete, save and close.

12. Open Cash Management Data Template – Monthly General Rates in BU Cash Path folder and select current month in the Accounting Period box at top left on the General Allocation Rates tab.

    a. Open DMI General Allocation Rate tab and follow steps in column A and B. Check the percentage used in step 3 against the Business Unit Cash Split Detail report percentages for the prior month. Report is located at W://Treasury/Cash, Interest & Reserves/Cash Management/BU Cash Split/Cash Management Data Mart/Production/Report Files folder. After upload process for adjustments and corrections is complete check the ending percentages and cash balance with this Report.

    b. Open AP, AR, ARC tab and confirm Power and Trans percentage at bottom of first two pivot tables matches the General Allocation Rates tab for AP, AR, and ARC for each allocated business unit. Note: detail amounts are from AP cash activity only and do not include prepaid expenses.

    c. Review bottom two pivot tables to confirm Pooled Allocation Rates matches SOY CORPT G&A allocation rate for each program provided by Accounting.

    d. Open HR, HRJE tab and confirm Power and Trans percentages at bottom of the two pivot tables match the General Allocation Rates tab for HR and HRJE for each allocated business unit. Note: Detail amounts are from HR cash activity only.

    e. After review is complete go to General Allocation Rates tab, confirm percentages match related tabs, save and close.

13. After upload process has been run for corrections and adjustments open Cash Management Data Template – Summary in BU Cash Path folder and filter Accounting Period for current month.

BPA F 2200.03e
(09-08)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE

Approved by Forms
Mgmt. 09/22/2008

    a.   Run `BPA_CM_DM_CASH_BAL` to verify grand total cash activity for month. Check cumulative total against cash balance in account 131001 in Financials. There will be small rounding differences from the AP and HR template processing.

    b.   If difference is noted, run JNL_LINE/JNL_HDR public query to check if any manual cash journal entry exist for the month. If found, go to section 11 in this document then follow the steps to manually allocate the CORPT amount via spreadsheet upload process. If no manual cash entry exists for the month, go through each transaction type in the Cash Management Data Template – Summary results for the month. Note what transaction type is different. Contact FC business analyst if there is a difference.

    c.   After upload process is complete open Cash Management Data Template – ADJ to ensure the corrections or adjustments have been made.

    d.   Note: Final check for each template summary tab make sure Corpt is zero and has been allocated to Power and Transmission.

14. Cash Management Data Template – Query is used for research. Use the filters for the area or type to see the details for your research.

15. Go to W://Treasury/Cash, Interest & Reserves/Cash Management/BU Cash Split/Cash Management Data Mart/Production/Report Files folder and open current fiscal year Cash by BU (in millions)(Cube) spreadsheet. Click on Data at top tool bar and then select Refresh All. Check cash split percentages for month with General Allocation Rates tab for DMI ending percentages.

Reserves Business Unit Split Calculation Procedure

1. Use the Deferred Borrowing report for Power and Transmission deferred borrowing balances. Copy, paste special amounts from Deferred Borrowing report into the respective reserve columns in the BU Cash Split report just under total reserves for the current month.

2. Determine the par value of Market Based Special investment at end of month. Run JNL_LINE/JNL_HDR query for the cash account, 131001. Take out investment interest that is shown in the template under #7 above. The remainder is the par activity of investments. This balance has been included in the total cash balance. Use the current end of month MBS investment par value in the formula on the BU Cash Split report just above total reserves.

3. Formula for total reserves by business unit adds cash, deferred borrowing and difference between Current Market Value of MBS and par value. Check BU Cash Split report reserve total with the 0012 Executive Overview reserve total.

4. End of year include Reserves not for Risk and Reserves for Risk by business unit at bottom of report. Also include SOY and Q3 reserve forecasts with the EOY reserves in box at bottom of report.

5. Send out report to distribution list as pdf and save in fiscal year folder. Also save excel version in the fiscal year folder that all values are copy, paste special so there are no links to the CM DM and send to select individuals in FRG and FTT.

Annual Reviews

1. Obtain the current year IPR G&A allocation rates for cost pool and project id. This has the percentage for each cost pool for each business unit. Run report 2006FYXX in PS Financials. This report shows the Project and Product. Use the October report to determine the percentages between the business units. Go to EPM Query Manager and run public queries BPA_CORPT_ALLOC_SRC_DATA and BPA_CORPT_ALLOC_TRG_DATA.

BPA F 2200.03e
(09-08)

**U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
CASH AND TREASURY MANAGEMENT
STANDARD OPERATING PROCEDURE**

*Approved by Forms
Mgmt. 09/22/2008*

The first query provides the product, project and descriptions and the second query provides the product, percentages for the business units and descriptions. Compare these queries with the 2006FYXX report and IPR to ensure that PS and EPM have the same allocation rates as IPR. Also open Tree Manager/Tree Viewer in PS Financials for detail of project numbers to ensure all are included in both PS and EPM. If there are differences, contact FC business analyst for further research. FRG inputs the allocation rates in PS Financials and FBF inputs the rates in EPM.

2. After G&A allocation rates have been verified in PS and EPM go to Cash Management Data Template – AP POOLED_ALLOC tab. Check percentages by product descriptions for accuracy and print. Use this to check pooled allocations for AP and HR each month.

3. Review accounts defined on CASH_SPLIT tree in EPM are current and valid. Accounting may have added accounts during the year that may affect the cash split rules.