Service Request 100431
IX Lump Sum Payment

Technical Specification

March 4, 2014
Prepared by Maxine Gerber

Information Resources & Communications
Office of the President
University of California
## Version History

<table>
<thead>
<tr>
<th>Version #</th>
<th>Date</th>
<th>Revised By</th>
<th>Reason for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1/14/14</td>
<td>Maxine Gerber</td>
<td>Initial Draft</td>
</tr>
<tr>
<td>1.1</td>
<td>1/22/14</td>
<td>Maxine Gerber</td>
<td>Added FT and costing details and control total details.</td>
</tr>
<tr>
<td>1.2</td>
<td>2/3/14</td>
<td>Maxine Gerber</td>
<td>Clarifications</td>
</tr>
<tr>
<td>1.3</td>
<td>3/4/14</td>
<td>Maxine Gerber</td>
<td>Finalize document</td>
</tr>
</tbody>
</table>


# Table of Contents

Version History .................................................................................................................................................... 1

1 Introduction.......................................................................................................................................................... 3
   1.1.1 Service Request 100431 ......................................................................................................................... 3

2 Background ....................................................................................................................................................... 3

3 Overview of System Modifications ..................................................................................................................... 3
   3.1.1 New One-Time Process .............................................................................................................................. 3

4 Design Considerations ....................................................................................................................................... 3
   4.1 Assumptions and Dependencies .................................................................................................................... 3

5 Testing Considerations ...................................................................................................................................... 3

6 Mainframe Design ........................................................................................................................................... 3
   6.1 New One-Time Process .................................................................................................................................. 3
   6.1.1 Cobol Programs ....................................................................................................................................... 3
   6.1.2 Bind Members ........................................................................................................................................... 8
   6.1.3 JCL Changes ............................................................................................................................................ 8

7 Unit Testing Requirements ............................................................................................................................... 9
   7.1 Test Strategy ............................................................................................................................................... 9
   7.2 Test Cases ............................................................................................................................................... 9

Attachment A – Example of FAU Proration ......................................................................................................... 12
1 Introduction

This technical specification provides detailed information about the modifications necessary to address the creation of IX lump sum payments (SR100431).

1.1.1 Service Request 100431
Generate one-time lump sum payments as per the IX Agreement ratified on December 10, 2013.

2 Background

On December 10, 2013 IX ratified an agreement with the UC. According to the terms of the Collective Bargaining agreement with IX, all eligible IX unit employees will receive a one-time, non-retirement eligible lump sum payment that will not be subject to Agency Fees or Union Dues. Payments are due to the employees within 120 days after the December 10, 2013 ratification date.

3 Overview of System Modifications

3.1.1 New One-Time Process
A new one-time program will be developed to generate compute transactions for payments to eligible IX employees.

4 Design Considerations

4.1 Assumptions and Dependencies

- One-Time Lump sum payments must be made within 120 days of the December 10, 2013 IX ratification date. We would like to target the MO pay date of February 28, 2014 for payment.

5 Testing Considerations

- The one-time program will be run to verify that the correct transactions are generated.
- A compute will be run to verify that the transactions are processed correctly.

6 Mainframe Design

6.1 New One-Time Process

6.1.1 Cobol Programs

6.1.1.1 PPOTrrrr (New)
PPOTrrrr is a new one-time program to generate FT transactions for payments to eligible IX employees. Prior one-time lump sum programs may be used for reference, such as PPO2021B, but the requirements for this one are distinctive so that this specification is not directly built upon a prior program.
Inputs and Outputs

Inputs:
- Merged PAR including the MO paid 7/1/2013 through the compute prior to the one-time execution.
- Run specification to contain the pay period end date to use on the FT transactions.
- PPPPER DB2 table
- PPPTCI DB2 table

Outputs:
- FT transaction file to be used as input to an MO compute
- Tab-delimited report file – see BRD for layout
- Warnings and Controls Report
- Costing file

WORKING-STORAGE

1. Array of IX title codes. 100 entries.
2. Array to contain all eligible earnings for an employee. 200 entries.
   - Earnings period end date
   - FAU
   - Earnings Amount
   - Lump sum amount for this earnings
3. Array of FAU’s for the final pay cycle. 50 entries
   - FAU
   - Total amount
   - Percentage of total final earnings for this FAU
   - Total Lump Sum for this FAU
4. Totals for Control Report
   - Total eligible earnings for all employees
   - Total number of FT records written.
   - Total FT amounts (should be same as total lump sum payments)
   - Total number of costing records written (should be same as number of FT records)
   - Total costing amount (should be same as total lump sum payments and FT total).
5. Working Totals for current employee
   - Total employee eligible earnings. Total employee eligible earnings in the final pay period.
6. Sequential PAR interface CPLNQPAR.
7. Sequential PAR layout CPWSXPAR.
8. Layouts for the tab-delimited report file header, detail and one blank record – see BRD.
9. Control totals report pages – see PPO2021B.
10. FT transaction layout – see PPO2021B.
11. DB2 Table definitions for PER and TCI.

12. TCI cursor:

```
SELECT DISTINCT TCI_TITLE_CODE
FROM PPPVZTCI_TCI
WHERE TCI_TITLE_UNIT_CD = 'IX'
AND TCI_TITLE_CODE <> '1550'
```

**PROCEDURE DIVISION**

**Initialization**

1. Call PPSEQPAR to open the sequential PAR. Then call it to read past all PCR records.
2. Validate the spec card. Date must be a valid date, but no reasonability check is needed.
3. Open the TCI cursor and fetch all rows into the working-storage array of IX title codes.
4. Write the header record to the tab-delimited file.

**Mainline**

1. Process each employee in the PAR

   1.1. Initialize the totals, earnings array and FAU array for the employee.

   1.2. Process each PAR record for the employee

      1.2.1. If it's an expense transfer PAR, bypass this PAR

      1.2.2. Process each earnings item in the current PAR

         1.2.2.1. Determine whether the earnings item is eligible:

            - XPAR-DOS must be REG
            - XPAR-TTL-CD must exist in the working-storage array of IX titles OR XPAR-TITLE-UNIT-CODE = "IX". XPAR-PAYCY-CODE must be "M"
            - XPAR-EARN-COVERAGE-IND must be 'C'
            - XPAR-PERIOD-END-DATE (earnings end date) must be between 7/31/13 and 12/31/13, inclusive.

         1.2.2.2. If the earnings item is eligible

            - Move PAR earnings data to the earnings array.
            - Calculate the lump sum amount for this earnings as .035 * the earnings amount and add to array.
            - Add earnings amount to the total eligible earnings for the employee
            - If this is the most recent pay cycle for the employee:

              - Add earnings amount to the total eligible earnings for the final pay period.
              - If the FAU is already in the FAU array, add the earnings amount to the total for the FAU, otherwise, move the FAU and earnings amount to the next available item in the FAU array.

            Note: If, after processing all of the earnings for the most recent pay cycle, there is no FAU with a positive amount, clear the FAU array, and use the earnings in the next most recent pay period.

   1.2.3. Calculate the percentages of the total eligible earnings for the final pay period in each FAU in the array. See example in Attachment A.
1.2.4. Calculate the total lump sum amount as the sum of the lump sums calculated in the earnings array for the employee. If this amount is less than or equal to zero, do not create FT or costing records, but do include them on the tab-delimited file.

1.2.5. Calculate the lump sum amount for each FAU by applying percentages to the employee total lump sum and add to FAU array. The last FAU should get the remainder of the total lump sum amount, rather than using the percentage. This will ensure that the employee gets the correct total regardless of any rounding.

1.2.6. Format and write one FT per FAU with amounts calculated.

<table>
<thead>
<tr>
<th>FT Transaction Field</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT-EMP-ID</td>
<td>XPAR-ID-NO</td>
</tr>
<tr>
<td>FT-TRANS-CODE</td>
<td>“FT”</td>
</tr>
<tr>
<td>FT-FAU</td>
<td>FAU from table</td>
</tr>
<tr>
<td>FT-TITLE-CODE</td>
<td>“3999”</td>
</tr>
<tr>
<td>FT-DOS</td>
<td>“LSN”</td>
</tr>
<tr>
<td>FT-AMOUNT</td>
<td>Amount calculated</td>
</tr>
<tr>
<td>FT-PAY-END-DATE</td>
<td>spec card date</td>
</tr>
<tr>
<td>FT-WORK-STUDY</td>
<td>Spaces</td>
</tr>
<tr>
<td>FT-EARN-EMP-REL-CODE</td>
<td>EMP_REL_CODE IN PPPPER</td>
</tr>
<tr>
<td>FT-APPT-TYPE-CODE</td>
<td>blank</td>
</tr>
<tr>
<td>FT-DIST-UNIT-CODE</td>
<td>blank</td>
</tr>
</tbody>
</table>

1.2.7. Obtain employee data needed for the tab-delimited and costing files from the PER table.

1.2.8. Format and write the tab-delimited records for the employee:

- One record per earnings array item.
- One final record with the total earnings and total lump sum. If the total lump sum for the employee is less than or equal to zero, the last column of the totals row should be “*”.
- One blank record following the final record for the employee.

1.2.9. Format and write the costing records for the employee, one per FT transaction written.

<table>
<thead>
<tr>
<th>Costing Transaction Field</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>XCTS-EMPLOYEE-ID</td>
<td>XPAR-ID-NO</td>
</tr>
<tr>
<td>XCTS-EMPLOYEE-NAME</td>
<td>XPAR-NAME-26</td>
</tr>
<tr>
<td>XCTS-EMPLOYEE-SUFFIX</td>
<td>XPAR-NAME-SUFX</td>
</tr>
<tr>
<td>XCTS-ACTION-CODE</td>
<td>“32”</td>
</tr>
<tr>
<td>XCTS-EFFECTIVE-DATE</td>
<td>spec card date</td>
</tr>
<tr>
<td>XCTS-TITLE-CODE</td>
<td>“3999”</td>
</tr>
<tr>
<td>XCTS-FAU</td>
<td>Same FAU as FT</td>
</tr>
<tr>
<td>XCTS-RATE-CODE</td>
<td>Space</td>
</tr>
<tr>
<td>XCTS-PCT</td>
<td>“1.0”</td>
</tr>
<tr>
<td>XCTS-DOS</td>
<td>“LSN”</td>
</tr>
<tr>
<td>XCTS-OLD-RATE</td>
<td>Zero</td>
</tr>
<tr>
<td>XCTS-NEW-RATE</td>
<td>FT amount</td>
</tr>
<tr>
<td>XCTS-FTE</td>
<td>Zero</td>
</tr>
<tr>
<td>XCTS-0161-CBUC</td>
<td>EMP_REL_CODE IN PPPPER</td>
</tr>
<tr>
<td>XCTS-0255-EMP-UNIT-CODE</td>
<td>EMP_REL_UNIT IN PPPPER</td>
</tr>
<tr>
<td>XCTS-0256-EMP-SPCL-HNDLG</td>
<td>EMP_SPEC_HAND IN PPPPER</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>XCTS-0257-EMP-DIST-UNIT-PIC</td>
<td>EMP_DIST_UNIT_CODE IN PPPPER</td>
</tr>
<tr>
<td>XCTS-0295-EMP-COV</td>
<td>EMP_REP_CODE IN PPPPER</td>
</tr>
<tr>
<td>XCTS-2029-TUC</td>
<td>IX</td>
</tr>
<tr>
<td>XCTS-2059-DIST-UNIT-CODE</td>
<td>blank</td>
</tr>
<tr>
<td>XCTS-2031-APPT-COV</td>
<td>C</td>
</tr>
<tr>
<td>XCTS-2030-APPT-SPCL-HNDLG</td>
<td>blank</td>
</tr>
<tr>
<td>05 XCTS-DUR-EMPLMT</td>
<td>Spaces</td>
</tr>
<tr>
<td>05 XCTS-PAY-END-DATE.</td>
<td>spec card date</td>
</tr>
<tr>
<td>05 XCTS-ERROR-CODE</td>
<td>Zero</td>
</tr>
<tr>
<td>05 XCTS-ACAD-STAFF-IND</td>
<td>Spaces</td>
</tr>
</tbody>
</table>
6.1.2 Bind Members

6.1.2.1 PPOTrrrr (New)
A new plan bind member for PPOTrrrr will be provided

6.1.3 JCL Changes

6.1.3.1 PPOTrrrr (New)
Sample JCL will be provided for running the one-time program PPOTrrrr.
7 Unit Testing Requirements

7.1 Test Strategy

- Run the one-time program to generate lump sum FT transactions.
  - Verify that the transactions were generated for all eligible earnings and no others.
  - Verify that the lump sum total is 3.5% of the total eligible earnings for an employee.
  - Verify that the lump sum is correctly prorated across the FAUs paid in the final PAR for the employee.
- Run an MO compute without the generated transactions. This is the “before” test to be used for comparison.
- Run an MO compute with the transactions generated.
  - Verify that the lump sum payment amounts (DOS code LSN) are 3.5% of eligible earnings.
  - Verify that union dues/Agency Fee were not assessed on the lump sum amounts. This can be done by comparing the dues/Agency fee amounts with the before test. They should be the same.

7.2 Test Cases

Although the one-time program will use the flat consolidated PAR as input, the DB2 PAR can be used to locate test cases. If test cases don’t exist in the current DB2 PAR, they will have to be manufactured.

1. Earnings eligible for lump sum

```sql
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS = 'REG'
AND E.APPT_REP_CODE = 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
  (SELECT T.TCI_TITLE_CODE
   FROM PPPTCI T
   WHERE T.TCI_TITLE_UNIT_CD = 'IX'
   AND T.TCI_TITLE_CODE <> '1550')
```

2. Earnings not eligible because they’re uncovered

```sql
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS = 'REG'
AND E.APPT_REP_CODE <> 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
  (SELECT T.TCI_TITLE_CODE
   FROM PPPTCI T
   WHERE T.TCI_TITLE_UNIT_CD = 'IX'
   AND T.TCI_TITLE_CODE <> '1550')
```
3. Earnings not eligible because they’re for title code 1550

```
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS = 'REG'
AND E.APPT_REP_CODE = 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
(SELECT T.TCI_TITLE_CODE
 FROM PPPTCI T
 WHERE T.TCI_TITLE_UNIT_CD = 'IX'
      AND T.TCI_TITLE_CODE = '1550')
```

4. Earnings not eligible for lump sum because they’re not REG

```
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS <> 'REG'
AND E.APPT_REP_CODE = 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
(SELECT T.TCI_TITLE_CODE
 FROM PPPTCI T
 WHERE T.TCI_TITLE_UNIT_CD = 'IX'
      AND T.TCI_TITLE_CODE <> '1550')
```

5. Earnings not eligible for lump sum because the period dates don’t fall in the required period.

```
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE NOT BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS = 'REG'
AND E.APPT_REP_CODE = 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
(SELECT T.TCI_TITLE_CODE
 FROM PPPTCI T
 WHERE T.TCI_TITLE_UNIT_CD = 'IX'
      AND T.TCI_TITLE_CODE <> '1550')
```

6. Earnings not eligible for lump sum because they’re expense distributions

```
SELECT E.*
FROM PPPERN E
WHERE E.PAY_CYCLE_END_DATE >= '07/31/2013'
AND E.PAY_PER_END_DATE BETWEEN '07/01/2013' AND '12/31/2013'
AND E.DIST_DOS = 'REG'
AND E.APPT_REP_CODE = 'C'
AND E.TRANS_CODE NOT LIKE 'E%'
AND E.TITLE_CODE IN
(SELECT T.TCI_TITLE_CODE
 FROM PPPTCI T
 WHERE T.TCI_TITLE_UNIT_CD = 'IX'
      AND T.TCI_TITLE_CODE <> '1550')
```
7. Test for a separated employee

8. Test for an employee not on the EDB
Attachment A – Example of FAU Proration

1. This employee has the following eligible earnings
   - MO Paid 9/1/2013 - $5000
   - MO Paid 10/1/2013 - $6000
   - MO Paid 11/1/2013 - $10,000 across the following FAUs
     - FAU1 - $2000
     - FAU2 - $3000
     - FAU3 - $5000

2. For the final pay cycle (ie. MO paid 11/1/13), calculate the percentage for each FAU
   - FAU1 – 20%
   - FAU2 – 30%
   - FAU3 – 50%

3. Calculate the total eligible earnings = $5000 + $6000 + $10,000 = $21,000

4. Calculate the total lump sum = .035 * 21,000 = $735

5. Prorate the total lump sum across the three FAUs as follows:
   - FAU1 – 20% = $147
   - FAU2 – 30% = $220.50
   - FAU3 – remainder of lump sum = $735 – (147 + 220.50) = $367.50