



TARIFF BILLING CODE

**PERFORMANCE MONITORING METRICS
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 performance monitoring metrics provided in Table 2-2 of V1.4 of the Tariff Billing Code (the “Code”).

This pseudocode has been provided to support market stakeholder reporting according to the following documents available on the AUC’s Tariff Billing Code website:

[Distributor Performance Metrics Quarterly Report Template](#)
[Distributor Performance Metrics Supporting Data Template](#)
[Retailer Performance Metrics Quarterly Report Template](#)
[Retailer Performance Metrics Supporting Data Template](#)
[Rule 004: Alberta Tariff Billing Code \(specifically Section 2.14 and 2.15\)](#)

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

For the purposes of this document, month refers to a calendar month (e.g., January 1 to January 31) and quarter refers to a calendar quarter (e.g., Q1 = January 1 to March 31).

PERFORMANCE MONITORING METRIC #1 – Currency of tariff bill file content

DESCRIPTION – Percentage of all sites with a site production reason code of “2020 – Regular Bill Cycle” published in original tariff bill files, where the number of business days from the current bill period end date for each site to the tariff bill file date created is less than or equal to 8 business days.¹

TARGET – 95% of sites

PSEUDOCODE:

Step 1 – Determine the count of all sites billing on their regular bill cycle (File Site Count), as well as, the count of sites within acceptable range of the tariff bill file Date Created (Site Count within Acceptable Range) for all original tariff bill files in the reporting period.

For each tariff bill file having:

1. Tariff Bill File Reference ID equal to [null]
2. Date Created greater than or equal to 00:00:00 of the first day of the quarter
3. Date Created less than or equal to 23:59:59 of the last day of the quarter

Extract Date Created from file header (FH) record

For each Site Header (SH) record in the tariff bill file having:

1. Site Production Reason Code equal to '2020'
2. Bill Cycle with a corresponding Irregular Bill Period Type Code equal to '9000' as per the TCF

If the Date Created (date portion only) minus Current Billing Period End Date of the site is less than or equal to 8 business days

Increment Site Count within Acceptable Range by 1

Increment File Site Count by 1

Else

Increment File Site Count by 1

End

Next SH

Store actual performance record consisting of Tariff Bill File Header Record ID, Date Created, Site Count within Acceptable Range and File Site Count

Next TBF

Step 2 – Determine monthly reporting values.

For each month in the reporting period

Perform a sum of Site Count within Acceptable Range and a sum of File Site Count values within all actual performance records created in step 1 where:

1. Date Created of actual performance record is greater than or equal to 00:00:00 of the first day of the month
2. Date Created of actual performance record is less than or equal to 23:59:59 of the last day of the month

Calculate the percentage of sites within acceptable range for the month:

$$\frac{\sum \text{Site Count within Acceptable Range}}{\text{Total Site Count}}$$

¹ Distributors are exempt from including sites belonging to a seasonal bill cycle (i.e. irrigation) and sites dependent on transmission tariff information from the ISO when reporting their performance for this metric.

(Σ File Site Count)

Next month

Step 3 - Determine quarterly reporting value.

Perform a sum of Site Count Within Acceptable Range and a sum of File Site Count values within all actual performance records created in step 1 where:

1. Date Created of actual performance record is greater than or equal to 00:00:00 of the first day of the quarter
2. Date Created of actual performance record is less than or equal to 23:59:59 of the last day of the quarter

Calculate the percentage of sites within acceptable range for the quarter:

$$\frac{(\Sigma \text{Site Count within Acceptable Range})}{(\Sigma \text{File Site Count})}$$

PERFORMANCE MONITORING METRIC #2 – File completeness

DESCRIPTION – Percentage of all sites assigned to bill cycles transmitted in original tariff bill files with a site production reason code of “2020 – Regular Bill Cycle” on their scheduled tariff bill file publish date as stated in the tariff bill calendar file.²

TARGET – 98% of sites

PSEUDOCODE:

Step 1 -Determine the count of sites billed for each bill cycle on their scheduled tariff bill file publish date (Actual Site Count), as well as, the count of sites expected to bill for each cycle (Expected Site Count) for the quarter.

Extract all records from Tariff Calendar File (TCF) having:

1. Scheduled Bill File Publish Date greater than or equal to 00:00:00 of the first day of the quarter
2. Scheduled Bill File Publish Date less than or equal to 23:59:59 of the last day of the quarter

For each TCF record

Perform a count of all sites scheduled to bill for the TCF record’s bill cycle (Expected Site Count) using Site Cycle File (SCF) information relevant for the day the bill cycle was scheduled to bill and the resulting TBF(s) were scheduled to be released to retailers.

For each TBF having:

1. Tariff Bill File Reference ID equal to [null]
2. Date Created (date portion only) equal to the Scheduled Tariff Bill File Publish Date of the TCF record

For each site header (SH) record in the Tariff Bill File having:

1. Bill Cycle equal to Bill Cycle of the TCF record
2. Site Production Reason Code equal to '2020'
3. Bill Cycle with a corresponding Irregular Bill Period Type Code equal to '9000' as per the TCF

Increment site count for the TCF record’s bill cycle (Actual Site Count) by 1

Next SH

Next TBF

Store a record of actual performance for the bill cycle consisting of Bill Cycle, Scheduled Bill File Publish Date, Actual Site Count, and Expected Site Count

Next TCF record

Step 2 - Determine monthly reporting values.

For each month in the reporting period

² Distributors are exempt from including sites belonging to a seasonal bill cycle (i.e. irrigation) and sites dependent on transmission tariff information from the ISO when reporting their performance for this metric.

Perform a sum of Actual Site Count and a sum of Expected Site Count values within all actual performance records created in step 1 where:

1. Date Created of actual performance record is greater than or equal to 00:00:00 of the first day of the month
2. Date Created of actual performance record is less than or equal to 23:59:59 of the last day of the month

Calculate the percentage of sites billed in tariff bill files on their scheduled tariff bill file publish date for the month:

$$\frac{(\sum \text{Actual Site Count})}{(\sum \text{Expected Site Count})}$$

Next month

Step 3 – Determine quarterly reporting value.

Perform a sum of Actual Site Count and a sum of Expected Site Count values within all actual performance records created in step 1 where:

1. Date Created of actual performance record is greater than or equal to 00:00:00 of the first day of the quarter
2. Date Created of actual performance record is less than or equal to 23:59:59 of the last day of the quarter

Calculate the percentage of sites billed in tariff bill files on their scheduled tariff bill file publish date for the quarter:

$$\frac{(\sum \text{Actual Site Count})}{(\sum \text{Expected Site Count})}$$

PERFORMANCE MONITORING METRIC #3 – Reported file rejections

DESCRIPTION – Count of TBR transactions produced by a retailer per distributor per calendar month.

TARGET – 0 per distributor per month

PSEUDOCODE:

Step 1: Determine number of TBR transactions by TBF Rejection Code³ per distributor per month.

For each month in the reporting period

Perform a count of all TBR transactions by TBF Rejection Code for each distributor where:

1. Date Created is greater than or equal to 00:00:00 of the first day of the month
2. Date Created is less than or equal to 23:59:59 of the last day of the month

Next month

Step 2: Determine number of TBR transactions by TBF Rejection Code per distributor for the quarter.

Perform a summation of monthly values by TBF Rejection Code for each distributor determined in Step 1.

³ Performance Metrics Quarterly Reports do not require disclosure of actual performance by TBF Rejection Code. However, the Performance Metrics Supporting Data requires disclosure of actual performance at this level.

PERFORMANCE MONITORING METRIC #4 – Invalid file rejections

DESCRIPTION – Count of TRN (reject) transactions produced by a distributor per retailer per calendar month.

TARGET – 0 per month

PSEUDOCODE:

Step 1: Determine number of TRN (reject) transactions by TBF Rejection Code⁴ per retailer per month.

For each month in the reporting period

Perform a count of all TRN transactions by TBF Rejection Code for each retailer where:

1. Reject Notification Status Code equal to 'R'
2. Date Created is greater than or equal to 00:00:00 of the first day of the month
3. Date Created is less than or equal to 23:59:59 of the last day of the month

Next month

Step 2: Determine number of TRN (reject) transactions by TBF Rejection Code per retailer for the quarter.

Perform a summation of monthly values by TBF Rejection Code for each retailer determined in Step 1.

⁴ Performance Metrics Quarterly Reports do not require disclosure of actual performance by TBF Rejection Code. However, the Performance Metrics Supporting Data requires disclosure of actual performance at this level.

PERFORMANCE MONITORING METRIC #5 – Reported tariff bill file disputes

DESCRIPTION – Number of TBD transactions produced per distributor per calendar month.

TARGET – To be determined following a 3-month monitoring window

PSEUDOCODE:

Step 1: Determine number of TBD transactions by Dispute Code⁵ per distributor per month.

For each month in the reporting period

Perform a count of all TBD transactions by Dispute Code for each distributor where:

1. Date Created is greater than or equal to 00:00:00 of the first day of the month
2. Date Created is less than or equal to 23:59:59 of the last day of the month

Next month

Step 2: Determine number of TBD transactions by Dispute Code per distributor for the quarter.

Perform a summation of monthly values by Dispute Code for each distributor determined in Step 1.

⁵ Performance Metrics Quarterly Reports do not require disclosure of actual performance by Dispute Code. However, the Performance Metrics Supporting Data requires disclosure of actual performance at this level.

PERFORMANCE MONITORING METRIC #6 – Reported tariff bill period disputes

DESCRIPTION – Number of tariff bill periods disputed per distributor per calendar month.

TARGET – To be determined following a 3-month monitoring window

PSEUDOCODE:

Step 1: Determine the number of unique tariff bill periods disputed by Dispute Code⁶ per distributor per month.

For each month in the reporting period

Perform a count of unique tariff bill periods by Dispute Code (i.e., unique Tariff Bill Period Record ID and Dispute Code) within TBD transactions for each distributor where:

1. Tariff Bill Period Record ID is not null
2. Date Created is greater than or equal to 00:00:00 of the first day of the month
3. Date Created is less than or equal to 23:59:59 of the last day of the month

Next month

Step 2: Determine number of unique tariff bill periods by Dispute Code disputed per distributor for the quarter.

Perform a summation of monthly values by Dispute Code for each distributor determined in Step 1.

* Note: One-time charge disputes are not included in this metric.

⁶ Performance Metrics Quarterly Reports do not require disclosure of actual performance by Dispute Code. However, the Performance Metrics Supporting Data requires disclosure of actual performance at this level.

PERFORMANCE MONITORING METRIC #7 – Invalid file disputes

DESCRIPTION – Count of TBD transactions that have been rejected by a distributor per retailer per calendar month.

TARGET – 0 per retailer per month

PSEUDOCODE:

Step 1: Determine number of TBD transactions by Dispute Code⁷ that have been rejected by a distributor per retailer per month.

For each month in the reporting period

Perform a count of all TBD transactions rejected by Dispute Code for each retailer where:

1. Date Created is greater than or equal to 00:00:00 of the first day of the month
2. Date Created is less than or equal to 23:59:59 of the last day of the month
3. Associated TDN Dispute Notification Status Code equal to 'R' (applies only to distributors utilizing TDN transaction)

Next month

Step 2: Determine number of TBD transactions by Dispute Code that have been rejected by a distributor per retailer for the quarter.

Perform a summation of monthly values by Dispute Code for each retailer determined in Step 1.

⁷ Performance Metrics Quarterly Reports do not require disclosure of actual performance by Dispute Code. However, the Performance Metrics Supporting Data requires disclosure of actual performance at this level.