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Introduction

Service Request 83015
Service Request 83015 asks that modifications be made to stop the assessment of the the employer UCRP contribution when an employee reaches the fiscal year-to-date covered compensation limit.

Service Request 83015 provides the following background information:

Internal Revenue Code Section 401(a)(17) limits the amount of compensation that can be recognized by a tax-qualified retirement plan. The UC Retirement Plan document section 2.13 defines “Covered Compensation” and specifies that compensation in excess of the 401(a)(17) limit be excluded from covered compensation. The UC Retirement Plan document section 4.01 defines University Contributions as, “The University shall contribute to the Plan a percentage of total Covered Compensation at rates determined from time to time by The Regents.”

In addition, the cap also applies to the UCRP supplemental assessment requested by SR83299. SR83299 will be implemented prior to SR83015, so the SR83015 changes will need to be extended to the calculation of the UCRP supplemental assessment.

Error Report 2422
Error Report 2422 notes that the existing process for setting up the working history buckets for grosses and calculating the partial retirement gross amount (the amount under the FYTD Covered Comp Limit) was not working correctly if the employee had late pay and was crossing from under the covered comp limit to over the covered comp limit.

Overview of System Modifications

Compute
The compute process currently calculates a total gross subject to UCRP, and also calculates how much of that is under the covered compensation limit, but only the total gross is passed into the final PAR file. The amount that is under the limit is passed in a temporary area for use during the compute only. The compute will be modified to replace the total gross with the amount that is actually under the limit to the final PAR file; it will be needed during subsequent processes that calculate the employer contribution, and the total gross is not currently required for any other processing. The current employee deduction calculation will be unchanged, but the process that sets the working history buckets and calculates the amount under the covered comp limit will be corrected.

Expense Distribution
Expense Distribution (PPP520) will be modified to identify the circumstances where an employee is crossing the covered compensation limit, and to cap the employer contribution at the same amount and month in which the employee deduction was capped. The process will build a set of buckets similar to the ones used in the compute to establish subject grosses for the current and previous four months (with an additional bucket for all grosses older than four months), and adjust the buckets with the actual retirement gross under the limit that will now be passed from the compute (XPAR-RETR-GROSS). For months where the subject gross was entirely over the limit, the employer contribution for earnings distributions with transaction end dates in that month will be zero; for months where the subject gross was partly under the limit, the employer contribution will be reduced by the factor of the actual subject gross for that month divided by the total subject gross for that
month. For months where the subject gross was entirely under the limit, the employer contribution will be calculated as it is currently.

The process will need to be modified to apply the covered comp limit to the UCRP supplemental assessment from SR83299 as well.

**STIP and UCRS Interfaces**

PPI730, which creates the STIP file and UCRP earnings interface file, calculates the UCRP employer cost; it will need to have the same modifications as the expense distribution process.

**OPEB Interface**

The process that creates interface files for OPEB costs was modified by SR83299 to also create interface transactions for the new UCRP supplemental assessment. The UCRP supplemental assessment calculation calls the employer retirement contribution routine (PPBENRET) to determine whether the earnings are subject to the new assessment. The process will need to be modified to apply the covered comp limit to the UCRP supplemental assessment as well.

**ORCA**

ORCA will need to be modified to ensure that the appropriate retirement gross is carried in the resulting overpayment and cancellation transactions.

**Rush Checks**

Rush checks will need to be modified to ensure that the appropriate retirement gross is carried in the resulting rush check transactions.

**Design Considerations**

**Design Approach**

The design approach is intended to retain as much of the existing employer contribution calculation process as possible, modifying it only for those employees who meet or exceed the covered compensation limit. For those employees, the process of determining the month in which the employee met or exceeded the limit should be similar to the process used for calculating the employee deduction.

**Background – Current Employer UCRP Contribution Calculation**

Currently, the employer contribution for UCRP is calculated at three points:

- after each compute, as the Plan 21 amount for the STIP interface
- during Month End reporting, as the Plan 21 amount in the UCRS earnings interface
- during Month End expense distribution,

In all cases, the amount is calculated for each earnings distribution in the PAR file by the same process (PPBENRET); each calculation is independent of other earnings distributions. The calculation considers whether the DOS code of the earnings is subject to UCRP, whether the retirement code is UCRP, and uses the transaction end date of the earnings and the EBEUC and EBERC to determine which contribution rate to use.
Background – Current Employee UCRP Deduction Calculation

The employee deduction for UCRP is calculated during the compute. The calculation considers activity for the current and prior four months; it retrieves the current and four-month history data from the EDB, and allocates earnings from the current cycle by transaction end date into a parallel set of buckets. If the sum of the employee’s total retirement gross for the current cycle and the fiscal year-to-date retirement gross from the EDB exceeds the fiscal year covered compensation limit, the buckets for the current cycle are adjusted so that the amount over the limit is removed from the most current back to the oldest, until all the excess is accounted for. The process then uses the dates of the buckets and the EBEUC and EBERC to calculate the UCRP and/or DCP deductions and the Regents’ reduction (PPBENUCR).

Assumptions and Dependencies

PPP400 sets the retirement code (PPPBEN.RET_ELIG_CODE) from U to 1 when the employee’s FYTD retirement gross (FYTD_RET_GROSS) equals or exceeds the FYTD covered compensation limits.

The FYTD covered compensation limit for an employee is based on the employee’s covered compensation limit code (PPPBEN.COV_COMP_LIMIT_CD); if it is ‘G’, the value is SYS PRM 023; if it is ‘N’, the value is SYS PRM 067 (these are retrieved by PPP390 and PPP400).

General Constraints

The FYTD retirement gross is set to zero by Fiscal Year periodic maintenance, which is run with Monthly maintenance to begin July. Employees will not typically exceed the covered compensation limit for several months, although a handful may exceed the limit by October or November.

Architectural Strategies

The following alternative approaches were considered:

- If the employee meets or exceeds the covered compensation limit in a particular pay cycle, do not calculate an employer contribution for any of the earnings in that pay cycle, or for any subsequent pay cycle; we can identify this circumstance by a PAR file retirement code (XPAR-RETR-PLAN-CODE) of ‘1’
  - Consequence: the employer contribution is understated
- If the employee meets or exceeds the covered compensation limit in a particular pay cycle, calculate the employer contribution for all earnings in that pay cycle, but do not calculate it for any subsequent pay cycle; we can identify the crossover PAR file by a retirement code of ‘1’ and a non-zero retirement rate (XPAR-RETIREMENT-RATE)
  - Consequence: the employer contribution is overstated
- Calculate the employer contribution at the same time during the compute that the employee deduction is calculated
  - Consequence: the employer contribution would no longer have to be calculated (it would be carried as a single GTN value in the PAR file), but it would still have to be distributed in Expense Distribution, and we would still have to determine the month in which the limit was exceeded and prorate the contribution for each earnings distribution for that month

Testing Considerations

The expense distribution process can require the presence of the last B1 PAR file of the previous month if the first BW cycle of the current month is a B2 cycle; these B1 PAR files may include retirement code values of ‘1’.
Mainframe Design

Compute

Programs

PPEXPTLA
PPEXPTLA generates the expense transfer data for TL pay transactions. It will be modified to set the factor and date to zero before calling PPBENRET.

PPGRSPAR
PPGRSPAR is called by gross pay generation programs to build the Payroll Audit Record. It will be modified to calculate the amount of earnings under the FYTD Covered Comp limit by processing the earnings data from the most current to the oldest.

PPP400
PPP400 performs Gross-to-Net processing within the compute and creates a PAR file from the EDB and the preliminary PAR file with gross-to-net activity.

PPP400 currently stores the entire amount of retirement pay (from KNET-GROSS-RETR) in the PAR file field XPAR-RETR-GROSS.

It will be changed to instead store only the amount of retirement pay that is less than the contribution limit (from KNET-GROSS-RETR-PART) if the retirement code is ‘U’ or ‘B’ and KNET-GROSS-RETR-PART is not zero, to move zero to XPAR-RETR-GROSS if the retirement code is ‘1’, and to move KNET-GROSS-RETR to XPAR-RETR-GROSS otherwise. XPAR-RETR-GROSS will be used later by the expense distribution process and for the STIP and UCRP earnings interface file creation.

Expense Distribution

Programs

PPBENRET
PPBENRET calculates the employer retirement benefit for all retirement plans. It will be changed to use the factor and date passed by PPP520, PPI730, or PPI735 in the calculation of the employer contribution for UCRP.

There will be a new working factor added to the existing calculation; the working factor will be set as follows:

- If the retirement code is not ‘1’, set the working factor to 1.000000 (the employee is under the limit)
- If the retirement code is ‘1’ and the PPBENUGR factor is zero, set the working factor to 0.000000 (the employee exceeded the limit previously)
- If the retirement code is ‘1’ and the PPBENUGR factor is not zero (the employee has just met or exceeded the limit)
  - If the earnings transaction end date month and year is less than the PPBENUGR date month and year, set the working factor to 1.000000 (the older months are under the limit)
  - If they’re equal, set the working factor to the PPBENUGR factor
Otherwise, set the working factor to zero (the newer months are over the limit)

Additional requirement to incorporate SR83299: PPBENRET will return an adjusted earnings gross (KRET-GRS-AMT-ADJ) that is calculated as KRET-GRS-AMT times the working factor, with a ROUNDED result.

PPBENUGR (new)

A new sub-program will be developed to identify the month and year in which the employee met or exceeded the covered compensation limit, and the factor to be used in calculating the employer contribution for that month.

The program will build an internal set of buckets, similar to the ones developed by PPGRSPAR (see para 7200-). XPAR-RETR-GROSS will be used to determine the month in which the covered compensation limit was reached.

There will be three types of calls to PPBENUGR:

- Initialization, to clear out the returned values and the buckets (current, one month prior, two months prior, three months prior, four months prior, all other months, and a total bucket) and their dates (the date of the current month bucket is the month and year of the pay cycle end date)

- Process, to add a single earnings distribution data (XPAR-EARN-AMT) to the appropriate bucket, based on the earnings transaction end date month and year, the DOS UCRS indicator, and the DOS total gross indicator:
  - Set the working earnings amount to the earnings distribution earnings amount
  - If the DOS total gross indicator is -1, multiply the working earnings amount by -1, or multiply the working earnings amount by the DOS total gross indicator (the purpose is to remove the effect of the DOS total gross indicator, which has already been applied to the earnings distribution)
  - Multiply the working earnings amount by the DOS UCRS indicator
  - Add the working earnings amount to the total bucket
  - Add the working earnings amount to the appropriate bucket based on the transaction end date of the earnings distribution; if the transaction end date month and year do not match the current or four prior month bucket dates, add it to the all other months bucket (the all other bucket will have a working date of five months prior, but is also where any future earnings would go – a future date is likely to be an input error, and is rare)

- Final, to determine in which month and year the covered compensation limit was exceeded:
  - compare the actual total retirement gross from the PAR file (XPAR-RETR-GROSS) to the total bucket to determine the amount in excess of the limit
  - adjust a duplicate set of buckets (current back to oldest) to remove the excess until it is used up.
  - A factor will then be calculated for the month where that occurs. The factor will be the amount from the adjusted bucket for that month that was under the limit divided by the total amount from the original bucket for that month. (rounded to 6 decimals)

Note that if the actual total retirement gross is zero, the factor will be zero and the date will be the low-value date.

Here is an example: The employee was paid the following for the May MO:

10,000.00 for FAU1, transaction end date 05/31/11
5,000.00 for FAU2, transaction end date 05/31/11
4,000.00 for FAU3, transaction end date 04/30/11

(The compute had previously determined that the employee is not grandfathered (limit is $245,000) and that the employee’s FYTD retirement balance prior to the May MO was $244,000. The calculated total retirement gross for the May MO was
$19,000.00, so the excess was $18,000.00 and the actual total retirement gross was $1,000.00. XPAR-RETR-GROSS will contain $1,000.00 (once the changes to PPP400 are made) instead of $19,000.00.

The bucket for 05/11 will contain $15,000.00; the bucket for 04/30/11 will contain $4,000.00. The calculated retirement gross is $19,000.00, and the actual retirement gross is $1,000.00; the excess is the difference, or $18,000.00.

The $18,000.00 first reduces the 05/11 bucket to zero, leaving $3,000.00 as excess; the $3,000.00 then reduces the 04/11 bucket to $1,000.00.

The factor is 1,000.00 / 4,000.00 or .250000, and the date is 04/01/2011. The factor, or percentage, is needed for processing by PPBENRET. The amount passed to PPBENRET is the total amount (XPAR-EARN-AMT) but the employer contribution may only apply to a portion of the amount as illustrated by the example. Both the factor and the result of the benefit calculation are rounded so the employer contribution amount may be off by a cent or two.

PPP520
PPP520 creates the Expense Distribution Work file (EDW) as an intermediate step of expense distribution.

It will be modified to call PPBENUGR whenever it encounters a PAR file record with a retirement code of ‘1’. It will pass data from the sequential PAR file (earnings distribution data and XPAR-RETR-GROSS). It will pass the factor and the date returned by PPBENUGR to PPBENRET. PPP520 includes code that changes retirement plans of ‘1’ to ‘U’; the original retirement plan code will be saved for use by PPBENRET before calling PPBENUGR.

Additional requirements to incorporate SR83299: the call to PPBENLON will use new field KRET-GRS-AMT-ADJ for KLON-GROSS-AMOUNT.

Copy Members

CPLNKRET
This copy member contains the LINKAGE section for PPBENRET. It will be modified to include additional data from PPBENUGR (factor and date).

Additional requirements to incorporate SR83299: include a new returned field for the adjusted gross amount (KRET-GRS-AMT-ADJ, PIC S9(5)V9(2) COMP-3)).

CPLNKUGR (new)
This copy member contains the LINKAGE section for PPBENUGR. It will include the earnings distribution data necessary to allocate the gross earnings subject to UCRP correctly (DOS code, DOS subject gross indicators of total gross and UCRS gross, transaction end date, earnings amount, and the actual retirement gross from the PAR file). It will include a flag to indicate the nature of the call – initialization, process, final. It will return the factor, date, adjusted gross amount, and a return status.

STIP and UCRS Interfaces

Programs

PPI730
PPI730 creates the STIP file for UCRP activity for each compute and the retirement interface files and the Bureau of Labor Standards report (via PPPBLS) at month end. STIP is the Short Term Investment Pool used by the treasurer's office.

It will be modified to call the new sub-routine, PPBENUGR, whenever it encounters a PAR file record with a retirement code of ‘1’, and to pass the data returned by PPBENUGR to PPBENRET.
If XPAR-RETR-PLAN-CODE = ‘1’, PPI730 will call PPBENUGR for initialization by setting the ‘call type’ in the interface record to ‘I’ (initial).

For the next and subsequent calls, the ‘call type’ will be set to ‘P’ (process). If there are multiple entries in XPAR-EARNINGS-DIST-ARRAY, PPI730 will call PPBENUGR multiple times and pass XPAR-EARN-AMT and XPAR-PERIOD-END-DATE for each entry.

After each entry in the XPAR-EARNINGS-DIST-ARRAY has been processed, PPI730 will call PPBENUGR with ‘call type’ set to ‘F’ (Final). That will cause PPBENUGR to determine the date in which the contribution limit was exceeded and to calculate the factor that will be used by PPBENRET to determine the employer contribution.

### OPEB Interface

#### Programs

**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 was modified by SR83299 to include a call to PPBENRET to determine eligibility for a new benefit. It will be modified to call PPBENUGR whenever it encounters a PAR file record with a retirement code of ‘1’. It will pass data from the sequential PAR file (earnings distribution data and XPAR-RETR-GROSS). It will pass the factor and the date returned by PPBENUGR to PPBENRET. The calls to PPBENLON that do not pass an explicit zero amount (they check for fund type only) should use new field KRET-GRS-AMT-ADJ for KLON-GROSS-AMOUNT.

### ORCA

#### Programs

**PPOROVPY**

POROVPY processes overpayments for ORCA processing.

Currently, PPOROVPY doesn’t use RET_GROSS in the process of generating the Ox transaction set – the ‘original’ total retirement gross is calculated from all of the original PAR file record earnings distribution, the corrected gross is based on the activity entered via function OVPY, and the difference is what is put in the O2 record as the retirement gross. The approach will be:

- If the retirement code is ‘1’ and RET_GROSS is zero, the difference will be set to zero
- If the retirement code is ‘1’ and RET_GROSS is not zero, no attempt will be made to find the limit crossover point – It is not currently being done for the employee side. The difference will be set to zero here as well:
  - There are very few overpayments that occur for retirement code ‘1’
  - For those that occur, it’s likely that the Payroll office will need to be careful about how it affects the employee’s FYTD balance, and may need to do a manual overpayment transaction set rather than use ORCA
Rush Checks

Programs

PPRCNET

PPRCENT calculates deductions for online Rush Check processing.

It will be modified to move KNET-GROSS-RETR-PART (amount under the limit) to RCPW-RETR-GROSS if KNET-GROSS-RETR-PART is greater than zero and retirement code is ‘U’ or ‘B’. If the retirement code is ‘1’ (already exceeded limit), zeros will be moved to RCPW-RETR-GROSS.

Control Table Updates

System Messages Table

The following message will be added to this table.

New Messages

73041 – (‘UNABLE TO SET FACTOR AND DATE; WILL USE ZERO’) - Severity Level of Warning.
73514 – (‘UNABLE TO SET FACTOR AND DATE; WILL USE ZERO’) - Severity Level of Warning.
52543 – (‘UNABLE TO SET FACTOR AND DATE; WILL USE ZERO’) - Severity Level of Warning.

These messages will be included on the error reports by PPI730, PPI735 and PPP520, respectively, if an error is encountered during PPBENUGR processing.