



TARIFF BILLING CODE

STANDARD FILE FORMAT VALIDATION PSEUDOCODE

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INTRODUCTION

This document presents pseudocode, a notation resembling a programming language that combines some of the structure of a programming language with an informal natural-language description of the computations to be carried out, for each of the standard file format validation tests provided in Table 5-1 of v1.3 of the Tariff Billing Code.

The pseudocode presented in this document has been written from a retailers perspective using simple "IF THEN ELSE" statements and "FOR LOOP" logic to point out the conditions that should be taken into consideration by retailers for each validation test. The EUB realizes that market participants have various programming languages and tools at their disposal and may program these validations differently according to their available resources as well as for increased performance.

FILE FORMAT VALIDATION CHECK # 1 – File Naming Convention

DESCRIPTION – Tariff Bill File Name must match Tariff Bill File Name format

PSEUDOCODE:

The file name for a given tariff bill file must match the following Naming Convention: TXN_Sender_Recipient_YYYYMMDDHHMISS.CSV

```
If length of filename is not equal to 37 Then
    Produce TBR with TBF Rejection Code 6001
End

If TXN (the first three characters of the filename) is not equal to 'TBF' Then
    Produce TBR with TBF Rejection Code 6001
End

If the fourth character in the filename is not equal to '_' Then
    Produce TBR with TBF Rejection Code 6001
End

If Sender (characters 5 to 8) in the filename is not equal to the Distributor
ID of the distributor responsible for the sites (i.e. 0040) Then
    Produce TBR with TBF Rejection Code 6001
End

If the ninth character in the filename is not equal to '_' Then
    Produce TBR with TBF Rejection Code 6001
End

If Recipient (characters 10 to 18) is not equal to the Retailer ID of the
retailer receiving the file (i.e. 999999999) Then
    Produce TBR with TBF Rejection Code 6001
End

If the nineteenth character in the filename is not equal to '_' Then
    Produce TBR with TBF Rejection Code 6001
End

If characters 20 to 33 is not equal to a valid datetime and in the format
YYYYMMDDHHMISS Then
    Produce TBR with TBF Rejection Code 6001
End

If the thirty-fourth character in the filename is not equal to '.' Then
    Produce TBR with TBF Rejection Code 6001
End

If the file extension (characters 35 to 37) is not equal to 'CSV' Then
    Produce TBR with TBF Rejection Code 6001
End

If file name is not in uppercase Then
    Produce TBR with TBF Rejection Code 6001
```

End

FILE FORMAT VALIDATION CHECK # 2 – File Format

DESCRIPTION – Tariff Bill File format must match Tariff Bill File format

PSEUDOCODE:

```
If tariff bill file is not delimited with a comma (,) then
    Produce TBR with TBF rejection code 6002
Else
    If Record Type equals 'FH' Then
        If field count is not equal to 9 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'SH' Then
        If field count is not equal to 18 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'TH' Then
        If field count is not equal to 14 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'DU' Then
        If field count is not equal to 17 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'DD' Then
        If field count is not equal to 15 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'DM' Then
        If field count is not equal to 10 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'CH' Then
        If field count is not equal to 19 Then
            Produce TBR with TBF rejection code 6002
        End
    End

    If Record Type equals 'OC' Then
        If field count is not equal to 11 Then
            Produce TBR with TBF rejection code 6002
        End
    End
```



```
        End
    End

    If Record Type equals 'FT' Then
        If field count is not equal to 5 Then
            Produce TBR with TBF rejection code 6002
        End
    End

End
```

FILE FORMAT VALIDATION CHECK # 3 – Data Type

DESCRIPTION – Field-level data types must match field-level data types

PSEUDOCODE:

```
For each record in the tariff bill file
```

```
    For each field in the record
```

```
        If field value does not match the required datatype of that field
```

```
            Produce TBR with TBF Rejection Code 6041
```

```
        End
```

```
    Next field
```

```
Next Record
```

FILE FORMAT VALIDATION CHECK # 4 - Record Production Sequence

DESCRIPTION – Tariff bill file records must be presented in the correct order according to the prescribed rules (i.e. Tariff Bill File Header, Site Header, Tariff Bill Period Header, Usage Determinant, Demand Determinant, Miscellaneous Determinant, Tariff Charge, One-time Charge, Tariff Bill File Trailer)

PSEUDOCODE:

See Record Production Sequence Diagram and associated description in Appendix B4.4

FILE FORMAT VALIDATION CHECK # 5 – Mandatory Field Logic

DESCRIPTION – Mandatory fields must be populated according to prescribed rules

PSEUDOCODE:

For each record in the tariff bill file

```
If Record Type equals 'FH' then
    If Record ID, Record Type, Retailer ID, Sender ID, Commodity Code, or
    Date Created are not populated Then
        Produce a TBR with TBR rejection code 6004
    End If
End
If Record Type equals 'SH' Then
    If Record ID, Parent ID, Record Type, Site ID, Distributor ID, Zone ID,
    Municipality ID, Bill Cycle, Usage Total, Usage UOM, Charge Total, or
    Site Production Reason Code are not populated Then
        Produce a TBR with TBF rejection code 6004
    End If
End
If Record Type equals 'TH' then
    If Record ID, Parent ID, Record Type, Site ID, Tariff Bill Period Start
    Date, Tariff Bill Period End Date, Cancel Indicator, Tariff Rate Code,
    Site Status Code, Usage Total, Usage UOM, or Charge Total are not
    populated Then
        Produce a TBR with TBF rejection code 6004
    End If
End
If Record Type equals 'DU' Then
    If Record ID, Parent ID, Record Type, Site ID, Usage Period Start Date,
    Usage Period End Date, Cancel Indicator, Meter Type Code, Usage Amount,
    or Usage UOM are not populated Then
        Produce a TBR with TBF rejection code 6004
    End If
End
If Record Type equals 'DD' Then
    If Record ID, Parent ID, Record Type, Site ID, Demand Period Start Date,
    Demand Period End Date, Cancel Indicator, Demand Type Code, Demand Value,
    or Demand UOM are not populated Then
        Produce a TBR with TBF rejection code 6004
    End If
End
If Record Type equals 'DM' Then
    If Record ID, Parent ID, Record Type, Site ID, Miscellaneous Determinant
    Period Start Date, Miscellaneous Determinant Period End Date, Cancel
    Indicator, Unit Quantity, Unit Quantity UOM, or Miscellaneous Determinant
    Code are not populated Then
        Produce a TBR with TBF rejection code 6004
    End If
End
If Record Type equals 'CH' Then
    If Record ID, Parent ID, Record Type, Site ID, Charge Period Start Date,
    Charge Period End Date, Cancel Indicator, Tariff Cross-reference Code,
```

```
        Component Category Code, Component Basis Code, Component Type Code,  
        Component Step Number, Component Billed Quantity, Component Billed  
        Quantity UOM, Time Calculation Type, Time Factor, Component Unit Price,  
        Charge Amount, or GST Exemption Indicator are not populated Then  
            Produce a TBR with TBF rejection code 6004  
        End If  
    End  
    If Record Type equals 'OC' Then  
        If Record ID, Parent ID, Record Type, Site ID, Charge Date, Cancel  
        Indicator, One-Time Charge Code, Charge Amount, or GST Exemption  
        Indicator are not populated Then  
            Produce a TBR with TBF rejection code 6004  
        End If  
    End  
    If Record Type equals 'FT' Then  
        If Record ID, Parent ID, Record Type, File Record Count, or Charge Total  
        are not populated Then  
            Produce a TBR with TBF rejection code 6004  
        End If  
    End  
Next Record
```

FILE FORMAT VALIDATION CHECK # 6 – Conditional Field Logic

DESCRIPTION – Conditional fields must be populated according to declared rules (sequencing triggers)

The following record elements are exempt from this test: REA Code, Power Factor

PSEUDOCODE:

If Record Type equals 'FH' Then

(Note: The following conditional fields in the File Header record cannot be validated using automated processes:
Bill Cycle, Tariff Bill File Reference ID)

a. Validate Parent ID

If Parent ID is not equal to [null] (i.e. ',,') Then

Produce a TBR with TBF rejection code 6005

End

If Record Type equals 'SH' Then

(Note: The following conditional fields in the Site Header record cannot be validated using automated processes:
REA Code, Parent Site ID)

For each record in a tariff bill file having a Record Type of 'SH'

a. Validate Current Billing Period Start Date

Extract Current Billing Period Start Date

Determine most recent Current Billing Period End Date for that Site ID

Extract MIN (Tariff Bill Period Start Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,
3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

If original tariff billing periods exist (i.e. a minimum tariff bill period start date has been returned) for that site Then

If Current Billing Period Start Date is not equal to MIN(Tariff Bill Period Start date) Then

Produce a TBR with TBF rejection code 6005

End

Else

If Current Billing Period Start Date is not equal to [null] Then

Produce a TBR with TBF rejection code 6005

End

End

b. Validate Current Billing Period End Date

Extract Current Billing Period End Date

Determine most recent Current Billing Period End Date for that Site ID

Extract MAX (Tariff Bill Period End Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,

3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

If original tariff billing periods exist (i.e. a maximum tariff bill period end date has been returned) for that site Then

 If Current Billing Period End Date is not equal to MAX(Tariff Bill Period End Date) Then

 Produce a TBR with TBF rejection code 6005

 End

Else

 If Current Billing Period End Date is not equal to [null] Then

 Produce a TBR with TBF rejection code 6005

 End

End

c. Validate Usage Total

Extract the count of all records in a tariff bill file having:

1. Record Type equal to 'DU', and
2. Site ID equal to the Site ID in the 'SH' record

If the usage record count for that site is equal to 0 Then

 If Usage Total not equal to 0 Then

 Produce a TBR with TBF rejection code 6005

 End

End

(Note: Usage records may only be absent for a site in a tariff bill file if only one-time charges are presented for that site)

d. Validate Usage UOM

Extract Commodity Code from FH record

If Commodity Code is equal to 'EL' Then

 If Usage UOM is not equal to 'KWH' Then

 Produce a TBR with TBF rejection code 6005

 End

ElseIf Commodity Code is equal to 'NG' Then

 If Usage UOM is not equal to 'GJ' Then

 Produce a TBR with TBF rejection code 6005

 End

End

e. Validate Charge Total

Extract the count of all records in a tariff bill file having:

1. Record Type equal to 'CH' or 'OC', and
2. Site ID equal to the Site ID in the 'SH' record

If the record count for that site is equal to 0 Then

 If Charge Total not equal to 0 Then

 Produce a TBR with TBF rejection code 6005

End
End

If Record Type equals 'TH' Then

a. Validate Tariff Bill Period Reference ID

If Cancel Indicator for a tariff bill period header record equals 'Y' Then
If Tariff Bill Period Reference ID of that same record is not populated
Produce a TBR with TBF rejection code 6005

End

Else

If Tariff Bill Period Reference ID of that same record is populated Then
Produce a TBR with TBF rejection code 6005

End

End

b. Validate Cancel Reason Code

If Cancel Indicator for a tariff bill period header record equals 'Y' Then
If Cancel Reason Code of that same record is not populated Then
Produce a TBR with TBF rejection code 6005

End

Else

If Cancel Reason Code of that same record is populated Then
Produce a TBR with TBF rejection code 6005

End

End

c. Validate Usage UOM

Extract Commodity Code from FH record

If Commodity Code is equal to 'EL' Then

If Usage UOM is not equal to 'KWH' Then

Produce a TBR with TBF rejection code 6005

End

ElseIf Commodity Code is equal to 'NG' Then

If Usage UOM is not equal to 'GJ' Then

Produce a TBR with TBF rejection code 6005

End

End

d. Validate Charge Total

Extract the count of all records in a tariff bill file having:

1. Record Type equal to 'CH',
2. Site ID equal to the Site ID in the 'TH' record, and
3. Parent ID equal to the Record ID of the parent 'TH' record

If the TH record count for that tariff bill period is equal to 0 Then

If Charge Total not equal to 0 Then

Produce a TBR with TBF rejection code 6005

End

End

If Record Type equals 'DU' Then

a. Validate Meter Number

If Meter Type Code = 'C' Then

If Meter Number of that same record is not populated Then

Produce a TBR with TBF rejection code 6005

End

End

b. Validate Number of Dials

If Meter Type Code equals 'C' Then

If Site Status Code of the parent TH record equals 'E' Then

If Number of Dials is not populated Then

Produce a TBR with TBF rejection code 6005

End

End

If Number of Dials is populated Then

If Number of Dials value is not a positive integer Then

Produce a TBR with TBF rejection code 6005

End

End

End

c. Validate From Reading

If Meter Type Code equals 'C' and the Site Status Code of the parent TH record equals 'E' Then

If From Reading of that same record is not populated Then

Produce a TBR with TBF rejection code 6005

End

End

d. Validate From Reading Code

If Meter Type Code equals 'C' and the Site Status Code of the parent TH record equals 'E' Then

If From Reading Code of that same record is not populated Then

Produce a TBR with TBF rejection code 6005

End

End

e. Validate To Reading

If Meter Type Code equals 'C' and the Site Status Code of the parent TH record equals 'E' Then

If To Reading of that same record is not populated Then

Produce a TBR with TBF rejection code 6005

End

End

f. Validate To Reading Code

If Meter Type Code equals 'C' and the Site Status Code of the parent TH record equals 'E' Then

 If To Reading Code of that same record is not populated Then
 Produce a TBR with TBF rejection code 6005

 End

End

g. Validate Billing Multiplier

If Meter Type Code equals 'C' and the Site Status Code of the parent TH record equals 'E' Then

 If Billing Multiplier of that same record is not populated Then
 Produce a TBR with TBF rejection code 6005

 End

End

If Record Type Code equals 'DD' Then

(Note: The following conditional fields in the Demand Determinant record cannot be validated using automated processes: Power Factor, Demand Contract End Date)

a. Validate Meter Number

If Meter Type Code from the 'DU' record having the same Parent ID as the 'DD' record equals 'C' AND the Demand Type Code of the 'DD' record equals 4080 Then

 If Meter Number of that same 'DD' record is not populated Then
 Produce a TBR with TBF rejection code 6005

 End

End

b. Validate Ratchet DateTime

If Demand Type Code of 'DD' record equals 4100, 4110, 4120, or 4200 Then

 If Ratchet Datetime is not populated Then
 Produce a TBR with TBF rejection code 6005

 End

End

c. Validate Ratchet Period Months

If Demand Type Code of 'DD' record equals 4100, 4110, 4120, or 4200 Then

 If Ratchet Period Months of that same 'DD' record is not populated Then
 Produce a TBR with TBF rejection code 6005

 End

End

If Record Type Code equals 'CH' Then

a. Validate Time Factor

If Time Calculation Type of a charge record equals 'D' Then

```
        If Time Factor of that same charge record is not a positive integer Then
            Produce a TBR with TBF rejection code 6005
        End
    ElseIf Time Calculation Type of a charge record equals 'M' Then
        If Time Factor of that same charge record is not greater than 0 Then
            Produce a TBR with TBF rejection code 6005
        End
    ElseIf Time Calculation Type of a charge record equals 'P' Then
        If Time Factor of that same charge record is not equal to 1 Then
            Produce a TBR with TBF rejection code 6005
        End
    End
End

If Record Type Code equals 'OC' Then

    a. Validate One-Time Charge Reference ID

    If Cancel Indicator for a one-time charge record equals 'Y' Then
        If One-time Charge Reference ID of that same record is not populated Then
            Produce a TBR with TBF rejection code 6005
        End
    Else
        If One-time Charge Reference ID of that same record is populated Then
            Produce a TBR with TBF rejection code 6005
        End
    End

    b. Validate Cancel Reason Code

    If Cancel Indicator for a one-time charge record equals 'Y' Then
        If Cancel Reason Code of that same record is not populated Then
            Produce a TBR with TBF rejection code 6005
        End
    Else
        If Cancel Reason Code of that same record is populated Then
            Produce a TBR with TBF rejection code 6005
        End
    End
End
```

FILE FORMAT VALIDATION CHECK # 7 – Standard Codes

DESCRIPTION – Fields requiring standard code population must contain values that match standard codes

PSEUDOCODE:

If record type equals 'FH' Then

a. Validate Commodity Code

If Commodity Code is not equal to one of the accepted values listed in Table B5-2 Then

Produce a TBR with TBF rejection code 6006

End

End

If record type equals 'SH' Then

a. Validate Zone ID

Extract Commodity Code from FH record

If Commodity Code equals 'EL' Then

If Zone ID is not equal to one of the Zone ID's presented in Schedule B of the SSC Then

Produce a TBR with TBF rejection code 6006

End

End

b. Validate Municipality ID

If Municipality ID is not equal to one of the values presented in the MID file Then

Produce a TBR with TBF rejection code 6006

End

c. Validate REA Code

If REA Code is populated Then

If REA Code is not equal to one of the values presented in Table B5-4 Then

Produce a TBR with TBF rejection code 6006

End

End

d. Validate Usage UOM

If Commodity Code of the 'FH' record equals 'EL' Then

If Usage UOM is not equal to 'KWH' Then

Produce a TBR with TBF Rejection Code 6006

End

ElseIf Commodity Code of the 'FH' record equals 'NG' Then

If Usage UOM is not equal to 'GJ' Then

Produce a TBR with TBF Rejection Code 6006

```
        End
    End

    e. Validate Site Production Reason Code

    If Site Production Reason Code is not equal to one of the values presented in
    Table B5-6 Then
        Produce a TBR with TBF rejection code 6006
    End

End

If record type equals 'TH' Then

    a. Validate Cancel Indicator

    If Cancel Indicator is not equal to 'Y' or 'N' Then
        Produce a TBR with TBF Rejection Code 6006
    End

    b. Validate Cancel Reason Code

    If Cancel Indicator = 'Y' Then
        If Cancel Reason Code is not equal to one of the values presented in
        Table B5-7 Then
            Produce a TBR with TBF rejection code 6006
        End
    End

    c. Validate Tariff Rate Code

    If Tariff Rate Code is not equal to one of the values presented in the TRC File
    Then
        Produce a TBR with TBF rejection code 6006
    Else
        If the Tariff Rate Code Effective Date is greater than the Tariff Bill
        Period Start Date OR the Tariff Rate Code Expiry Date (if available) is
        less than the Tariff Bill Period End Date Then
            Produce a TBR with TBF rejection code 6006
        End
    End

    d. Validate Site Status Code

    If Site Status Code is not equal to one of the values presented in Table B5-9
    Then
        Produce a TBR with TBF Rejection Code 6006
    End

    e. Validate Usage UOM

    If Commodity Code of the 'FH' record equals 'EL' Then
        If Usage UOM is not equal to 'KWH' Then
            Produce a TBR with TBF Rejection Code 6006
        End
    ElseIf Commodity Code of the 'FH' record equals 'NG' Then
```

```
        If Usage UOM is not equal to 'GJ' Then
            Produce a TBR with TBF Rejection Code 6006
        End
    End
End

If record type equals 'DU' Then

    a. Validate Cancel Indicator

    If Cancel Indicator is not equal to 'Y' or 'N' Then
        Produce a TBR with TBF Rejection Code 6006
    End

    b. Validate Meter Type Code

    If Meter Type Code is not equal to one of the values presented in Table B5-10
    Then
        Produce a TBR with TBF Rejection Code 6006
    End

    c. Validate From Reading Code

    If From Reading Code is populated Then
        If From Reading Code is not equal one of the values presented in Table
        B5-11 Then
            Produce a TBR with TBF Rejection Code 6006
        End
    End

    d. Validate To Reading Code

    If To Reading Code is populated Then
        If To Reading Code is not equal one of the values presented in Table B5-
        11 Then
            Produce a TBR with TBF Rejection Code 6006
        End
    End

    e. Validate Usage UOM

    If Commodity Code of the 'FH' record equals 'EL' Then
        If Usage UOM is not equal to 'KWH' Then
            Produce a TBR with TBF Rejection Code 6006
        End
    ElseIf Commodity Code of the 'FH' record equals 'NG' Then
        If Usage UOM is not equal to 'GJ' Then
            Produce a TBR with TBF Rejection Code 6006
        End
    End
End

If record type equals 'DD' Then
```

a. Validate Cancel Indicator

If Cancel Indicator is not equal to 'Y' or 'N' Then
 Produce a TBR with TBF Rejection Code 6006
End

b. Validate Demand Type Code

If Demand Type Code is not equal to one of the values presented in Table B5-12
Then
 Produce a TBR with TBF Rejection Code 6006
End

b. Validate Demand UOM

If Demand UOM is not equal to one of the values presented in Table B5-13 Then
 Produce a TBR with TBF Rejection Code 6006
End

End

If record type equals 'DM' Then

a. Validate Cancel Indicator

If Cancel Indicator is not equal to 'Y' or 'N' Then
 Produce a TBR with TBF Rejection Code 6006
End

b. Validate Unit Quantity UOM

If Unit Quantity UOM is not equal one of the values presented in Table B5-14
Then
 Produce a TBR with TBF Rejection Code 6006
End

c. Validate Miscellaneous Determinant Code

If Miscellaneous Determinant Code is not equal to one of the values presented
in the applicable distributor's MDF Then
 Produce a TBR with TBF rejection Code 6006
Else
 If Miscellaneous Determinant Code Effective Date is greater than the
 Miscellaneous Determinant Start Date OR the Miscellaneous Determinant
 Code Expiry Date (if available) is less than the Miscellaneous
 Determinant End Date Then
 Produce a TBR with TBF Rejection Code 6006
 End
End

End

If record type equals 'CH' Then

a. Validate Cancel Indicator

If Cancel Indicator is not equal to 'Y' or 'N' Then

Produce a TBR with TBF Rejection Code 6006

End

b. Validate Tariff Cross Reference Code

If Tariff Cross Reference Code is not equal to one of the values presented in the applicable distributor's TRF Then

Produce a TBR with TBF Rejection Code 6006

Else

If the Tariff Cross Reference Code Effective Date is greater than the Charge Period Start Date OR the Tariff Cross Reference Code Expiry Date (if available) is less than the Charge Period End Date Then

Produce a TBR with TBF Rejection Code 6006

End

End

c. Validate Component Category Code

If Component Category Code is not equal to one of the values presented in the Table B5-16 Then

Produce a TBR with TBF Rejection Code 6006

End

d. Validate Component Basis Code

If Component Basis Code is not equal to one of the values presented in Table B5-17 Then

Produce a TBR with TBF Rejection Code 6006

End

e. Validate Component Type Code

If Component Type Code is not equal to one of the values presented in the applicable distributor's CTF Then

Produce a TBR with TBF Rejection Code 6006

Else

If Component Type Code Effective Date is greater than the Charge Period Start Date OR the Component Type Code Expiry Date (if available) is less than the Charge Period End Date Then

Produce a TBR with TBF Rejection Code 6006

End

End

f. Validate Component Billed Quantity UOM

If Component Basis Code of a charge period record equals 'D' Then

If Component Billed Quantity UOM is not equal to one of the values presented in Table B5-13 Then

Produce TBR with TBF Rejection Code 6006

End

ElseIf Component Basis Code of a charge period record equals 'E' Then


```
        If Component Billed Quantity UOM is not equal to one of the values
        presented in Table B5-5 Then
            Produce TBR with TBF Rejection Code 6006
        End
    Else
        If Component Billed Quantity UOM is not equal to one of the values
        presented in Table B5-14 Then
            Produce TBR with TBF Rejection Code 6006
        End
    End
End

g. Validate Time Calculation Type

If Time Calculation Type is not equal to 'D','M', OR 'P' Then
    Produce TBR with TBF Rejection Code 6006
End

h. Validate GST Exemption

If GST Exemption Indicator is not equal to 'Y' or 'N' Then
    Produce TBR with TRF Rejection Code 6006
End

End

If record type equals 'OC' Then

    a. Validate Cancel Indicator

    If Cancel Indicate is not equal to 'Y' or 'N' Then
        Produce TBR with TBF Rejection Code 6006
    End

    b. Validate Cancel Reason Code

    If Cancel Indicator equals 'Y' Then
        If Cancel Reason Code is not equal to one of the values presented in
        Table B5-7 Then
            Produce TBR with TBF Rejection Code 6006
        End
    End

    c. Validate One-time Charge Code

    If One-time Charge Code is not equal to one of the values presented in the
    applicable distributor's OCF Then
        Produce TBR with TBF Rejection Code 6006
    Else
        If One-time Charge Code Effective Date is greater than the One-Time
        Charge Date OR the One-time Charge Code Expiry Date (if available) is
        less than the One-Time Charge Date Then
            Produce TBR with TBF Rejection Code 6006
        End
    End
End
```

d. Validate GST Exemption Indicator

If GST Exemption Indicator is not equal to 'Y' or 'N' Then
 Produce TBR with TBF Rejection Code 6006

End

End

FILE FORMAT VALIDATION CHECK # 8 – Unique File Header Record ID (with previous Tariff Bill Files)

DESCRIPTION – Record ID in the Tariff Bill File Header must be unique to a distributor

PSEUDOCODE:

```
If record type equals FH Then
    Compare Record ID with Record IDs received from previous tariff bill files for
    that distributor

    If Record ID is not unique within Record IDs received in previous tariff bill
    files for that distributor Then
        Produce TBR with TBF Rejection Code 6007
    End
End
```

FILE FORMAT VALIDATION CHECK # 9 – Unique Record ID (within Tariff Bill File)

DESCRIPTION – All Record IDs must be unique within a Tariff Bill File

PSEUDOCODE:

For each record in a tariff bill file

 Compare Record ID with Record ID's of each record within the tariff bill file

 If record with a duplicate Record ID found Then

 Produce TBR with TBF Rejection Code 6007

 End

Next Record

FILE FORMAT VALIDATION CHECK # 10 – Parent ID

DESCRIPTION – Parent ID at any level within the Tariff Bill File structure must match the Record ID of the parent record

PSEUDOCODE:

For each record in the tariff bill file
 Extract Record Type

 If Record Type equals 'SH' Then
 Retrieve the Record ID of the FH record

 If Parent ID of 'SH' record is not equal to Record ID of the 'FH' record
 Then
 Produce TBR with TBF Rejection Code 6008
 End
End

 If Record Type equals 'TH' Then
 Retrieve the Record ID of the 'SH' record having a Site ID equal to the Site ID presented in the TH record

 If Parent ID of 'TH' record is not equal to Record ID of the 'SH' record
 Then
 Produce TBR with TBF Rejection Code 6008
 End If
End

 If Record Type equals 'DU' Then
 Retrieve the Record ID of the 'TH' record having:
 1. Site ID equal to the Site ID of the 'DU' record,
 2. Tariff Bill Period Start Date less than or equal to the Usage Period Start Date,
 3. Tariff Bill Period End Date greater than or equal to the Usage Period End Date, AND
 4. Cancel Indicator equal to the Cancel Indicator of the 'DU' record

 If Parent ID of 'DU' record is not equal to Record ID of the parent 'TH' record Then
 Produce TBR with TBF Rejection Code 6008
 End If
 End

 If Record Type equals 'DD' Then
 Retrieve the Record ID of the 'TH' record having:
 1. Site ID equal to the Site ID of the 'DD' record,
 2. Tariff Bill Period Start Date less than or equal to the Demand Period Start Date,
 3. Tariff Bill Period End Date greater than or equal to the Demand Period End Date, AND
 4. Cancel Indicator equal to the Cancel Indicator of the 'DD' record

```
    If Parent ID of 'DD' record is not equal to Record ID of the parent 'TH'
    record Then
        Produce TBR with TBF Rejection Code 6008
    End If
End

If Record Type equals 'DM' Then
    Retrieve the Record ID of the 'TH' record having:
    1. Site ID equal to the Site ID of the 'DM' record,
    2. Tariff Bill Period Start Date less than or equal to the Miscellaneous
    Determinant Period Start Date,
    3. Tariff Bill Period End Date greater than or equal to the Miscellaneous
    Determinant Period End Date, AND
    4. Cancel Indicator equal to the Cancel Indicator of the 'DM' record

    If Parent ID of 'DM' record is not equal to Record ID of the parent 'TH'
    record Then
        Produce TBR with TBF Rejection Code 6008
    End If
End

If Record Type equals 'CH' Then
    Retrieve the Record ID of the 'TH' record having:
    1. Site ID equal to the Site ID of the 'CH' record,
    2. Tariff Bill Period Start Date less than or equal to the Charge Period
    Start Date,
    3. Tariff Bill Period End Date greater than or equal to the Charge Period
    End Date, AND
    4. Cancel Indicator equal to the Cancel Indicator of the 'CH' record

    If Parent ID of the 'CH' record is not equal to Record ID of the parent
    'TH' record Then
        Produce TBR with TBF Rejection Code 6008
    End If
End

If Record Type equals 'OC' Then
    Retrieve the Record ID of the 'SH' record having a Site ID equal to the
    Site ID presented in the 'OC' record

    If Parent ID of 'OC' record is not equal to Record ID of the parent 'SH'
    record Then
        Produce TBR with TBF Rejection Code 6008
    End If
End

If Record Type equals 'FT' Then
    Retrieve the Record ID of the 'FH' record

    If Parent ID of 'FT' record is not equal to Record ID of the parent 'FH'
    record Then
        Produce TBR with TBF Rejection Code 6008
    End If
End
```

Next Record

FILE FORMAT VALIDATION CHECK # 11 – Retailer ID

DESCRIPTION – Retailer ID must match Retailer ID of the recipient

PSEUDOCODE:

Extract the Retailer ID from the 'FH' record

If Retailer ID is not a 9-digit number Then

 Produce a TBR with TBF Rejection Code 6009

Else

 If the Retailer ID is not equal to the Retailer ID of the retailer receiving
 the tariff bill file Then

 Produce a TBR with TBF Rejection Code 6009

 End

End

FILE FORMAT VALIDATION CHECK # 12 – Distributor ID

DESCRIPTION – Distributor ID must match Distributor ID of the sender

PSEUDOCODE:

Extract the Sender ID from the 'FH' record

If Commodity Code of FH record is equal to 'EL' Then

 If Sender ID is not equal to one of the 4 digit Wires Company IDs presented in
 Schedule B of the SSC Then

 Produce a TBR with TBF Rejection Code 6010

 End

End

FILE FORMAT VALIDATION CHECK # 13 – Date Created

DESCRIPTION – Date Created must be less than or equal to the date of receipt

PSEUDOCODE:

Extract the Date Created value from the 'FH' record

Determine the date and time of when the tariff bill file was received

If Date Created is greater than the date and time the tariff bill file was received
Then

 Produce a TBR with TBF Rejection Code 6026

End If

FILE FORMAT VALIDATION CHECK # 14 – Date Logic

DESCRIPTION – All Period date ranges within a Tariff Bill File must report the End Date as greater than or equal to the Start Date

PSEUDOCODE:

For each record in the tariff bill file

```
If Record Type equals 'SH' Then
    Extract Current Billing Period Start Date
    Extract Current Billing Period End Date

    If Current Billing Period Start Date is greater than the Current Billing
    Period End Date Then
        Produce TBR with TBF Rejection Code 6011
    End
End

If Record Type equals 'TH' Then
    Extract Tariff Bill Period Start Date
    Extract Tariff Bill Period End Date

    If Tariff Bill Period Start Date is greater than the Tariff Bill Period
    End Date Then
        Produce TBR with TBF Rejection Code 6011
    End
End

If Record Type equals 'DU' Then
    Extract Usage Period Start Date
    Extract Usage Period End Date

    If Usage Period Start Date is greater than the Usage Period End Date Then
        Produce TBR with TBF Rejection Code 6011
    End
End

If Record Type equals 'DD' Then
    Extract Demand Period Start Date
    Extract Demand Period End Date

    If Demand Period Start Date is greater than the Demand Period End Date
    Then
        Produce TBR with TBF Rejection Code 6011
    End
End

If Record Type equals 'DM' Then
    Extract Miscellaneous Determinant Period Start Date
    Extract Miscellaneous Determinant Period End Date

    If Miscellaneous Determinant Period Start Date is greater than the
    Miscellaneous Determinant Period End Date Then
```

```
        Produce TBR with TBF Rejection Code 6011
    End
End

If Record Type equals 'CH' Then
    Extract Charge Period Start Date
    Extract Charge Period End Date

    If Charge Period Start Date is greater than the Charge Period End Date
    Then
        Produce TBR with TBF Rejection Code 6011
    End
End

Next Record
```

FILE FORMAT VALIDATION CHECK # 15 – Future Dates

DESCRIPTION – All date values within a Tariff Bill File must be equal to or less than the Tariff Bill File Header Date Created (excluding Demand Contract End Date within a demand determinant record).

PSEUDOCODE:

Extract Date Created from 'FH' record

For each record in a tariff bill file

 If Record Type equals 'SH' Then

 If Current Billing Period Start Date, Current Billing Period End Date OR
 As-at Date is greater than the Date Created in the 'FH' record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'TH' Then

 If Tariff Bill Period Start Date OR Tariff Bill Period End Date is
 greater than the Date Created in the 'FH' record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'DU' Then

 If Usage Period Start Date OR Usage Period End Date is greater than the
 Date Created in the 'FH' record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'DD' Then

 If Demand Period Start Date, Demand Period End Date OR Ratchet Datetime
 is greater than the Date Created in the 'FH' record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'DM' Then

 If Miscellaneous Determinant Period Start Date OR Miscellaneous
 Determinant Period End Date is greater than the Date Created in the 'FH'
 record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'CH' Then

 If Charge Period Start Date OR Charge Period End Date is greater than the
 Date Created in the 'FH' record Then

 Produce TBR with TBF Rejection Code 6012

 End

 End

 If Record Type equals 'OC' Then

```
        If Charge Date is greater than the Date Created in the 'FH' record Then
            Produce TBR with TBF Rejection Code 6012
        End
    End
```

FILE FORMAT VALIDATION CHECK # 16 – Current Billing Period / Tariff Bill Period Alignment

DESCRIPTION – The Current Billing Period Start Date and the Current Billing Period End Date must equal the earliest Tariff Bill period Start Date and the latest Tariff Bill Period End Date, respectively, for a site (excluding cancel/rebills and original tariff bill periods that precede the end date of the last current billing period previously issued to a retailer)

PSEUDOCODE:

For each record in a tariff bill file having a Record Type of 'SH'

 Extract Current Billing Period Start Date

 Extract Current Billing Period End Date

 Determine most recent Current Billing Period End Date for that Site ID

a. Validate Current Billing Period Start Date Alignment

 Extract MIN (Tariff Bill Period Start Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,
3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

 If original tariff billing periods exist (i.e. a minimum tariff bill period start date has been returned) for that site Then

 If Current Billing Period Start Date is not equal to MIN(Tariff Bill Period Start date) Then

 Produce a TBR with TBF rejection code 6014

 End

 Else

 If Current Billing Period Start Date is not equal to [null] Then

 Produce a TBR with TBF rejection code 6014

 End

 End

b. Validate Current Billing Period End Date Alignment

 Extract MAX (Tariff Bill Period End Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,
3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

 If original tariff billing periods exist (i.e. a maximum tariff bill period end date has been returned) for that site Then

 If Current Billing Period End Date is not equal to MAX(Tariff Bill Period End Date) Then

 Produce a TBR with TBF rejection code 6014

 End

 Else

 If Current Billing Period End Date is not equal to [null] Then

 Produce a TBR with TBF rejection code 6014

 End

 End

Next 'SH' Record

FILE FORMAT VALIDATION CHECK # 17 – Cancel Indicator Logic

DESCRIPTION – All Tariff Bill Period child records must have the same Cancel Indicator value as the parent Tariff Bill Period

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Cancel Indicator
 Extract Record ID

 Extract all records within the tariff bill file having a Parent ID equal to the Record ID of the 'TH' record

 For each child record

 If Cancel Indicator is not equal to the Cancel Indicator of the 'TH' record Then

 Produce TBR with TBF Rejection Code 6015

 End

 Next child record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 18 – Tariff Bill Period Overlap (within a Tariff Bill File)

DESCRIPTION – Tariff Bill Periods for current period charges may not overlap. The Tariff Bill Period Start Date must be greater than the preceding Tariff Bill Period End Date (within a Tariff Bill File for the same site excluding cancel/rebills)

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'SH'

For each record in the tariff bill file having a Record Type of 'SH'

 Extract Site ID

 Extract Current Billing Period Start Date

 Extract Current Billing Period End Date

 Extract all records within the tariff bill file having:

1. Site ID equal to the Site ID of the 'SH' record
 2. Record Type equal to 'TH'
 3. Tariff Bill Period Start Date greater than or equal to the Current Billing Period Start Date
 4. Tariff Bill Period End Date less than or equal to the Current Billing Period End Date
 5. Cancel Indicator equal to 'N'
- Extracted 'TH' records should be sorted in ascending date sequence

 For each 'TH' record

 If first 'TH' record Then

 Store Tariff Bill Period End Date

 Next Record

 Else

 If the Tariff Bill Period Start Date (current 'TH' record) is less than or equal to the Tariff Bill Period End Date of previous 'TH' record Then

 Produce TBR with TBF Rejection Code 6016

 Else

 Store Tariff Bill Period End Date

 End

 End

 Next 'TH' record

Next 'SH' record

FILE FORMAT VALIDATION CHECK # 19 – Tariff Bill Period Gap (within the Current Billing Period)

DESCRIPTION – Tariff Bill Periods for the same site within the Current Billing Period must be continuous within the Tariff Bill File. Where tariff bill periods are discontinuous, the gap must be supported by an SRO followed by an SRN (both within the current billing period)

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'SH'

For each record in the tariff bill file having a Record Type of 'SH'

- Extract Site ID
- Extract Current Billing Period Start Date
- Extract Current Billing Period End Date

Extract all records within the tariff bill file having:

1. Site ID equal to the Site ID of the 'SH' record
2. Record Type equal to 'TH'
3. Tariff Bill Period Start Date greater than or equal to the Current Billing Period Start Date
4. Tariff Bill Period End Date less than or equal to the Current Billing Period End Date
5. Cancel Indicator equal to 'N'

Extracted 'TH' records should be sorted in ascending date sequence

For each 'TH' record

- If first 'TH' record Then
 - Store Tariff Bill Period End Date
 - Next Record

- Else

- Establish Gap Period by determining the difference between the Tariff Bill Period Start Date (current 'TH' record) and the Tariff Bill Period End Date of previous 'TH' record

- If Gap Period is greater than 1 day Then

- Compare date range of the Gap Period with the period of Site Ownership (i.e. period(s) established by SRN and SRO transactions)

- If (Site Ownership Start Date is less than Start Date of Gap Period AND Site Ownership End Date is greater or equal to the Gap Period Start Date) OR (Site Ownership Start Date is greater than Gap Period Start Date AND Site Ownership Start Date is less than Gap Period End Date) Then

- Produce TBR with TBF Rejection Code 6042

- End If

- Else

- Store Tariff Bill Period End Date

- End

- End

Next 'TH' record

Next 'SH' record

FILE FORMAT VALIDATION CHECK # 20 – Usage Period / Tariff Bill Period Alignment

DESCRIPTION – The Tariff Bill period Start Date must equal the earliest Usage Period Start Date and the Tariff Bill Period End Date must equal the latest Usage Period End Date within a Tariff Bill Period, unless there are no usage and tariff charge records for the current billing period

PSEUDOCODE:

For each record in a tariff bill file having a Record Type of 'TH'

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract Record ID of 'TH' record

a. Validate Tariff Bill Period Start Date Alignment

 Extract MIN(Usage Period Start Date) of 'DU' records from TBF having:

1. Record Type of 'DU',
2. Parent ID matching the Record ID presented in the 'TH' record, and
3. Site ID matching the Site ID presented in the 'TH' record

 If Tariff Bill Period Start Date is not equal to MIN(Usage Period Start Date) Then

 Produce a TBR with TBF rejection code 6017

 End

b. Validate Tariff Bill Period End Date Alignment

 Extract MAX (Usage Period End Date) of 'DU' records from TBF having:

1. Record Type of 'DU',
2. Parent ID matching the Record ID presented in the 'TH' record, and
3. Site ID matching the Site ID presented in the 'TH' record

 If Tariff Bill Period End Date is not equal to MAX(Usage Period End Date) Then

 Produce a TBR with TBF rejection code 6017

 End

Next 'TH' Record

FILE FORMAT VALIDATION CHECK # 21 – Usage Period Overlap (within a Tariff Bill Period)

DESCRIPTION – Usage Periods within a Tariff Bill Period may not overlap. The Usage Period Start Date must be greater than the preceding Usage Period End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Record ID

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DU',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Usage Period Start Date greater than or equal to the Tariff Bill Period Start Date, and
5. Usage Period End Date less than or equal to the Tariff Bill Period End Date

 Extracted 'DU' records should be sorted in ascending date sequence

 For each 'DU' record

 If first 'DU' record Then

 Store Usage Period End Date

 Next Record

 Else

 If the Usage Period Start Date (current 'DU' record) is less than or equal to the Usage Period End Date of previous 'DU' record Then
 Produce TBR with TBF Rejection Code 6018

 Else

 Store Usage Period End Date

 End

 End

 Next 'DU' record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 22 – Usage Period Gap (within a Tariff Bill Period)

DESCRIPTION – Usage Periods within a Tariff Bill Period must be continuous; the Usage Period Start Date must be one day greater than the preceding Usage period record's End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

```
Extract Record ID
Extract Tariff Bill Period Start Date
Extract Tariff Bill Period End Date
```

Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DU',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Usage Period Start Date greater than or equal to the Tariff Bill Period Start Date, and
5. Usage Period End Date less than or equal to the Tariff Bill Period End Date

Extracted 'DU' records should be sorted in ascending date sequence

For each 'DU' record

 If first 'DU' record Then

 Store Usage Period End Date

 Next Record

 Else

 If the difference between the Usage Period Start Date (current 'DU' record) and the Usage Period End Date of previous 'DU' record is greater than 1 day Then

 Produce TBR with TBF Rejection Code 6019

 Else

 Store Usage Period End Date

 End

 End

Next 'DU' record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 23 – Demand Period / Tariff Bill Period Alignment

DESCRIPTION – The Tariff Bill period Start Date and the Tariff Bill Period End Date must equal the earliest Demand Period Start Date and the latest Demand Period End Date respectively of demand determinant records (where applicable) within that Tariff Bill Period having a demand type code of either 'Billing', 'Transmission Billing', 'Distribution Billing' or 'Service Billing'

PSEUDOCODE:

For each record in a tariff bill file having a Record Type of 'TH'

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract Record ID of 'TH' record

a. Validate Tariff Bill Period Start Date Alignment

 Extract MIN (Demand Period Start Date) of 'DD' records from TBF having:

1. Record Type of 'DD',
2. Parent ID matching the Record ID presented in the 'TH' record,
3. Site ID matching the Site ID presented in the 'TH' record, and
4. Demand Type Code equal to 4000, 4010, 4020, OR 4180

 If Tariff Bill Period Start Date is not equal to MIN(Demand Period Start Date) Then

 Produce a TBR with TBF rejection code 6020

 End

b. Validate Tariff Bill Period End Date Alignment

 Extract MAX (Demand Period End Date) of 'DD' records from TBF having:

1. Record Type of 'DD',
2. Parent ID matching the Record ID presented in the 'TH' record,
3. Site ID matching the Site ID presented in the 'TH' record, and
4. Demand Type Code equal to 4000, 4010, 4020, OR 4180

 If Tariff Bill Period End Date is not equal to MAX(Demand Period End Date) Then

 Produce a TBR with TBF rejection code 6020

 End

Next 'TH' Record

FILE FORMAT VALIDATION CHECK # 24 – Demand Period Overlap (within a Tariff Bill Period)

DESCRIPTION – Demand Periods for the same Demand Type and Demand UOM within a Tariff Bill period may not overlap; the Demand Period Start Date must be greater than the preceding Demand Period End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Record ID

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DD',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Demand Period Start Date greater than or equal to the Tariff Bill Period Start Date, and
5. Demand Period End Date less than or equal to the Tariff Bill Period End Date

 Extracted 'DD' records should be sorted by Demand Type, Demand UOM and in ascending date sequence

 For each 'DD' record

 If first 'DD' record Then

 Store Demand Type

 Store Demand UOM

 Store Demand Period End Date

 Next Record

 Else

 If Demand Type and Demand UOM of current record match previous record Then

 If the Demand Period Start Date (current 'DD' record) is less than or equal to the Demand Period End Date of previous 'DD' record Then

 Produce TBR with TBF Rejection Code 6021

 Else

 Store Demand Period End Date

 End

 Else

 Store Demand Type

 Store Demand UOM

 Store Demand Period End Date

 End If

 End

 Next 'DD' record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 25 – Demand Period Gap (within a Tariff Bill Period)

DESCRIPTION – Demand Periods for the same Demand Type and Demand UOM within a Tariff Bill Period must be continuous; the Demand Period Start Date must be one day greater than the preceding Demand Period record's End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Record ID

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DD',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Demand Period Start Date greater than or equal to the Tariff Bill Period Start Date, and
5. Demand Period End Date less than or equal to the Tariff Bill Period End Date

 Extracted 'DD' records should be sorted in ascending date sequence

 For each 'DD' record

 If first 'DD' record Then

 Store Demand Type

 Store Demand UOM

 Store Demand Period End Date

 Next Record

 Else

 If Demand Type and Demand UOM of current record match previous record Then

 If the difference between the Demand Period Start Date (current 'DD' record) and the Demand Period End Date of previous 'DD' record is greater than 1 day Then

 Produce TBR with TBF Rejection Code 6022

 Else

 Store Demand Period End Date

 End

 Else

 Store Demand Type

 Store Demand UOM

 Store Demand Period End Date

 End If

 End

 Next 'DD' record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 26 – Charge Period / Tariff Bill Period Alignment

DESCRIPTION – The Tariff Bill Period Start Date must equal the earliest Charge Period Start Date and the Tariff Bill Period End Date must equal the latest Charge Period End Date within a Tariff Bill Period

PSEUDOCODE:

For each record in a tariff bill file having a Record Type of 'TH'

 Extract Tariff Bill Period Start Date

 Extract Tariff Bill Period End Date

 Extract Record ID of 'TH' record

a. Validate Tariff Bill Period Start Date Alignment

 Extract MIN (Charge Period Start Date) of 'CH' records from TBF having:

1. Record Type of 'CH',
2. Parent ID matching the Record ID presented in the 'TH' record', and
3. Site ID matching the Site ID presented in the 'TH' record

 If Tariff Bill Period Start Date is not equal to MIN(Charge Period Start Date) Then

 Produce a TBR with TBF rejection code 6023

 End

b. Validate Tariff Bill Period End Date Alignment

 Extract MAX (Charge Period End Date) of 'CH' records from TBF having:

1. Record Type of 'CH',
2. Parent ID matching the Record ID presented in the 'TH' record, and
3. Site ID matching the Site ID presented in the 'TH' record

 If Tariff Bill Period End Date is not equal to MAX(Charge Period End Date) Then

 Produce a TBR with TBF rejection code 6023

 End

Next 'TH' Record

FILE FORMAT VALIDATION CHECK # 27 – Charge Period Overlap (within a Tariff Bill Period)

DESCRIPTION – Charge periods for a single component charge (combination of tariff cross-reference code, component category code, component type code, component basis code and step number) within a Tariff Bill period may not overlap; the Charge Period Start Date must be greater than the preceding Charge Period End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

Extract Record ID
Extract Tariff Bill Period Start Date
Extract Tariff Bill Period End Date

Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'CH',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Charge Period Start Date greater than or equal to the Tariff Bill Period Start Date, and
5. Charge Period End Date less than or equal to the Tariff Bill Period End Date

Extracted 'CH' records should be sorted in ascending date sequence,

For each 'CH' record

Extract all charge records from the tariff bill file having:

1. Parent ID equal to the Parent ID of the current 'CH' record,
2. Tariff Cross Reference Code equal to the Tariff Cross Reference Code of the current 'CH' record,
3. Component Category Code equal to the Component Category Code of the current 'CH' record,
4. Component Type Code equal to the Component Type Code of the current 'CH' record,
5. Component Basis Code equal to the Component Basis Code of the current 'CH' record,
6. Component Step Number equal to the Component Step Number of the current 'CH' record,
7. (Charge Period Start Date less than or equal to the Charge Period Start Date of current 'CH' and Charge Period End Date greater than or equal to the Charge Period Start Date of current 'CH') OR (Charge Period Start Date is greater than the Charge Period Start Date of current 'CH' and Charge Period End Date is less than or equal to the Charge Period End Date of current 'CH'),
8. Record ID is not equal to Record ID of current 'CH' record

If 'CH' records are returned Then

Produce TBR with TBF Rejection Code 6024

End

Next 'CH' record

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 28 – Charge Period Gap (within a Tariff Bill Period)

DESCRIPTION – Charge Periods for a single component charge (combination of tariff cross-reference code, component category code, component type code, component basis code and step number), having a component basis code of 'D' or 'E' within a Tariff Bill Period, must be continuous; the Charge Period Start Date must be one day greater than the preceding Charge Period record's End Date

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

Extract Record ID
Extract Tariff Bill Period Start Date
Extract Tariff Bill Period End Date

Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'CH',
3. Site ID matching the Site ID presented in the 'TH' record,
4. Charge Period Start Date greater than or equal to the Tariff Bill Period Start Date,
5. Charge Period End Date less than or equal to the Tariff Bill Period End Date, and
6. Component Basis Code equal to 'E' or 'D'

Extracted 'CH' records should be sorted in ascending date sequence,

For each 'CH' record

Extract all charge records from the tariff bill file having:

1. Parent ID equal to the Parent ID of the current 'CH' record,
2. Tariff Cross Reference Code equal to the Tariff Cross Reference Code of the current 'CH' record,
3. Component Category Code equal to the Component Category Code of the current 'CH' record,
4. Component Type Code equal to the Component Type Code of the current 'CH' record,
5. Component Basis Code equal to the Component Basis Code of the current 'CH' record,
6. Component Step Number equal to the Component Step Number of the current 'CH' record,

Extracted records should be sorted in ascending date sequence

For each record

If first 'CH' record Then
Store Charge Period End Date
Next Record

Else
If the difference between the Charge Period Start Date (current 'CH' record) and the Charge Period End Date of previous 'CH' record is greater than 1 day Then

```
                Produce TBR with TBF Rejection Code 6025
            Else
                Store Charge Period End Date
            End
        End
    Next Record

Next 'CH' record

Next 'TH' record
```

FILE FORMAT VALIDATION CHECK # 29 – Site Header Usage Total

DESCRIPTION – Site Header Usage Total must match total of all of the site's usage in the file (including cancel/rebills)

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'SH'

For each record in the tariff bill file having a Record Type of 'SH'

 Extract the SUM(Usage Amount) of all records within the tariff bill file having:

1. Site ID equal to the Site ID of the 'SH' record
2. Record Type equal to 'DU'

 If SUM(Usage Amount) is not equal to the Usage Total of 'SH' record Then
 Produce TBR with TBF Rejection Code 6028

 End

Next 'SH' record

FILE FORMAT VALIDATION CHECK # 30 – Site Header Charge Total

DESCRIPTION – Site Header Charge Total must equal the sum of all of the Charge Amount fields in the file (including cancel/rebills) for a site

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'SH'

For each record in the tariff bill file having a Record Type of 'SH'

Extract the SUM(Charge Amount) of records within the tariff bill file having:

1. Site ID equal to the Site ID of the 'SH' record
2. Record Type equal to 'CH'

Extract the SUM(Charge Amount) of records within the tariff bill file having:

1. Site ID equal to the Site ID of the 'SH' record
2. Record Type equal to 'OC'

If SUM(Charge Amount) of 'CH' records plus the SUM(Charge Amount) of 'OC' records is not equal to the Charge Total of 'SH' record Then

Produce TBR with TBF Rejection Code 6029

End

Next 'SH' record

FILE FORMAT VALIDATION CHECK # 31 – Tariff Bill Period Header Usage Total

DESCRIPTION – Tariff Bill Period Header Usage Total must equal the sum of all 'Usage Amount' fields within a tariff bill period

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Record ID

 Extract the SUM(Usage Amount) of all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DU', and
3. Site ID matching the Site ID presented in the 'TH' record

 If SUM(Usage Amount) is not equal to the Usage Total of 'TH' record Then
 Produce TBR with TBF Rejection Code 6031

 End

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 32 – Tariff Bill Period Header Charge Total

DESCRIPTION – Tariff Bill Period Header Charge Total must equal the sum of all 'Charge Amount' fields within the tariff bill period

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each record in the tariff bill file having a Record Type of 'TH'

 Extract Record ID

 Extract the SUM(Charge Amount) of all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record
2. Record Type equal to 'CH'
3. Site ID matching the Site ID presented in the 'TH' record

 If SUM(Charge Amount) is not equal to the Charge Total of 'TH' record Then
 Produce TBR with TBF Rejection Code 6032

 End

Next 'TH' record

FILE FORMAT VALIDATION CHECK # 33 – File Trailer File Record Count

DESCRIPTION – File Record Count must match the number of records in the file

PSEUDOCODE:

Extract the Record Count from the 'FT' record within the tariff bill file.

Perform a count of all records in the tariff bill file (includes all record types).

If Record Count in 'FT' is not equal to the derived record count Then

 Produce TBR with TBF Rejection Code 6033

End

FILE FORMAT VALIDATION CHECK # 34 – File Trailer Charge Total

DESCRIPTION – File Trailer Charge Total must equal the sum of all 'Charge Amount' fields in the file (including cancel/rebills)

PSEUDOCODE:

Extract the Charge Total from the 'FT' record of the tariff bill file.

Extract the SUM(Charge Amount) of records within the tariff bill file having:

1. Record Type equal to 'CH'

Extract the SUM(Charge Amount) of records within the tariff bill file having:

1. Record Type equal to 'OC'

If SUM(Charge Amount) of 'CH' records plus the SUM(Charge Amount) of 'OC' records is not equal to the Charge Total of 'FT' record Then

 Produce TBR with TBF Rejection Code 6034

End

FILE FORMAT VALIDATION CHECK # 35 – Billing Demand Determinant Requirement

DESCRIPTION – If tariff charge records report Component Basis Code of Demand, 'Billing', 'Transmission Billing', 'Distribution Billing', or 'Service Billing', demand determinant records must also be disclosed within the same tariff bill period

PSEUDOCODE:

Extract all records within the tariff bill file having

1. Record Type equal to 'CH'
2. Component Basis Code equal to 'D'

For each CH record

Extract Parent ID
Extract Charge Period Start Date
Extract Charge Bill Period End Date

Extract all records within the tariff bill file having:

1. Parent ID equal to the Parent ID of the 'CH' record,
2. Record Type equal to 'DD',
3. Demand Period Start Date less than or equal to the Charge Period Start Date,
4. Demand Period End Date greater than or equal to the Charge Period End Date,
- and
5. Demand Type Code equal to 4000, 4010, 4020 OR 4180

If no 'DD' records are returned Then
Produce TBR with TBF Rejection Code 6035
End

Next CH record

FILE FORMAT VALIDATION CHECK # 36 – Usage Determinant Requirement

DESCRIPTION – One or more usage determinant records must be present for each tariff bill period

PSEUDOCODE:

Extract all records within the tariff bill file having a Record Type equal to 'TH'

For each 'TH' record

 Extract Record ID

 Extract all records within the tariff bill file having:

1. Parent ID equal to the Record ID of the 'TH' record,
2. Record Type equal to 'DU', and
3. Site ID matching the Site ID presented in the 'TH' record

 If no 'DU' records are returned Then

 Produce TBR with TBF Rejection Code 6036

 End

Next record

FILE FORMAT VALIDATION CHECK # 37 – Calculated Values

DESCRIPTION – Calculated field values based on a calculation involving one or more fields in the tariff bill file must match the expected calculated value (i.e. Charge Amount = Component Unit Price x Time Factor x Component Billed Quantity)

PSEUDOCODE:

a. Validate Usage Amount

Extract all records within the tariff bill file having:

1. Record Type equal to 'DU'
2. Meter Type equal to 'C'

For each 'DU' record

 If Number of Dials, From Reading, To Reading, and Billing Multiplier are populated Then

 'Calculate Usage

 If To Reading is greater than From Reading Then

 If Cancel Indicator is equal to 'N' Then

 Calculated Usage = (To Reading - From Reading) x Billing Multiplier

 Else

 Calculated Usage = (To Reading - From Reading) x Billing Multiplier x (-1)

 End

 ElseIf To Reading is less than From Reading Then

 If Cancel Indicator is equal to 'N' Then

 Calculated Usage = ((10^{Number of Dials} + To Reading - From Reading) x Billing Multiplier)

 Else

 Calculated Usage = ((10^{Number of Dials} + To Reading - From Reading) x Billing Multiplier) x (-1)

 End

 Else

 Calculated Usage = 0

 End

 'Compare Calculated Usage with Posted Usage

 If Absolute Value of (Usage - Calculated Usage) > 0.5 Then

 Produce TBR with TBF Rejection Code 6038

 End If

Else

 If Usage Amount is not equal to 0 Then

 Produce TBR with TBF Rejection Code 6038

 End If

End If

Next 'DU' record

b. Validate Charge Amount

Extract all records within the tariff bill file having a Record Type equal to 'CH'

For each 'CH' record

Calculate Charge Amount (Component Billed Quantity x Time Factor x Unit Price)

If Absolute Value of (Calculated Charge Amount - Charge Amount) > 1.00 Then
 Produce TBR with TBF Rejection Code 6038

End

Next 'CH' record

FILE FORMAT VALIDATION CHECK # 38 – Child Record Values

DESCRIPTION – Where the same field name exists in parent and child records within the Tariff Bill File, child record field values must match the field values of the parent record (e.g. Site ID in the Tariff Bill Period must match the Site ID in the Site Header; likewise, the Site ID in the Usage Determinant, Demand Determinant, Miscellaneous Determinant and Tariff Charge records must match the Site ID in the Tariff Bill Period Header record)

PSEUDOCODE:

```
Extract all records in the tariff bill file having a Record Type equal to 'SH'
```

```
For each 'SH' record
```

```
    Extract the Site ID of 'SH' record  
    Extract the Record ID of 'SH' record
```

```
    Extract all records within the tariff bile file having:
```

1. Record Type equal to 'TH'
2. Parent ID equal to Record ID of 'SH' record

```
    For each 'TH' record
```

```
        If Site ID is not equal to Site ID of 'SH' record Then  
            Produce TBR with TBF Rejection Code 6040  
        End
```

```
    Next 'TH' record
```

```
    Extract all records within the tariff bill file having:
```

1. Record Type equal to 'OC'
2. Parent ID equal to Record ID of 'SH' record

```
    For each 'OC' record
```

```
        If Site ID is not equal to Site ID of 'OC' record Then  
            Produce TBR with TBF Rejection Code 6040  
        End
```

```
    Next 'OC' record
```

```
Next 'SH' record
```

```
Extract all records in the tariff bill file having a Record Type equal to 'TH'
```

```
For each 'TH' record
```

```
    Extract the Site ID of 'TH' record  
    Extract the Record ID of 'TH' record
```

```
    Extract Record ID, Record Type and Site ID of all records within the tariff  
    bile file having:
```

1. Record Type equal to 'DU', 'DD', 'DM', OR 'CH'
2. Parent ID equal to Record ID of 'TH' record

```
For each record
    If Site ID is not equal to Site ID of 'TH' record Then
        Produce TBR with TBF Rejection Code 6040
    End
Next record
Next 'TH' record
```

FILE FORMAT VALIDATION CHECK # 39 – Cancel Cross-Reference Logic

DESCRIPTION – A Tariff Bill Period Header or One-time Charge record flagged with Cancel Indicator = Y must report a valid previous Tariff Bill period Record ID or One-time Charge Record ID respectively

PSEUDOCODE:

Extract all records in the tariff bill file having:

1. Record Type equal to 'TH', and
2. Cancel Indicator equal to 'Y'

For each 'TH' record

 Extract Tariff Bill Period Reference ID

 Extract 'TH' records having a Record ID equal to the Tariff Bill Period Reference ID from table where tariff bill period history is stored*

 If no records returned Then

 Produce a TBR with TBF Rejection Code 6043

 End

Next 'TH' record

Extract all records in the tariff bill file having:

1. Record Type equal to 'OC', and
2. Cancel Indicator equal to 'Y'

For each 'OC' record

 Extract One-time Charge Reference ID

 Extract 'OC' records having a Record ID equal to the One-time Charge Reference ID from table where one-time charge history is stored*

 If no records returned Then

 Produce a TBR with TBF Rejection Code 6043

 End

Next 'OC' record

*Note: Depending on how a market participant configures their system, the validation check may require an additional criterion: Distributor ID.

FILE FORMAT VALIDATION CHECK # 40 – Cancel Value Logic

DESCRIPTION – Tariff Bill File records flagged with Cancel Indicator = Y must match the value of records, with the following element exceptions, Ratchet Datetime, Ratchet Period Months, Demand Contract End Date, Power Factor and Miscellaneous Determinant Type Code, in a previously sent tariff bill file that are being cancelled, with amount fields being reverse in sign*

PSEUDOCODE:

A. Validate Cancelled Tariff Bill Periods

For each record in a tariff bill file having:

1. Record Type equal to 'TH'
2. Cancel Indicator equal to 'Y'

a. Validate cancel TH record

Extract Tariff Bill Period Cross Reference ID from cancel 'TH' record
Extract Site ID

Extract original 'TH' record having:

1. Record ID equal to the Tariff Bill Period Cross Reference ID,
2. Site ID equal to the Site ID of the cancelled record,
3. Tariff Bill Period Start Date equal to Tariff Bill Period Start Date of cancelled record,
4. Tariff Bill Period End Date equal to Tariff Bill Period End Date of cancelled record,
5. Cancel Indicator equal to 'N',
6. Tariff Rate Code equal to Tariff Rate Code of cancelled record,
7. Site Status Code equal to Site Status Code of cancelled record,
8. Usage Total equal to Usage Total of cancelled record x (-1),
9. Usage UOM equal to the Usage UOM of cancelled record, and
10. Charge Total equal to Charge Total of cancelled record x (-1)

If no record returned Then

Produce a TBR with TBR rejection code 6044

Else

b. Validate Cancel DU Records

For each record in the tariff bill file having:

1. Record type equal to 'DU',
2. Parent ID equal to Record ID of 'TH', and
3. Cancel Indicator equal to 'Y'

Extract original 'DU' record having:

1. Parent ID equal to the Tariff Bill Period Cross Reference ID of cancelled 'TH' record,
2. Site ID equal to the Site ID of the cancelled record,
3. Usage Period Start Date equal to the Usage Period Start Date of cancelled record,

* Demand records having a demand value of 0 and charge records having a component billed quantity or unit price of 0 may not be present in a cancelled tariff bill period as the distributor may have suppressed presentation of these records.

4. Usage Period End Date equal to the Usage Period End Date of cancelled record,
5. Cancel Indicator equal to 'N',
6. Meter Type Code equal to Meter Type Code of cancelled record,
7. Meter Number equal to Meter Number of cancelled record,
8. Number of Dials equal to Number of Dials of cancelled record,
9. From Reading equal to From Reading of cancelled record,
10. From Reading Code equal to From Reading Code of cancelled record,
11. To Reading equal to To Reading of cancelled record,
12. To Reading Code equal to To Reading Code of cancelled record,
13. Billing Multiplier equal to Billing Multiplier of cancelled record,
14. Usage Amount equal to Usage Amount of cancelled record x (-1), and
15. Usage UOM equal to Usage UOM of cancelled record

If no record returned Then

Produce a TBR with TBR Rejection Code 6044

End

Next cancelled 'DU' record

c. Validate Cancel DD Records

For each record in the tariff bill file having:

1. Record type equal to 'DD',
2. Parent ID equal to Record ID of 'TH', and
3. Cancel Indicator equal to 'Y'

Extract original 'DD' record having:

1. Parent ID equal to the Tariff Bill Period Cross Reference ID of cancelled 'TH' record,
2. Site ID equal to the Site ID of cancelled record,
3. Demand Period Start Date equal to the Demand Period Start Date of cancelled record,
4. Demand Period End Date equal to the Demand Period End Date of cancelled record,
5. Cancel Indicator equal to 'N',
6. Demand Type Code equal to Demand Type Code of cancelled record,
7. Demand Value equal to Demand Value of cancelled record x (-1),
8. Demand UOM equal to Demand UOM of cancelled record, and
9. Meter Number equal to Meter Number of cancelled record

If no record returned Then

If demand value is not equal to 0 Then

Produce a TBR with TBR Rejection Code 6044

End

End

Next cancelled 'DD' record

d. Validate Cancel DM Records

For each record in the tariff bill file having:

1. Record type equal to 'DM',

2. Parent ID equal to Record ID of 'TH', and
3. Cancel Indicator equal to 'Y'

Extract original 'DM' record having:

1. Parent ID equal to the Tariff Bill Period Cross Reference ID of cancelled 'TH' record,
2. Site ID equal to the Site ID of cancelled record,
3. Miscellaneous Determinant Period Start Date equal to the Miscellaneous Determinant Period Start Date of cancelled record,
4. Miscellaneous Determinant Period End Date equal to the Miscellaneous Determinant Period End Date of cancelled record,
5. Cancel Indicator equal to 'N',
6. Miscellaneous Determinant Type Code equal to Miscellaneous Determinant Type Code of cancelled record*,
7. Unit Quantity equal to Unit Quantity of cancelled record x (-1), and
8. Unit Quantity UOM equal to Unit Quantity UOM of cancelled record

If no record returned Then

Produce a TBR with TBR Rejection Code 6044

End

Next cancelled 'DM' record

e. Validate Cancel CH Records

For each record in the tariff bill file having:

1. Record type equal to 'CH',
2. Parent ID equal to Record ID of 'TH', and
3. Cancel Indicator equal to 'Y'

Extract original 'CH' record having:

1. Parent ID equal to the Tariff Bill Period Cross Reference ID of cancelled 'TH' record,
2. Site ID equal to the Site ID of cancelled record,
3. Charge Period Start Date equal to the Charge Period Start Date of cancelled record,
4. Charge Period End Date equal to the Charge Period End Date of cancelled record,
5. Cancel Indicator equal to 'N',
6. Tariff Cross Reference Code equal to Tariff Cross Reference Code of cancelled record,
7. Component Category Code equal to Component Category Code of cancelled record,
8. Component Basis Code equal to Component Basis Code of cancelled record,
9. Component Type Code equal to Component Type Code of cancelled record,
10. Component Step Number equal to Component Step Number of cancelled record,

* Note: Prior to v1.2 of the Tariff Billing Code, FortisAlberta provided a Description element in place of the Miscellaneous Determinant Type Code. As a result, a retailer would need to take into account the following additional criteria in the above validation for 'DM' records: Distributor ID (0040) and a Miscellaneous Determinant Period Start Date of July 1, 2006.

```
11. Component Billed Quantity equal to Component Billed Quantity of
cancelled record x (-1),
12. Component Billed Quantity UOM equal to Component Billed
Quantity UOM of cancelled record,
13. Time Calculation Type equal to Time Calculation Type of
cancelled record,
14. Time Factor equal to Time Factor of cancelled record,
15. Component Unit Price equal to Component Unit Price of cancelled
record,
16. Charge Amount equal to Charge Amount of cancelled record x (-
1), and
17. GST Exemption Indicator equal to GST Exemption Indicator of
cancelled record.
```

```
If no record returned Then
    If Charge Amount of the 'CH' record is not equal to 0 Then
        Produce a TBR with TBR Rejection Code 6044
    End
End
```

```
Next cancelled 'CH' record
End
```

Next 'TH' Record

B. Validate Cancelled One-Time Charges

For each record in a tariff bill file having:

1. Record Type equal to 'OC', and
2. Cancel Indicator equal to 'Y'

```
Extract One-time Charge Cross Reference Code from cancel 'OC' record
Extract Site ID
```

Extract original 'OC' record having:

1. Record ID equal to the One-time Charge Cross Reference ID,
2. Site ID equal to the Site ID of the cancelled record,
3. Charge Date equal to Charge Date of cancelled 'OC' record,
4. Cancel Indicator equal to 'N',
5. One-time Charge Code equal to One-time Charge Code of cancelled record,
6. Charge Amount equal to Charge Amount of cancelled record x (-1), and
7. GST Exemption Indicator equal to GST Exemption Indicator of cancelled record

```
If no record returned Then
    Produce a TBR with TBR rejection code 6044
End
```

Next cancelled 'OC' record

FILE FORMAT VALIDATION CHECK # 41 – Current Billing Period Cancel Logic

DESCRIPTION – All cancelled records must be presented in the timeframe preceding the current billing period

PSEUDOCODE:

Extract all records in a tariff bill file having:

1. Record Type equal to 'SH'
2. Current Billing Period Start Date is populated
3. Current Billing Period End Date is populated

For each 'SH' record

 Extract Site ID

 Extract Current Billing Period Start Date

 Extract Current Billing Period End Date

 Extract all records from a tariff bill file having:

1. Site ID equal to Site ID of 'SH' record,
2. Record Type equal to 'TH',
3. Tariff Bill Period Start Date greater than or equal to the Current Billing Period Start Date AND Tariff Bill Period End Date less than or equal to the Current Billing Period End Date,
4. Cancel Indicator equal to 'Y'

 If one or more records are returned

 Produce TBR with TBF Rejection Code 6045

 End

Next 'SH' Record

Note: Assume One-time charges are excluded from this validation.

FILE FORMAT VALIDATION CHECK # 42 – Usage Period / Charge Period Alignment for Energy Based Charges

DESCRIPTION – A usage period must exist that starts on the same day as a charge period having a component basis code equal to 'E' and a usage period must exist that ends on the same d day as that same charge period.

PSEUDOCODE:

Extract all records in a tariff bill file having:

1. Record Type equal to 'CH', and
2. Component Basis Code equal to 'E'

For each 'CH' record

Extract Site ID
Extract Parent ID
Extract Charge Period Start Date
Extract Charge Period End Date

a. Validate Charge Period/Usage Period Start Date Alignment

Extract all records from a tariff bill file having:

1. Site ID equal to the Site ID of the 'CH' record,
2. Parent ID equal to the Parent ID of the 'CH' record, and
3. Usage Period Start Date equal to the Charge Period Start Date of the 'CH' record

If no record is returned Then

Produce TBR with TBF Rejection Code 6046

End

b. Validate Charge Period/Usage Period End Date Alignment

Extract all records from a tariff bill file having:

1. Site ID equal to the Site ID of the 'CH' record,
2. Parent ID equal to the Parent ID of the 'CH' record, and
3. Usage Period End Date equal to the Charge Period End Date of the 'CH' record

If no record is returned Then

Produce TBR with TBF Rejection Code 6046

End

Next 'CH' record

FILE FORMAT VALIDATION CHECK # 43 – Current Billing Period Content

DESCRIPTION – Any tariff bill periods not already presented to a retailer must be fully contained within the current bill period, excluding enrollment corrections.

PSEUDOCODE:

For each record in a tariff bill file having a Record Type of 'SH'

 Extract Current Billing Period Start Date

 Extract Current Billing Period End Date

 Determine most recent Current Billing Period End Date for that Site ID

a. Validate Current Billing Period Start Date Alignment

 Extract MIN (Tariff Bill Period Start Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,
3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

 If original tariff billing periods exist (i.e. a minimum tariff bill period start date has been returned) for that site Then

 If Current Billing Period Start Date is not equal to MIN(Tariff Bill Period Start date) Then

 Produce a TBR with TBF rejection code 6047

 End

 Else

 If Current Billing Period Start Date is not equal to [null] Then

 Produce a TBR with TBF rejection code 6047

 End

 End

b. Validate Current Billing Period End Date Alignment

 Extract MAX (Tariff Bill Period End Date) of records from TBF having:

1. Record Type of 'TH',
2. Site ID matching the Site ID presented in the 'SH' record,
3. Tariff Bill Period Start Date greater than the last Current Billing Period End Date for that site, and
4. Cancel Indicator equal to 'N'

 If original tariff billing periods exist (i.e. a maximum tariff bill period end date has been returned) for that site Then

 If Current Billing Period End Date is not equal to MAX(Tariff Bill Period End Date) Then

 Produce a TBR with TBF rejection code 6047

 End

 Else

 If Current Billing Period End Date is not equal to [null] Then

 Produce a TBR with TBF rejection code 6047

 End

 End

Next 'SH' Record

FILE FORMAT VALIDATION CHECK # 44 – Tariff Bill File Reference ID

DESCRIPTION – The Tariff Bill File Reference ID must equal the tariff file header Record ID of the most recently rejected tariff bill file for that distributor

PSEUDOCODE:

Extract the following from the Tariff Bill File Header Record:

1. Tariff Bill File Reference ID
2. Sender ID

If Tariff Bill File Reference ID is populated Then

 Extract the Tariff Bill File Record ID of the last Tariff Bill File that was rejected for that Sender ID.

 If Tariff Bill File Reference ID is not equal to the Tariff Bill File Record ID of the last rejected Tariff Bill File for that Sender ID Then
 Produce a TBR with TBF Rejection Code 6048

 End If

End If