Release 1915

Service Request 82831

Federal Tax Table for Non-Resident Aliens

Detail Design

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Introduction

Service Request 82831

Service Request 82831 asks for a new tax rate set in the Federal Tax Withholding Table in PPS to be used in calculating additional federal income tax withholding for Non Resident Alien (“NRA”) employees only. This rate set does not replace the current federal withholding tax data in PPS nor does it eliminate the current procedure in PPS for calculating federal withholding for NRAs. The federal tax calculated using the additional rate set should be added to the NRA federal withholding tax currently calculated in PPS, the sum of the two tax amounts equaling the total federal withholding for NRAs.

Service Request 82831 provides the following background information:

Non-Resident Alien employees who earn compensation for services are subject to federal income tax withholding which the employer is obligated to withhold. The standard federal withholding tax table incorporates two benefits for which the non-resident alien is not eligible: the standard deduction and the Making Work Pay Credit (MWPC) created by the American Recovery and Reinvestment Act of 2009. The additional NRA tax mitigates the impact of the MWPC in the standard federal tax table and was announced by the IRS in Notice 2009-91. The additional tax is effective for wages paid on or after January 1, 2010.

Establishment of the additional Federal Tax table rate set for Non-Resident Aliens only is needed to offset the MWPC benefit. To offset the standard deduction benefit, a flat amount is currently added to gross wages to determine NRA tax liability using the standard federal table.

The additional federal income tax withholding for Non Resident Alien (“NRA”) triggers the following changes to PPS:

- A new UPAY547B form should be added to accommodate the new NRA tax rate set in the Federal Tax table with a column for the sign (+ or -). In addition, the UPAY547 form should be renamed to UPAY547A and a note about submitting them together should be added to both forms.
- The control table edit process must be modified to receive the new input for NRA rate set, edit them for errors, allow negative % excess only for NRA rates, and multiply % excess by -1 when the position 23 of the NRA federal tax rates contains a negative sign.
- The PPPFED update and reporting process must be modified to update the new NRA rates and verify that at least 1 rate set is added for each of the period types: S, M, and B. In addition, report the new NRA federal tax rates after a successful update and / or report the errors associated with this update.
- Increase the fed tax table array to 33 (from 22) and add logic in the Federal Tax table load program PPFEDUTL to load NRA rates into the expanded table array.
- The compute process that uses the federal tax rates should be modified so that it uses the new rate set for NRA employees for the additional federal tax computations.
Overview of PPS Modifications

Because of the addition of the new NRA federal tax rates set, the batch input federal tax rates transaction entry, reporting, working table array, and compute process of the PPS system will be modified.

The overview of the changes needed to PPS is outlined below:

Federal Tax Tables - UPAY Forms

UPAY form 547 that is used to input the Federal Tax Rate table batch transactions will be renamed to UPAY547A.

A new UPAY form UPAY547B will be created to update the NRA tax rate set into the Federal Tax table. This NRA tax rate set will be of type ‘N’ and will have a column at position 23 for indicating the negative (‘-’) sign for the % excess field.

In addition, a comment will be added to both the forms saying that they must be submitted together.

Control table Update process and Reporting changes

The control table update process will be modified to receive the new UPAY547B form input and update the NRA federal tax rate set into the table PPPFED.

A new federal tax table edit will be in place to allow the NRA rate set of type ‘N’. It will expect a negative sign for percent of excess value only for NRA rates and report an error if the negative sign is entered for other than ‘N’ rate type. In addition, it will make sure that the percent of excess is multiplied by -1 when the position 23 contains a negative sign for NRAs.

Control table consistency edit logic will be added with a check for the new set of rates ‘N’ to be present (at least 1 for each of the period types S, M, and B) for a successful PPP004 federal control table update. The federal tax table reporting will be changed to report the new NRA federal tax rate set with a possible negative sign for the percent of excess value.

The following changes will be done in PPS for the control table update process and Reporting:

1. In the copy book CPCTFEDI, a new field will be added to indicate negative sign for percent of excess for the new set of NRA federal tax rates. In addition, add this field to the transaction assembly module PPCTT03 so that this value will be passed to the edit module.
2. In the programs PPCTC05, a consistency edit check will be added to verify that at least 1 set of rates for NRA is present for each period type of S / M / B.

3. In the program PPCTFEDE, allow the new rate set type ‘N’ for Non Resident Aliens with negative percent of excess. In addition, multiply the percent of excess value by -1, if the new sign field allowed has a value of ‘-’.

4. The federal tax rate reporting program PPCTR03 will be changed to report the new rate set type ‘N’ for NRAs, change the label heading, and add a ‘-‘ to the report if the percent of excess is negative.

In addition, the Federal Tax Table will be updated with the new set of tax rates for the year 2010 including the NRA rates.

**Load Federal Tax Rates – Expand the working Tax Rate Table array**

Currently, the Single (type ‘S’), Married (type ‘M’), and Exemption (type ‘E’) Federal Tax Rates are loaded into the CPWSXFTA copybook layout structure and used by the compute in their federal tax calculations.

The following changes will be done in the compute to use the new NRA tax rate set type ‘N’ for the federal tax calculation:

1. In the copy book CPWSXFTA, increase the size of the Federal Tax holding array from 22 to 33, so that the NRA rate set steps will be held from 23 to 33 of the expanded array space. In addition, add a new field to hold the total number of NRA rate steps currently loaded.

2. In the program PPP400, before calling the PPFEDUTL program to load NRA rates, the expanded CPWSXFTA table array and the total number of NRA rate steps hold field will be initialized.

3. In the Federal Tax table load program PPFEDUTL, add logic to load NRA rates into the expanded CPWSXFTA table array and store the total number of NRA rate steps into the new hold field for further use by the compute.

**Compute Process changes**

The compute process will be modified to use the NRA federal tax rates in the federal tax calculations.

The following changes will be done in the compute process of PPS:

1. In the federal tax computation module PPFEDTAX, logic will be added to calculate and add the additional NRA tax using the NRA rate set loaded into the federal tax array of the CPWSXFTA copybook.

2. The programs that call the federal tax computation module PPFEDTAX and use the copy book CPWSXFTA as external will be recompiled and tested for using the new NRA federal tax rates.
Programs

New and Modified Programs

PPCTR03

PPCTR03 is the report module and it reports the federal tax table PPPFED in the Federal Tax Table report PPP0403.

The following changes will be done in the report PPP0403 to report the new rate set type ‘N’ for Non Resident Aliens:

1. Report the new rate set type ‘N’ for Non Resident Aliens under the label ‘NON RESIDENT ALIEN’.
2. Add a negative sign (‘-’) after the percent of excess value, if the percent of excess for the NRA federal tax rate step is negative.
3. Change the heading ‘MARITAL STATUS’ to ‘MARITAL STATUS / TAX RATE SET’ to group all the possible descriptions of SINGLE, MARRIED, EXEMPTION AMOUNT, and NON RESIDENT ALIEN.

PPCTT03

PPCTT03 is the transaction handler for the control table PPPFED (Federal Tax Table).

In the transaction assembly module PPCTT03, add the new CPCTFEDI field that indicates negative sign for the percent of excess for the new set of NRA federal tax rates to the transaction assembly processing.

In addition, program PPCTT03 will pass the new percent of excess sign value to the edit module PPCTFEDE for further editing of the federal tax rates.

PPCTFEDE

PPCTFEDE is the edit module for the batch transactions that update the Federal Tax Table PPPFED.

In the Federal Tax Table edit module PPCTFEDE, the following new edits will be added to edit the new rate set type ‘N’ for Non Resident Aliens (NRA):

1. Allow the new rate set type of ‘N’ for NRAs. If the tax rate type is not one of ‘M’ (Married), ‘S’ (Single), ‘E’ (Exemption), or ‘N’ (NRA), existing message 01-186 will be displayed.

   Note: The message description of the existing message 01-186 will be changed to "FED TAX: INVALID MARITAL STATUS OR TAX RATE SET” from "FED TAX: INVALID MARITAL STATUS."
2. If the new sign field contains a value other than "+", "-", or blank, then a new message M01165 (description: "FED TAX: % EXCESS SIGN MUST BE "+", ",-", OR BLANK (IMPLIED "+")"") will be displayed.

3. Only for NRA federal tax rate type ‘N’, allow negative sign in the new sign field that indicates the sign of percent of excess value. If negative sign is inputted for tax types other than ‘N’, then a new message 01-179 (description "FED TAX: NEGATIVE TAX PERCENT ALLOWED FOR ONLY NRA TAX RATE SET") will be displayed.

4. Multiply the percent of excess value by -1, if the new sign field has a value of ‘-’. This will ensure that correct % excess value will be passed down to the PPPFED update program PPCTFEDU.

**PPCTC05**

PPCTC05 is the control table consistency edit module 05, used for the Federal Tax Table PPPFED consistency edit.

In the program PPCTC05, consistency edits will be added to verify that at least 1 set of rates for NRA is present for each period type of ‘S’ (Semi-monthly), ‘M’ (Monthly), and ‘B’ (Bi-weekly). If no valid NRA rate set found, then the new message 01-169 (description "FED TAX: NON RESIDENT ALIEN PORTION OF TABLE IS MISSING.") will be displayed.

**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.

It will be modified to initialize the expanded CPWSXFTA table array and the array to hold the total number of NRA rate steps, before calling the PPFEDUTL program to load the Federal Tax table rates.

**PPFEDUTL**

PPFEDUTL program loads the federal tax (Single / Married / Exemption) rates from PPPFED table for each period type (Semi-monthly / Monthly /Bi-weekly) into the copy CPWSXFTA table array. In addition, it stores the total #steps in each tax type of the pay period into their respective hold fields array of the CPWSXFTA for further use by the compute.

In the Federal Tax table load program PPFEDUTL, the following changes will be added:

1. Load the NRA rates for each period type into the expanded CPWSXFTA table array.
2. Store the total number of NRA rate steps for each period type into the new hold field array.
3. Display existing message P0-548, if there are no rates found for any of the tax rate types in each period type.
PPFEDTAX

Program PPFEDTAX calculates the federal withholding tax amount for an employee using the following input details passed from the calling programs:

1. Single / Married / Exemption / Non Resident Alien federal tax table rates for all the period types (Semi-monthly / Monthly / Bi-weekly) loaded into an array of the CPWSXFTA copybook.

2. Copybook CPLNKFED that contains employee personnel data related to federal tax computation, gross and reduction amounts, pay compute details, and system parameter values.

The following logic will be added to PPFEDTAX after the regular computation of the federal tax, if the employee is a Non Resident Alien (Citizenship Code of ‘N’ or ‘A’):

a. For each Pay Period (S/M/B) and Marital Status/Tax Rate Set (S/M/B/N), copybook CPWSXFTA has an array to hold all the Federal Tax table rates in the ascending Salary Limit.

b. Using the same Base Salary (taxable wages) of the employee used for the regular federal tax calculation, search through the NRA tax rate sets that are in ascending Salary Limit, for the following range (2 NRA tax rate sets):

   i. Select the current NRA tax rate set (Begin Range), if the next NRA tax rate set is the first set that has the Salary Limit greater than the Base Salary (taxable wages).

   ii. The first NRA rate step (End Range) that has the Salary Limit greater than the Base Salary (taxable wages).

c. Calculate the NRA additional tax, using the begin NRA rate step found above, by adding the following 2 amounts:

   i. Base Tax amount of the NRA rate step

   ii. The Excess Tax amount that will be calculated by multiplying the Percent of Excess with the Excess Base Salary above the Salary Limit.

d. Add the additional NRA tax calculated with the regular federal tax computed.

Copy Members

CPCTFEDI

Copy book CPCTFEDI is used in the programs that edit Federal Tax Rate input transactions and update them into the PPPFED DB2 control table.

In the copy book CPCTFEDI, a new field will be added to indicate negative sign for percent of excess for the new set of NRA federal tax rates.
CPWSXFTA
Copy book CPWSXFTA is used by the PPFEDUTL program to store the Single (‘S’)/ Married (‘M’)/ Exemption (‘E’) Federal Tax table data. The loaded CPWSXFTA data is passed between the calling programs and the federal taxes computation module PPFEDTAX.

The following changes will be done in the CPWSXFTA copybook layout structure for the new NRA tax rate set type ‘N’:

1. Increase the size of the Federal Tax holding array from 22 to 33, so that the NRA rate set steps will be held from 23 to 33 of the expanded array space.
2. Add a new field to hold the total number of NRA rate steps currently loaded.

Forms

UPAY547 Federal Tax Table
UPAY547 is used to input the batch transactions to update the standard PPS Federal Tax Rate table (Control Table 03) for the Monthly, Semi-monthly, and Bi-weekly pay periods.

The following will be the changes to the Federal Tax Table update form UPAY547:

1. Rename UPAY547 to UPAY547A
2. Add a comment of submitting the UPAY547A together with the new UPAY547B form for NRA rates.

UPAY547B Federal Tax Table - NRA
UPAY547B will be the new UPAY form created to update the PPS Federal Tax Rate table (Control Table 03) for the Monthly, Semi-monthly, and Bi-weekly pay periods for the additional NRA tax.

The new form will be for the NRA federal tax transactions, layout of which is based on the Single or Married tables from the Federal Tax Table update form UPAY547A. However, the NRA table in the form UPAY547B will have the following differences:

1. Position 5 of the ‘LINE ID’ will be ‘N’ for the NRA tax rate type.
2. A new column at position 23 for indicating the negative (‘-’) sign for the % excess field.

In addition, a comment of submitting UPAY547A together with UPAY547B will be added in the UPAY547B form.
Control Table Updates

Federal Tax Rate Table
SR82831 has provided the NRA tax rate transactions for the control table 03 (Federal Tax Rate Table). Locations will use these transactions to update the federal tax table.

System Messages Table
The following three new messages will be added to the System Messages Table:

<table>
<thead>
<tr>
<th>Message#</th>
<th>Severity</th>
<th>Message Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-165</td>
<td>5</td>
<td>FED TAX: % EXCESS SIGN MUST BE &quot;+&quot;, &quot;,&quot;, OR BLANK (IMPLIES &quot;+&quot;)</td>
</tr>
<tr>
<td>01-169</td>
<td>3</td>
<td>FED TAX: NON RESIDENT ALIEN PORTION OF TABLE IS MISSING</td>
</tr>
<tr>
<td>01-179</td>
<td>5</td>
<td>FED TAX: NEGATIVE TAX PERCENT ALLOWED FOR ONLY NRA TAX RATE SET</td>
</tr>
</tbody>
</table>

For the existing message 01-186, the description will be changed as below:

<table>
<thead>
<tr>
<th>Current description of message# 01-186</th>
<th>Changed Description of message# 01-186</th>
</tr>
</thead>
<tbody>
<tr>
<td>FED TAX: INVALID MARITAL STATUS</td>
<td>FED TAX: INVALID MARITAL STATUS OR TAX RATE SET</td>
</tr>
</tbody>
</table>