

AUC Rule 004: Alberta Tariff Billing Code Industry Consultation Meeting Summary

Meeting date	October 3, 2012	Time	10 a.m. to 2 p.m.
Location	<u>Video conference AUC offices</u> Tenth floor, 10055 - 106 St., Edmonton Fourth floor, 425 First St. S.W., Calgary <u>Teleconference</u> Phone: 1-866-792-1318 Conference code: 8665992	Facilitator	AUC staff

1. Introductions

Name	Company
Chad Crossland	AltaGas Utilities Inc.
Nap Pepin	ATCO Electric
Stacey Zinyk	ATCO Electric
Carol Benoit	ATCO Gas
Jennifer Bell	ATCO Gas
Andrea Laroia	AUC
Anne Glass	AUC
Rob Thomas	AUC
Lori Harnack	Cognera Corp.
Marcelo Maciel	Direct Energy
Donna Sanderow	Encana
Brian Neufeld	ENMAX Encompass
Leo Scarcelli	ENMAX Power
Sue Boyd	ENMAX Power
Lisa Zuger	EPCOR Distribution & Transmission Inc.
Shirley Kwan	EPCOR Energy Alberta Inc.
Tammy Haydey	EPCOR Energy Alberta Inc.
Ngan Duong	Just Energy
May Ruan	Negawatt Business Solutions
John Hutchison	Valeo Power

2. Review of last meeting's summary and Rule 004 Action Item List

- No changes mentioned at meeting.

ACTION: Parties to review last meeting summary and notify the AUC of any changes by October 15.

3. Revised timelines

- Parties discussed the current status of the Rule 004 review and agreed that, because of some outstanding and unresolved issues, the original timelines around a revision to Rule 004 should be pushed back.
- The group indicated that the AUC should not proceed with making the changes that had been agreed upon to date but should hold off on making changes to the rule until all changes could be made at once (including the cancel/rebill issue). The group unanimously agreed that it would prefer a non-piecemeal approach to the review and would rather that all changes be made at once.
- With outstanding issues yet to be resolved, the group agreed that a reasonable timeline would be approval of the revised rule by September, with implementation to take place during 2014.

4. Billing transmission-connected (direct-connect) sites

- The AUC updated the group with respect to the AESO's internal discussions regarding whether or not the development and maintenance of a calculation tool would be a possibility. The AESO indicated to the AUC that it could proceed with developing a calculation tool; however, it would take a significant amount of time to program. The AESO suggested that the tool could be available for testing by industry sometime in 2013.
- ATCO Electric questioned, once the AESO calculation tool is available and fully tested, whether or not it would be required to stop putting detail in the tariff bill file. ATCO Electric was reluctant to discontinue its practice of providing detail in the tariff bill file and wondered if it could continue this practice while others provide the AESO spreadsheet or use the output from the AESO calculation tool. The AUC emphasized that an important goal is standardization, so distributors should all be providing the same things.
- The group then again discussed the relative merits of the ATCO Electric approach versus Fortis's approach of putting less detail in the tariff bill file and providing the AESO spreadsheet as backup. One retailer pointed out that it would be ideal if they could get all of the information from everyone in the tariff bill file but that the tariff bill file has limitations so that some additional backup would always be required. The AUC questioned what could not be provided in the tariff bill file and was told by the group that some of the determinants, such as the coincidental peak and the substation fraction, etc., could not be provided.
- Because of the limitations of the tariff bill file, the group then focused on standardizing how the AESO invoice should be provided to the retailers and what detailed information is required in the tariff bill file. The group also discussed whether or not the AESO calculation tool could be the backup for the tariff bill file, but the group concluded that the AESO calculation tool should only be the backup in shared POD situations. Also, the group discussed what happens if the AESO tool produces charges that, when added together, are a few cents out from the total charges for the POD. The distributor will see this discrepancy, and one of them questioned what the tolerance should be. The group decided that this question should be explored during the testing phase.
- Valeo volunteered to draft a standardized version of how the AESO spreadsheet should be reduced down to just the retailers sites for providing to retailers.

ACTION: Valeo to attempt to standardize the presentation of the AESO spreadsheet and bring back for distributor's review to see if doable.

5. RIM Issue 474 – Cancels and rebills involving charge periods more than one year old

- The AUC reminded the group that, during the last meeting, the group had compared the various approaches for producing cancels and rebills involving charge periods more than a year old and that retailers had been most in favour of the approach used by ENMAX Power whereby the one-time charges align with the bill periods and charges split when there is a customer switch. Retailers also wanted to be informed in advance when there will be a cancel/rebill covering an extended period of time. Ideally there should be a standardized spreadsheet to provide information that cannot be provided in the one-time charge. During the last meeting, those distributors that do not currently split their one-time charges to align with bill periods had been asked to research the approximate cost of changing their systems to do this.
- The AUC asked the distributors for the results of their research. ATCO Electric indicated that it currently splits the one-time charges to align with bill periods, but that it only stores two years online and that if the adjustment goes past two years it presents those adjustments as one-time charges and not as reversals (as in the ENMAX Power case). ENMAX Power keeps all tariff bill records going back to 2006 online, performs the full cancel and rebill in tariff bill file format, and the one-time charges are just reversals for adjustments that go beyond the period it is adjusting.
- The AUC questioned whether or not there was a need to standardize how many years of tariff bill files are kept online. Retailers indicated that this would not be necessary, as long as either the charges or the reversals came to them as one-time charges where the dates aligned with the billing periods and split when the retailer had sent a CSA advising the distributor of a customer switch.
- The group discussed what occurs when a retailer switch occurred for the site long ago and the one-time charge, therefore, would be to a retailer that had not owned the site for years. EPCOR Distribution & Transmission does not use the tariff bill file in those cases; it uses an adhoc invoice to the retailer.
- FortisAlberta was not present to provide what its costs would be to split their one-time charges to align with bill periods and with customer switches.
- ATCO Gas indicated that it currently splits its one-time charges to align with bill periods, but that it only adjusts two years, which matches how much it keeps online. So, ATCO Gas does not need to use one-time charges because it does everything using tariff bill files and does not need to perform reversals. Depending on the number of years that the AUC decides upon for standardizing cancels and rebills, if the AUC decides on three years, ATCO Gas would likely decide to increase its tariff bill file storage to three years so that it could continue to do all of the cancels and rebills using automation.
- The AUC asked the distributors who currently keep only two years online to research how much additional cost it would be to increase their storage to three years, in case the AUC decides to standardize the cancels and rebill maximum to three years. Also, for those distributors that had not provided costs for changing to the ENMAX Power approach for the one-time charges of splitting them to align to the bill period dates, the AUC requested that they find out how big a cost it would likely be to do so.

ACTION: Distributors who currently keep only two years online to research how much additional cost it would be to increase their storage to three years.

ACTION: Distributors that do not currently split their one-time charges to align to bill periods, research approximate cost of change to their systems.

6. RIM Issue 489 – Include micro-generation consumption in the tariff bill file (TBF)

- The group continued its discussion regarding how best to use the tariff bill file to provide micro-gen kilowatt hours to the retailer. ENMAX Power suggested that the Miscellaneous Determinant (DM) record could be used with very little cost to implement. The group explored this idea and determined that all that would be needed would be to add another unit of measure to the Unit Quantity UOM and Billed Quantity UOM table for kWhs generated.
- The DM record already has fields for start and end dates, but the group discussed that the DM record would need to split when the other charge records split. Right now the distributor does not split or prorate the kWhs in the GCM; the retailer does. The group decided that the distributor would have to start splitting the GCM kWhs to include them in the TBF. One suggestion was for the distributor to prorate the kWhs based on the number of days, just like retailers currently have to do in the cases of retailer switch.
- ENMAX Encompass provided a document detailing another alternative for discussion which the group reviewed. This approach involved creating a new record type – the Generation Determinant record or DG record.



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- The group identified that one drawback with the DM record approach relative to the DG record approach is that the DM record does not have fields for the dial readings. The group discussed whether or not dial readings would be necessary since the retailers already get them from the GCM.
- The AUC suggested that everyone go back to their shops explore the relative merits and costs of the two alternatives: DM record without dial readings and the proposed DG record.

ACTION: Everyone to investigate costs and advantages and disadvantages of the DM record approach and the DG record approach proposed by ENMAX Encompass for providing micro-gen information in the TBF.

7. RIM issue 503 – VLTrader downtime

- The group discussed whether or not set processes or communication plans need to be added to Rule 004 to address situations similar to that recently experienced by ATCO Gas and ATCO Electric. The group concluded that the transactions in Rule 021 and Rule 028 are much more time sensitive than those in Rule 004. Therefore, processes and communication plans should be included in those rules rather than in Rule 004.

8. Other new issues

- No new issues were raised in the meeting.

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Changes for Micro-Generated Energy to be included in TBF

With the growth in Micro-Generation, retailers has experience an increase in Micro-Generation billing.

With an enhancement made to allow both tariff billing information and generation energy supplied to grid, to be located in the Tariff Billing File (TBF), this would allow retailers to use micro-generated energy and energy used for sites to flow from the TBF to the customer bill for the same billing period.

The changes would require Rule 004 to include micro generation energy supplied to grid, and changes to Rule 021 to ensure that MDM sends the micro generation energy (GCM/GIM) data to LSA/WSP also so they can include generated energy into the TBF.

Changes to Rule 004 – Tariff Billing Code

Definitions, New record type for micro-generated energy and additional validations checks

Below are items within Rule 004 identified that need to be looked at for changes (highlighted in BLUE):

1.1 Add Definitions for GCM/GIM

“GCM transaction” (GCM) means the Micro-Generation Cumulative Meter Readings to Retailer/RSPs as defined in the SSC;

“GIM transaction” (GIM) means the Micro-Generation Interval Meter Readings to Retailer as defined in the SSC;

2.4 Publish and maintain tariff bill calendar

No changes necessary

2.x Provision of generated energy information (Similar to 2.5 Provision of usage information)

A distributor must report **site generated energy** in the tariff bill file. Tariff bill file generated energy must be reconcilable to periodic generated energy presented in metering transactions.

Where generated energy reflects metering data, distributors are obligated to validate generated energy according to the validation, estimation, and editing procedures prescribed in the SSC.

The stated obligation to provide generated energy information in the tariff bill file does not affect a distributor’s obligation to report cumulative, and interval generated energy as stipulated in the SSC.

2.5 Provision of usage information

No changes necessary

2.7 Full-day billing

No changes necessary

3.1.1 Distributor responsibilities

Distributors will not be estimating generated energy supplied out of the site.

In situations where a micro-generated site switches retailers, should/will distributor pro-rate energy supplied out of the site in the meter reading period to the number of days the site was enrolled with retailer. If not, will distributor provide the generated energy read that has taken place after retailer lost the site?

3.2 Tariff Billing Events

No changes necessary

3.3 Tariff Billing Period Structure

No changes necessary

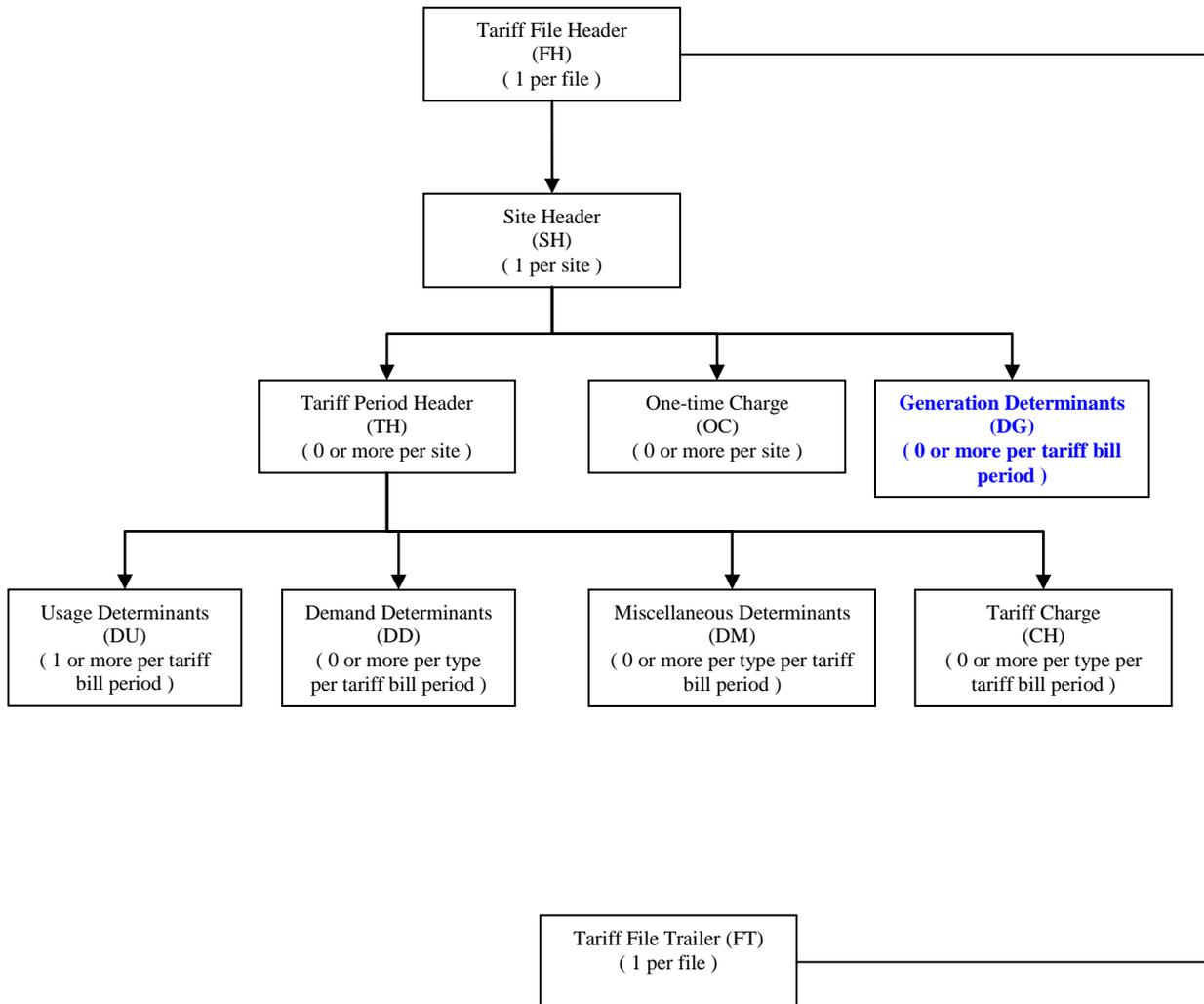
3.3.x Micro-Generation Period (Similar to 3.3.3 Usage period)

A micro-generation period refers to a whole day span of time bound by the effective timing of micro-generation period events (such as a scheduled or off-cycle meter read) where generation is determined for a site.

4.2 Tariff bill file structure

The tariff bill file presents site-specific distribution and transmission tariff charges, as well as applicable one-time charges, **micro-generation**, for a given period of time. The tariff bill file information is presented in a hierarchical structure, which supports presentation of summary file, site and tariff bill period information, and detailed tariff bill period determinants and charges. Further, the structure supports presentation of multiple tariff bill periods and associated records to segment charges within a site's scheduled billing period. The tariff bill file structure, represented in Figure 4-1 for presentation purposes, is provided and transmitted as a comma separated value (CSV) file.

Figure 4-1 Tariff Bill File Structure



4.3 – Tariff Bill File Content Rules

4.3.1 General Tariff Bill File Rules

4b) Generation Determinants (DG) must be presented independently from other tariff charges under a site header and likewise must be disputed, cancelled, and/or re-billed independently from other tariff charges.

4.3.3 Site Header

The site header of the tariff bill file is the hierarchical child of the tariff file header and is the physical representation of a site’s current billing period. It contains general site information, as well as site summary information related to usage, **generation** and tariff charges contained within a tariff bill file. The contents of the site header are provided in Table 4-3.

Table 4-3 Site Header Content

Element Sequence	Element (in sequence)	Data Type/Size	Description
1	Record ID	Number(15)	MANDATORY FIELD – A unique reference ID for a site header record produced by a distributor to allow the distributor or a retailer to refer to the specific data record. This value must be unique to a distributor.
2	Parent ID	Number(15)	MANDATORY FIELD – Unique reference ID for the parent tariff file header record. This must match the record ID presented in the tariff file header record.
3	Record Type	Char(2)	MANDATORY – Code to indicate record type. Value must equal ‘SH’.
4	Site ID	Site ID format	MANDATORY – Unique identifier representing a site in the electric or gas market. Refer to Appendix B for further information.
5	Current Billing Period Start Date	Date format	CONDITIONAL FIELD – Start date (inclusive) of the current billing period. This must equal the earliest Tariff Bill Period Start Date of original tariff bill periods for a site (i.e., excluding cancel/rebills) that occur after the last current billing period previously issued to a retailer. Where tariff bill periods consisting of only cancel and/or rebill charges are presented for a site, or in the absence of tariff bill periods, this field must equal [null].
6	Current Billing Period End Date	Date format	CONDITIONAL FIELD – End date (inclusive) of the current billing period. This must equal the latest Tariff Bill Period End Date of original tariff bill periods for a site (i.e., excluding cancel/rebills) that occur after the last current billing period previously issued to a retailer. Where tariff bill periods consisting of only cancel and/or rebill charges are presented for a site, or in the absence of tariff bill periods, this field must equal [null].
7	Distributor ID	Distributor ID format	MANDATORY FIELD – Unique identifier for a distributor. This identifier must equal that of the distributor responsible for the site. Refer to Appendix B for further information. Note: This distributor may be different from the distributor sending the tariff bill file.
8	Zone ID	Zone ID format	MANDATORY FIELD – Unique identifier representing a settlement zone within Alberta. Refer to Appendix B for further information.
9	Municipality ID	Varchar(4)	MANDATORY FIELD – Unique identifier representing a municipality in Alberta. Refer to Appendix B for further information.

Element Sequence	Element (in sequence)	Data Type/Size	Description
10	REA Code	Char(4)	CONDITIONAL FIELD – Unique identifier representing a valid REA in Alberta. Refer to Appendix B for further information. If Commodity Code equals 'EL' and the site is not within an REA Code this must equal [null]. If Commodity Code equals 'NG', this must equal [null].
11	Billing Cycle	Varchar(9)	MANDATORY FIELD – A value representing the billing cycle to which a site belongs. This value must match a distributor's published billing cycle.
12	Usage Total	Number(14,4)	MANDATORY FIELD – Usage check total for a site. This must equal the sum of all 'Usage Amount' fields in a given tariff bill file for a site, including cancel/rebills. Positive and negative values are acceptable. If a site has no usage records, Usage Total must equal 0
13	Usage UOM	Varchar(4)	MANDATORY FIELD – Unit of measure for usage. If Commodity Code equals 'EL', Usage UOM must equal 'KWH'. If Commodity Code equals 'NG' Usage UOM must equal 'GJ'.
xx	Micro-Generation Total	Number(14,4)	CONDITIONAL FIELD – Generation check total for a site. This must equal the sum of all 'Generation Amount' fields in a given tariff bill file for a site, including cancel/rebills. Positive and negative values are acceptable. If Commodity Code equals 'EL' and the micro-generator site is commissioned, Generation Total must have a value even if equal 0, else must equal [null]
xx	Micro-Generation UOM	Varchar(4)	CONDITIONAL FIELD – Unit of measure for micro-generation. If Commodity Code equals 'EL' and micro-generator site is commissioned, Generation UOM must equal 'KWH', else must equal [null].
14	Charge Total	Number(11,2)	MANDATORY FIELD – Charge check total for a site. This must equal the sum of all 'Charge Amount' fields in both tariff charge and one-time charge records in a given tariff bill file for a site, including cancel/rebills. Positive and negative values are acceptable. If a site has no tariff charge or one-time charge records, Charge Total must equal 0
15	Additional Site Information	Varchar(50)	OPTIONAL FIELD – Free-form text field for providing additional site information that can be used at a retailer's discretion to place on a customer's bill.
16	Site Production Reason Code	Number(4)	MANDATORY FIELD – Standardized code representing the tariff billing event triggering the inclusion of the site in the tariff bill file. Refer to Appendix B for further information.
17	As-at Date	Datetime format	OPTIONAL FIELD – Latest transaction datetime for interval data used in the bill run for a site.
18	Parent Site ID	Site ID format	CONDITIONAL FIELD – Site ID of the master/parent site, where applicable. If a site does not have a parent site ID, this must equal [null].

Production rules

The following production rules apply to the site header:

- 1) Data contained within the tariff bill file site header must adhere to the field level rules stated in Table 4-3.
- 2) A tariff bill file must contain only one site header per site.
- 3) If the tariff bill file is only presenting cancels, rebills, or one-time charges for the site, no current billing period applies.

- 4) A site header is required in the case of a site that has incurred no charges (i.e., tariff or one-time charges) for a scheduled billing period. The exceptions to this production rule are:
 - a) sites that belong to a seasonal rate class (e.g., irrigation), which will be billed in accordance with the terms and conditions of that rate class.
 - b) sites that have been created but not yet energized.
- 5) A site header is not required if a site has been withheld from tariff bill file production due to failure of standard content validation tests or other internal production validation tests.
- 6) Current billing periods must be contiguous. As a consequence, if a distributor must present original tariff billing information for a period of time that precedes the end date of the last current billing period presented to a retailer, the current billing period must only reflect original tariff bill periods that occur after the end date of the last current billing period presented to that retailer.

4.3.4 Tariff Bill Period Header

Production Rules

The following production rules apply to the tariff bill period header:

- 1) Data contained within the tariff bill period header must adhere to the field level rules stated in Table 4-4.
- 2) A tariff bill file can contain multiple tariff bill period header records per site.
- 3) Gaps are permitted between tariff bill periods for a site only if the gap is supported by an SRO transaction followed by an SRN transaction for that site.
- 4) Tariff bill periods having a cancel indicator equal to 'N' cannot overlap unless the tariff bill period being overlapped has been cancelled.
- 5) The tariff bill period end date must be equal to the effective date of a tariff billing event, as outlined in Table 3-1.
- 6) Unless only one-time charges **or only generation determinants** are being presented for a site, a distributor must present a tariff bill period header record for each site in the tariff bill file, even if no charges apply to a site for that specific tariff bill period, to support the disclosure of site status during the period and to support the audit trail of potential cancel/re-bills.

4.3.9b Generation Determinants

This generation determinants record of the tariff bill file is the hierarchical child of the site header and is the physical representation of a site generation. This record provides detailed generation information for generation incurred.

The contents of the generation determinant record are provided in Table 4-x.

Table 4-x Generation Determinant Content

Element Sequence	Element (in sequence)	Data Type/Size	Description
1	Record ID	Number(15)	MANDATORY FIELD – A unique reference ID for each generation determinant record produced by a distributor to allow the distributor or retailer to refer to the specific data record. This value must be unique to a distributor.
2	Parent ID	Number(15)	MANDATORY FIELD – Unique reference ID for the parent site ID record. This must match the record ID presented in the associated site header record.
3	Record Type	Char(2)	MANDATORY FIELD – Code to indicate record type. Value must equal 'DG'.
4	Site ID	Site ID format	MANDATORY FIELD – Unique identifier representing a site in the electric or gas market. This must equal the site ID presented in the associated site header. Refer to Appendix B for further information.
5	Generation Period Start Date	Date format	MANDATORY FIELD – Full-day representation of the start date (inclusive) of a generation period.
6	Generation Period End Date	Date format	MANDATORY FIELD – Full-day representation of the end date (inclusive) of a micro-generation period.
7	Cancel Indicator	Char(1)	MANDATORY FIELD – Y/N value indicating a cancelled record. Y=Yes; N=No.
	Generation Determinant Reference ID	Number (15)	CONDITIONAL FIELD – Record ID of a previous Generation Determinant record being cancelled. If Cancel Indicator equals 'Y', this field is MANDATORY; otherwise it must equal [null].
	Cancel Reason Code	Number (4)	CONDITIONAL FIELD – Standardized code indicating a reason for sending a cancel. Refer to Appendix B for further information.

Element Sequence	Element (in sequence)	Data Type/Size	Description
			If Cancel Indicator equals 'Y', this field is MANDATORY; otherwise it must equal [null].
8	Meter Type Code	Char(1)	MANDATORY FIELD – Code to indicate meter type. Refer to Appendix B for further information.
9	Meter Number	Varchar(20)	CONDITIONAL FIELD – Unique identifier within a distributor's zone representing a meter. If Meter Type Code equals 'C', this field is MANDATORY.
9x	Asset ID	Varchar(10)	CONDITIONAL FIELD – Unique identifier within a distributor's zone representing a meter. If site is a large micro-generation with a Micro-Generation Meter Type Code equals 'I', this field is MANDATORY. Asset ID is the identifier assigned by the ISO to the micro-generator.
10	Number of Dials	Number(3)	CONDITIONAL FIELD – Value representing the number of dials on a meter. The value must represent a positive integer. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
11	From Reading	Number(14,4)	CONDITIONAL FIELD – Value representing the start dial read for the generation period. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
12	From Reading Code	Char(1)	CONDITIONAL FIELD – Standardized reading type code to indicate type of reading. Refer to Appendix B for further information. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
13	To Reading	Number(14,4)	CONDITIONAL FIELD – Value representing the end dial read value for the generation period. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
14	To Reading Code	Char(1)	CONDITIONAL FIELD – Standardized reading type code to indicate type of reading. Refer to Appendix B for further information. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
15	Meter Multiplier	Number(14,9)	CONDITIONAL FIELD – Multiplier is the factor that is multiplied by the meter dial difference to determine a generation value. This value must be a positive number. If Site Status Code equals 'E' and Meter Type Code equals 'C', this field is MANDATORY.
16	Micro-Generation Amount	Number(13,4)	MANDATORY FIELD – Value representing the number of units generated. Positive and negative values are acceptable. If Meter Type equals 'I', this represents the total measured generated for the generation period. If Meter Type equals 'C' then, where metering information has been provided, Usage Amount must be within 0.5 kWh of the result of the following calculation: (To Reading – From Reading) × Meter Multiplier where To Reading is greater than From Reading, or (10 to the power of the number of dials + To Reading – From Reading) × Meter Multiplier where To Reading is less than From Reading; otherwise generation amount must equal 0 If Cancel Indicator equals 'Y', generation amount must be expressed as a negative value.
17	Micro-Generation UOM	Varchar(4)	MANDATORY FIELD – Unit of measure for usage. If Commodity Code equals 'EL', Usage UOM must equal 'KWH'.

Element Sequence	Element (in sequence)	Data Type/Size	Description
18	Micro-generation Demand Type Code	Number(4)	CONDITIONAL FIELD – Standardized code indicating the micro-generation demand type. Refer to Appendix B for further information. If generated demand does not apply, this field will equal [null].
19	Micro-generation Demand Value	Number(10,4)	MANDATORY FIELD – Value indicating the micro-generation demand as per CONDITIONAL type. Positive and negative values are acceptable. Negative values represent cancels; If Meter Type equals 'I' or 'C', this must represent metered micro-generation demand. If generated demand does not apply, this field will equal [null].
20	Micro-generation Demand UOM	Varchar(4)	CONDITIONAL FIELD – Standardized code representing the unit of measure. Refer to Appendix B for further information. If generated demand does not apply, this field will equal [null].

Production Rules

The following production rules apply to the generation determinant record:

- 1) Data contained within the generation determinant record must adhere to the field level rules stated in Table 4-x.
- 2) A tariff bill file can contain multiple generation determinant records per site.
- 3) Micro-generation periods having a cancel indicator equal to 'N' cannot overlap unless the generation period being overlapped has been cancelled.
- 4) The generation determinants disclosed in a tariff bill file should fall within the current billing period dates specified in the site header record.
- 5) If a site has no generation installed, this record will be absent from the tariff bill file for that specific site.
- 6) If a physical meter read (GCM) is allocated into smaller components, the sum of all the smaller components must add up to the original Micro-generation amount in the GCM, even if they span multiple tariff bill files.

4.7 Tariff Bill Dispute (TBD) Transaction

The TBD transaction enables a retailer to dispute tariff billing information delivered by a distributor in a tariff bill file at the tariff bill period level, one-time charge level or [generation determinant level](#). This transaction is utilized by a retailer to inform a distributor of standard file content validation test failures. A distributor is not obligated to build automated functionality to process this transaction and resolve retailer disputes. The contents of the TBD transaction are provided in Table 4-14.

Table 4-14 Tariff Billing Dispute (TBD) Transaction Content

Element Sequence	Element (in sequence)	Data Type/Size	Description
1	Transaction Abbreviation	Char(3)	MANDATORY FIELD – Transaction abbreviation. This code must equal 'TBD'.
2	Transaction ID	Number(15)	MANDATORY FIELD – Unique identifier for the TBD transaction. This identifier must be unique to a retailer
3	Sender ID	Retailer ID format	MANDATORY FIELD – Unique identifier for the sender. This identifier must equal that of the retailer sending the transaction. Refer to Appendix B for further information.
4	Distributor ID	Distributor ID format	MANDATORY FIELD – Unique identifier for the recipient. This identifier must equal that of the distributor, or agent of the distributor, receiving the transaction (i.e., the Sender ID from File Header record of the applicable tariff bill file). Refer to Appendix B for further information.
5	Date Created	Datetime format	MANDATORY FIELD – Datetime the TBD transaction was created or last modified.
6	Tariff Bill File Record ID	Number(15)	MANDATORY FIELD – Unique reference ID for the tariff bill file in which records are being disputed. This must match the record ID presented in the tariff bill file header record of the tariff bill file being disputed.
7	Site ID	Site ID format	MANDATORY FIELD – Unique reference ID for the site for which disputed records apply. Refer to Appendix B for further information.
8	Tariff Bill Period Record ID	Number (15)	CONDITIONAL FIELD – Unique reference ID for the tariff bill period being disputed. If disputing a tariff bill period, this field is MANDATORY and must equal the record ID of the tariff bill period header record being disputed; otherwise it must equal [null].
9	Record ID	Number (15)	OPTIONAL FIELD – Record ID of the related tariff bill period child record in error.
10	One-Time Charge Record ID	Number(15)	CONDITIONAL FIELD – Unique reference ID for the one-time charge being disputed. If disputing a one-time charge record, this field is MANDATORY and must equal the record ID of the one-time charge record being disputed; otherwise it must equal [null].
10b	Generation Determinant Record ID	Number(15)	CONDITIONAL FIELD – Unique reference ID for the Generation Determinant being disputed. If disputing a generation determinant record, this field is MANDATORY and must equal the record ID of the generation determinant record being disputed; otherwise it must equal [null].
11	Dispute Code	Number(4)	MANDATORY FIELD – Standard code representing the reason for the dispute. Refer to Appendix B for further information.

Production Rules

The following production rules apply for the TBD transaction:

- 1) Data contained within the TBD transaction must adhere to the field level rules stated in Table 4-14.
- 2) The dispute code must be reported at the record level of a tariff bill file.
- 3) A TBD transaction must be created for each tariff bill period header record or one-time charge record or [generation determinant](#) record found to be in error.

5.1 Tariff Bill File Validation and Notification

As prescribed in Section 2.9, distributors are obligated to validate tariff bill files according to standard file format and file content validation tests prior to transmission to retailers. Retailers, at their discretion, shall perform the validation and notification steps in accordance with the rules described in this section upon receipt of a tariff bill file. Retailers and distributors shall maintain adequate records to explain all validation failures.

Distributor release or withholding, in whole or in part, of a tariff bill file and retailer acceptance, rejection, or partial acceptance of a tariff bill file will be based on the results of the following validation tests:

- 1) File Format – Failure of any one of these validations will result in the rejection of the tariff bill file:
 - a) Validate the format of the physical attributes of the tariff bill file, including field attributes (i.e., data type and size) and tariff bill file record structure.
 - b) Validate the content of the data as contained within the file in conjunction with billing history the retailer of record has compiled relating to the site, including mandatory and conditional field checks, file integrity checks (i.e., record counts and check totals), expected field values, cross field edits (e.g., conditional field population, gaps/overlaps for tariff periods contained within the file, and expected record types), and site billing continuity (i.e., cancel/rebill integrity).
- 2) File Content – Failure of any one of these validations will result in the dispute of a tariff billing period or one-time charge or generation determinant within the tariff bill file:
 - a) Validate the content of a tariff bill file in conjunction with other data the retailer of record has compiled relating to the site, including enrollment, tariff billing, and usage data.

5.1.1 Standard File Format Validation and Notification

Retailers shall be restricted to performing only the procedures outlined in Table 5-1 to accept or reject a tariff bill file. Failure of at least one of these validation test procedures will result in tariff bill file rejection utilizing the TBR transaction described in Section 4.5. For the purpose of these validation tests, the term “expected” means the value contained in the field must be valid as per field level definitions in Section 4.3.

Table 5-1 Standard File Format Validation Tests

Ref ID	Check	Test	Description	Outcome
4	Record Production Sequence	Compare published record production sequence with expected record production sequence	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, Generation Determinant , Tariff Bill File Trailer)	Pass: Record production sequence = expected record production sequence Fail: Record production sequence ≠ expected record production sequence.
NEW	Site Header Micro-Generation Total	Compare Site Header Micro-Generation Total with expected Site Header Micro-Generation Total	Site Header Micro-Generation Total must match total of all of the site's Micro-Generation generated in the file (including cancel/rebills)	Pass: Site Header Micro-Generation Total = sum of all 'Micro-Generation Amount' fields in the tariff bill file for a site (including cancel/rebills) Fail: Site Header Micro-Generation Total ≠ sum of all 'Micro-Generation Amount' fields in the tariff bill file for a site (including cancel/rebills)

Ref ID	Check	Test	Description	Outcome
38	Child Record Values	Check child record value with parent record value	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. Micro-Generation Determinant , Micro-Generation Demand Determinant and Tariff Charge records must match the Site ID in the Tariff Bill Period Header record)	Pass: Child record field value = Parent record field value Fail: Child record field value ≠ Parent record field value
39	Cancel Cross-Reference Logic	Compare contents of the Tariff Bill Period Reference ID and/or One-time Charge Reference ID and/or Generation Determinant Reference ID with expected results	A Tariff Bill Period header or One-time Charge record or Generation Determinant record flagged with Cancel Indicator = y must report a valid previous Tariff Bill Period Record ID or One-time Charge Record ID or Generation Determinant Record ID respectively	Pass: Tariff Bill Period Reference ID = a valid previous Tariff Bill Period Record ID, and/or One-time Charge Reference ID = a valid previous One-time Charge Record ID, and/or Generation Determinant Reference ID = a valid previous Generation Determinant Record ID Fail: Tariff Bill Period Reference ID ≠ a valid previous Tariff Bill Period Record ID, and/or One-time Charge Reference ID ≠ a valid previous One-time Charge Record ID and/or Generation Determinant Reference ID ≠ a valid previous Generation Determinant Record ID

5.1.2 Standard File Content Validation and Notification

Retailers shall be restricted to performing only the procedures outlined in Table 5-2 to dispute tariff bill file content. Failure of at least one of these validation test procedures will result in a tariff bill file dispute utilizing the TBD transaction described in Section 4.7. These disputes will not affect a distributor's payment terms with the retailer and may not be used as justification for nonpayment of a distributor invoice. Distributors are not required to respond to these disputes in an automated fashion. For the purpose of these validation tests, the term "expected" means the value contained in the field must be valid as per field level definitions in Section 4.3.

Table 5-2 Standard File Content Validation Tests

Table Ref ID	Check	Test	Description	Outcome
2	Site Ownership	Compare site ownership for the Tariff Bill Period or One-time Charge or Generation Determinant Period	Retailer must be assigned as Retailer of Record for the site for the entire Tariff Bill Period or One-time Charge or Generation Determinant (Depends on who prorates switches)	Pass: Cross-reference to Enrollment transactions confirms site ownership for entire Tariff Bill Period or One-time Charge or Generation Determinant Fail: Cross-reference to Enrollment transactions disputes site ownership for Tariff Bill Period or One-time Charge or Generation Determinant
NEW	Micro-Generation Dial Readings	Compare From Reading of Micro-Generation Determinant record with To Reading of previous Micro-Generation Determinant record	For a cumulative metered site, the From Reading value on a Micro-Generation determinant record must match the To Reading value on the previous Micro-Generation determinant record for the same meter (except when the site was de-energized for the previous period, the site is billing for the first time, or in the case of a cancel/rebill)	Pass: From Reading value of current Micro-Generation period record = To Reading value of previous Micro-Generation determinant record Fail: From Reading value of current Micro-Generation period record ≠ To Reading value of previous Micro-Generation determinant record

“Standard File Content Validation Pseudocode” on AUC web site also needs be updated

5.4.1 General Cancel/Rebill Production Rules

- 1) Cancels and rebills may be issued for tariff-based charges, one-time charges and generation determinants. The cancel and rebill of tariff-based charges is independent from the cancel and rebill of one-time charges or generation determinants for the same site and time period.
- 2) Where possible, a distributor must attempt to send the tariff bill period or one-time charge or generation determinants rebill records in the same tariff bill file as the associated cancel records. Exceptions for prior period adjustments should be rare.
- 3) Original or rebilled charges presented within a tariff bill file cannot be cancelled within the same tariff bill file (i.e., no redundant charge and cancel presentation).
- 4) All cancel/rebills processed by a distributor must be sent to retailers as part of a tariff bill file according to the record production sequence outlined in Appendix B.

5.4.1.x Generation Determinants Cancel/Rebill Production Rules

Cancelled generation determinants must:

- 1) have a new generation determinant record ID assigned;
- 2) have the cancel indicator of the generation determinant record set to Y;
- 3) match the content of the original generation determinant record values with the exception of the following fields: Record ID, Parent ID, Cancel Indicator, generation determinant record Reference ID, and Cancel Reason Code;
- 4) provide a cross-reference to the original generation determinant record ID being cancelled utilizing the generation determinant Reference ID field in the generation determinant record;
- 5) populate a reason code as an explanation for the cancellation utilizing the Cancel Reason Code field of the generation determinant record;
- 6) apply a sign reversal to the **micro-generation amount** and/or **micro generation demand value** of the one-generation determinant record; and
- 7) be presented either:
 - a. on an off-cycle basis for disputes relating to the most recently billed period, or
 - b. according to the site's scheduled billing cycle for prior billing period adjustments.

Rebilled generation determinant must:

- 1) have a new generation determinant record ID assigned;
- 2) follow the standard production rules for new generation determinant presentation; and
- 3) be presented on an off cycle basis according to the site's scheduled billing cycle.

5.4.2 Responses to Valid Retailer Disputes

In response to a valid retailer dispute with respect to a specific site, a distributor must adjust tariff charges, as well as one-time charges, as well as generation determinant according to the procedures outlined in this section of the code.

Following receipt and confirmation of a TBD transaction identifying at least one tariff bill file content dispute, a distributor must:

- 1) cancel the applicable disputed tariff charges or one-time charge or generation determinant to the retailer who initiated the dispute and;
- 2) rebill the applicable tariff charges or one-time charge generation determinant to the retailer initiating the dispute, a different retailer, or both.

Appendix B

B4.4 Tariff Bill File Record Production Sequence

The record production sequence of all data within each tariff bill file is provided in Figure B4-1.

Figure B4-1. Tariff Bill File Record Production Sequence

Insert updated figure

Each step below corresponds to a numbered item in Figure B4-1.

- 1) The tariff bill file header record must be presented as the first record in a tariff bill file.
- 2) The tariff bill file header record must be followed by the presentation of a site header record.
- 3) Each site header record within the tariff bill file must be followed by the presentation of a tariff bill period record.¹³ Within each site header, tariff bill periods must be presented in ascending date sequence. In the event that a tariff bill period is being cancelled and rebilled, the cancelled tariff bill period (and its associated child records) must be presented before the rebilled tariff bill period.
- 4) Usage determinant record(s) must be presented following the tariff period header record and in ascending date sequence.
- 5) If demand determinants are applicable for a specific tariff bill period, the applicable demand determinant record(s) must be presented following the usage records, when available, and in ascending date sequence.
- 6) If miscellaneous determinants are applicable for a specific tariff bill period, the applicable miscellaneous determinant record(s) must be presented following the usage and demand determinant records, when available, and in ascending date sequence.
- 7) If charges (excluding one-time charges) are applicable for a specific tariff bill period, the applicable charge(s) must be presented following the usage, demand, and miscellaneous determinant records, when available, and in ascending date sequence.
- 8) If one-time charges are applicable to a specific site, the applicable one-time charge(s) must be presented following the tariff bill period records, when available, and in ascending date sequence for that site. In the event where a one-time charge is being cancelled and rebilled, the cancelled one-time charge must be presented before the rebilled one-time charge for that site.
- x) If **Generation determinant** are applicable to a specific site, the applicable **Generation determinant** must be presented following the one-time charges records, when available, and if not available following the tariff bill period records, when available and in ascending date sequence for that site. In the event where a **Generation determinant** is being cancelled and rebilled, the cancelled **Generation determinant** must be presented before the rebilled **Generation determinant** for that site.
- 9) The tariff bill file trailer record must be presented as the last record in a tariff bill file.

B5.1 Record Type Code

This is a two-character code representing record type.

Table B5-1 Record Type Codes

Table Ref ID	Record Type Code	Record Type Name
1	FH	File header record
2	SH	Site header record
3	TH	Tariff bill period header record
4	DU	Determinant - measured usage record
5	DD	Determinant - demand record
6	DM	Determinant - miscellaneous record
7	CH	Tariff charge record
8	OC	One-time charge record
X	DG	Determinant – generation record
9	FT	File trailer record

B5.10 Cancel Reason Code

A four-digit code representing a reason for canceling a tariff charge or one-time charge or **generation determinant**

Table B5-7. Cancel Reason Codes – May need new codes

Table Ref ID	Reason Code	Reason Code Name
1	3000	Pre-implementation charge correction
2	3010	Site ownership correction
3	3020	Rate correction
4	3030	Estimate replacement with actual (true-up following estimate by tariff billing function)
5	3040	Meter read adjustment (from MDM function)
6	3050	Usage estimation revision
7	3060	Demand or miscellaneous determinant correction
8	3070	One-time charge correction
9	3080	Resolution of system error
10	3090	Other

B5.25 Dispute Code

A four-digit code representing a tariff bill files dispute code

Table B5-22. Dispute Codes – May need new codes

Table Ref ID	Dispute Code	Dispute Code Name
1	7000	Non-unique Record ID
2	7001	Failed Site Ownership
3	7003	Tariff Bill Period Gap (with previous Tariff Bill Files)
4	7004	Tariff Bill Period Overlap (with previous Tariff Bill Files)
5	7005	Invalid Usage Value
6	7008	Misalignment of Tariff Bill Periods with Tariff Bill Period Events
7	7009	Misalignment of Usage Periods with Usage Period Events
8	7010	Misalignment of Charge Periods with Charge Period Events
9	7011	Current From Dial Reading does not match previous To Dial Reading
10	7012	Duplicate One-time Charge
11	7013	Invalid Billing Cycle (Site Header)
12	7014	Invalid Meter Rollover

Changes to Rule 021 – Settlement System Code

Still need to review Rule 021 for changes.

I know currently it states that the MDM sends GCM to retailer (not retailer and LSA)

May need to add a field to GCM so that the MDM will supply the generated energy to the LSA/WSP (currently MDM to Retailer only)