

D-R-A-F-T

TECHNICAL IMPLEMENTATION OF THE BILLING AND PAYMENT PROCESS

Business Process Summary

The Billing and Payment invoicing process is used to communicate billing data between the Non-Billing Party (NBP) and the Billing Party (BP) concerning individual Customer accounts. In most cases, the individual Customer accounts will be “batched” and transmitted as an aggregated cluster.

The Billing and Payment invoicing process is a Consolidated Billing communication procedure that transmits NBP information to the BP about bill components and their corresponding amounts that are to be billed to the Customer by the BP under the Bill Ready scenario. It is also used by the BP to notify the NBP that a Customer bill(s) has been calculated and rendered by the BP for the NBP and the data included in this invoice represents bill components and their corresponding amounts that have just been billed under the Rate Ready scenario.

The Billing and Payment invoicing process is also a communication procedure that transmits NBP information from the BP to the NBP to notify the NBP that a payment has been received from the Customer and that funds will be sent to the NBP pursuant to an agreed upon process.

The act of exchanging billing data takes place only under a form of Consolidated Billing and the Single Retail Supplier Option, so it requires only that data be exchanged among trading partners for the following three scenarios:

1. *Consolidated Billing-Bill Ready.*
 - The purpose of this transaction is to have the NBP transmit Customer specific billing data to the BP so the information can be placed on the consolidated Customer bill that will be rendered by the BP.
2. *Consolidated Billing-Rate Ready.*
 - The purpose of this transaction is to have the BP transmit Customer specific billing data to the NBP indicating the Customer specific bill components the BP has calculated and placed on the bill for the NBP. Since this transaction is sent after the Customer bill has been rendered, it serves to notify the NBP that a bill has been rendered.
3. *Single Retail Supplier Option.*
 - The purpose of this transaction is to have the Distribution Utility transmit its Customer specific distribution charges to the retail Supplier so the Supplier can pay those charges.

Background

The Billing and Payment Process, as herein described, defines the interactions to be taken by the Billing Party (BP) and the Non-Billing Party (NBP) under the following optional scenarios: Supplier Consolidated Billing-Bill Ready, Supplier Consolidated Billing-Rate Ready, Utility Consolidated Billing-Bill Ready, Utility Consolidated Billing-

Rate Ready and Single Retail Supplier. A decision regarding which billing option is to be used must be made before a Customer begins to take service.

There is no data exchange process relative to billing in a Dual Billing scenario because both parties have acquired the necessary usage data and are performing independently as their own BP in a manner designed and carried-out under its own choosing.

The context under which Billing and Payment action takes place is that of accounting for individual Customer accounts on a periodic¹ basis. The technical requirements for exchanging data account for the individual Customers' periodic billing activity, and that individual Customer data may be reported to the BP in batches, such as data grouped as a billing cycle. In other words, numerous Customers are usually billed at once for the same billing period or cycle, so the exchange of such periodic data between the parties may be packaged into a single communication containing all the data regarding the batch of Customers.

The rendering of a bill to a Customer is defined as actions necessary to print and send a retail bill directly to the retail Customer. In some cases, the BP will also calculate the bill for the NBP. There are, then, two fundamental activities taking place during the billing cycle: (1) preparation of the bill from acquired data whether that be from the NBP each billing period or from internally generated data and (2) the printing and delivery of the bill by the BP.

Therefore, the act of exchanging billing data is only necessary when a BP performs Consolidated Billing (CB) services for the NBP and under the Single Retail Supplier Options. The technical implementation, therefore, must address the exchange of periodic billing data between the BP and the NBP so that the BP is able to render a bill directly to the Customer.

Under Consolidated Billing, the BP renders a Customer bill that consolidates the energy, transmission/transportation and distribution charges of the Distribution Company and the Supplier, for which a single payment from the Customer is made to the BP. The identity of which party calculates the bill will fall under one of two scenarios: Bill Ready or Rate Ready.

When operating under the Bill Ready scenario, the BP accepted the responsibility for billing the retail customer for the NBP, but it is only able perform the action after first acquiring the necessary data from the NBP. Such data defines, for each Customer account, the particular amounts, balances and other pre-defined NBP charges that are to appear on the bill. The NBP is therefore responsible to provide the data to the BP and will do so after receiving the Customer usage data from the meter reading entity.

When operating under the Rate Ready scenario, the BP accepted the responsibility for billing the retail customer and will also calculate the billing amounts for the NBP charges. Accordingly, the exchange of billing data between the BP and NBP under a Rate Ready scenario is to have the BP send the NBP "after-the-fact information" concerning the Customer accounts that it has recently billed on behalf of the NBP.

¹ Periodic generally means on a monthly billing basis as most utility billing is performed that way.

Under the Single Retail Supplier Option, the Supplier renders a Customer bill that corresponds to the energy, transmission/transportation and distribution charges of the Distribution Company and the Supplier, for which a single payment from the Customer is made to the Supplier.

The distinction between Consolidated Billing and Single Retail Supplier Option lies with the fact that Consolidated Billing brings together separate charges of the Distribution Company and the Supplier where each party is separately identified on the bill rendered by the BP and the Distribution Company is owed money by the Customer even though the Billing Party collects it. Whereas, the Single Retail Supplier Option represents the Suppliers bill for the sum total of energy, transmission/transportation and distribution charges but the Distribution Company is owed money by the Supplier. In addition, the amount billed to the Customer for Distribution Charges may not necessarily be the same as the amount invoiced to the Supplier. In addition, there is no reference made to Bill Ready or Rate Ready because there is no Non-Billing Party.

Payment processing is defined as actions necessary to collect, record, and distribute cash received from the Customer. There are business rules that define the *timing* process of collecting; recording; and making payment upon the receipt of cash from the Customer but they don't require the exchange of data between the NBP and BP.

The Technicalities

The Billing and Payment invoice is constructed around two main informational categories: (1) Header Level, (2) Detail Level, and (3) Summary Level.

Header level

A further breakdown indicates that the Header section has Trading Partner and Summary Bill information. Naturally, any communication between two or more parties requires those parties to identify themselves by name and some other identifying feature such as Customer number, DUNS, or a proprietary code determined by mutual agreement.

The Summary Bill Information section is constructed to contain data that applies to the individual Customer account and the Detail Level is where one finds the breakdown information.

Detail Level

The Detail Level Information section is where usage data is reported for each meter along with its corresponding charges. Such information is necessary because aggregating usage and charges from individual meters into one single Customer bill is generally the way multiple-metered accounts are billed.

Prior to billing a Customer, the BP must know what information is to appear on the Customer bill. In most jurisdictions, the Applicable Regulatory Authority specifies the format and minimum content of the Residential bills; however, it generally leaves the determination of commercial and industrial (C&I) bills to the BP. For example, if the C&I Customer wishes to have all individual metered usage and charges information made available via the bill, then the BP can make that happen by designing a billing process that obtains the detail level information and places such data on the bill. On the other hand, summary bill data may be sufficient, so some detail may be ignored.

There are five options to summarize Detail Level data: Account, Rate, SDID, Un-metered, and Metered. The NBP and BP should design their billing applications to accommodate all five options. Each one of these options accommodates a dozen standard data elements that are used to convey billing related data:

1. Indication of the type of service rendered (Electric or Gas)
2. Indication of how charges are summarized (Account, Rate, SDID, Un-metered, or Metered)
3. Product description (text)
4. Service Period Start Date
5. Service Period End Date
6. Unit of measure (use correct Electric or Gas acronym)
7. Quantity
8. Indication of whether this is a Charge, Allowance, or No charge (A, C, or No charge)
9. Indication of whether the charge is Actual, Estimated or Budgeted (A, E, or B)
10. Energy charge code (GEN or GAS)
11. Charge description (text)
12. Price per unit

The twelve standard data items listed directly above describe energy units and their related charges to be used by the BP as elements to construct a Customer bill. Since these items are reported at the Detail Level, a loop structure should be constructed to accommodate multiple meters. For example, when the Account summary option is chosen, all usage and charges for each meter can be reported under the same Distribution Company's Account Number found in the Header Level. A loop structure should also be constructed for the other four summary options so that each option can accommodate all individual meters that are to be summarized in the Summary Level.

Summary Level

This Level is used to specify the total invoice discounts and amounts. It is the total amount due for the invoice, excluding arrearages, and must equal the algebraic sum of the all charges. If the amount is negative, send a minus sign.

Canceling a Bill or Invoice

There may be a time when an Invoice from the NBP to the BP is issued in error and should be cancelled. Likewise, a time may come when an Invoice from the BP to the NBP is issued in error and should be cancelled. In both cases, Header Level data, namely Original Bill Number and Original Invoice Number along with the Bill or Invoice code, allows for an indication specifying that such a cancellation is taking place.

Subsequent to the cancellation process, a new invoice should be issued containing the correct data.