Service Request 83299
UCRP Supplemental Assessment

Technical Specification

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Introduction

Service Request 83299

Service Request 83299 asks that a new process be created for handling the calculation, maintenance and reporting of a new UCRP supplemental assessment.

Overview of System Modifications

Compute Process
Currently, after each compute, program PPI735 creates a STIP file with OPEB information which is combined with other STIP data and sent to the UCOP EIAS/Treasurer’s office. In addition, this program accumulates the OPEB STIP data during the month so it can be reconciled at month-end.

PPI735 will be modified to calculate the new UCRP supplemental assessment on each eligible earnings, and include the assessment as STIP transactions in the OPEB STIP file which is sent to UCOP Accounting (EIAS), with corresponding GL transactions for campus ledger systems. The process will report on the per-compute and monthly assessments in the same manner as it does for OPEB.

The per-compute EIAS transaction set will include:

- Account 1195xx, fund 0900xx, reference ARCSUP; the amount is the grand total (Federal and non-Federal) of the calculated UCRP supplemental assessment
- Account 112417, fund 067900, reference 1195xx; the amount is the total of the calculated UCRP supplemental assessment for Federal funds, with the sign reversed
- Account 112416, fund 067900, reference 1195xx; the amount is the total of the calculated UCRP supplemental assessment for non-Federal funds, with the sign reversed

The per-compute campus GL transaction set will include:

- FAU x115072; the amount is the grand total of the calculated UCRP supplemental assessment
- FAU x119500; the amount is the grand total of the calculated UCRP supplemental assessment, with the sign reversed

Expense Distribution Process

The expense distribution process will be modified to calculate the UCRP supplemental assessment on the month’s combined earnings. The UCRP supplemental assessment will be combined with the GSTR/IAPOFF contribution amount for reporting and the transfer of expense (TOE) file.

For expense transfers processed during the month, the expense distribution process will be modified to separate out the UCRP supplemental assessment from the combined GSTR/IAPOFF amount.

The UCRP supplemental assessment will be added to report PPP5202.

Report PPP5302 will be modified so that the column heading for GSTR/IAPOFF will also include “UCRPSU” to indicate the UCRP supplemental assessment, and the assessment will be included in that column.

- PPP530 will generate additional campus GL transactions: Departmental FAU transactions with object code 8630; the amount for each is the total calculated UCRP supplemental assessment for the departmental FAU
- FAU x115072; the amount is the grand total of the calculated UCRP supplemental assessment, with the sign reversed
Program PPI735 currently also runs after expense distribution to reconcile the per-compute OPEB amounts with the final amounts from expense distribution, and creates an adjustment STIP file which is sent to UCOP. This process will be modified to include reconciliation of the new UCRP supplemental assessment contribution in the OPEB STIP adjustment file.

Table Updates
A new System Parameter will be added for the UCRP supplemental assessment; the rate is likely to change only at the beginning of the month (and most likely at the beginning of the fiscal year), and the rate will apply to all earnings processed during the month (current or prior period activity).

Design Considerations

Design Approach
The process will essentially duplicate the OPEB STIP process.

PPI735 will be modified to produce the additional campus and UCOP GL transactions and include them in the existing output files. The new reports will also be appended to the existing report file.

Testing Considerations

• Multiple computes should be run for one month. After each, PPI735 should be run, accumulating UCRP supplemental assessment amounts in the hold file. Review PPI735 reports.
• Run expense distribution for the month. Review UCRP supplemental assessment data in the PPP5302 report.
• PPI735 should be run also in month-end mode to validate the reports and output.
• A compute with an expense transfer should be done for an earnings with a UCRP supplemental assessment. This should be followed by running expense distribution to validate the distribution of the UCRP supplemental amount in the transfer.

Mainframe Design

Control Table Updates

System parameter table
A new system parameter will be created for the UCRP supplemental assessment rate. Use PRM number 289 for the rate.

Copy Members

CPWSXIC5
CPWSXIC5 contains several installation constants, used primarily by Expense Distribution. It will be modified as follows:
• Add UCRP supplemental assessment to the IDC-BENE-CODES benefits codes array and IDC-XEDR-BENEFIT-COUNT. Campuses will format the FAU to their specifications. The value of IDC-BENE-CDE-INDEX for each item must correspond with the position of the matching item in CPWSXEDR.
  o Entry 37: 30*8630UCRP SUPPLEMENT 3115072
CPWSXEDR
CPWSXEDR defines the layout of the Expense Distribution Work records. It will be modified as follows:
- Add UCRP STIP loan assessment to XEDR-RCD23-BENEFITS-AMOUNTS and add 1 to the OCCURS clause for XEDR-RCD23-BENEFITS-AMOUNTS. This array contains one item for each “benefit” type in expense distribution.

CPFDXEDF
CPFDXEDF is the FD for the Expense Distribution work file. It will be modified as follows:
Increase record size from 8914 to 9114

CPWSXEXP
CPWSXEXP defines the Expense Distribution Work file type 2 (earnings) entries created during Expense Distribution. It will be modified as follows:
- Increase the FILLER from 176 to 180 to accommodate the additional employer cost occurrence.

CPLNKLON (new)
This will be a new copylib member containing the linkage to the new program PPBENLON.
Input fields:
- PPBENRET return code – since a PAR is eligible for the UCRP supplemental loan assessment if and only if it is eligible for UCRP contributions, eligibility can be based on the return code from PPBENRET (KRET-ERROR-RETURN) and the retirement plan code
- Gross amount (from XPAR-EARN-AMT(PAR-IX))
- FAU (from XPAR-FAU(PAR-IX) or XEDR-KEY-FAU)
- Retirement plan code (from XPAR-RETR-PLAN-CODE or XEDR-RCD23-RETR-PLN)

Output fields:
- Return code (status)
- Eligibility code (yes/no)
- Federal account indicator (yes/no)
- Total assessed amount
- Assessment rate

Cobol Programs
PPBENLON (new)
This will be a new program to determine eligibility and calculate the UCRP supplemental assessment amount. Logic is as follows:
- Obtain the new parameter with the UCRP supplemental assessment rate, and include the parameter value in the returned values. As PPBENOPB does, shift the decimal point two to the left with a REDEFINE and use the shifted amount for calculations.
- Determine whether the earnings is eligible for the UCRP assessment by looking at the PPBENRET return code passed. If it’s 0 the retirement plan code is UCRP (U, B, or 1), set the eligibility indicator to Y; otherwise, set it to N.
- If eligible:
  - Call PPFAU018 for each of the specified fund groups, FEDCTRCT, FEDFUNDS, and FEDPASS, using the FAU passed on input. If there’s a match in any of the fund groups, then it’s a federal fund, otherwise, it’s not. Set the federal account indicator in the output
  - Calculate the assessment amount (rounded) by multiplying the parameter rate by the gross amount from the input.
Note that PPI735 will need to determine whether a given FAU is Federal or not for expense transfers and for the month-end reconciliation – perhaps those can be handled with a call to PPBENLON that would include a hard-coded zero for the PPBENRET return code, a hard-coded zero for the gross, the PAR or EDW FAU, and the PAR or EDW retirement code.

PPI735

PPI735 creates campus and OP GL transactions for the estimated OPEB amounts for each compute, and creates any necessary adjustments (when compared to actual OPEB amounts) at month end. It runs in two modes: one is per-compute with the sequential PAR as input and the other is at month-end with the expense distribution work file (EDW) as input.

It will be modified to perform the same functions for the UCRP supplemental assessment. Modifications will be as follows:

- Change internal documentation to make it clear that this program now processes both OPEB and the UCRP supplemental assessment.
- Add CPLNKLON to working-storage
- Add CPLNKRET to working-storage
- Add new report lines to working-storage
- Adjust any FD, SD, or WORKING-STORAGE versions of the EDW file to match the changes made to CPWSXEDR.
- Add new totals for the UCRP amounts to working-storage, similar to WS-OPEB-BENE-AMT-TOT-ME and WS-OPEB-BENE-AMT-TOT-CP. For the UCRP supplemental assessment, there should be separate federal and non-federal totals. Also add a new total similar to WS-RETIREMENT-GRS-AMT to accumulate the UCRP gross amount.
- Add the Federal and non-Federal UCRP assessment amounts to the existing HLDOPEB records (same format as the existing OPEB amount), and reduce the size of the FILLER so the total record length remains the same.
- Modify Compute Processing under 2000-PROCESS-COMPUTE:
  - The main PERFORM can no longer bypass expense transfers; they’ll need to be handled separately. If an expense transfer is encountered:
    1. scan the deductions segment for XPAR-CUR-DED-CODE (<ern-idx>) = ‘131’ (it’s an OCCURS DEPENDING ON XPAR-NO-DED-REF). If it’s there, save the index; otherwise, skip this record (the amount for GTN 131 is zero, so there was no assessment).
    2. Check XPAR-TITLE (1); if it’s subject to GSTR (IC5-GSTUI-VALID-TITLE), skip this record (the assessment amount has no UCRP supplement).
    3. Check XPAR-FAU (1) to see if it is Federal or not
    4. Check the earnings distributions (OCCURS DEPENDING ON XPAR-NO-ACCTS) starting with an index (<ern-idx>) of 2 (the first occurrence is always transaction type E1, and the second and all others – although there will be likely be only the second one – are E3s).
      - Check XPAR-FAU (<ern-idx>) to see if it is Federal or not. If it and the FAU (1) above are both Federal, or both are not, skip this record (Federal to Federal or non-Federal transfers won’t change the totals).
      - If XPAR-EARN-AMT (1) is zero, calculate a TRANSFER-PERCENT (S9(1)V9(4)) as 1.0000; otherwise calculate TRANSFER-PERCENT (rounded) as XPAR-EARN-AMT (<ern-idx>) / XPAR-EARN-AMT (1) * -1. (The negative gets the sign right.) Calculate the assessment amount (rounded) as XPAR-CUR-AMT (<saved index from the check of XPAR-CUR-DED-CODE>) * TRANSFER-PERCENT. If FAU(1) was Federal, subtract the assessment amount from the Federal bucket and add it to the non-Federal bucket; otherwise, subtract the assessment amount from the non-Federal bucket and add it to the Federal bucket.
    - Modify code in 2100-GET-DOS-DETAILS to also obtain DOS-NSETC-CODE-1 and DOS-NSETC-CODE-2 from the DOS table.
  - Add a section similar to 2200-COMPUTE-OPEB-GROSS to compute the UCRP supplemental assessment.
    1. Populate CPLNKRET fields as follows:

```plaintext
KRET-RETR-PLAN-CODE    XPAR-RETR-PLAN-CODE
```
2. Call PPBENRET to determine eligibility for retirement assessment. The retirement assessment itself will not be used, but the return code is needed for PPBENLON.
3. Call NEW program PPBENLON to determine eligibility and calculate contribution amount.
4. If eligible, add the amount to the either the federal or non-federal accumulated total, depending on the returned indicator. Also add the gross to the UCRP gross total.
   o Modify 2400-WRITE-PER-COMPUTE-REPORT: add code to write the new report lines defined in working-storage, using the UCRP supplemental assessment data. The federal and non-federal amounts should be combined in the assessment amount.
   • Modify month-end processing under 3000-PROCESS-MONTHEND:
     o In the loop through the EDW, add code to sum the UCRP supplemental assessment amount from each record; check the FAU to sum them as Federal or non-Federal. As with OPEB, bypass records with DOS codes of VAC or SKL.
     o Prior to performing para 3200-, compute WS-NEW-HLDUCRP-AMT as the sum of the Federal and non-Federal amounts.
     o In 3200-WRITE-MONTHEND-REPORT, duplicate the code for the existing month-end report, to produce a second page with the per-compute and monthly totals for the UCRP supplemental assessment, using the new report lines defined in working-storage. The report will display the totals of the Federal and non-Federal amounts.
   • Copy section 4000-OPEB-GL-OUTPUT to a new section to format campus GL transactions for the UCRP supplemental assessment. Then make the following changes
     o Use WS-NEW-HLDUCRP-AMT instead of WS-NEW-HLDOPEB-AMT.
     o Use the provided liability account number (115072), and call PPFAU109 to obtain the campus FAU layout.
     o Move WS-NEW-HLDUCRP-AMT to the GL amount and write the record.
     o Then continue with the 119500 account, using WS-NEW-HLDUCRP-AMT in the amount and write the record.
   • Copy section 4500-UCOP-GL-OUTPUT to a new section to format the UCOP EIAS transactions for the UCRP supplemental assessment.
     o Use WS-NEW-HLDUCRP-AMT instead of WS-NEW-HLDOPEB-AMT for the debit entry (account 1195xx, fund 0900xx (this is the same as the existing one used for OPEB (E-FAU-DB-OPEB-FC), reference ARCSUP).
     o There will be two credit entries (multiply each of the amounts by -1 to change the sign):
       1. Federal (account 112417, fund 067900, reference 1195xx)
       2. non-Federal (account 112416, fund 067900, reference 1195xx)

PPP520

PPP520 creates the Expense Distribution Work file (EDW) as an intermediate step of expense distribution. It reads the monthly PAR file and assigns prorated benefits to the PAR earnings.

Code will be added to calculate the new UCRP supplemental assessment and add it to the EDW file. The total will also be added to the PPP5202 report.
Modifications will be as follows:

1. Add CPLNKLON to working-storage.

2. There are two arrays in working-storage which itemize the amounts for each benefit assessment. These are EDT-DETAIL-BENEFITS and SRT-DTL-BENEFITS. The new UCRP supplemental assessments should be added to these arrays, and increment the associated OCCURS clauses by 1. These arrays must be in sync with those in CPWSXIC5 and CPWSXEDR. EDT-BENE-AMT in particular has hard-coded subscripts in the PROCEDURE DIVISION; be sure to check for those (para 201500-, 201600-, 201800-, 201850-).

3. Add 1 to the OCCURS clause for CTR-BENEFITS. Note the comment which states “"OCCURS" MUST BE IN SYNC WITH "IDC-XEDR-BENEFIT-COUNT”.”

4. For the second page of report PPP5202, in P5204-HD9, add a new column label “UCRP SUPP”.

5. Add a new section under 203000-CALC-BENEFITS to process the current PAR earnings record for the UCRP supplemental assessment.
   a. Call NEW program PPBENLON to determine eligibility and calculate contribution amount. Since PPBENRET will have already been called in 203100-MTCHING-RETIR-CONTR, KRET-ERROR-RETURN is available to move to the input for PPBENLON.
   b. If eligible, move the calculated amount to the appropriate position in the EDT-DETAIL-BENEFITS array.

6. Add code at the end of 203000-CALC-BENEFITS to perform the new section.

7. Calculate expense transfer benefits for the UCRP supplemental assessment.
   a. Since the UCRP supplemental assessment is going to be combined with the GSTR/IAP offset amount, it will be processed along with EDT-GSTUI, which is the third occurrence in the EDT array. In the following code, just before the “ELSE”, add the code in red italics. n is the value of the index of the new UCRP supplemental assessment item in the EDT array.

   ```
   IF  INDX IS EQUAL  TO  3
      PERFORM 203972-SEPARATE-IAPOFF-GSTUI
      MOVE 2 TO  H
      PERFORM 200650-E1-BENEFITS
      MOVE 3 TO  H
      PERFORM 200650-E1-BENEFITS
      MOVE n TO H
      PERFORM 200650-E1-BENEFITS
   ELSE
   ```

   b. Section 203972-SEPARATE-IAPOFF-GSTUI contains the code to allocate the transfer amount to comprising benefits. Code should be added to determine which portion is the UCRP supplemental assessment as follows:

      If the title code is subject to GSTR (IC5-GSTUI-VALID-TITLE), it’s all GSTR; otherwise, it’s all UCRP supplemental assessment.

8. Add the UCRP supplemental assessment totals to the PPP5202 report:

   In section 300200-PRINT-BENEFIT-TOTALS, after the code to write P5204-HD10, change the code “PERFORM 300300-BENEFITS-TO-PRINT 1 TIMES” to “2 TIMES” so that the new UCRP supplemental assessment column will be written from the accumulated total.

PPP530

PPP530 is the expense distribution reporting program, which reports the amounts that are to be distributed to different accounts using the expense distribution work file (EDW) produced by PPP520 program. In addition, it creates the general ledger transactions, transfer of expense (TOE) update transactions, and reversal transactions.
The UCRP supplemental assessment will be added to the GSTR/IAPOF column of the PPP5302 report, and the heading of that column will be changed accordingly. Since the TOE file matches PPP5302, the UCRP supplemental assessment will be added to the GSTR/IAPOF field in that file as well.

Modifications will be as follows:

1. In working-storage, change the PPP5302 report heading. Change WB-5302-RPT-H9 and WB-5302-RPT-H10 so that:
   
   \[
   \text{ACONTRIB/ IAPOF} \\
   N \text{ FSS/SMSP} \\
   \]
   
   becomes:
   
   \[
   \text{ACONTRIB IAPOF/} \\
   \text{NFSS/SMSP UCRPSU} \\
   \]


3. In section PRINT-LOCATION-TOTALS-2010, find the three blocks code which were added for release 1670. Copy these, but replace index “36” with the index of the new UCRP supplemental assessment item in the IDC-BENE-CODES array in CPWSXIC5. For example,

   ```
   MOVE WK-LOC-IDC-ACCT-DESC \(n\) TO WB-5302-D5-TTL1.
   MOVE IDC-BENE-CDE-FAU \(n\) TO WORK-D5-FAU.
   MOVE WK-LOC-IDC-BENE-AMT \(n\) TO WB-AMT.
   MOVE 2 TO WORK-D5-COLUMN
   PERFORM BALNC-SHEET-FAU-TOT-PRT-2034
   ```

4. In section PROCESS-EDW-DTL-SEGMENT-2510, make the following modification to add the UCRP supplemental amount from the XEDR array to the column total for GSTUI.

   ```
   \[
   \]
   ```

5. Also in section PROCESS-EDW-DTL-SEGMENT-2510, add the same value to the COMPUTE WB-TOTAL-BENEFITS statement.

PPP532 (recompile only)

Recompile required for CPWSXEDR and CPWSXEXP.

PPP533 (recompile only)

Recompile required for CPWSXEDR and CPWSXEXP.

PPP536 (recompile only)

Recompile required for CPWSXEDR and CPWSXEXP.

PPP538 (recompile only)

Recompile required for CPWSXEDR and CPWSXEXP.
PPP541 (recompile only)  
Recompile required for CPWSXEDR and CPWSXEXP.

PPP542 (recompile only)  
Recompile required for CPWSXEDR and CPWSXEXP.

PPP546 (recompile only)  
Recompile required for CPWSXEDR and CPWSXEXP.

PPP549 (recompile only)  
Recompile required for CPWSXEDR and CPWSXEXP.

**Bind Members**

**PPI735**
Add PPBENLON, PPBENBRR, PPBENRET and PPFAU018 to the member list.

**PPP520**
Add PPBENLON to the member list.

**Control Table Updates**

**System parameter table**
A new system parameter will be created for the UCRP supplemental assessment rate.

**Unit Testing Requirements**

- Run a compute and PPI735. Validate output files and reports.
- Run expense distribution. Validate reports
- Run PPI735 in month-end mode and validate the reports and output.
- Create an expense transfer transaction for an earning with a UCRP supplemental assessment.
- Run the compute and expense distribution and validate the distribution of the UCRP supplemental amount in the transfer.