Oracle Utilities Customer Care and Billing Release 2.4.0

Utility Reference Model

4.2.2.15 Manage Net Energy Metering Charges

December 2015

ORACLE

Oracle Utilities Customer Care and Billing Utility Reference Model 4.2.2.15, Release 2.4.0

Contents

4.2.2.15 Manage Net Energy Metering Charges

4.2.2.15 Manage Net Energy Metering Charges

This section provides a description of the "Manage Net Energy Metering Charges" business process. It includes:

Brief Description

Business Process: 4.2.2.15 Manage Net Energy Metering Charges

Process Type: Sub-Process

Parent Process: 4.2.2 CC&B.Manage Bill

Sibling Processes:

- 4.2.2.2 CC&B.Manage Metered Charges
- 3.3.8.1 CC&B.Establish and Manage Net Energy Metering Service

Customers in a distributed generation energy market may have renewable energy devices such as solar panels or wind turbines connected to their meters. The energy generated at this service point, as well as any energy used, could possibly be measured by a single meter, with the energy generated being netted against the energy used. This is called net energy metering (NEM). The meter records a positive number when customers use more energy than they generate, and a negative number when they generate more than they consume. These customers may owe a minimum charge each month.

This process describes how actual energy charges and generation credits are accrued until the account is adjusted at the end of a specified period, called the true up period. True up process occurs during billing. Application evaluates the consumption charges and generation credits for the period and determine if the customer owes money to the utility or has a credit. Customer's bills reflect charges accordingly.

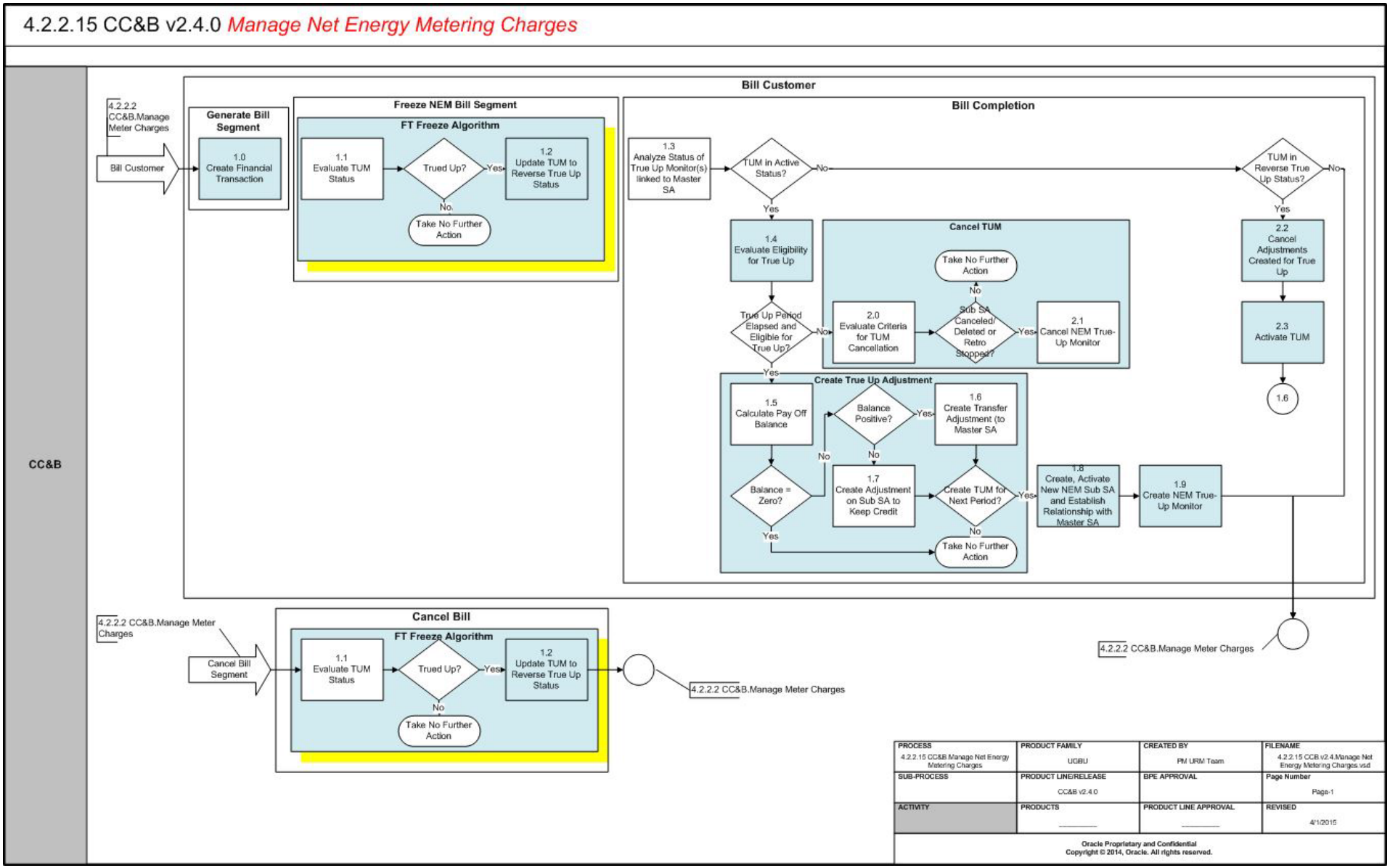
Actors/Roles

The Manage Net Energy Metering Charges business process involves the following actors and roles:

- **CC&B**: The Customer Care and Billing application.

Business Process Diagrams

Manage Net Energy Metering Charges Process Model - Page 1



Manage Net Energy Metering Charges Detailed Process Model Description

This section provides a detailed description of the "Manage Net Energy Metering Charges" business process, including:

1.0 Create Financial Transaction

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Generate Bill Segment

Actor/Role: CC&B

Description: CC&B creates the financial details related to the Bill Segment. The Financial Transaction contains the financial effects of the Bill Segment on the Service Agreement's current and payoff balances and on the General Ledger. This step is executed from online and batch processing.

Available Algorithms

- C1-NEM-GL Current Amt = 0 / Payoff Amt = Bill Amt (GL affected)
- C1-NEM-NOGL Current Amt = 0 / Payoff Amt = Bill Amt (no GL)

Process Names

- BILLING - The Bill cycle Batch processing creates Bills for accounts with an “open” Bill cycle.

Entities to Configure

- Rates
- Customer Class
- Bill Segment Type

1.1 Evaluate TUM Status

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Freeze NEM Bill Segment (FT Freeze Algorithm)
- Cancel Bill (FT Freeze Algorithm)

Actor/Role: CC&B

Description: CC&B evaluates TUM status to determine if it has been trued up and determine if true up process must be reversed.

Entities to Configure

- SA Type

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-RV-TRUP Transitions a True Up monitor from the Trued Up state to the Reverse True Up state whenever bill segment activity is detected for the period covered by the true up monitor.

1.2 Update TUM to Reverse True Up Status

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group:

- Freeze NEM Bill Segment (FT Freeze Algorithm)

- Cancel Bill (FT Freeze Algorithm)

Actor/Role: CC&B

Description: Application initiates reverse true up and transitions TUM to the Reverse True Up state when a Bill Segment or Bill Segment Cancellation FT is frozen for the NEM Sub SA and the current TUM state is Trued Up.

Entities to Configure

- SA Type

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-RV-TRUP this FT Freeze algorithm transitions a True Up monitor from the Trued Up state to the Reverse True Up state whenever bill segment activity is detected for the period covered by the true up monitor.

1.3 Analyze Status of True Up Monitors Linked to Master SA

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: CC&B identifies and evaluates all the True Up monitors linked to Customer's Master SA determine if any further actions required depends on current Monitor status.

Entities to Configure

- SA Type

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-TRN-TUM - Bill Completion Algorithm transitions any true up monitor (TUM) service tasks in the Active or Reverse True Up states associated with the master SA.

1.4 Evaluate Eligibility for True Up

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: CC&B checks eligibility for True up.

> **Note**: TUM is eligible for true up when the latest non-cancelled Bill Segment for the NEM Sub SA is a Closing Bill Segment or the minimum true up period has elapsed. The elapsed time period is calculated from the earliest Bill Segment Start Date to the latest Bill Segment End Date of the NEM Sub SA.

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-TRU-ELIG- Check eligibility for True up

1.5 Calculate Pay Off Balance

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Create True Up Adjustment

Actor/Role: CC&B

Description: If application determines that Net Metering account's service is eligible for True Up, it transitions TUM from the Active state to the Trued Up state, and initiates the True Up process. It syncs the Payoff and Current Balances of the NEM Sub SA and calculates the Payoff Balance of all the non-cancelled Bill Segments on the NEM Sub SA.

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-NEM-TRUUP - Performs the true up process at the end of a true up period.

1.6 Create Transfer Adjustment to Master SA

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Create True Up Adjustment

Actor/Role: CC&B

Description: If the Payoff Balance is positive (the customer owes), a Transfer Adjustment is created from the NEM Sub SA to the NEM Master SA for the amount of the Payoff Balance.

Available Algorithms

- C1-NEM-TRUUP - Performs the true up process at the end of a true up period.

Business Objects

- C1-NEMTrueUpTask

Entities to Configure

- Adjustment Type

1.7 Create Adjustment on Sub SA to Keep Credit

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Create True Up Adjustment

Actor/Role: CC&B

Description: If the Payoff Balance is negative (utility owes the customer), a Write Down Adjustment is created on the NEM Sub SA to zero out the Payoff and Current Balances (the utility gets to keep the credit).

Available Algorithms

- C1-NEM-TRUUP - Performs the true up process at the end of a true up period.

Business Objects

- C1-NEMTrueUpTask

Entities to Configure

- Adjustment Type

1.8 Create, Activate New NEM Sub SA and Establish Relationship with Master SA

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: Application creates new NEM Sub SA and links it to Master SA.

Entities to Configure

- SA Type
- SA Relationship Type
- Service Task Type
- Characteristic Type

Business Objects

- C1-NEMTrueUpTask
- C1-NEMTrueUpTaskType

Available Algorithms

- C1-TUM-SARL - This algorithm creates a new SA relationship or updates an existing future SA relationship for the subsequent true up period.

1.9 Create NEM True Up Monitor

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: Application creates automatically new True Up Monitor for new True Up period.

Entities to Configure

- SA Type

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-SAT-TUM This algorithm creates True Up Monitor For Sub SA (SA Creation)

2.0 Evaluate Criteria for TUM Cancellation

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: CC&B evaluates Active TUM to determine TUM eligibility for cancellation.

> **Note**: A TUM is eligible for cancellation when the NEM Sub SA has been cancelled / deleted or the NEM Sub SA Stop Date is before the NEM SA Relationship Effective Date.

Available Algorithms

- C1-CK-TUMCN - This algorithm checks True Up Monitor Eligibility For Cancellation.

Business Objects

- C1-NEMTrueUpTask

2.1 Cancel NEM True Up Monitor

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: If eligibility criteria for TUM cancellation met, application cancels NEM True Up Monitor by transitioning it to Canceled state.

Available Algorithms

- C1-CK-TUMCN - this algorithm checks True Up Monitor Eligibility For Cancellation and transitions the true up monitor (TUM) to the Cancelled state (associated with transition condition 'F1CN') if its related sub SA has been cancelled or deleted or if the SA's stop date is before the relevant SA relationship's effective date.

Business Objects

- C1-NEMTrueUpTask

2.2 Cancel Adjustments Created For True Up

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: If TUM has been reversed and currently in Reverse True Up State, application cancels all frozen Adjustments created for True Up and populates cancellation reason.

Entities to Configure

- Service Task Type

Business Objects

- C1-NEMTrueUpTask

Available Algorithms

- C1-RT-CNFZAD - This algorithm cancels all adjustments created as part of the true up process. The adjustments are stamped with the true up monitor's ID. The adjustment cancel reason is defined on the true up monitor's service task type.

2.3 Activate TUM

Reference: Manage Net Energy Metering Charges Process Model - Page 1 on page 3 for the associated business process diagram.

Group: Bill Completion

Actor/Role: CC&B

Description: CC&B transitions NEM True Up Monitor to Active state.

Business Objects

- C1-NEMTrueUpTask

Entities to Configure

- Service Task Type

Related Training

The following User Productivity Kit (UPK) modules provide training related to this business process:

- Oracle Utilities UPK for Customer Care and Billing, Administrative Setup
- Oracle Utilities UPK for Customer Care and Billing, User Tasks
- Oracle Utilities UPK for Customer Care and Billing, Credit and Collections
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing for Interval Data