Revenue Lifecycle Management

Cutomer Information System

Help and Training Manual

Aurea

Unlimited Possibility

Notices

For details, see the following topics:

- Notices

Notices

Copyright © 2016 - 2019. Aurea Software, Inc. ("Aurea"). All Rights Reserved. These materials and all Aurea products are copyrighted and all rights are reserved by Aurea.

This document is proprietary and confidential to Aurea and is available only under a valid non-disclosure agreement. No part of this document may be disclosed in any manner to a third party without the prior written consent of Aurea. The information in these materials is for informational purposes only and Aurea assumes no responsibility for any errors that may appear therein. Aurea reserves the right to revise this information and to make changes from time to time to the content hereof without obligation of Aurea to notify any person of such revisions or changes.

You are hereby placed on notice that the software, its related technology and services may be covered by one or more United States ("US") and non-US patents. A listing that associates patented and patent-pending products included in the software, software updates, their related technology and services with one or more patent numbers is available for you and the general public's access at www.aurea.com/legal/ (the "Patent Notice") without charge. The association of products-to-patent numbers at the Patent Notice may not be an exclusive listing of associations, and other unlisted patents or pending patents may also be associated with the products. Likewise, the patents or pending patents may also be associated with unlisted products. You agree to regularly review the products-to-patent number(s) association at the Patent Notice to check for updates.

Aurea, Aurea Software, Actional, DataXtend, Dynamic Routing Architecture, Savvion, Savvion Business Manager, Sonic, Sonic ESB, and SonicMQ are registered trademarks of Aurea Software, Inc., in the U.S. and/or other countries. Actional Agent, Actional Intermediary, Actional Management Server, DataXtend Semantic Integrator, Pantero, Savvion BizLogic, Savvion BizPulse, Savvion BizRules, Savvion BizSolo, Savvion BPM Portal, Savvion BPM Studio, Savvion Business Expert, Savvion Business Manager, Savvion Process Edge ,and Sonic Workbench are trademarks or service marks of Aurea Software, Inc., in the U.S. and other countries. Additional Aurea trademarks or registered trademarks are available at: www.aurea.com/legal/.

The following third party trademarks may appear in one or more user guides:

- Apache is a trademark of Apache Software Foundation.

- Chrome is a trademark of Google Inc.

- Eclipse is a registered trademark of the Eclipse Foundation, Inc.

- IBM, AIX, DB2, and WebSphere are registered trademarks of International Business Machines Corporation.

- Intel and Pentium are registered trademarks of Intel Corporation in the U.S. and/or other countries.

- JBoss is a registered trademark of Red Hat, Inc. in the U.S. and other countries.

- Linux is a registered trademark of Linus Torvalds.

- Microsoft, Active Directory, Internet Explorer, SharePoint, Visual Studio, and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

- Mozilla and Firefox are registered trademarks of the Mozilla Foundation.

- Oracle and Java are registered trademarks of Oracle and/or its affiliates.

- Red Hat and Red Hat Enterprise Linux are registered trademarks of Red Hat, Inc. in the U.S. and other countries.

- SUSE is a registered trademark of SUSE, LLC.

- Sybase is a registered trademark of Sybase, Inc. in the United States and/or other countries.

- UNIX is a registered trademark of The Open Group in the United States and other countries.

All other marks contained herein are for informational purposes only and may be trademarks of their respective owners.

Table of Contents

1

About CIS

Retail energy providers (Suppliers) need enterprise capabilities to seamlessly manage Customers across the entire revenue lifecycle. **Aurea Energy Solutions (AES) Revenue Lifecycle Management** lets energy retailers offload the complexity and cost of retail billing, driving maximum revenue and growth through a fully managed, scalable platform. There are two products that are core to the AES Revenue Lifecycle Management business - **Electronic Data Interchange** (EDI) and **Customer Information System** (CIS). This documentation focuses on CIS.

CIS is a web-based billing, invoicing, payment, and Customer service & management system designed for use by Suppliers.

For details, see the following topics:

- Supported Regional Energy Markets
- Customer & Account Types
- Users and Group Management
- Transactions
- Products and Rates
- Enrollment Overview

Supported Regional Energy Markets

CIS supports clients in the energy market of various US regions. Here is a list of such regions in US:

- Texas
- Maryland
- New York
- New Jersey
- Illinois
- Delaware
- California
- Massachusetts
- Ohio

- Connecticut
- Maryland
- Direct
- Maine
- Pennsylvania
- Rhode Island
- New Hampshire
- Georgia

Customer & Account Types

Learn the Customer types and the differences in functionality within CIS to support each type.

Along with the different Customer types, there are different account structures and functionality within CIS for the purpose of organizing and managing the data depending upon the Customer type, the services they receive and the markets in which they are served.

Customer Types

There are three primary **Customer Types** serviced within CIS:

- **Residential** - Customer who lives in a residential home or apartment.
- **Commercial** – Customer with a business location that provides goods or services to consumers.
- **Property** – Owner of multifamily units that are rented to Residential Customers.

Account Types

There are three **Customer Account** Structures serviced within CIS for the purpose of managing the Customer data:

- Master Customer Account
- Location Master Account
- Customer Account

Master Customer Account

A Master Customer is a "place holder" account that allows multi-level organizational hierarchies to be constructed. Mainly used for Commercial Customers, Master Customers have no service addresses, meters, consumption, or Transactions. Master Customers are used to group Customer Accounts. This structure allows the Customer to track data of "Customer accounts" at an aggregate level under that Master. It also allows the flexibility to easily arrange accounts into an infinite array of possibilities. Other benefits of this account structure include summary bill presentation, summary payment management, and summary reporting.

Location Master Account

A Location Master account is a "place holder" account used to group Customer Accounts who are receiving multiple commodity services, i.e. Gas and Electric. Location Masters have no service addresses, meters, consumption, or Transactions. Also, Location Masters do not function in the same manner as Master Customers in that they cannot have Master Customers assigned to them. The only types of accounts assigned to Location Masters are their Customer Accounts having multiple commodity services provided at the same location. This structure however, does not prevent a Location Master from being assigned to a Master Customer.

Customer Account

A Customer Account is for a single Customer receiving one commodity. This account structure holds all the basic information about that Customer, such as billing address, service address, meter information, consumption, Transactions, account balance, invoices, payments, and Customer communications. Customer Accounts can be directly linked to either a Location Master or a Master Customer Account.

Users and Group Management

Learn to create new users and manage them from the CSR site.

From the User Setup screen you can do the following functions:

- Add a new user.
- Search an existing user.
- Manage an existing user.

From the Group Setup screen you can do the following functions:

- Create a new group.
- Manage an existing group.

Create New User

Learn to create new user in CIS.

The User Setup screen provides ability to create new users.

Follow these steps to create a new user:

1. Navigate to **Administration Menu > Security > User Setup**.

2. Click **Add User**.

3. On the **USER DETAIL** page provide the details requested including a temporary password and click **Save**. A new user is created.

   All users are required to change their password the first time they login.

   You can also choose to create the account in "disabled" mode. This can be useful if you want to take care of the administration account creation process but wish to delay account activation until the training is completed.

4. Click on the last name (from the **Last Name** column) of the newly created user and click **Assign Groups** to add a security role to a new user. To search for a user, see Manage Users on page 11.

5. To assign group roles select a relevant role from **Available Groups** and move it to **Current Groups** using the using the forward direction button.

6. Click username to return to the **User Details** screen.

7. Optionally you may assign particular Customers to a user account using **Assign Customers**. This is only needed if you want to support the creation of user accounts for Customers using the B2B portal.

On the **Customer Assign** screen you can add or remove Customers to this new user account as you want.

USER SETUP: CUSTOMER ASSIGN

First Last

Account No:	
Customer Name:	

Filter

Select/Deselect All   Add All Selected

0 Available Customers Selected

Available Customers

Customer	Account No	Type
☐	000699745	Residential
☐	000700385	Residential
☐	000922015	Residential
☐	000755676	Residential
☐	000700462	Residential
☐	000924724	Residential
☐	000700815	Residential
☐	000924551	Residential
☐	000701774	Residential
☐	000702670	Residential
☐	000701799	Residential
☐	001049493	Residential
☐	001042145	Residential
☐	000703100	Residential
☐	001051535	Residential
☐	M50000009	Residential
☐	M50000010	Residential
☐	M50000011	Residential
☐	M50000012	Residential
☐	M50000013	Residential
☐	M50000014	Residential
☐	M50000015	Residential

1 2 3 4 5 6 7 8 9 10 ...

Select/Deselect All   Remove All Selected

0 Current Customers Selected

Manage Users

Learn how to manage users in CIS.

The **User Setup** screen allows you to search for specific users by their last name, group or status. Using this screen you can also edit, create, and assign individual users into groups.

Follow these steps to search, view, and edit individual users:

1. Navigate to **Administration Menu > Security > User Setup**.

2. Search specific users using **Last Name**, **Group** and **Status**. You can use also use a combination of these search fields to perform advance search.

3. In the search results, click the **Last Name** of the respective user to view the account details.

4. On the **User Detail** screen, edit or change user details as you want. You can also assign the same user to different groups or Customers from here, if required. You can also change password and activate / deactivate a user.

Create New Group

Learn to create new group in CIS system.

You can set up groups to classify users and assign them security objects.

To create new group,

1. Go to **Administration Menu > Security > Group Setup**.
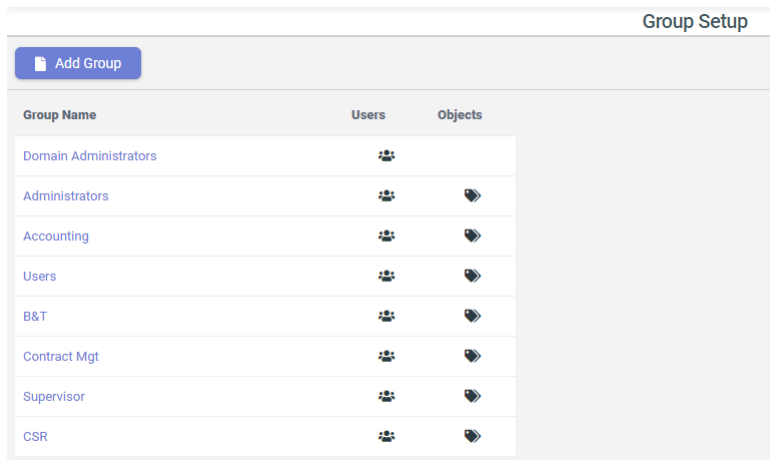
2. On the **Group Setup** page click **Add Group**. Enter the following details and click **Save**.

Fields	Description
Group Name	Enter the desired name of group.
Description	Enter the desired description for the group.
Group E-Mail	Enter the e-mail id for the group.
Template	Select the desired template for the group.
Copy Security Objects	Select security objects for the group. (You can choose multiple objects)
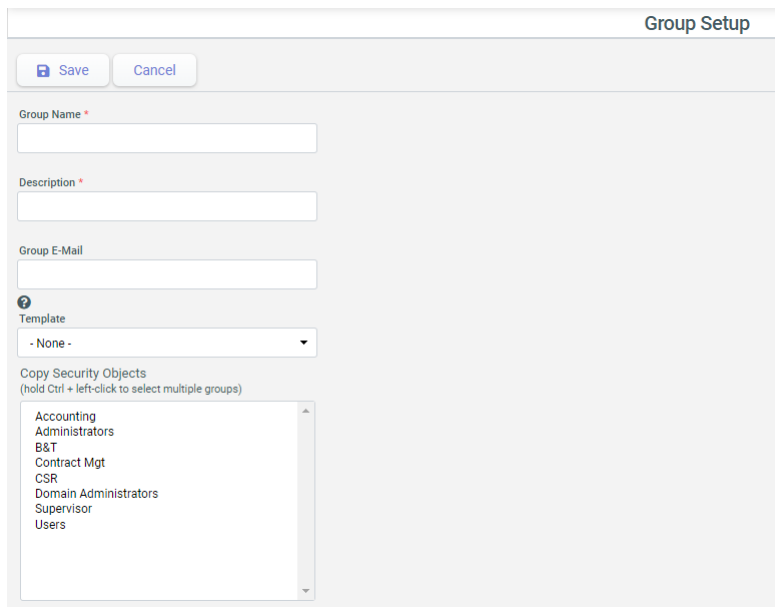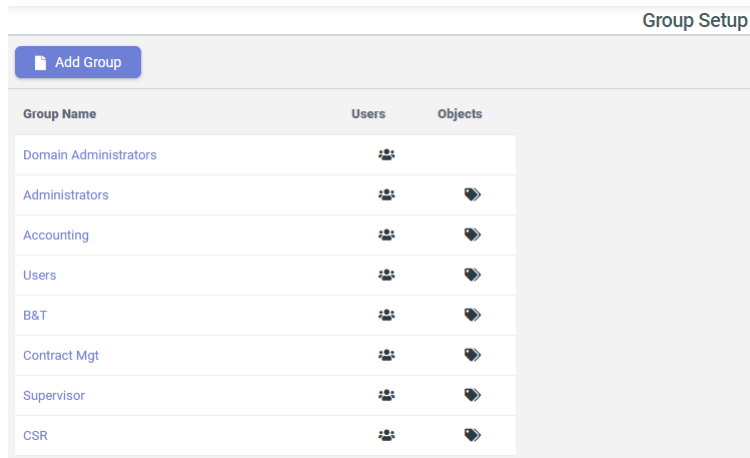
Manage Groups

Learn how to manage groups in CIS.

To modify a group,
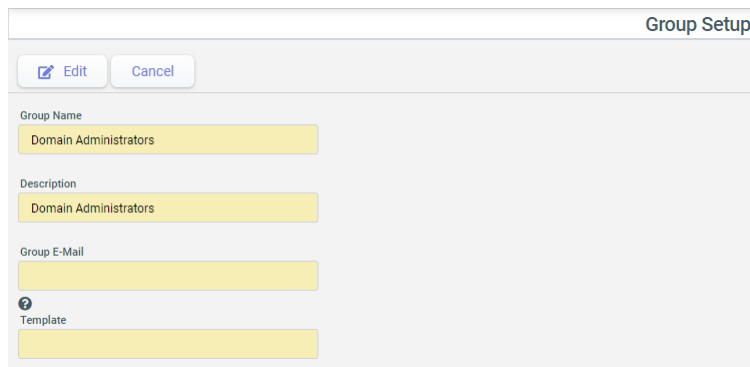
1. Go to **Administration Menu > Security > Group Setup**. **Group Setup** page is displayed.

2. On the **Group Setup** page click on the Group Name and click **Edit** to modify that group.

To add user to a group,

1. Go to **Administration Menu > Security > Group Setup**.

2. On the **Group Setup** page, click 👥 corresponding to the desired group to which user needs to be added.

3. On the **GROUP SETUP: USER ASSIGN** page, select users from **Available Users** and click [>] to assign them to the group. Select users from **Current Users** and click [<] to remove them from the group.
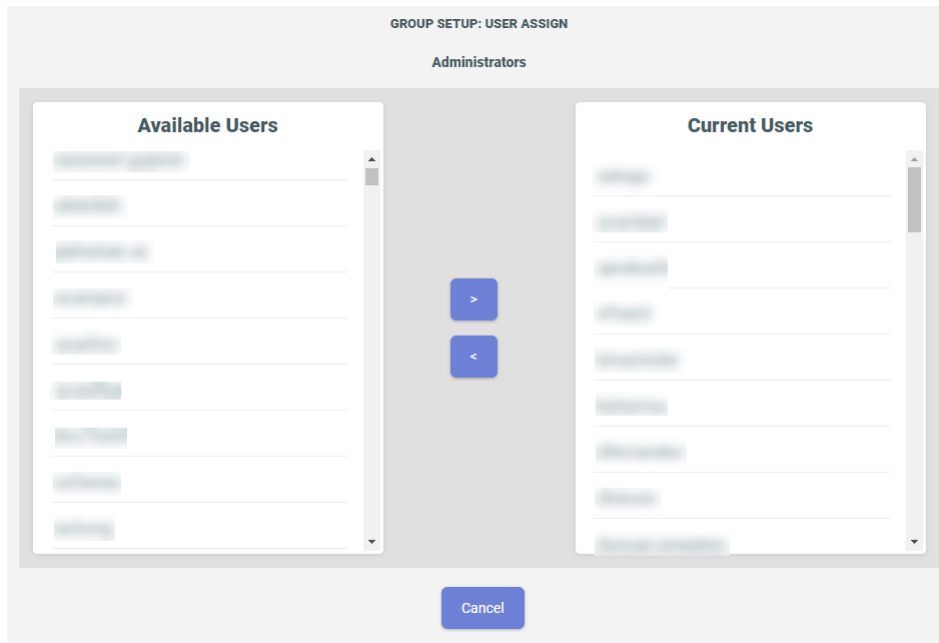
To assign objects to a group,

1. Go to **Administration Menu > Security > Group Setup**.

2. On the **Group Setup** page, click 🏷 corresponding to the desired group to which object needs to be assigned.

3. On the **GROUP SETUP: OBJECT ASSIGN** page, select the desired objects from **Available Objects** and click [>] to assign them to the group. Select the desired objects from **Current Objects** and click [<] to remove them from the group.

GROUP SETUP: OBJECT ASSIGN

Accounting

Application: CIS.Web.Billing ▾

Available Objects	Current Objects
820 Payment Master Account	248 Report
820 Payment Report	650 Disconnect Reconnect Detail
820 Payment Report	810 Details
820 Payment Report	810 Invoice Reconcile
820 Payment Report	814 Market Transaction Report
820 Payment Report	820 Payment Report
820 Payment Report	820 Payment Report Extended
820 Payment Report	A/R Ledger
820 Payment Report	A/R Ledger Detail

[>]
[<]

Copy Objects   Assign Rights

Cancel

Select the object you would like to add, and click on the icon to move the object to the selected group.

Transactions

Learn about the commonly used transactions in CIS.

The Customer life cycle starts with enrollment and then as the Customer starts using the services as provided in form of gas and electricity, he starts getting billed based on the usage inclusive of special charges like disconnect charges, late payment fee, promotional credit, and others. At some stage, the Customer may decide to stop availing services and close his account or the Supplier may decide to close his account due to bad payment history. All these stages in a life cycle are managed by transactions.

The commonly used transactions in CIS are:

Transactions Type	Transaction Set	Description	Flow
867	Product Transfer and Resale Report	Used to communicate energy usage (gas or electric): • Metered (non-interval and interval) • Unmetered • Historical usage	Utility to Supplier
810	Invoice	Used to communicate invoice transactions. **Note:** Outbound 810s: transactions include Supplier charges to be sent to the utility, to bill to Customers in a Bill Ready model. Inbound 810s: transactions include utility charges or delivery charges, to be billed to Customer, by Supplier (in Supplier Consolidated model) or to shadow bill (in Rate Ready model) respectively. To learn more about billing models, see Supported Billing Models on page 131.	Both ways

Transac-tions Type	Transaction Set	Description	Flow
814	General Request, Response or Confirmation	Used to request enrollments or communicate changes to a Customer account. • Enrollments – enrolling a new Customer. • Changes – changing Customer account information (address, billing type, rate, etc.) • Drops – Customer dropped by marketer or switches to a different Supplier. • Historical Usage – request historical usage for a Customer. • Reinstatement – a Customer rescinds a switch request and is reinstated to previous Supplier. • Move-ins and Move-outs.	Both ways
650	Service Order	Used to request or communicate changes in service: • Disconnect and Reconnect for Non Pay. • Meter Maintenance • Switch Holds • Switch Hold removal • Outage notifications (for ERCOT only)	Both ways
820	Payment Order/Remittance Advice	Used to communicate details about remittance/payment to LDC or Marketer.	Both ways

Transac-tions Type	Transaction Set	Description	Flow
824	Application Ad-vice	Used to communicate acceptance and rejection of various transactions to the sending party. • 810 accept / reject • 867 reject • 820 reject • 568 reject • 248 reject **Note:** The sender of an 810 receives an 824 acceptance or rejection. 824 is designed to either request a resend (reject), or serve as an acceptance notification only.	Both ways
248	Account Assign-ment	Used to communicate a write-off in consolidated billing models.	Utility to Sup-plier
568	AccountsReceiv-able Advice	Used to communicate A/R balances in consolidated billing models.	Utility to Sup-plier
997	Functional Ac-knowledgement	Used to acknowledge receipt of other transactions. It serves as a response or electronic receipt between EDI transactions. **Note:** It is an important function for establishing timely delivery of EDI transactions. Suppliers gain valuable insights if their transactions are submitted to utilities and vice versa, on time.	Both ways

Products and Rates

Learn how to create and manage products and rates in CIS.

Suppliers offer their Customers competitive pricing for their energy commodities and Customer services. This is called product in CIS. A Product is comprised of two components - a commodity and service(s) offered to Customers, and a Rate Package containing Rate Details for generating charges to bill Customers.

Relationship between Product and Rate

- The very basic unit of product is rate. A user can create Rate Details from the Client Rate Administration screen. Form more information, see Creating and Managing Rate Details on page 64.

- Rates are of several types. For Example: Meter charge, Electric Energy charge, NSF charge, Natural Gas Energy Rate, Late fee charge etc.

- A user can group together several rate details and create a rate package. Form more information, see Creating and Managing Rate Packages on page 69.

  A rate package may have different kinds of rate details bundled together.

  For Example: Meter rate and electric energy rate can be grouped to form a rate Package. Another set of rates can be grouped to form a different rate package and so on.

- Rate package is applied while creating products. Form more information, see Creating and Managing Products on page 23

  Products are salable service items which have clearly defined Customers, commodity being sold (Gas or electricity), any special offer, service start date, service end date and other product related details.

  An example of product name may be - "Resi_noetf". This product is for residential Customers and is offering no fee for early termination of contract. This product has an appropriate rate package applied. Similarly, there can be another product created and a rate package applied to it.

Note: Users can have any product name of their choice. It is a good practice to name products in such a way so that it is easy to identify them later.

- When a product is sold and applied to a Customer, an instance of that product is created for that particular Customer, such an instance is called Rate Transition.

  If there are 100 Customers buying the same product, there are a 100 unique rate transitions created, one for each Customer.

  On the day the service starts, these rate transitions unpacks all the rate information and other product information to be applied on that account.

The Customer ontinues to receive invoices as per the rate details/charge details defined in the rate packages for the particular product. This continues till the service end date is reached.

- When the service end date is reached the product ceases to be valid on that Customer. The next action is as per the "Rollover Product" defined on that product.

"Rollover product" defines which is the next product that is applied on the Customer after the expiry of the term of the existing product. The Customer is rolled over accordingly.

Note: The "Rollover Product" can be the existing product, in this case the Customer is re assigned on the same product. This continues till the Customer or the premise is active.

The "Rollover Product" can be the existing product, in this case the Customer is re assigned on the same product. This continues till the Customer or the premise is active.

Illustration of the relationship between rate and product.
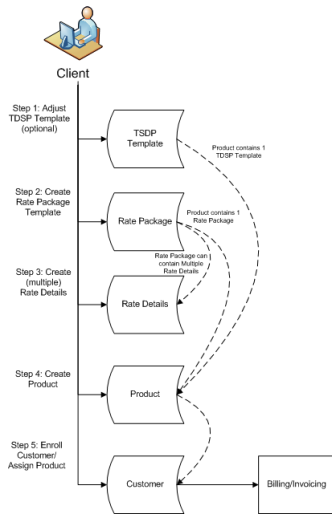
Product Overview

Learn about products and their configuration in CIS.

Suppliers apply pricing for their energy commodities and Customer services. This is referred to as a "Product." Products are customized to meet the needs of the Customer and frequently change to stay competitive.

Products offered to residential Customers are different from those offered to commercial Customers due to volume differences. Products differ based on utility territories and markets served due to the different utility tariffs and market rules.

A product is comprised of several components such as the commodity and/or service(s) being offered and the rate package or rate detail.

A product is further comprised of business rules and/or marketing attributes that define to whom the product is available.

In order for billing to occur the Customer must receive monthly consumption from the Utility for the commodity being served and have a current Product assigned for that commodity. Proper management of Products and their assignment to the Customer is important.

Below is a list of business rules that are included in a product:

- Business Division – Business Entity of the ESP offering the Product
- Customer Type – Residential or Commercial
- Commodity Type – Gas or Electric
- LDC Rate Class – Customer Service Class assigned by Utility
- Offering Period – Begin and End date for Product Offering
- Terms – Length of Contract
- Cancellation Fees – Charges associated if contract is terminated early
- Rollover Product – Product used for billing at end of a contract period
- Special Offers – Promotional offers
- Documents - Customer documents sent upon the enrollment of a product
- Commissions – Sales channel commissions associated with the product
- TDSP Template – Define which utility charges are passed through to the Customer during billing

Products are first configured in the system and then assigned to Customers during the enrollment process.

Creating and Managing Products

Learn about creating and managing products.

CIS allows you to create and manage/edit products from the **Rate Package and Product Management** page.

Creating a Product

In CIS, creating a product involves three stages:

- Adding product details
- Adding billing charges to the product
- Reviewing the added details and charges before finalizing creation.

Follow these steps to create a new product:

1. Go to **Administration Menu > General > Rate Package and Product Management**.

2. In the **Product Management** tab, click **Add New Product**.

3. On the **Product Details** page:

a. Specify the following **Product Identification** details:

Field	Description
Product Code	Enter a Unique code to locate and assign this new product in CIS.
Product Name	Enter the name for this new product. This name appears on Customer invoices and is displayed to Customers during product selection.
Product Description	Enter the description outlining details of this new product to help Customers decide during product selection.
Incentives Section	Enter details of any incentives attached to this new product.
Price Description	Enter the description for price attached to this new product for sales.
Plan Type	Select an appropriate plan from the options available to categorize this new product.
CreditScore Threshold	Enter a threshold value of credit score for Customers to avail this new product.
Product Categories	Add new product categories or select the existing to link them to this new product.

b. Specify for whom this product is being created:

Field	Description
LDC	Choose the Utility Territories where this new product would be offered. **Note:** All the relevant Rate Classes linked to the selected LDC get applied to this new product.
Commodity Type	Choose the relevant commodity type for this new product.
UOM	Enter a Unit of Measure for this new product.
Customer Type	Choose whether this new product is for `Commercial` or `Residential` Customers. For more information on these Customer types. see Customer & Account Types on page 7.

Field	Description
Rate Class	Choose either `All Rate Classes` or a few `Selected Rate Classes` to link to this product.
Make this the default product for Customers of the Rate Class you selected.	Check this option if applicable.

c. Specify when and how long can this new product be offered for Sales using **From** and **To** date fields. In case you want the product to be always available for sales, check the **Does not expire** option.

d. Select an appropriate **Term** and attach any **Special Offers** you want to provide on this new product.

e. Specify the following additional information for this new product:

Field	Description
Product Specific Text	Enter text to tell Customers more about this new product.
Is Active for Enrollment	Check this option if you want to make this new product applicable for enrollment right after its creation.
Is Best Choice	Check this option to tag this new product as best choice.
Is Green	Check this option to indicate the same.
Product Zone	Select to limit the product offering to a specific zone.
Cash Back	Select if you want to offer cash back to Customers who avail this product.

f. Select a **Rollover Product** that a Customer of this new product would be enrolled to after its term expiration. Select "The Same product" from dropdown if the Customer needs to be enrolled to the same product after the term is expired.

g. Specify the following **Documents and Commission** details to be attached to the new product:

Field	Description
Welcome Letter	Select a specific 'Welcome Letter' to be sent to Customers of this new product.
Contract Renewal Letters Initial	Select a specific 'Renewal Letter' to be initially sent to Customers of this new product.
Contract Renewals Letters Second	Select a 'Renewals Letter' to be sent out to Customers after they have already been sent a renewal letter before.
ECF Notice Letters	Select an ECF Letter to be sent to Customers of this new product.
Email Notices	Choose one or more from the list of Email notifications you want to link to this new product.
Commission Amount	Enter the commission rate to be paid to the Sales Channel of this new product.
Deposit Amount	Enter an appropriate deposit amount required to avail this product.

h. Click `Save and Continue` to proceed to adding charges to the product.

4. On the **Product Charges** page:

a. Specify **Account Charges for this product**.

- **Cancel Fee** - Select a relevant cancel fee, if applicable.
- **Distribution Charges Passthrough Template** - Select an appropriate template for distribution charges.

b. Use the **Rate Package Code**, **Rate Package Name** and **Rate Package Desc** search fields to find and select the Rate Package you want to use with this product for billing purposes. For more information on Rate Packages, see

c. Click `Save & Continue` to move to the product review stage.

5. On the **Review** page, validate the details configured for the product in the previous steps before finalizing creation. If required, use the **Edit** option available for each of **Product Details** and **Product Charges** section to do changes.

6. Click `Finished` when done.

Editing or Cloning a Product

Apart from creating a new product from the **Product Management** tab on the **Rate Package and Product Management** page, you can also use the `Search` feature to look for existing Products in CIS.

Enter the exact **Product Code** or its first few characters to find the relevant Products. The search results include Products that matched your searched text. You can further filter the search results using the **Brand**, **LDC**, **Status** and **Product Category** search fields.

You can also leave all the fields empty and click on `Search` button to fetch all the product codes and their corresponding details in the system.

In the search results grid, you can:

- clone or edit any product from **Action** column.
- click the **Product Code** to open details of a particular Product. The fields and sections that are eligible for editing display an edit icon that can be used to change the current details.

Rate Overview

Learn about rates and their configuration in CIS.

Rate refers to the pricing and calculation method used for the charges billed to the Customer.

Rates comprises of unit charges, certain fixed charge, adder charges and variable charges. The combination of one or more such charges form the rate package.

A CIS inovice displays all the applied charges for a billing period as per the rate package applied.

Rate Types

Learn about different types of rates - calculations and configuration.

In a Customer invoice, billing rate is applied to energy consumptions to calculate energy charges. CIS supports both simple billing rate types such as **Fixed Rate** and **Index Price Rate** and advanced billing rate such as **Block Price Rate** and **Tiered Rate**.

Fixed Price Rate

This is the most simple and common billing rate type. In **Fixed Price Rate**, the rate is fixed for a defined period of time.

Fixed price rate Configuration

Fixed Rate can be created from the **Add / Edit Charge Detail** window in the **Rate Package** tab while creating Rate Package. See Creating and Managing Rate Packages on page 69.

On **Add / Edit Charge Detail** window the Fixed price Calculation should be selected from **Type** dropdown menu.

Other details should be filled as per the product requirement. Block Pricing and Tired checkbox should be checked, if required.

Fixed Pricing Calculations

Product Type	Rate Types & Calc Method	Product Elements
• **Non-Tiered Energy** – fixed energy price charged irrespective of consumption quantity • **Tiered Energy** – multiple fixed energy prices charged based on varying levels of consumption quantity • **Seasonal Energy** - multiple fixed energy prices charged based on specified time periods	• **Energy Charge times Consumption -** `Fixed energy price * monthly consumption.` • **Energy Charge times Consumption by Meter Type -** `Fixed energy price * monthly consumption.` Takes meter type into consideration. (metered or unmetered) • **Energy Charge Majority -** `Fixed energy price * monthly consumption,` when service period spans 2 rate details, price used determined by rate detail having the majority days in the period. • **Energy Charge Proration -** `Fixed energy price * monthly consumption,` when service period spans 2 rate details respective prices are prorated by days in respective period. • **Energy Charge Proration By Meter Type -** `Fixed energy price * monthly consumption,` when service period spans 2 rate details respective prices are prorated by days in respective period. Takes	• Charge Category • Charge Description • Plan Type • Rate Type • Rate Amount • Unit of Measure • Secondary Rate • Effective Date • Expiration Date • Customer Type • Lower Range (if Tiered) • Upper Range (if Tiered)

Product Type	Rate Types & Calc Method	Product Elements
	meter type into consideration (metered or unmetered) • **Energy Charge CAA/CSA/EMA Filter** - `Fixed energy price * monthly consumption`. Takes Service type (Plan Type) into consideration. • **Fixed Price Calculation** - `Fixed energy price * monthly consumption`. Part of the "1000" Rate Type series that can be blended and pro-rated with the other Rate Types in this series.	
Monthly Fixed Adder – miscellaneous fixed monthly charges assessed based on certain criteria		• Charge Category • Charge Description • Rate Type • Rate Amount • Unit of Measure • Effective Date • Expiration Date • Customer Type

Product Type	Rate Types & Calc Method	Product Elements
	• **Flat Charge Per Customer** – fixed monthly charge per Customer • **Flat Charge Per ESI ID** – fixed monthly charge for each ESI ID on the Customer Account • **Flat Charge Metered Premise** – fixed monthly charge for each metered ESI ID on the Customer Account • **Flat Charge Unmetered Premise** – fixed monthly charge for each non-metered ESI ID on Customer Account • **Flat Charge Per ESI ID By CSA/EMA** – fixed monthly charge per service type. • **Annual Credit Cap** - ceiling amount set to cap certain types of charges.	
Daily Fixed Adder – miscellaneous fixed daily charges assessed based on certain criteria. Primarily used in the CSA/EMA service types to prorate Customer charge between two Customers for a single service period.	• **Flat Daily Charge** – fixed daily charge per Customer. • **Flat Charge Daily Rate** – `fixed daily price * consumption charged per Customer.` • **Flat Charge Daily Rate CSA / EMA Filter** – `fixed daily price * consumption charged per service type.`	• Charge Category • Charge Description • Rate Type • Rate Amount • Unit of Measure • Effective Date • Expiration Date • Customer Type

Index Price Rate

Also known as variable rate. Variable products, that change frequently, use index rate.

The Index Priced rate is base rate plus adder, where the base rate is supplied by data stored in tables instead of in the rate details. These tables are intended to be updated on a regular basis either by user interface, file upload, or automated data retrieval mechanism.

The adder is designed to encompass margin and optionally other factor that would be added to an index value to come up with a total, variable rate to charge Customer.

Indexed Rates are calculated at Invoice generation and stored in the **InvoiceDetail** table.

In the Customer bill calculation, the `energy charge = (Rate + Adder) * Consumption 3-2`

Rate Index Range Maintenance

"Rate Index Range Maintenance" user interface is used by Client to enter the rate amount for the "custom" indices. For details refer Rate Index Range Maintenance on page 78 page.

When entering values for an index, ensure that `From` and `To` dates must be same for consecutive entries.

Figure 1: Index Rate Type Example

For some clients the rate amount can be optionally prorated when it changes during a meter read date range. Similarly for other clients, the rate amount cannot be optionally prorated but the rate amount to use for the entire consumption period is determined by a lookup using the End Date of the Consumption instead.

For Example,

* Consumption Period: `1/1/2008 - 1/31/2008`
* Rate Index Type: `Texas Electric Index`
* Range Index Range Values:

Index Price Rate Example

Date From	Date To	Rate Amount
12/7/2007	1/15/2008	.756
1/15/2008	1/31/2008	.715
1/31/2008	2/17/2008	.723

The Rate Amount is `.723`. For CIS to keep the system flexible enough to handle proration (and another feature discussed in Block Price Rate on page 39), consecutive values have be same for `Date To` and `Date From`. To ensure the correct amount is returned during the lookup, one day is subtracted from the `Date To` when compared to the `End Date` of the Consumption.

Index Pricing Calculations

Product Type	Rate Types & Calc Method	Product Elements
Market Clearing Price for Energy (MCPE) - is a rate for the particular 15 minute ERCOT Settlement Interval for the congestion management zone in which the meter is located.	**MCPE Consumption Interval Rate** - `Energy Charge = summation of [interval meter reads * ERCOT Interval MCPE price]` **Index Maintenance**: ERCOT Interval MCPE Pricing loaded daily to CIS via web service. **Note:** Interval meter read can be generated from a single monthly meter read using published profiles in a process called loosely "intervalization" of a monthly read.	• Charge Category • Charge Description • Rate Type • Unit of measure • Secondary Rate • Customer Type • Minimum Amount • Maximum Amount • Fixed Adder • Fixed Cap Rate • Effective Date • Expiration Date
External Index Pricing – CIS currently provides a mechanism to price electricity based on an external index.	**Flat Pricing Structure (Heat Rate)** – this Rate type is based on the Heat Rate Index which is a fixed conversion rate from fuel to electricity (BTUs per kWh). The contracted rate may be fixed or may vary each month. To capture the benefit of the actual Gas Price for a given month, consumption is calendered. If a meter read crosses two months, the system sums the total of each month for IDR meters and prorate each month's period for non-IDR meters. Once the monthly period consumption is calculated, each period must be multiplied by the NYMEX index for that matching month. **Index Maintenance**: Heat Rate Index maintained via UI by Client. **Note:** This rate type uses the same "1000 Series" rate calculation type as the LBMP variable pricing but utilizes a manually keyed index data source	• Charge Category • Charge Description • Rate Type • Unit of measure • Secondary Rate • Customer Type • Fixed Adder • Fixed Cap Rate • Effective Date • Expiration Date

Product Type	Rate Types & Calc Method	Product Elements
Locational Based Marginal Pricing - (LBMP) - a variable pricing mechanism that prices energy congestion and marginal losses at every generator bus in the New York service area (also known as ESS).	**Index Price Calculation** – calculation based on daily rates published by LDC. Part of the "1000" Rate Type series that can be blended and prorated with the other Rate Types in this series. **Index Maintenance**: LBMP pricing provided via data file (daily pricing) extracted from NY LDCs' web sites. (currently loaded via file and FTP upload) **Note:** This rate type uses the same "1000 Series" rate calculation type as the External Index (Heat Rate) variable pricing but utilizes bulk data source and file up load process.	• Charge Category • Charge Description • Unit of measure • Blended Percentage • Time of Use • Rate Type • Index Type • Margin • Effective Date • Expiration Date

Block Price Rate

Here the rate is a comparison of actual usage against projected usage.

A Block Price rate calculation compares the consumption (actual usage) against the contract volumes (expected usage).

"Swing" percentage can be specified to create an expected usage range.

```
Assuming, expected usage = 500, swing percentage = 10%, there-
fore,

swing range = 450 - 550

expected usage range upper = 550, expected usage range lower =
450.
```

If the actual usage falls within the expected usage range, no additional charges are applied. If the actual usage is outside the expected usage range, an additional charge is applied to the Customer's invoice. Overtake charges are applied when the actual usage is greater than the expected usage range upper amount. Undertake charges are applied when the actual usage is less than the expected usage range lower amount. All overtake and undertake charges are based on a Custom Index plus an adder.

Overtake and Undertake Charges explained with graphical representation

The image below illustrates Customer's monthly expected energy usage or contracted volume of year 2007 and partial year 2008. For the contracted volume, negotiated fixed Rate A is applied to that volume contracted (kWh or Therms). If the actual usage is outside the expected usage range, an additional charge or credit is applied to the Customer's invoice at optionally a different fixed rate or index-base rate (most common usage would be for overages to be billed at a market value index based rate).

Figure 2: Customer Annual Expected Usage
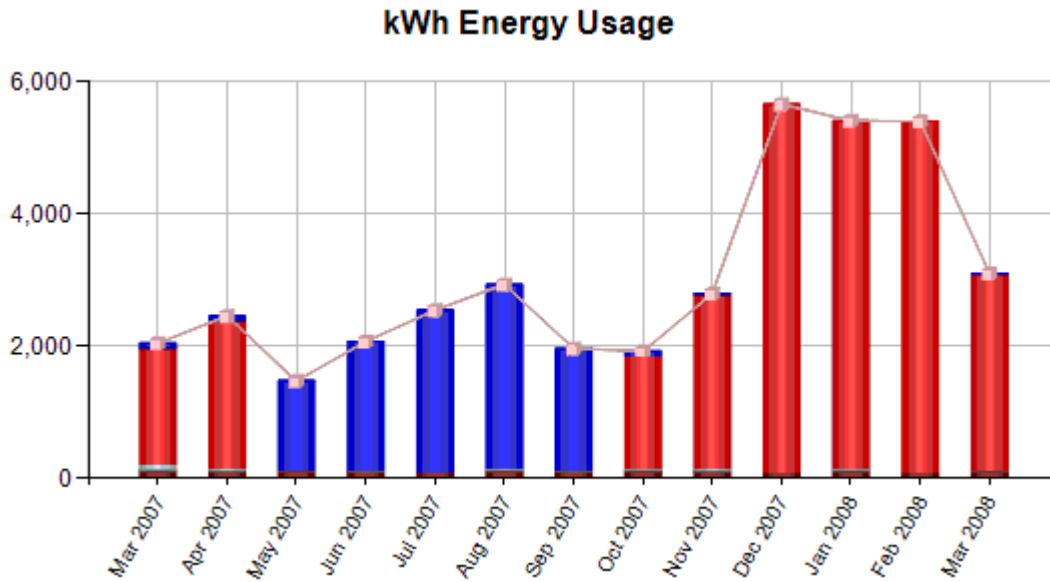
Overtake charges are applied when the actual usage is greater than the expected usage range upper amount. As shown in the image below, the blue part illustrates the overtake energy. Here Index Rate B plus an adder is applied to Customer on the overtake energy charge calculation.

Figure 3: Energy Consumption Overtake
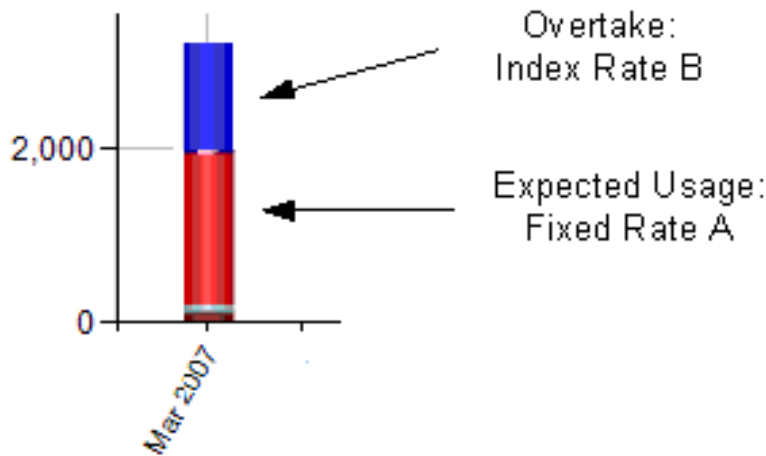
Undertake credits are optionally applied when the actual usage is less than the expected usage range lower amount. In the image below, the green part illustrates the undertake energy. Here index rate C plus an adder is applied to Customer on the undertake energy charge calculation.

Figure 4: Energy Consumption Undertake
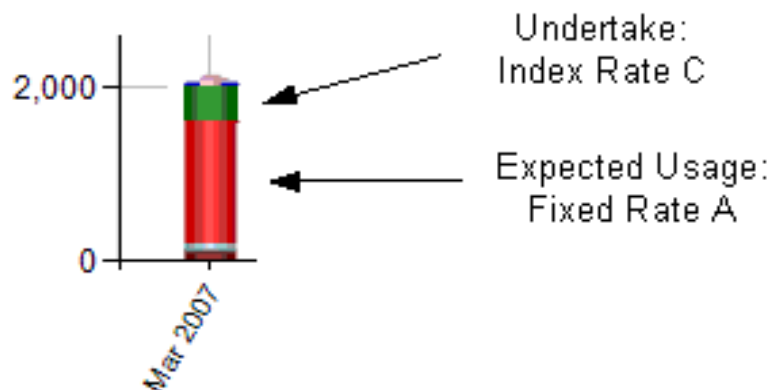
An optional "swing" percentage can be specified to create an expected usage range. If the actual usage falls within the expected usage range, the fixed price is used for the entire volume.

Figure 5: Change on Expected Energy Usage
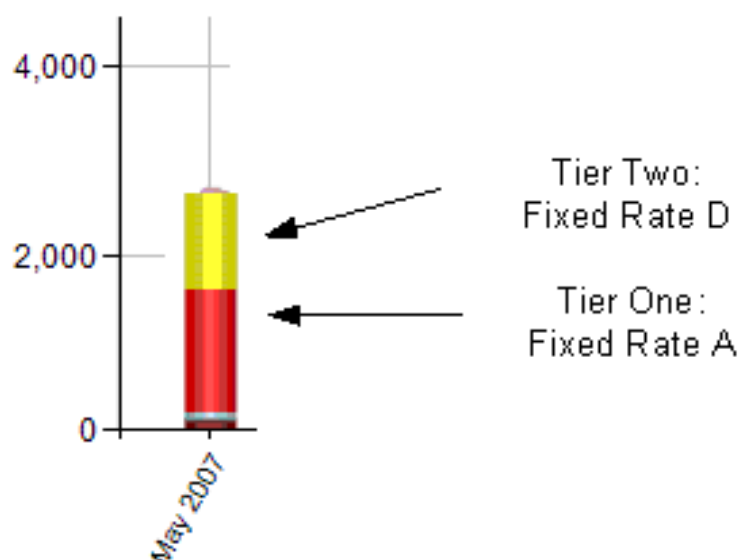
A Customer may negotiate and change his expected usage during the contract term. Locking in another fixed block of volume when he feels prices are at a low point or he feels he has too much future volume exposed or risked at market prices.

For example, starting from May 2007, the Customer increases its expected usage (the yellow section in the image above). For the increase expected usage he is locking in price at fixed Rate D. In this case, the Customer creates a tier rate structure: for tier one, fixed rate A is applied and for tier two, fixed rate D is applied.

In CIS, there is no limit on tiers.

Note: Currently, Block Price rate calculations only work with Fixed Price Rate and Index Price Rates only.

Block Price Rate Components
Learn about components of block rate.

Block Price Rate has the following components: Base Rate, Overtake Index Type with Adder and Undertake Index Type with Adder.

The following example shows a Customer with block price rate settings:

Cus-tomer	Date From	Date to	Base Rate	Expect-ed Us-age	Over %	Un-der %	Over In-dex	Un-der In-dex	Over Adder	Un-der Adder	Actu-al Us-age
John Smith	9/1/2007	10/1/2007	0.985	4480	10	10	GDD MAX	GDD MIN	.0123	-0.0123	5450
John Smith	10/1/2007	11/1/2007	0.935	5150	15	15	GDD MAX	GDD MIN	.0123	-0.0123	

Base Rate

In the example above, John Smith uses fixed rate as his base rate (`$0.985/kWh` from `9/1/2007` to `10/1/2007`, and `$0.935/kWh` from `10/1/2007` to `11/1/2007`).

Base Rate Sample

Overtake Index Type

The overtake index type is used to obtain the overtake rate for the overtake amount of usage calculation. Index rate look up can be different for different Customer groups (such as "core" and "non-core" Customers for some natural gas LDCs). Undertake and overtake charges are similar to other Index rate charges.

Undertake Index Type

The undertake index type is used to obtain the undertake rate for the undertake amount of usage calculation. Index rate look up can be different for different Customer groups (such as "core" and "non-core" Customers for some natural gas LDCs).

Overtake Adder

This is the extra adder on top of the overtake rate. For instance, if the overtake rate is $0.76 and the overtake adder is $0.0123, then the total overtake charging rate amounts to 0.7723 ($0.76 + $0.0123)

Undertake Adder

This is the extra negative adder on top of the undertake rate. For instance, if the undertake rate is $0.76 and the undertake adder is -$0.0123, then the total undertake charging rate is 0.7477 (= $0.76 - $0.0123)

In the example shown above, John smith's overtake rate index is GDD Max, and Undertake Index is GDD Min, the overtake adder is 0.0123 and undertake adder is -0.0123

The following image shows the CIS block price rate setting interface:

Block Price Rate Example

Customer Contract Volumes Maintenance

	From	To	Expected Usage	Min %	Max %	Undertake Type	Overtake Type	Undertake Margin	Overtake Margin
Edit	6/1/2009	7/1/2009	110	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	5/1/2009	6/1/2009	180	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	4/1/2009	5/1/2009	510	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	3/1/2009	4/1/2009	510	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	2/1/2009	3/1/2009	610	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	1/1/2009	2/1/2009	600	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	12/1/2008	1/1/2009	540	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	0.123
Edit	11/1/2008	12/1/2008	490	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	-0.123
Edit	10/1/2008	11/1/2008	220	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	-0.123
Edit	9/1/2008	10/1/2008	160	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	-0.123
Edit	8/1/2008	9/1/2008	110	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	-0.123
Edit	7/1/2008	8/1/2008	40	0	0	GDD Min PG&E Citygate	GDD Max PG&E Citygate	-0.123	-0.123

Block Price Rate User Interface and Setup
Learn how to configure block rate details.

Customer Block Price Rate Interface Example

The image below shows an example of Customer with Block Price rate. From `12/16/2010` to `01/16/2011`, the Block Price is set up in two parts: from `0` to `7660` therm, a fixed rate of 0.717 with 0 margin is used. And from `7661` to `9999999999` therm, index price calculation Block Price is used.

Rate Administration: Rate Detail

Edit ✳ Add Detail Done

CSP

SGE

Rate Code

CUST_10721

Description

LDC Rate Code

Templated Rate
☑

Show Inactive Rate Details
☐

Effective Date

12/16/2010

Expiration Date

01/16/2011

Plan Type

Rate Type

Details

All

Description	Category	Rate	Graduated	Taxable	Date From	Date To	Range From	Range To	Active
Electric Energy Charges	Charges	0.071700000		Y	12/15/2010	01/16/2011			True
Electric Energy Charges	Charges	0.000000000		Y	01/17/2011				True

As described in Block Price Rate Components on page 42, Block Price Rate has the following components: Base Rate, Contract Volume, Overtake Index Type and Adder and Undertake Index Type and Adder.

Follow these steps to set up the Block Price Rate properly.

1. Go to **General > Client Rate Administration** to set up base rate, overtake index type and undertake index type.

   Base Rate Set up – Based on Index Price Rate.

   Rate Administration: Rate Item Detail

   Save Clone and Deactivate Cancel

   Category*
   Energy Charge
   Description*
   Base
   Unit*
   Time
   Blended Percentage

   Taxable
   ☑
   Time Of Use
   51
   Type*
   Index Price Calculation Swing
   Index Type*
   NGI PG&E Citygate
   Margin
   .012
   Lower Range

   Upper Range

   Date From
   February 5 2008
   Date To
   March 5 2008   ☐ Does not expire
   Active
   ☑

	Rate Type	Index Type	Margin	Lower Range	Upper Range	Rate	Blend %	Date From	Date To	Active	Rate Variable
	Index Price Calculation Swing	NGI PG&E Citygate	0.012			0.000000000		01/01/2001		True	

   Base Rate Set up – Based on Fixed Price Rate

2. Go to **Activity > Contract Volume Management** to set up Block Price Rate and fill in the rate details.

Contract Volume Management List Example

Contract Volume Management Set up Details

Edit									
Edit	3/1/2008	4/1/2008	510	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	2/1/2008	3/1/2008	610	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	1/1/2008	2/1/2008	600	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	12/1/2007	1/1/2008	540	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	11/1/2007	12/1/2007	490	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	10/1/2007	11/1/2007	220	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	9/1/2007	10/1/2007	160	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	8/1/2007	9/1/2007	110	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	7/1/2007	8/1/2007	40	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011
Edit	6/1/2007	7/1/2007	110	0	0	GDO Min PG&E Citygate	GDO Max PG&E Citygate	-0.011	0.011

1 2

[Add]

New Contract Data

From: February 5 2008
To: February 5 2008
Expected Usage: 100
Min %: .05
Max %: .05

Undertake Type:
GDO Max NoAve SoCal Border
GDO Min NoAve SoCal Border
GDO Mid NoAve SoCal Border
GDO Max PG&E Citygate
GDO Min PG&E Citygate
GDO Mid PG&E Citygate
GDO Max SoCal Border
GDO Min SoCal Border
GDO Mid SoCal Border
Texas Electric Index
Nimo Variable Index

Overtake Type:
GDO Max NoAve SoCal Border
GDO Min NoAve SoCal Border
GDO Mid NoAve SoCal Border
GDO Max PG&E Citygate
GDO Min PG&E Citygate
GDO Mid PG&E Citygate
GDO Max SoCal Border
GDO Min SoCal Border
GDO Mid SoCal Border
Texas Electric Index
Nimo Variable Index

Undertake Margin: -.012
Overtake: .012

Note: Please be aware that in , even though the Min and Max has percentage sign, the actual number should ignore this percentage sign. For instance, for a 5% range, user should type in 0.05 instead of 5.

3. Assign the Block Price Rate index contract to the Customer.

Block Price Rate Calculation Examples
Learn how to calculate block rate.

Due to different client requirements, the default overtake and undertake calculations can be overridden for each client.

For each consumption that is invoiced, an Invoice Charge is calculated as it normally would be for Fixed Price or Index Price. After the Invoice Charge(s) is calculated, the contract volume is compared against the consumption and, if needed, the additional charge is added to the invoice. Contract volume information is always determined using the TO DATE of the consumption period.

Following are some examples on how the undertake and undertake calculations are conducted.

Base Rate Calculation Example
Lean how to calculate core rate for block rate.

In this example, the Customer consumption period is 12/7/2007 to 1/8/2008, the table below shows the index range values.

DateFrom	DateTo	IndexRate
12/7/2007 0:00	12/8/2007 0:00	0.733
12/8/2007 0:00	12/9/2007 0:00	0.73
12/11/2007 0:00	12/12/2007 0:00	0.717
12/12/2007 0:00	12/13/2007 0:00	0.732
12/13/2007 0:00	12/14/2007 0:00	0.742
12/14/2007 0:00	12/15/2007 0:00	0.762
12/15/2007 0:00	12/16/2007 0:00	0.726
12/18/2007 0:00	12/19/2007 0:00	0.726
12/19/2007 0:00	12/20/2007 0:00	0.732
12/20/2007 0:00	12/21/2007 0:00	0.73
12/21/2007 0:00	12/22/2007 0:00	0.728
12/22/2007 0:00	12/23/2007 0:00	0.722
12/9/2007 0:00	12/10/2007 0:00	0.73
12/10/2007 0:00	12/11/2007 0:00	0.73
12/27/2007 0:00	12/28/2007 0:00	0.72
12/28/2007 0:00	12/29/2007 0:00	0.71
12/16/2007 0:00	12/17/2007 0:00	0.726
12/17/2007 0:00	12/18/2007 0:00	0.726
12/23/2007 0:00	12/24/2007 0:00	0.722
12/24/2007 0:00	12/25/2007 0:00	0.722

DateFrom	DateTo	IndexRate
12/25/2007 0:00	12/26/2007 0:00	0.722
12/26/2007 0:00	12/27/2007 0:00	0.722
12/29/2007 0:00	12/30/2007 0:00	0.734
12/30/2007 0:00	12/31/2007 0:00	0.734
12/31/2007 0:00	1/1/2008 0:00	0.734
1/1/2008 0:00	1/2/2008 0:00	0.734
1/2/2008 0:00	1/3/2008 0:00	0.734
1/3/2008 0:00	1/4/2008 0:00	0.78
1/4/2008 0:00	1/5/2008 0:00	0.776
1/5/2008 0:00	1/6/2008 0:00	0.764
1/6/2008 0:00	1/7/2008 0:00	0.764
1/7/2008 0:00	1/8/2008 0:00	0.764
		0.73525

The core rate is the average of the rate within this time period (`12/7/2007 - 1/8/2008`) which is `0.73525`.

`Core Rate = Average (Rate from 12/7/2007, Rate to 1/8/2008)`

Block Price Rate Undertake Calculation Example
Learn how to calculate undertake price.

Client overrides the default Undertake calculation.

For Undertake, the Customer invoice has two charges

- Actual usage at base rate

- Under usage charge at base price – undertake price

For undertake, the Customer is charged the actual usage at base rate, and the difference outside the Block Price rate at the rate equals to (base rate − undertake rate). For Example:

- Base Fixed Rate: `0.985 per therm.`

- Expected Usage Range: `13,500 − 16,500`

- Actual usage: `12,506`

- Undertake Rate (with adder): `0.789 per therm.`

Then, the undertake volume is: `13,500 − 12,506 = 994 therm.` The two charges are:

- Actual usage of 12,506 therm at the base rate of 0.985, the actual charge is: `12,506 * 0.985 = $12,318.41`

- Under usage charge of 994 therms at base price − undertake price: `994 * (0.985 − 0.789) = $194.824`

Total charge is: `$12,318.41 + $194.824 = $ 12,513.234`

Another way to calculate is: Customer is responsible for his expected usage of 13,500; he is charged at the rate of 0.985. However, his actual usage is 994 lower than this, therefore he is refunded this difference at the undertake rate. His charge is:

`(13,500 * 0.985) − (994 * 0.789) = $ 12,513.234`

Default Overtake Calculation Example
Learn how to find default overtake rate.

Client uses the default Overtake calculation.

For overtake, the Customer's invoice has two charges

- Actual usage at base rate

- Over usage charge at over usage rate

For Example:

- Base Fixed Rate: `0.985 per therm.`

- Block Price Range: `13,500 − 16,500`

- Actual usage: `18,506`

- Overtake Rate (with adder): `0.789 per therm.`

Then, the overtake volume is: `18,506 − 16,500 = 2006` therm. The two charges are:

- The 16,500 therm at the rate of 0.985, the actual charge is: `16,500 * 0.985 = $16,252.50`

- Charge for the exceeded 2006 therms using overtake rate of `0.789` is: `2006 * 0.789 = $1583.523`

Total charge is: `$16,252.50 + $1,583.523 = $17836.023`

Please be aware that the overtake rate is normally an index price rate based on the real time price.

Default Undertake Calculation Example
Learn how to find default undertake rate.

For undertake, the Customer is charged the actual usage at base rate, and the difference outside the Block Price rate at the undertake rate. For Example:

- Base Fixed Rate: `0.985 per therm.`
- Block Price Range: `13,500 - 16,500`
- Actual usage: `12,506`
- Undertake Rate (with adder): `0.789 per therm.`

Then, the undertake volume is: `13,500 - 12,506 = 994 therm.`

Utility charges the Customer for 12,506 therm at the rate of 0.985, the actual charge is:

`12,506 * 0.985 = $12,318.41`

Since Customer used less than expected, the utility needs to charge Customer for the under usage:

`994 * 0.789 = $784.266`

Total charge is: `$12,318.41 + $784.266 = $13,102.676`

Please be aware that the undertake rate is normally an index price rate based on the real time price.

Multiple Accounts Block Price Rate Aggregation
Learn how to apply block rate on multiple accounts for a Customer.

Some Customers may have multiple accounts when using Block Price rate. In this case, invoicing is done based on the actual usage, and any undertake or overtake needs to be divided evenly across all accounts. Similarly, the expected usage amount also needs to be the summation of expected usage of all accounts.

In this scenario, the Block Price rate calculation comparison is between overall actual usage across accounts and the overall expected usage across accounts. The updated expected usage for each account is then considered as the actual usage plus (or minus) the difference per account.

Following is one example to illustrate how Block Price rate consolidation is calculated. Assuming, Customer has three accounts - `9325007000`, `9805073008` and `9869584000`.

- Usage for accounts: `32604 therms`
    - `9325007000:50 therms`
    - `9805073008:8929 therms`
    - `9869584000:23625 therms`

- Expected Usage for accounts: `36800 therms`
    - `9325007000:36800 therms`
    - `9805073008:36800 therms`
    - `9869584000:36800 therms`

- Expected Usage Range with `10% "Swing":33120 to 40480`
- Undertake: `33120 - 32604 = 516`
- Divide undertake by `3:516/3 = 172`
- Update expected usage to actual usage + undertake per account
    - `9325007000:50 + 172 = 222 therms`
    - `9805073008:8929 + 172 = 9101 therms`
    - `9869584000:23625 + 172 = 23797 therms`

In CIS, multi-Customer calculations are supported but done operationally outside of the system and then updated expected usage is reloaded.

On the CIS UI, the "Swing" percentage is 0%, since the UI is generic user interface and the updated calculation has considered the previous 10% already in the calculation and should not over-calculate again.

Tiered Rate

In this rate type, clients pay a different rate for different levels, called Tier.

Customers can choose a contract for a "structured" deal which results in tiered rates. In Tiered rates, the Customers pays a different price for usage at different "tiers". A client would specify the tiers by using the Upper Range and Lower Range amounts on the Rate Details. These Tiered rate Customers can also use the Block Price calculation. In this case, the Contract Volume expected usage must be greater than the lower range of the top tier.

Tiered Rate Calculations
Learn how to calculate tiered rate.

Tiered Rate Example:Table 1

Rate Type	Lower Range	Upper Range	Fixed Price
Fixed Price	0	2000	.98
Fixed Price	2000	5150	.93

Tiered Rate Example:Table 2

Customer	Date From	Date to	Base Rate	Expected Usage	Over %	Under %	Over Index	Under Index	Over Adder	Under Adder	Actual Usage
John Smith	9/1/2007	10/1/2007	0.985	4480	10	10	GDD MAX	GDD MIN	.0123	-0.0123	6450
John Smith	10/1/2007	11/1/2007	0.935	5150	15	15	GDD MAX	GDD MIN	.0123	-0.0123	3

In this example, Customer energy usage has two tiers: 0 – 2000, and 2000 – 5150, assuming 15% "swing" on tier two, which makes the sing range of upper range of tier two (4377.5 – 5922.5).

Overtake charges for Tiered rates works exactly the same as block rate. The only difference is that you have two "base" charges for the two tiers. As shown in the example above:

- John Smith's meter read on 10/01/2007 was for 6450. There is an overtake of 527.5 (6450 – 5922.5). There would be three charges on his Invoice:

  - "Base" Usage charge for 2000 at fixed price .98.
  - "Base" Usage charge for 3922.5 (5922.5 – 2000) at fixed price .93.
  - Overtake usage charge for 527.5 at the Overtake price.

Undertake charges for Tiered rates can be different depending upon which tier the actual usage was within. If the actual usage was greater than the lower range of the top tier, it would work exactly the same except you would have two "base" charges for the two tiers

If, however, the actual usage is *less* than the lower range of the top tier, the under-take charge must be spread across the tiers. Continuing our example:

- Assuming, John Smith's meter read on 10/01/2007 was for 1850. There is an undertake of 2527.5 (4377.5 – 1850). There would be four charges on his Invoice:

  - "Base" Usage charge for 1850 at fixed price .98.

  - Undertake usage charge for 150 at fixed price .98 – Undertake price (i.e. .98 - .745 = .225)

  - "Base" Usage charge for 0 at fixed price .93.

  - Undertake usage charge for 2377.5 at fixed price .93 – Undertake price (i.e. .93 - .745 = .185)

There is no limit to the number of tiers you can configure for a Customer. If the Tiered rate is to use Block Price too, ALL TIERS MUST BE SETUP AS BLOCK PRICE (see screen print below for how to do this). This could simplify for any fixed cases as necessary through "fixed" indexes or other means.

Any of the fixed and index rate types for Client can be configured as tiered. Tiered rate and Block Price rate can also combine into tiered Block Price rate.

Tiered Rate Setup User Interface
Learn how to configure tiered rate details.

To enable the Block Price rate calculation and specify "tiers", user can use the Client Rate Administration screen. Refer to access Rate Administration:Rate Item Detail page.

As shown in the image below, there is a checkbox for Block Price. Check this to use Block Price rate calculation. There are text boxes for Lower Range and Upper Range. If it is the top tier, leave Upper Range blank.

Tiered Rate User Interface

As shown in the image below, to specify the Contract Volumes, use the Contract Volumes Maintenance screen (**Activity > Contract Volumes Management**).

Tiered Rate User Interface

Heat Rate

Here the rate is tied to the efficiency of the power plant. Learn more about heat rates.

What is heat rate?

The term "heat rate" refers to a power plant's efficiency in converting fuel to electricity. Heat Rate is expressed as the number of British thermal units (Btu) required to generate a kilowatt hour (kWh) of electricity. Lower Heat Rates are associated with more efficient power generating plants.

What is a Heat Rate price?

In retail electric markets, Heat Rate products offer consumers an opportunity to link their power price to the price of natural gas. Rather than opting for a fixed price contract, Customers on a Heat Rate pay a price for electricity that varies based on the level of a gas price index such as the NYMEX natural gas index or Houston Ship Channel Index. This is called Heat Price.

Heat Rate Calculation
Learn how to calculate heat rate.

The heat rate component and the adder are stored in the rate detail, the gas index component is stored as a dynamic value in an index table by month.

The most common Heat Rate product is index price heat rate.

The Client sets up monthly heat rate price and the monthly rate amount. The heat rate is calculated using the following equations:

```
Heat rate = (Index price x rate amount) / 1,000 + Fixed adder
Hence, Energy Amount on Invoice = Heat Rate x Consumption
```

If Customer's consumption crosses two months, the invoice amount is also split into two months: `Customer invoice amount = heat rate1 x consumption1 + heat rate2 x consumption2`

Where:

- Rate amount is the Customer's rate amount for a month.

- Index price typically refers to a monthly index price

- Retail Adder may include items such as ISO fees, ancillary services costs, retail margin, losses, and shaping costs. The Retail Adder may vary based on the Heat Rate chosen. For example, higher Heat Rates result in lower retail adders.

The market implied Heat Rate refers to the forward power price divided by the forward gas price.

Heat Rate and Retail Adder should be fixed at the time of contract. The Gas Index price typically varies month to month and is not known until you get closer to the delivery month.

The NYMEX contract settles three business days prior to the start of the delivery month and the Houston Ship Channel price is typically published on the first business day of the delivery month.

Heat Rate Invoice Calculation

In the following example shown in Index Details figure below, the heat index amount for April is $9.5780, if Customer's rate amount for April is 8.48, and adder is 0.01118, then the heat rate for April is: `April heat rate = (9.5780 x 8.48) / 1,000 + 0.01118 = 0.092401`

Assuming, consumption for April is 200 KWh: `Hence, energy amount on In-voice for April = April Heat Rate x Consumption = 0.092401 x 200 = $18.4`

Figure 6: Index Details

Rate Index Type	Year	Month	Amount	Edit
Heat Rate	2008	April	$9.5780	[edit]
Heat Rate	2008	March	$8.9300	[edit]
Heat Rate	2008	February	$7.9960	[edit]
Heat Rate	2008	January	$7.1720	[edit]
Heat Rate	2007	December	$7.2030	[edit]
Heat Rate	2007	November	$7.2690	[edit]
Heat Rate	2007	October	$6.4230	[edit]
Heat Rate	2007	September	$5.4300	[edit]
Heat Rate	2007	August	$6.1100	[edit]
Heat Rate	2007	July	$6.9290	[edit]
Heat Rate	2007	June	$7.5910	[edit]
Heat Rate	2007	May	$7.5080	[edit]
Heat Rate	2007	April	$7.5580	[edit]
Heat Rate	2007	March	$7.5470	[edit]
Heat Rate	2007	February	$6.9170	[edit]
Heat Rate	2007	January	$5.8380	[edit]
Heat Rate	2006	December	$8.3180	[edit]
Heat Rate	2006	November	$7.1530	[edit]
Heat Rate	2006	October	$4.2010	[edit]
Heat Rate	2006	September	$6.8200	[edit]
		1 2		

Heat Rate Product Configuration
Learn how to configure rate details for heat rate.

From the equation as described in Heat Rate Calculation on page 54, the following parameters are required to be configured:

Index Amount: This is configured through the Rate Index Range Maintenance page. To configure Index Amount, do the following:

1. Go to Administration **Menu > General > Rate Index Range Maintenance**.

2. On the Rate Index Range Maintenance page, select the required Rate Index Type from the drop down, then click on **View** button.

3. Rate Index Type details and **Add** button is displayed. Click on **Add** button.

4. **New Rate Index Range** section is displayed. Fill in **From Date**, **To Date**, and **Amount** fields and click on **Save** button. This configures Index Amount.

Rate Amount and Fixed Adder : These parameters are configured through Client Rate Administration. To configure Rate Amount and Fixed Adder, do the Following:

1. Go to Administration **Menu > General > Client Rate Administration**.

2. On the Rate Administration page, click **New Rate**.

3. On the Rate Administration: Rate Detail page, set all the fields and click **save** button.

   - **CSP** - Select the relevant service provider for whom this new rate details is being created.

   - **Rate Code** - This is the name of the rate.Enter a unique code to locate and identify this new rate in CIS.

   - **Description** - Enter the description of this charge to be used by the Supplier to bill a Customer. For example, `Energy Charge`, `Monthly Meter Charge`, `City Taxes`, `County Taxes`, `NSF Charge`, `Late fee`.

   - **LDC Rate Code** - Enter an appropriate code as for rate changes, CIS either sends the LDC Rate Code or Rate Amount to the utility.

   - **Templated Rate** - Check this option to indicate the same.

   - **Effective Date** and **Expiration Date** - Specify the time span during which this Rate Details would be valid and active in CIS. The dates must be inclusive dates with no overlap.

   - **Plan Type** - Select the plan type from dropdown.

   - **Rate Type** - Enter the calculation method for a given Rate Description. For example - `Fixed`, `Variable`, `Indexed`.

4. On the **Rate Administration: Rate Detail** page, now click **Add Details**. Enter the below mentioned details and click on **Save** button.

   - **Category**: Energy Charges

   - **Description**: Meter Charges

   - **Type**: Flat Price Structure

   - **Unit**: kWh

- **Rate**: is the actual Rate Amount
- **Secondary Rate**: is the fixed adder.
- **Date From**: is the actual starting date.
- **Customer Type**: can be residential, C&I or both.

Note: Additional information on adding rate details can be found in Creating and Managing Rate Details on page 64

NYISO Rate Calculation Graphical User Interfaces

Learn how to calculate NYISO rate.

The Energy Market Cost and Rate Dash Board shows the energy cost and rate calculation program dash board information.

Energy Market Cost and Rate Dash Board
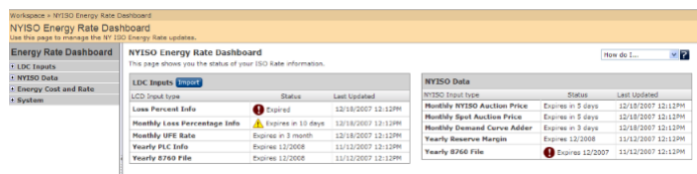
The Rate Calculation Component Import User Interface shows one example of user interfaces to import LDC information into the rate calculation engine. The components can be imported as individual files or imported as a batch.

Rate Calculation Component Import User Interface
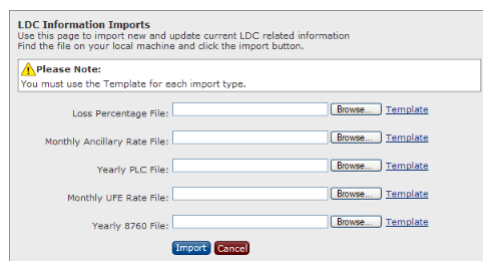
The LDC Ancillary Information Interface shows one example of user interfaces to import NYISO information into the rate calculation engine.

LDC Ancillary Information Interface
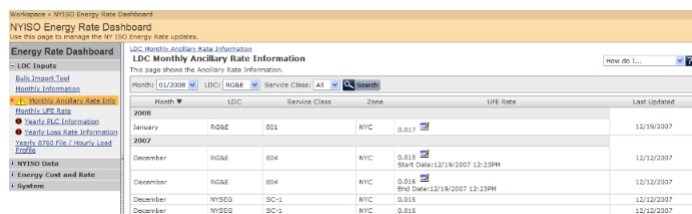
The LDC UFE Information Interface shows LDC monthly UFE Rate information.

LDC UFE Information Interface

The LDC UCAP Year PLC Data Interface shows LDC UCAP Year PLC Data information.

LDC UCAP Year PLC Data Interface

The LDC Loss Rate Data Interface shows LDC loss rate information.

LDC Loss Rate Data Interface

The image below shows one example of Load Profile Interval data.

LDC Load Interval Data Example

The NYISO UCAP Data Interface shows NYISO UCAP Data information including Seasonal Reserve Margin, Monthly Auction and Spot Auction Price and Demand Curve Adder.

NYISO UCAP Data

This shows one example of NYISO DAM Price.

NYISO DAM Price Example

The NYISO Real Time Price Data Interface shows one example of NYISO real time price information.

NYISO Real Time Price Data Interface

The image below shows one example of Daily Energy Cost and Rate Calculation.

The image below shows Customer billing cycle calculation details.

The image below shows one example of Hourly Energy Cost and Rate Calculation.

The image below shows one example of Energy Cost and Rate Calculation detail information for a billing cycle.

The System Event Interface shows one example of System Events.

MCPE Rate

Learn about MCPE rates.

CIS supports MCPE billing type for both interval Customers and non interval Customers.

For interval Customers, ista|net calculates the rate based on 15 minute rates based on Market Clearing Price and the 15 minute reads gathered from an Interval meter. These prices are called Shadow Market Prices.

In the case of NonInterval meters, CIS calculates a "Proxy" of 15 minute reads. These are calculated by using standard amounts multiplied out by the load profile of the meter in order to make the begin and end read of a NonInterval meter appear as 15 minute reads. This is called "backcasting".

CIS provides rich and easy to use graphical user interfaces to calculate, present and assign MCPE based billing type.

MCPE Rate Calculation for Interval Customers

Learn to calculate MCPE rate for Interval Customers.

There are multiple factors in the Interval calculation. These factors are configured on the rate itself via the CIS application.

```
Amount = ((Rate * LineLoss) + Adder) * Quantity
```

- `Rate`: Shadow price for this interval by load profile

- `Adder`: (i.e. profit) Amount added to each rate per interval

- `Line Loss`: Multiplier on the rate if you want to pass along line loss charges.

- `Floor`: Minimum amount to charge per kWh per interval. This comes into effect if the market sends a rate lower than this for the given interval.

MCPE Rate Calculation for Non Interval Customers

Learn to calculate MCPE rate for Non-Interval Customers.

In the absence of interval-level consumption data, a methodology can be used to calculate interval consumption based on a monthly meter read. This method is outlined within ERCOT Protocols Section 11 and is used by ERCOT and its market participants for load settlement and forecasting.

The following is a brief description of the methodology.

Each ESIID within the ERCOT market is assigned a load profile. Load profile includes profile type and weather zone. ERCOT maintains and publishes daily reports containing average interval consumption for each profile type and trade date. Some examples are: BUSHILF_NCENT, BUSIDRRQ_SOUTH, and NMLIGHT_NORTH.

Profiled non-interval data is calculated by dividing the ESIID's total KWh for a specific time period (usually a month) by the profile class' KWh for the same specific time period and scaling the load profile for that same specific operating day by the resulting value in order to create interval consumption data.

$$PND_{Operating\ Day} = (\ Actual\ KWH_{Specific\ Time\ Period}\ /\ CP\ KWH_{Specific\ Time\ Period})\ *\ LP_{Operating\ Day}$$

Where:

PND is Profiled Non-Interval Data

CP is Class Profile

LP is Load Profile (daily interval data set in KWh)

The value resulting from dividing the ESIID's total KWh for a specific time period by the profile class KWh for the same specific time period is also known as the scale factor.

The following example estimates usage for a given trade date (1/15/2005) based on an ESIID's non-interval usage consumption.

ESIID 10032789400900000

Market-Provided Information:

Profile Class is BUSMEDLF_COAST

NIDR Usage for Period 12/22/04 to 1/25/05 = 18,585 KWh

Profile Class Usage for Period 12/22/04 to 1/25/05 = 33,390 KWh

Profile Class Daily KWh for 1/15/2005 = 891 KWh

Calculations:

Scale Factor = (18585 / 33390)

Daily KWh = (18585 / 33390) * 891 = 496

Interval KWh: Scale Factor * Profile Class Interval KWh

INTERVAL	SCALE FACTOR	PROFILE CLASS KWH	PROFILED KWH
INT001	0.556603774	7.62	4.241320755
INT002	0.556603774	7.53	4.191226415
INT003	0.556603774	7.44	4.141132075
INT004	0.556603774	7.36	4.096603774
INT005	0.556603774	7.26	4.040943396
INT006	0.556603774	7.17	3.990849057
INT007	0.556603774	7.11	3.95745283
INT008	0.556603774	7.06	3.929622642
INT009	0.556603774	7.02	3.907358491
INT010	0.556603774	6.98	3.88509434
INT011	0.556603774	6.95	3.868396226
INT012	0.556603774	6.94	3.862830189
INT013	0.556603774	6.93	3.857264151

INTERVAL	SCALE FACTOR	PROFILE CLASS KWH	PROFILED KWH
INT014	0.556603774	6.92	3.851698113
INT015	0.556603774	6.92	3.851698113
INT016	0.556603774	6.94	3.862830189
…			

MCPE Billing Type User Interface
Learn to configure MCPE rate.

Go to Client Rate Administration page to set up Rate details. See Creating and Managing Rate Details on page 64.

On Rate Administration: Rate Detail Page, do the following:

- Set **Plan Type** field as "MCPE ISTA".
- Set rest of the fields as per your convenience. Click on **Save** button.

On Rate Administration: Rate Item Detail page, do the following:

- Set **Type** field as "MCPE Interval Consumption Rate".
- Set **Rate** field to a minimum threshold amount.
- Set **Secondary rate** field as per the required profit amount per interval.
- Set **Rate 3** field as per the Line loss multiplier amount.
- Set rest of the fields as per your convenience. Click on **Done** button.

Creating and Managing Rate Details

Learn about creating and managing rate details.

Rate Details refer to the rate structure assigned to a Customer (or Product) that specifies Utility Charge calculations, Customer Charge Calculations for billing purposes. It is also commonly referred as the Customer's rate. CIS allows you to create and manage Rate Details from the **Client Rate Administration** page.

Creating Rate Details

Creating Rate Details is a two stage process:

- Adding rate description details
- Adding rate charge details

To create new rate details:

1. Navigate to **General > Client Rate Administration** from the middle pane. Alternatively, go to **Administration Menu > General > Client Rate Administration**.

2. On the **Rate Administration** page, click **New Rate**.

3. On the **Rate Administration: Rate Detail** page, set the following identification fields:

- **CSP** - Select the relevant service provider for whom this new rate details is being created.

- **Rate Code** - This is the name of the rate. Enter a unique code to locate and identify this new rate in CIS.

- **Description** - Enter the description of this charge to be used by the Supplier to bill a Customer. For example, `Energy Charge`, `Monthly Meter Charge`, `City Taxes`, `County Taxes`, `NSF Charge`, `Late fee` etc.

- **LDC Rate Code** - Enter an appropriate code as for rate changes, CIS either sends the LDC Rate Code or Rate Amount to the utility.

- **Templated Rate** - Check this option to indicate the same.

- **Effective Date** and **Expiration Date** - Specify the time span during which this Rate Details would be valid and active in CIS. The dates must be inclusive dates with no overlap.

- **Plan Type** - Select an appropriate value to give a higher level description of this Rate Details.

- **Rate Type** - Enter the calculation method for a given Rate Description. For example - `Fixed`, `Variable`, `Indexed`.

4. Once done, click **Save**.

5. On the **Rate Administration: Rate Detail** page click **Add Details**.

6. On the **Rate Administration: Rate Item Detail** page, set the following fields to include a charge in Rate Details:

Category *
- None -

Description *
- None -

Type *
- None -

Rate *

Unit *
- None -

Secondary Rate

Rate 3

Fixed Adder

Fixed Cap Rate

Scale Factor 1

Scale Factor 2

Margin

Meter Register

Minimum Detail Amount

Maximum Detail Amount

Date From *

Date To

Charge Type

Taxable
☑

Tiered
☐

Customer Type
- All -

Active
☑

Use Meter Multiplier
☑

- **Category** - Select an appropriate category for the charge.
- **Description** - Based on the selected Category, select a relevant Description. Category and Description drive the Customer summary screen, invoice layout, accounting reports.
- **Type** - Select an appropriate type for the charge being created.
- **Rate** - Enter the fixed rate for the charge being created.
- **Unit** - Enter the unit for measuring this charge.
- **Secondary Rate** - Enter the rate amount in case the charge being defined is tiered.
- **Rate 3** - Enter the rate amount in case the charge being defined is tiered..
- **Fixed Adder** - Specify the additional amount to be added to the rate in case of indexed rate.
- **Fixed Cap Rate** - Enter a amount to be utilized for indexes. Indexes are used for variable products that change frequently. When an Index is changed, the Rate Details will refer to the Index.
- **Scale Factor 1** and **Scale Factor 2**- Enter additional factor to multiply it with the rate during invoicing.
- **Margin** - Enter a margin to keep the charge as adjustable.
- **Meter Register** - Enter the TOU register number for usage.
- **Minimum Detail Amount** - Enter a maximum amount that can be billed for this charge.
- **Maximum Detail Amount** - Enter a minimum amount that has to be billed for this charge.
- **Date From and Date To** - Specify the time span during which this charge would be valid and active in CIS. The dates must be inclusive dates with no overlap.
- **Charge Type** - Enter the Charge Type to define how to calculate a line item of this charge on an invoice.
- **Taxable** - Check this option to indicate if Invoice details generated by Rate Detail are taxable.
- **Tiered** - Check to indicate the same. If this option is checked then Lower, Upper Range field and Minimum and Maximum Days per period field will be displayed. These needs to be filled appropriately.
- **Customer Type** - Select an appropriate Customer type for which this charge would be applicable.
- **Active** - Check to indicate the same.
- **Use Meter Multiplier** -
- **Lower Range** and **Upper Range** - Define the tiered rate range.
- **Minimum Days Per Period** - Enter the minimum days a period must have.
- **Maximum Days Per Period** - Enter the maximum days a period must have.

7. To add more charges in Rate Details, follow the same steps.

8. Once done, click **Save**.

   You can also use **Clone and Deactivate** to keep the charge deactivated in the Rate Details. This provides you the same result as when you uncheck the `Active` option as explained in the steps above.

Managing Rate Details

Apart from creating a new rate from the **Client Rate Administration** page, you can also use the `Search` feature to look for an existing Rate Details. Enter the exact **Rate Code** or its first few characters to find the relevant Rate Code. The search results include Rate Code and their corresponding description.

Search can also be performed with the **Rate Code** search field empty, this will return all the rate codes and their corresponding description.
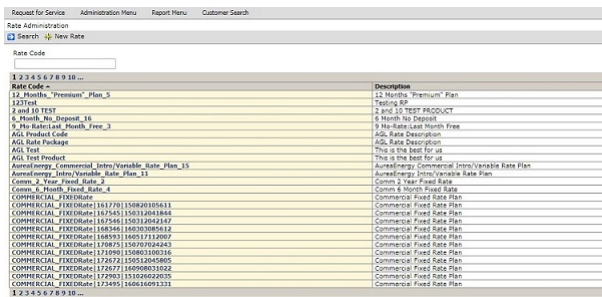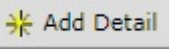
In the search results, click the **Rate Code** to open a particular Rate Details on the **Rate Administration: Rate Detail** page.

From this page, you can:

- change and update the current Rate Details using the button

---

Note: While editing, only editable fields are displayed as enabled and can be edited. Fields that are ineligible for edit appear as disabled and highlighted in yellow. Edited rate details are applied on future invoices for the account(s) tied to the Rate Code

---

- add more charges using the button
- edit existing charges added to the Rate Details
- view and edit deactivated charges using the `Show inactive rate details` option

Creating and Managing Rate Packages

Learn about creating and managing rate packages.

A **Rate Package** refers to logical grouping of one or more Rate Details that can be linked to a product and then used for billing Customers each month. A **Rate Package** defines the services and how these services are charged to the Customer. CIS allows you to create and manage Rate Packages from the **Rate Package and Product Management** page.

Creating a Rate Package

In CIS, creating a Rate Package involves three stages:

- Adding package details
- Adding charge details
- Reviewing the added details and charges before finalizing creation.

Follow these steps to create a new rate package:

1. Go to **Administration Menu > General > Rate Package and Product Manage-ment**.

2. In the **Rate Package Management** tab, click `Add New Rate Package.`
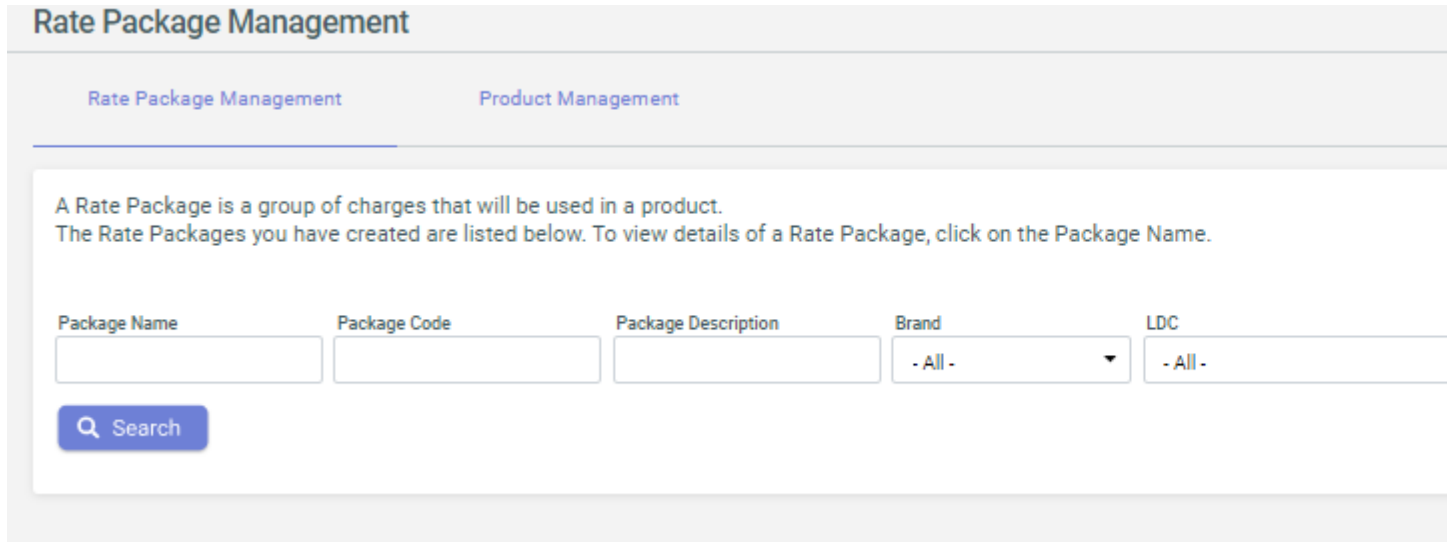
3. On the **Rate Package Details** page:
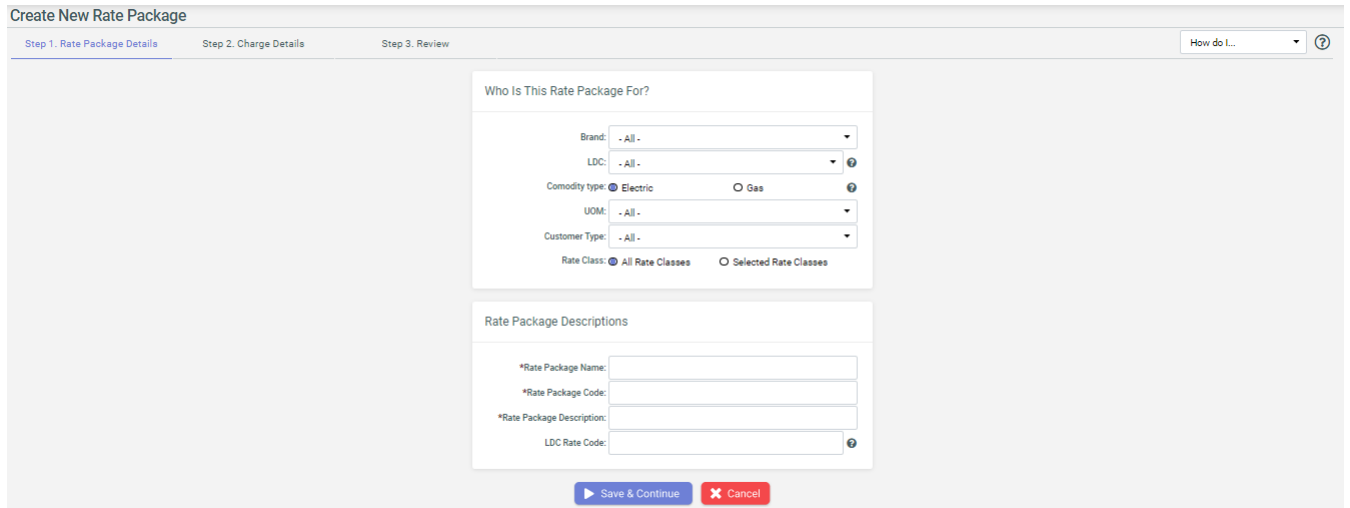
a. Specify the following **Rate Package Details**:

Field	Description
Brand	Select an appropriate brand for which this new rate package is being created.
LDC	Choose the Utility where this new rate package would be offered. **Note:** All the relevant Rate Classes linked to the selected LDC get applied to this new rate package.

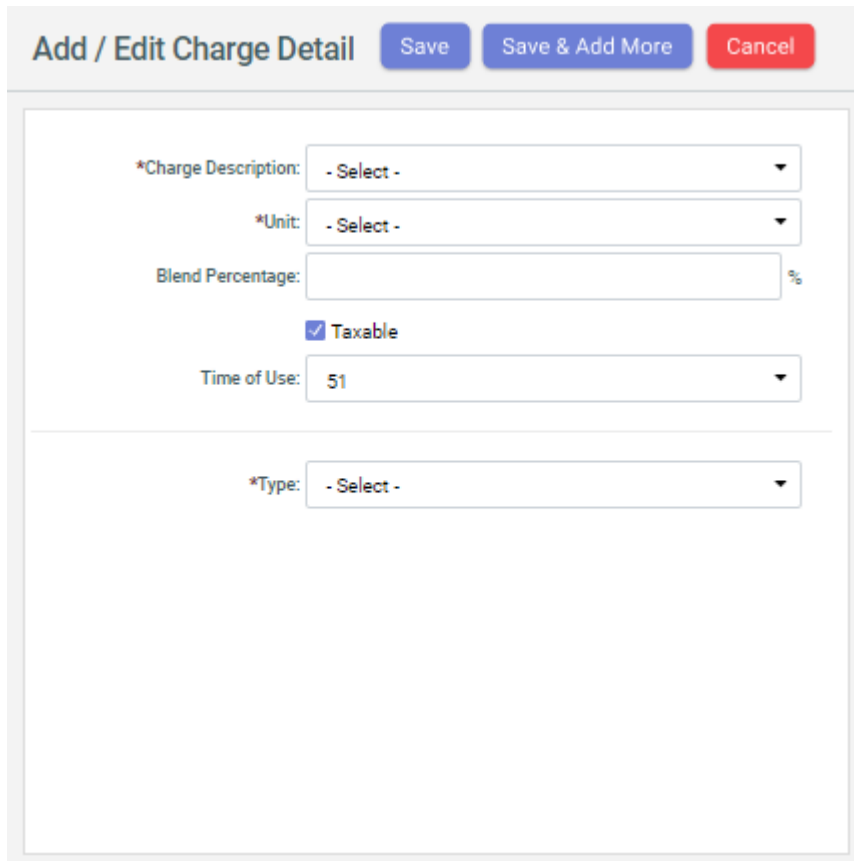| Field	Description
Commodity Type	Choose the relevant commodity type for this new rate package.
Customer Type	Select the appropriate Customer type. For more information on these Customer types. see Customer & Account Types on page 7.
UOM	Select the Unit of Measure for this new rate package, corresponding to the commodity type.
Rate Class	Choose either `All Rate Classes` or a few `Selected Rate Classes` to link to this rate package.
Rate Package Name	Enter a unique name to locate and identify this new rate package in CIS.
Rate Package Code	Enter a unique code to locate and identify this new rate package in CIS.
Rate Package Description	Enter the description of this rate package to be used by the Supplier to bill a Customer.
LDC Rate Code	Enter the LDC Rate Code (Pricing Group) for Rate Ready LDC's where appropriate. **Note:** For Rate changes, CIS either sends LDC Rate Code or Rate Amount to the utility.

Note: These field selections depends on the current configuration and business rules as set by the Supplier.

b. Click `Save and Continue` to proceed to adding rate charges in the rate package.

4. On the **Charge Details** page, click `Add Charge Detail.`

a. On the **Add/Edit Charge Detail** pop-up that appears, specify the following de-
tails:

- **Charge Description** - Select a relevant Rate Details from the list. All Rate
  Details added in the system appears here for selection. For more information
  see, Creating and Managing Rate Details on page 64.

- **Unit** - Select a unit of measure for measuring the selected Rate Details
  within the Rate Package.

- **Blend Percentage** - Specify a percentage of the selected rate detail that is
  applied to a Customer's usage during invoicing.

- **Taxable** - Check this option to indicate if Invoice details generated by selected
  Rate Detail would be taxable.

- **Time of Use** - Select the number of times the selected Rate Details can be
  used in the Rate Package during invoicing.

- **Type** - Select an appropriate calculation method for the Rate Detail/Charge
  Detail. Depending upon the selection an option to define index type, margin
  and rate is displayed.

- **ESS** radio button gives pre defined index type. If a user defined index name is to be created then **Custom index** radio button should be selected.

b. Click `Save` to save the current Rate Details in the package or click **Save and Add More** to save and continue adding more charges in the rate package.

c. After adding all the necessary Rate Details in the package, click `Save and Continue` to proceed to the review stage.

5. Review the Rate Package Details and click `Finish`.

After creating a Rate Package, you can link to to the product to start including it in billing. For more information see, Creating and Managing Products on page 23.

Managing Rate Packages

Apart from creating a new rate package from the **Rate Package Management** tab on the **Rate Package and Product Management** page, you can also use the `Search` feature to look for existing rate packages in CIS.

Enter the exact **Rate Package Name** or **Rate Package Code** or its first few characters to find the relevant packages. You can further filter the search results using the **Brand**, **LDC**, **Status** and **Package Description** search fields. The **Rate Package Name** and **Rate Package Code** search fields can also be left empty if required.

In the search results grid, you can:

- clone or edit any rate package from **Action** column.
- click the **Rate Package Name** to open details of a particular rate package. The fields and sections that are eligible for editing display an edit ✎ icon that can be used to change the current details.

View Rate

Learn how to view all the rates that have been applied to a Customer.

Follow the below steps to view the rates applied for a Customer:

1. Search for a Customer from the top of the page.

2. From the Customer summary screen, Go to **Activity > View Rates**. **Rate Code Details Lookup** page is displayed. This page has an uneditable **Rate Code** field and a table displaying all the rate details associated with the Customer.

Rate Code Details Lookup

☰ List

Rate Code *

PREM_2483736

Rate ID	Rate Code	Description	Category	Amount	Unit	Amount 2	Amount 3	Effective Date	Expiration Date	Min Amount	Max Amount	Range Lower	Range Upper	Rollup	Customer Type	Taxable	Calculation	Usage Class
3186148	PREM_2483736	Energy Charges	Energy Charge	0.16900000	kWh			06/09/2019	07/08/2019	0.00	0.00					Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Energy Charges	Energy Charge	0.16900000	kWh			07/09/2019	08/08/2019	0.00	0.00					Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Energy Charges	Energy Charge	0.16900000	kWh			08/09/2019	09/08/2019	0.00	0.00					Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Energy Charges	Energy Charge	0.16900000	kWh			09/09/2019	10/08/2019	0.00	0.00					Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Energy Charges	Energy Charge	0.16900000	kWh			10/09/2019	11/08/2019	0.00	0.00					Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Electric Charges	Energy Charge	0.07250000	kWh			03/08/2018	06/08/2019					R		Y	Spark Fixed Price Calculation	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	5.95000000	Month			03/08/2018	06/08/2019					R		Y	Customer charge	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	8.99000000	Month			06/09/2019	07/08/2019	0.00	0.00		999			Y	Customer charge	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	8.99000000	Month			07/09/2019	08/08/2019	0.00	0.00		999			Y	Customer charge	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	8.99000000	Month			08/09/2019	09/08/2019	0.00	0.00		999			Y	Customer charge	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	8.99000000	Month			09/09/2019	10/08/2019	0.00	0.00		999			Y	Customer charge	
3186148	PREM_2483736	Monthly Customer Charge	Monthly Fee	8.99000000	Month			10/09/2019	11/08/2019	0.00	0.00		999			Y	Customer charge	

Ancillary Activities

Learn about additional activities related to rates and products.

To ensure accurate billing, there are other ancillary activities for Rate and Product Administration. These include the following:

* **TDSP Matrix Administration** – This is the template for determining which TDSP/LDC charges are passed through to the Customer in Supplier Consolidated billing models.

* **Rate Index Range Maintenance** – This is Table of Indices that determines the rate given to a Customer on a specific period of time.

TDSP Matrix Administration

Learn to configure TDSP matrix administration.

The TDSP Matrix assigned to the Customer's service location determines which charges are passed on to the Customer. Client Matrices are created as part of the initial implementation process and new Templates are being added as needed. Although the name of a Matrix is determined by the ESP and varies accordingly, how the Matrix functions is the same across all Clients.

The maintenance of existing Matrices is the responsibility of the Client and can be performed using the **TDSP Matrix Administration** user interface.

To access the interface, go to **Administration Menu > General > TDSP Matrix Administration**.
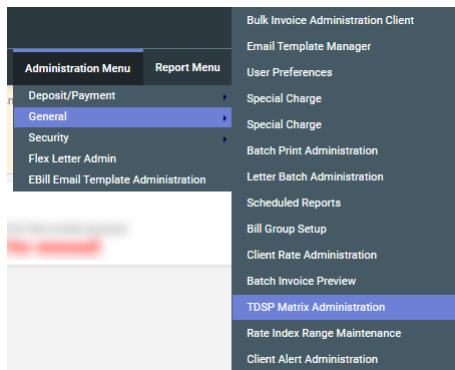
Select the **TDSP Template** and click **Load**.

TDSP MATRIX ADMINISTRATION

TDSP Template

Resi Unbundled ▾

Rate Ready
Resi Unbundled
Not Applicable
GA - Standard
AGL-R1-Residential
AGL-R1-ResdntlSenior
AGL-G10-MultiFamily
AGL-S51-Seasonal
AGL-AG1-Agricultural
AGL-G11-Commercial
AGL-G12-Commercial
AGL-R1-Residential
AGL-R1-Residential
AGL-R1-Residential
AGL-R1-Residential
Dual
Bill Ready

All possible LDC/TDSP charges are displayed in a grid.

TDSP MATRIX ADMINISTRATION

TDSP Template

Rate Ready ▾

Code	Description	BGE	PEPCO	CONED	RGE	NIMO	NYSEG	POTED	DELMARVA	PEPCODC	PSEG	ACE	DELDE
0101	Service Order Turn Off	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0102	Service Order Turn On	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0103	Service Order Superceded Turn On	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0104	Service Order Meter Set	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0105	Service Order Active Remove	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0108	Service Order Cut Out In Error	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
0111	Service Order Reconnect	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑

In the grid, you can check specific charge for the LDC indicating that the charge is passed onto the Customer during billing. Once done, click `Save` to save the changes.

Rate Index Range Maintenance

Learn to view and add Rate index range.

Some Rate Types use an Index and these indices need to be managed properly either via Web Services or manually using the **Rate Index Range Maintenance** user interface.

To access this interface, go to **Administration Menu > General > Rate Index Range Maintenance**.
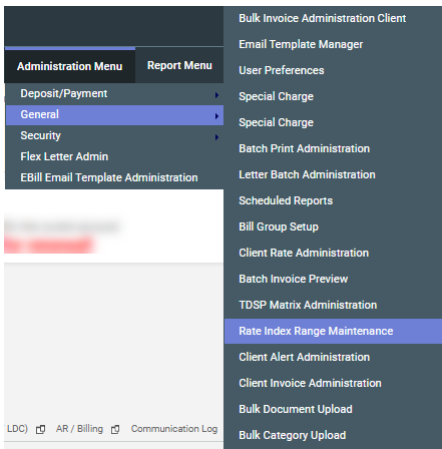
Select a **Rate Index Type** and click **View** to display the list of indices currently configured. You can **Add** more indices or **[edit]** existing ones.
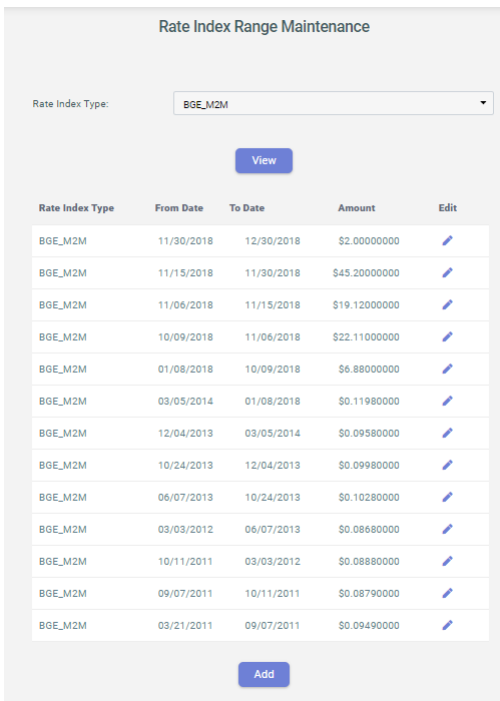
Note: When entering values for an index, the **Date To** and **Date From** fields of consecutive entries must be the same date.

Enrollment Overview

Learn the process of enrolling new customers on the CIS system.

Enrollment is the process through which the prospective customers are enrolled in the system. The CIS enrollment functionality provides Suppliers the ability to enroll new customers who are seeking to use their services.

Enrollment Methods

Learn about the various enrollment methods in CIS.

You can enroll customers following the below four methods:

- CIS Enrollment using Enrollment Wizard
- Mass Enrollments File Upload
- Web services Enrollment
- Self Service Web Enrollment

CIS Enrollment

Learn how to enroll new customers using CIS Customer Summary Screen site.

CIS provides the functionality for manually enrolling the customers through the CIS Enrollment Wizard. Enrollments are taken by CSR agents who are accessing CSR site on a live call with the prospective customer.

The customer provides the details required for the enrollment process and the agent enters the same in the Enrollment Wizard in the CIS application. Once the required information are gathered the system generates an outbound enrollment transaction to the market. For details on transactions, see Transactions on page 18. The market responds with an acceptance or rejection of the customer's enrollment.

Note: The interface for enrollment varies according to Supplier as per their business process.

This functionality is useful for the Supplier who are directing enrollments to their existing call center through either direct marketing or outbound calls.

To enroll a customer using CIS Enrollment Wizard, do the following:

1. Go to **Request for Service > New request for service.** Enter following details on **Customer Information** screen. Click **Save**.

Fields	Description
Service State	Enter the state in which service is required.
Customer Type	Select the customer type.
Serviced By	Select Serviced by
First Name	Enter the first name of the customer.
Middle	Enter the middle name of the customer, if any.
Last	Enter the last name of the customer.
Full SSN	Enter the Social Security Number.
Home Phone	Enter home phone number.
Mobile Phone	Enter mobile number
Email	Enter valid email id.
Work Phone	Enter work phone number.
Fax	Enter fax number.
First	Enter first name of authorized contact.
Last	Enter last name of authorized contact.
Language	Select language preference.
Referred By	Select referred by
Referrer Name	Enter the referrer name.
Address	Enter the mailing address.

Fields	Description
City, State, ZIP	Enter the city, state and Zip for the mailing address.
IA Number	Enter IA number.
Sales Source	Select Sales Source.
Preferences (Choose at least one)	Choose email or mail or both.
Billing Preferences	Select billing preference from drop down.

2. Go to **Service Locations** tab. Click **Add Service Location**. Enter details on **Add Service Location** page and click **Save**.

3. Go to **Interfaces** tab and click **Submit** for verification.

4. Go to **Documents** tab. Upload required documents.

5. Go to **Notes** tab. Enter notes, if required.

6. Click **Submit Enrollment** after all the required details are entered.

Mass Enrollment

Learn how to enroll new customers by Mass Enrollment method.

CIS provides the functionality for mass enrollments for the Suppliers. You can request mass enrollments by providing a CSV file to CIS operations for importing it into the CIS enrollment table. A batch file is routinely run to process the mass enrollment.

CIS then processes the data and sends enrollment transactions to the market. The files are typically sent via FTP to a secure location and picked up for processing one or more times a day. This is handled by the Task Toaster tasks (Event Engine).

This process is best suited for Suppliers that have partnered with 3rd party sales groups who are unable to provide real-time enrollments to CIS via the web-service. For example, this process is useful for the door to door sales or outsourced call centers.

Web services Enrollment

Learn how to enroll new customers using Web Service.

This is the most popular enrollment method in CIS. Enrollments are transmitted via web-service at the time of enrollment. The enrollment service can support priority move-ins and switches, credit checks, identity checks, ESI ID validation (in supporting markets), security deposit collection and auto-payment setup. The service can also provide product information.

This process is best suited for Suppliers that want to integrate with an in-house system or a 3rd party sales partner who can support system integration. Furthermore, this option can also be used by the Suppliers who want to create a self-service enrollment portal for their Customers.

Below are the screen shots from web service enrollment screens, designed for a Supplier:

Enrollment and Security Deposit

Learn about security deposit collected during enrollment process.

Enrollment Wizards includes a step in the business process called Deposit Informa-tion. The Enrollment Wizard can be configured in two ways for managing this two-step process:

With a Payment Gateway

Here the Enrollment Wizard has built-in flexibility to allow the User to perform both steps simultaneously – recording both the request of the Security Deposit information and the collection of the money. To process security deposit during enrollment follow the below steps:

1. Enter the customer's Credit Score.

    Note: If the credit score results in requiring a Security Deposit, the Wizard prompts the user for additional data.

2. Enter the Deposit Amount and Deposit Payment Type.

3. Enter the additional information on the screen.

4. Select the Next button to continue to payment gateway.

Without a Payment Gateway

If the system is not configured with an interface to a payment-processing gateway, the Enrollment Wizard allows the user to perform only the first step of requesting the Security Deposit information. The user can then collect security deposit using the steps described in

2

Customer Summary Screen

The Customer Summary screen provides the functionality to manage the information and billing needs of the Customer. Using this screen you can manage Customer information, generate communication logs, perform billing, post payments, and send letters.

The **Customer Summary** page can be organized into different logical sections to display the account details as you want using.

Learn how to use the Customer Summary screen and perform various tasks on it.

For details, see the following topics:

- Settings
- Customer Hierarchy Trail
- Customer Overview Panel
- Account Alerts
- Account Warning
- Recent Activity Panel
- Common Tasks Bar
- AR Aging Summary Panel
- Customer Summary Tabs
- Activity Menu

Settings

Use the `User Prefs` button on the Customer Summary screen to customize the screen as it suits you best.

Top Level Navigation Options

You can choose the navigation levels within the top menu using the following options:

- **Three Level Navigation** This option enables you to navigate to three levels within the main menu.

  Note: Recommended for Internet Explorer version 7.
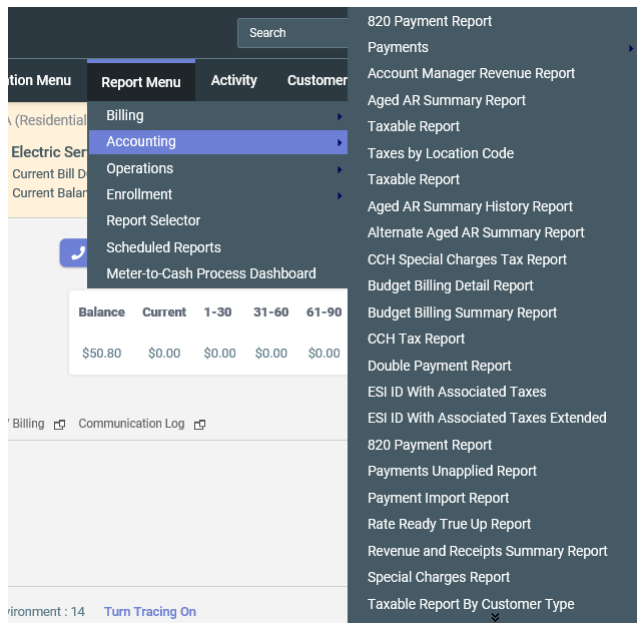
- **Two Level Navigation** - This option enables you to navigate to just two levels within the main menu. It is recommended to use this option if you find the other option causing performance issues.

  Note: These options only apply to the Customer Summary screen and its sub-pages.
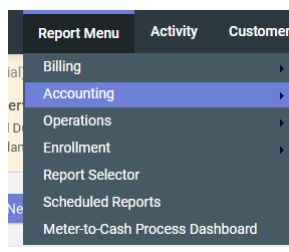
Customer Account Tabs

You can choose which tabs to display on the **Customer Summary** screen. The `Default` option also allows you to set a tab to appear as active by default.

Default	Tab Name / Description
●	**General** General Category
○	**Customer** Customer Information
○	**Utility Accounts (ESI / LDC / MPAN)** Utility Accounts (ESI / LDC / MPAN)
○	**Communication Log** Communication Log
○	**Accounts Receivable** Accounts Receivable
○	**Change Log** Change Log
○	**Reporting** Reporting
○	**Meter** Meter Info...
○	**Contract** Contracts Info...
○	**PrePay** PrePay

Communication Log Display Options

In the **Communication Log** tab, you can choose to display the call note records in one of the following formats:

- **Summary View** – This option displays only 250 characters in the Communication Log notes. Notes with more than 250 characters appear as truncated.

	ID ▼	Date	Department	Type	Detail	Priority	Status	Opened By	Date Opened	Closed By	Date Closed	Service	Modified By	Note
	15572059	12/24/2019 8:09 PM	Enrollment	Customer Care	Customer Service	Low	Open	qa.test.stg qa.test.stg	12/24/2019 8:09 PM			N/A	qa.test.stg qa.test.stg	qa.test.stg qa.test.stg accessed account '3001682877'
	14464565	3/16/2019 11:31 AM	Customer Operations - Back Office	Disconnect/Transfer	Disconnect for Non-Payment - Utility	High	Closed	System User	3/16/2019 11:31 AM		3/16/2019 11:31 AM	N/A		Disconnect Letter letter generated. [View]
	10855598	11/16/2017 2:00 PM	Customer Operations - Back Office	Customer Care	Customer Service	Low	Open	Jesus Carrillo	11/16/2017 2:00 PM			N/A	Jesus Carrillo	** ACCESSED the account working on the happy path report. Send the turn on for the customer on 11/20/2017 Order Details: Requestor Name: Yolanda Limon Marketer Reference Data: Premise Address: 1033 HICKORY ROAD CANTON GA 30115 -------------------- ------- The following order has been issued: Service Order ID: 112060951 Order Type: Turn On Schedule Date & Time: 11/20/2017 All Day Appointment Entrance...
	10855585	11/16/2017 1:55 PM	Enrollment	Customer Care	Customer Service	Low	Open	Jesus Carrillo	11/16/2017 1:55 PM			N/A	Jesus Carrillo	Jesus Carrillo accessed account '3001682877'

- **Call Detail View** – This option displays the entire Communication Log note but hides all memos attached to it.

	ID ▼	Date	Department	Type	Detail	Priority	Status	Opened By	Date Opened	Closed By	Date Closed	Service	Modified By	Note
	15572059	12/24/2019 8:09 PM	Enrollment	Customer Care	Customer Service	Low	Open	qa.test.stg qa.test.stg	12/24/2019 8:09 PM			N/A	qa.test.stg qa.test.stg	qa.test.stg qa.test.stg accessed account '3001682877'
	14464565	3/16/2019 11:31 AM	Customer Operations - Back Office	Disconnect/Transfer	Disconnect for Non-Payment - Utility	High	Closed	System User	3/16/2019 11:31 AM		3/16/2019 11:31 AM	N/A		Disconnect Letter letter generated. [View]
	10855598	11/16/2017 2:00 PM	Customer Operations - Back Office	Customer Care	Customer Service	Low	Open	Jesus Carrillo	11/16/2017 2:00 PM			N/A	Jesus Carrillo	** ACCESSED the account working on the happy path report. Send the turn on for the customer on 11/20/2017 Order Details: Requestor Name: Yolanda Limon Marketer Reference Data: Premise Address: 1033 HICKORY ROAD CANTON GA 30115 -------------------- ------- The following order has been issued: Service Order ID: 112060951 Order Type: Turn On Schedule Date & Time: 11/20/2017 All Day Appointment Entrance Instructions: Gate Code: Intersecting Street: Subdivision: Additional Instructions: Account Number: 3025395538

- **Full Detail View** – This option displays the entire Communication Log note along with its memos.

	ID ▼	Date	Department	Type	Detail	Priority	Status	Opened By	Date Opened	Closed By	Date Closed	Service	Modified By	Note
	15572059	12/24/2019 8:09 PM	Enrollment	Customer Care	Customer Service	Low	Open	qa.test.stg qa.test.stg	12/24/2019 8:09 PM			N/A	qa.test.stg qa.test.stg	qa.test.stg qa.test.stg accessed account '3001682877'
	14464565	3/16/2019 11:31 AM	Customer Operations - Back Office	Disconnect/Transfer	Disconnect for Non-Payment - Utility	High	Closed	System User	3/16/2019 11:31 AM		3/16/2019 11:31 AM	N/A		Disconnect Letter letter generated. [View]
	10855598	11/16/2017 2:00 PM	Customer Operations - Back Office	Customer Care	Customer Service	Low	Open	Jesus Carrillo	11/16/2017 2:00 PM			N/A	Jesus Carrillo	** ACCESSED the account working on the happy path report. Send the turn on for the customer on 11/20/2017 Order Details: Requestor Name: Yolanda Limon Marketer Reference Data: Premise Address: 1033 HICKORY ROAD CANTON GA 30115 -------------------- ------- The following order has been issued: Service Order ID: 112060951 Order Type: Turn On Schedule Date & Time: 11/20/2017 All Day Appointment Entrance Instructions: Gate Code: Intersecting Street: Subdivision: Additional Instructions: Account Number: 3025395538

AR/Billing Tab Options

The **Pre-Expand All Invoice Charge Details** option allows the invoice to display the entire charge details by default without any need to expand it manually.

Customer Hierarchy Trail

The **Customer Hierarchy Navigation Trail** is located at the top of the **Customer Summary** screen and it allows you to access any Customer within the hierarchy and also to **Manage Hierarchy**.
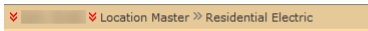
A list of all Customers that fall under a specific Master Customer can be seen by clicking the Customer Hierarchy ⚡ icon to the left of the Master Customer name. A drop down menu displays all Customer accounts under that specific Master Customer . Clicking the Customer name within the drop down menu loads the **Customer Summary** page for the selected Customer.
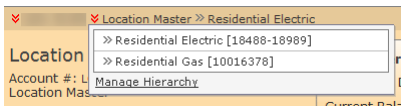
If the Customer Hierarchy contains more than 12 Customers, a pagination navigation control is located beneath the Customer list.

Accessing the Customer Hierarchy Management Page

You can access the **Customer Hierarchy Management** page from the **Customer Summary** page of the Master Customer you wish to view. Click on the icon to the left of the Master Customer name and the hierarchy opens a drop down menu. The drop down menu displays all Customer accounts under that specific Master Customer . The **Customer Summary Hierarchy** page can be accessed for a specific Customer by selecting the **Manage Hierarchy** link under the Master Customer drop down menu.
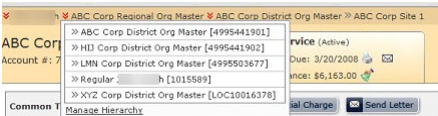
Customer Hierarchy Management Core Features

From the **Customer Hierarchy Management** screen, the following actions can be performed.

- **Customer Hierarchy**
  - Creating a new Master Customer
  - Adding Customers to an existing Master Customer
  - Moving Customer from one Master Customer to another Master Customer

    For more information, see Customer Hierarchy on page 91.

- **Summary Billing**
  - Assign Customers to be billed under a Master Customer

    For more information see, Summary Billing Management on page 93.

Customer Hierarchy

CIS provides extensive functionality to help retail electric providers organize their Customers in logical hierarchies.
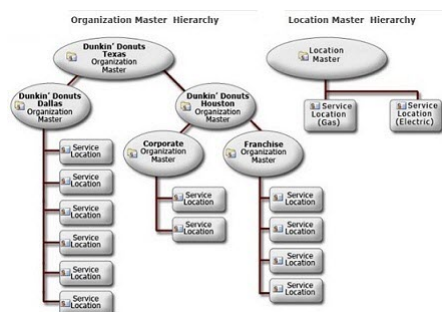
There are two structural formats that can be used while defining the hierarchy:

- **Organization Master Format** - Used when you operate from multiple locations. For example, when you have central headquarters and regional offices based on corporate or franchise locations. For example, the image on top shows a commercial Customer with central headquarters and regional offices in Dallas and Houston. The Houston office is further broken down into Corporate and franchise locations.

- **Location Master Format** - Used when you operate from a single location and provide multiple services. The hierarchies based on Location Master format allows you to quickly navigate to different levels in the hierarchy.

Understanding levels in a hierarchy

The following image shows a Customer with a gas and electric service account.
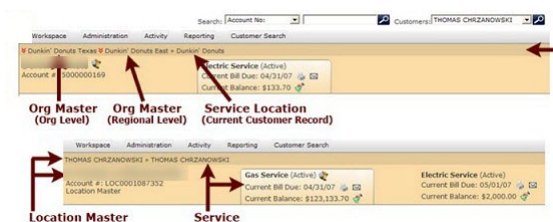
You can easily find the account's master level in the organizational hierarchy by looking at the hierarchy trail located below the top level navigation. For example, the account in the image falls under the master level - Dunkin' Donuts East, which itself is under Dunkin' Donuts Texas, its own master level in the hierarchy.

You can also use the dropdown next to the levels in the hierarchy trail to view and navigate to more accounts at the same level.
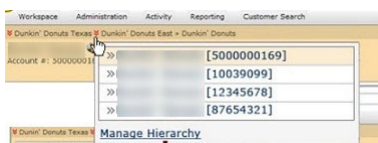
Customer Hierarchy Management

The **Manage Hierarchy** link at the bottom of the dropdown menu also allows you to manage the hierarchy and to view the complete summary billing of the selected level.

Creating a New Master Customer

Organization Master Customer Accounts are always created within a given hierarchy.

1. From the **Manage Hierarchy** page, select the Master Customer Account under which you wish to create a new Master Customer . The selected Customer is highlighted in blue.

2. To open the **Create** Master Customer panel, click on the **Create New** Master Customer icon for the Master Customer name under which you want the new Master Customer to be categorized.

3. Enter the name of the new Master Customer into the field labeled **Name** and click on the Save button to create a new Master Customer . Press the Cancel button to exit the Create New Master Customer process and return to the default screen.

4. Once the Save button has been selected, the new Master Customer is displayed below its assigned Master Customer .

Assigning Customers to a Master Customer

Assign Customers to a Master Customer by following the steps below:

1. From the **Manage Hierarchy** tree located in the left-hand panel, select the desig-nation Master Customer. Notice that the selected Master Customer is now dis-played in the Add Customers to…[Customer name] panel on the right-hand panel.

2. Find the accounts that need to be reassigned by searching for them via the **Cus-tomer Search** panel. You can find the Customer account(s) you want to assign by entering one of the following choices:

   • Select the Existing Master Customer from the drop down list. This is the Master Customer that the account(s) you want to reassign are currently assigned.

   • Enter the utility account number of the Customer that needs to be assigned.

   • Enter the CIS account number of the Customer that needs to be assigned.

   • Enter the name of the Customer that needs to be assigned.

   • Click on the Search button and the account(s) are listed in a secondary panel beneath the **Add Customers** panel.

3. Select the Customer account(s) you want reassigned and click on the Assign Customers button to execute the change. If you wish to have these Customers inherit certain attributes from the Master Customer, click the Assignment Options link to the right of the Assign Customers button. The panel expands, allowing you to select which attributes to inherit from the Master Customer. If the Set Master as "Bill To" Customer option is selected, the Inherit "Bill Group" from Master" option is automatically selected.

Summary Billing Management

Any Master Customer in the multi-level hierarchy can be selected to receive a Summary Bill on a particular day/cycle of the month.

When the "Summary Bill" option is selected, the normal bill print process of sending a bill to each Customer as soon as meter reads are available is altered and the bill is not printed at the Customer level. It gets rolled up into Summary Bill of the master Customer.

Assigning Customers to be Billed under a Master Customer

1. From the Manage Hierarchy screen, click the **Summary Billing** tab located to the right of the **Customer Hierarchy** tab and just below the **Customer Hierarchy Trail**. This loads the **Add Customers to Summary Bill** page.

2. Enter relevant search criteria and click the Search button to proceed. If search results are found, section entitled "Step 2. Select Customers" gets displayed below the Search panel.

3. To assign the Customer to the Summary Bill, select the Customers using checkboxes you wish to add.

4. Click the **Assign Customers** button to assign Customer(s) to be billed under the Master Customer.

Customer Overview Panel

Utilities classify Customers by types of service, account structures and functionality. The Customer Overview Panel is designed to follow this way of classification for the purpose of managing the Customer data. Located at the top of the page it displays the Customer name, account number, and master Customer name (if applicable), the type of service, the current status of the account (in parenthesis), the current bill due date, and the Customer's current balance.

Options available on Customer Overview Panel

Here are the key functions that can be performed in this section:

- **View the Account Alerts** - Click ⚠ to open alerts in a new panel below the primary Customer information section.

- **View Recent Activities** - Click 📄 to view the recent activity in the Customer account.

- **Print or View the Current Invoice Online** - Click 🖨 view the current invoice in printable format.

- **Email the Customer's Current Invoice** - Click ✉ to send the current invoice to Customer via email.

- **Post a payment** - Click 💳 to pay all outstanding bills.

Account Alerts

The **Account Alerts** section shows messages of any account related thing that needs attention.

This section only appears on the Customer's account when certain conditions are met. It is for information only. This panel is hidden by default, unless there are valid account alerts for this Customer. The **Account Alerts** section can be closed within the **Customer Summary** page by clicking **Close** located at the top right corner.

Account Warning

Learn how to display warning message on Customer accounts on CSR site.

Account warning is set by the CIS system administrator to flag a certain account. This is a message for the CSR site user about the account status. The CSR site user considers the warning message before taking any action on the account.

To display warning on account, do the following:

1. Go to **Administration menu > Operations > Account Warning Admin**.

2. On the **Add Customer Account Warnings.** page, enter the **Warning Text** and click **Insert**. Check **Active** to display the warning message.

   Account warning is displayed on the Customer Summary Screen.

Note: Already added warning is deleted by clicking **Delete** on **Account Warning Admin** page.

Recent Activity Panel

This panel displays the most recent activity that was performed on the account, categorized by the type of activity.

To open recent activity panel, click [icon] beside the customer name. The **Recent Activity** Panel loads between the Customer overview panel and the common tasks bar. This panel is hidden by default.

The activity types which are displayed in this section are listed below:

1. **Call Note:** : – Displays the most recent call or memo that was entered into the system, as well as relevant note details. Clicking the *Call Note* title opens the communications tab.

2. **Payment:** – Displays the most recent payment that was posted on the Customer's account and the relevant payment details associated with the payment. Clicking the *Payment* title opens the AR / Billing tab.

3. **Invoice:** – Displays the most recent invoice that was released and printed in addition to the relevant details relating to this invoice. Clicking the *Invoice* title opens the AR / Billing tab.

4. **Customer Information Changes:** – Displays the most recent change to the Customer's account information. Clicking the *Customer Information Changes* title opens the Customer information tab.

Common Tasks Bar

Under the **Account Alerts** section is the **Common Tasks** bar which provides the user a quick access to various tasks which are needed frequently.
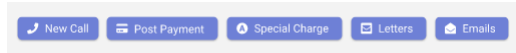
The common tasks include:

1. Creating a new Customer communication log. For details, see Verbal Correspondence on page 120.

2. Posting payments. For details, see Payment Posting Options on page 202.

3. Adjusting a Customer's account. For details, see Adjusting Customer Billing and AR on page 164.

4. Sending Letters to Customers. For details, see Written Correspondence on page 112.

5. Accessing help..

The primary benefit of the **Common Tasks** bar is that it allows the user to retrieve data from different tabs without having to close and reopen windows constantly while performing a specific task.

AR Aging Summary Panel

The account summary **AR Aging Summary Panel** gives the user a summary view of the Customer's current financial status.

Balance	Current	1-30	31-60	61-90	91-120	121-150	151+	AR Terms (Days)
($349.76)	($349.76)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	20

Balance - Total balance due at Customer side.

Current - Current balance due at Customer side.

1-5 - balance pending from 1-30 days.

6 - 16 - balance pending from 31-60 days.

17 - 30 - balance pending from 31-60 days.

31 - 60 - balance pending from 31-60 days.

61 - 90 - balance pending from 31-60 days.

91+ - pending from 31-60 days.

Terms - The value in this column is the number of days after invoice date when the invoice amount is due to be paid.

Customer Summary Tabs

Under the **Common Tasks** bar there are four primary tabs designed to increase efficiency in accessing relevant Customer details by organizing data in logical segments and providing clear-cut navigation.
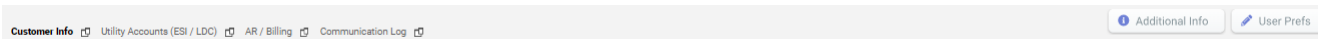
1. **Customer Info tab:** – Allows the user to view and edit Customer contact, billing, and account information.

2. **Utility Accounts tab:** – Allows the user to view and manage all premises assigned to the Customer. In this section, the user is also able to create and view transactions related to a particular premise.

3. **Communication Log tab:** – Allows the user to view and manage all communications made with the Customer.

4. **AR / Billing tab:** – Allows the user to view the Customer's current account status, as well as the accounts receivable history of the Customer.

   The content in the panel below the **Customer Summary** tabs changes based on the selected tab.

   Furthermore, clicking the ⧉ icon located at the top right corner of each tab opens the tab in a new window, thereby allowing the user to review two panels at the same time.

Customer Info Tab

The Customer Info tab grants the user the ability to view and edit a Customer's Contact, Billing, and Account info.

Accessing the Customer Info tab

1. Access the Customer summary screen by performing a Customer search.

2. If the `Cust Info` tab is not the default tab, click the `Cust Info` tab directly beneath the **Common Tasks** bar.
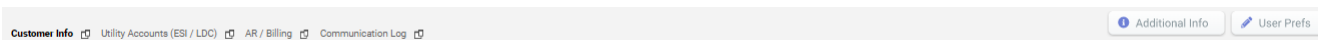
To View Customer Information

The Customer Info tab contains the following subsections:

- Contact Information
- Billing Information
- Account Information

Balance	Current	1-30	31-60	61-90	91-120	121-150	151+	AR Terms (Days)
($349.76)	($349.76)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	20

Customer Info   Utility Accounts (ESI / LDC)   AR / Billing   Communication Log

ⓘ Additional Info   ✎ User Prefs

CONTACT INFORMATION ✎

Name:	Annie Mack
Customer Type:	Residential
Service Account:	
Customer Category:	
DBA:	
First Name:	Annie
Middle Name:	
Last Name:	Mack

Billing Address

Contact:	Annie Mack
Address:	3669 Jervis Court Rex, Georgia 30273
Home Phone:	6782841875
Work Phone:	6782841875
Email:	\\\

Additional Info

Sales Source:	
Ignite Account Number:	G1204266
TCPA Authorization:	Not Answered

BILLING INFORMATION ✎

Bill To Customer:	None
Billing Type:	Supplier Consolidated
Rate Code:	Variable Rate Plan [GAAGLG01] 🔍 ✎
Product Terms:	
Bill Group:	107401
Production Cycle:	55
Language:	English
Taxable:	Yes
Late Fees:	Yes
Invoice Delivery Type:	Print ✎

ACCOUNT INFORMATION ✎

Master Customer:	None
Status:	Active
AR Status:	Ok
Csr Info:	
Collection Status:	0
Customer Group:	
SSN:	2015
Has ETF:	Yes
Promise To Pay:	Yes
Collections Agency:	None []

Editing Customer Information

In many cases, the user may need to update a Customer's account information that may have become out of date. This can be accomplished through the **Customer Information** tab of the **Customer Summary** page. In addition, the user is able to make pending changes which are not applied to a Customer's record until the user-specified date.

1. To edit the Customer's account information, click on the **Edit** button located in the upper right-hand corner of the Customer information section you wish to edit.

Note: Note that you can edit each section independently.

---

2. Click the **Edit** button and the fields within that section is editable as shown below:

3. Make the desired changes to the Customer's account.

4. If the changes need to be made at a later date, the user must enter the desired date into the `Changes Effective` field. The user can populate the `Changes Effective` date in one of two ways.

   a. **Calendar Control** – The user can enter the `Changes Effective` date using the calendar control. Click the calendar button to open the calendar control and select the desired date to auto-populate the `Changes Effective` date.insert image

5. Click the **Save** button to save changes or click the **Cancel** button to cancel all pending changes and go back to view mode.

6. If the changes to Customer information were saved with the `Changes Effective` field populated with a future date, the **Account Alerts** section displays the pending changes to this Customer account.

Mass Customer Update

Sometimes you might want to update update identical information on a number of customers (for eg. City, Customer Type, personal information for Summary Customers and others)

To update customer information in mass, do the following:

1. Go to **Administration Menu > Operations > Mass Customer Update**.

2. Enter the list of affected account numbers in **Customer No. List** and enter the value to set in one or many of the fields on the right. Click Preview. Click Update. This updates the desired field of the affected customers list.

Utility Accounts ESI/LDC Tab

Use this tab to view and manage all utility accounts assigned to the Customer. In this section, user is also able to create and view transactions related to a particular utility account.

Note: This tab is not available at the Master Customer level.

Accessing the Utility Accounts ESI / LDC tab

From the Customer Summary screen, click on the *Utility Accounts (ESI / LDC)* tab under the Common Tasks bar.

Features of the The Utility Accounts ESI / LDC tab

Note: Some of these features are conditional and is only displayed once certain conditions are met.

1. **Utility Account Search Bar:** Located at the topmost section within the Utility Accounts tab is a Search bar where the user can start finding specific utility accounts. The Search bar can filter results based on the criteria set.

2. **Premise Level Alerts:** If there is no premise currently enrolled under the Customer, the following alert is shown below the Utility Account Search Bar.

   If a premise search returned no results, the following alert is displayed below the Utility Account Search Bar.

3. **Multiple Utility Account Premise View:** This applies to Customers who have more than one utility account enrolled and active. A table view displays all active premises enrolled under the Customer.

4. **Single Utility Account Premise View:** This applies to Customers who have only one utility account enrolled or the utility account search returned only one result. The **Multiple Utility Account Premise View** is replaced with a "postcard view" of the single premise which includes a graph of historical consumption.

5. **Location Master Utility Accounts (ESI / LDC):** This feature displays a service summary view of each service.
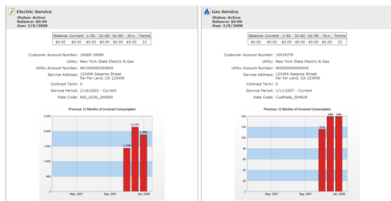
The top section of the Utility Account summary view shows general service information including the type of service and Utility Account status. Below the top section is the AR Summary table which includes the balance due and accounts receivable aging details for the specific service. The actual Utility Account details can be found below the Service Account AR Summary table. This section displays various Utility Account details relating to each specific service. In addition, this section also includes a graph of the last 12 months of invoiced consumption for each Utility Account.

Using Utility Accounts Tab

The Utility Accounts tab contains details of the utility or service accounts linked to the Customer and allows you to perform various premise-based tasks.

To search for a specific utility account:

1. In the **Utility Accounts (ESI / LDC)** tab, enter your search criteria using the following fields:

   • **ESI ID:** ESI ID is also called Premise Number. It is associated with the premise where the Customer is using the commodity(Gas/Electricity). This menu contains a list of all ESI ID's associated to a multi premise Customers account. In case of a single premise Customer account, the list has only one ESI ID.

Note: ESI ID Transfer is a function using which a Customer's ESI ID is changed. This happens in the following cases:

- Wrong ESI ID is linked to the Customer during enrollment.
- Customer changes address and moves to a new location keeping the same Supplier.

To use EDI ID transfer functionality, do the following:

1. Go to **Administration Menu > Operations > ESI ID Transfer**.

2. On **ESI-ID TRANSFER** page, enter **From Customer No** and To **Customer No** and click **Get Customers**.

3. Check **Transfer** on the list of ESI IDs that needs on **From Customer** table and click **Transfer**. The transferred ESI IDs appears on **To Customer** table.

- **ESI ID Fragment:** This field allows you to enter part of an ESI ID number. For example, if you are looking for 123456789123456789, you can enter "123" or "678".
- **Address Fragment:** This field allows you to enter part of the service address of an ESI ID. For example, if you are looking for 112 maple Hill Farm Rd., you can enter "112" or "Maple".
- **Status:** This menu allows you to select the status of the utility account you are looking for.
  - `Active` = Currently on flow.
  - `Inactive` = Not on flow.
  - `All` = All utility accounts.
- **Type:** This field is used primarily for apartment complexes and allows you to select between apartment units and common areas.
- **Unit #:** This field allows you to specify the unit number of an apartment.

2. Click Search to view the results.

Note: Some of these fields may not appear as per your system configuration.

From the Utility Accounts tab, you can also perform the following operations related to each utility account:

View Transaction History

Use the icon to view your utility account transactions history in the grid below. For details on transactions, see Transactions on page 18.

If required, you can filter transactions based on a specific date range and type.

The grid displays details like `Direction` (sent or received), `Date`, `Type`, `Transaction #` or `Reference #`, `Description` and `Status` of each transaction. For detailed information on a particular transaction, use .

While viewing the detailed information of a particular transaction, you can also click the **View Raw Market Transaction** link to view its related raw market data.

In case the user must review the details of a transaction, the Transaction History panel gives users the ability to view raw market data.

To view Raw Market Transaction Data:

1. Open the **Transaction History** Panel.

2. Click the **View Market Data** icon 🔍 to view transaction details. The market data contained in this row only returns data that is commonly requested when viewing this specific transaction type.

3. If the market data retrieved in step 2 is not sufficient, click the **View Raw Market Transaction** link to view the raw market data.

4. Clicking on the **View Raw Market Transaction** link opens a new window which shows actual raw transaction information received by the CIS system from the Utility. Each transaction is identified by a unique key. Click Close at the top right corner of the window to close this page.

Create Market Transaction

Use ⇄ to initiate a new Customer enrollment, service order, termination, historical usage request, move-in, and switch. There may be other market transactions available for different Utility/Market. Refer to the **Create Transaction** for additional information on creating market transactions.

View Consumption

Use to view the meter information, final reads, and consumption information for a specific Customer and premise. You can edit existing consumption by clicking **E** and add consumption by clicking **A**.

From the **Meter Information** you can find the following:

- The TDSP name.
- List of meters for the account and the meter exchange date, if any.
- Process date of a consumption on a meter.
- Transaction number for each consumption.
- Begin and End read and the quantity of commodity consumed.

From the **Consumption Information** you can find the following:

- The unbilled consumptions (one having no invoiceid in **Invoice** column).
- The Documet Due Date.
- The Invoice for a particular period.

CONSUMPTION ADMINISTRATION

Customer No: [000120003]

[Get Customer]

STEPHANIE JONES-ARREDONDO
5813 LIMERICK DR
CORPUS CHRISTI, TX 78413

ESI ID: [10032789423533940 ▾]

Meter Information													Total: 1	All
							TDSP	Meter No		Type	Multi	Date From	Date To	
10032789423533940	867	867H	867S	814	810	TD	TDBK	FCON	CPL	106555702		1.00	09/02/2010	✎

Final Reads					
LDC Account No	Meter Number	Period Start	Period End	Begin Read	End Read

Consumption Information	LDC Account No: [10032789423533940 ▾]	Date: [9/24/2019]	Invoice: [- All - ▾]	[Filter] [All]								Total: 0
LDC Account No	Meter Number	Type	Document Due Date/Time	Date From	Date To	Begin Read	End Read	Demand	Quantity	Unit	Type	Multi	Invoice

Edit Premise Information

Use ✏ to edit the Service Details, Service Address and Tax.

- Service Details

Fields	Description
Changes Effective	Set the date from which the change is effective.
TDSP	Set the desired TDSP
Date From and Date To	Set the start and end date.
Status	Select the desired status.
Service Cycle	Set the service cycle.
TDSP Template	Select the desired TDSP Template.
Metered	Set wheather Metered or Not.
Lida Discount	Choose yes or no.
Rate Code	Set rate code.
Gas Pipeline	Select desired gas pipeline.
Gas Loss Factor	Select gas loss factory.
Name Key	Set name key.
Interval Usage Type	select desired interval usage type.
Billing Account Number	Set billing account number.
On Switch Hold	Choose yes or no.
Is TOU?	Choose yes or no.
Create Date	This is prepopulated.

- Service Address

Fields	Description
Attention	Enter name of the customer/addressee.
Address details	Enter Address, city, country, state, zip.
Communication details	Enter phone number, fax and e-mail.
Geocode	Enter Geocode.

- Tax – determines which taxes are assessed. For details, see Taxes on page 180.

Fields	Description
Tax Exemption	Choose **None** or **Tax Exempt**.
Tax Assessment	Set tax assessment.

Note: In the Texas electricity market it is important to understand that the service address data belongs to the TDSP and therefore cannot be modified. If you discover that the Service Address is incorrect, contact the TDSP and request them to change their records.

Communication Log Tab

Use this tab to view and manage all communications made with the Customer.

Note: The data displayed in the Master Customer and Location Master accounts is a listing of all Customer notes from all accounts within the **Customer Hierarchy**. Any note stored at a Customer Account can be seen on all Master Customer Accounts within its **Customer Hierarchy**.

Accessing the Communication Log tab

The Communication Log tab consists of the following sections:

Note: Some of these sections are conditional and are only be displayed once certain conditions are met.

- **Communication Log Tab Search Bar:** Located below the **Communication Log** tab is a search bar which allows a user to search communication log notes. When text is entered into the search box and the user clicks the search button , the system search the *notes* field of all communication log notes and return only notes that match the search criteria.

- **Communication Log Alerts:** In the event that the communication log search returned no results, the following alert get displayed below the search bar.

- **Communication Log Content Panel:** The communication log content panel includes all communication log records that have been created for a particular Customer. If a search was preformed previously, only the search results get displayed in this panel.

Bulk Note Insert

Bulk note insert feature can be used to insert common note on multiple Customers/Accounts. To use this feature, do the following:

1. Go to **Administration Menu > Operations > Bulk Note Insert.**

2. On **Bulk Call Note Updates** page, enter the fields in **Step 1. Enter your call note.**

Fields	Description
Call Type	Select the call type.
Type	Select the call purpose.
Detail	Select the details of the call purpose.
Department	Select the department that received or made the call.
Status	Select status of the note for the call.
Priority	Select the priority of the note.
Call Note	Enter the message of call note.

3. On **Bulk Call Note Updates** page, enter or upload account numbers in **Step 2. Enter Account numbers** or **Add Account Numbers from file** and click **Save** to insert the note.

Correspondence

Learn to manage various modes of written and verbal correspondence in CIS.

Correspondence module is an important part of the CIS as it provides functionality for written and verbal correspondence through which the Suppliers can get in touch with their Customers.

Written correspondence includes letters, e-mails, text messages and messages for invoices. Verbal correspondence includes maintaining the Customer call logs and the IVR system through which all the verbal communications with the Customers are recorded.

The correspondence can be done either through the Customer Summary Screen or, it can also be automated through the event engine as per the configuration selected by the Supplier.

The following configured events trigger notification from the Event Engine:

- `Payment Confirmation Notification`
- `Service Interruption Notification (650 disconnect sent)`
- `Service Reinstated Notification (650 reconnect sent)`
- `Payment Received Notification-Interrupted State`
- `Disconnect Notice (814_24 sent)`

The following notifications are generated from the Billing Engine during its processing of consumption:

- Balance Notification
- Service Interruption Notice

Written Correspondence

Learn how to setup, manage and view written correspondence with Customers in CIS.

Written correspondence allows the Suppliers to get in touch with their Customers via various modes as mentioned below:

Letters

Suppliers can send letters to their Customers manually using the **Customer Summary Screen** or automatically via the **Event Engine**.
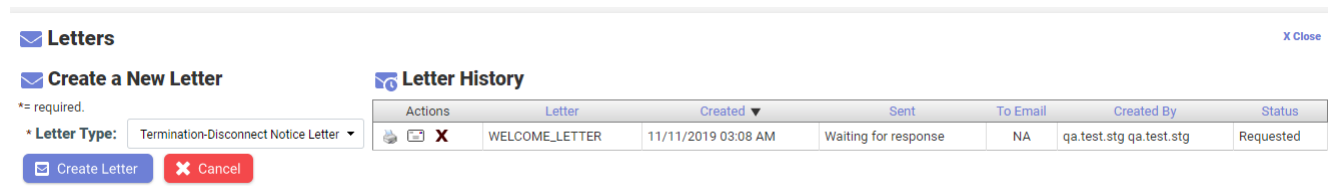
To send letters manually from **Customer Summary Screen**:

1. Go to the **Customer Summary Screen** and click **Letters** on the **Common Tasks** bar.

2. On the **Letters** panel, select the **Letter Type** from the dropdown and click **Create Letter**.

> **Note:** The the drop down menu contains only those letters that have been previously generated for the Customer.
>
> A confirmation message **Letter Sent Successfully.** is displayed.

3. To view the sent letter, click the **Letters** button. Here you can find all the sent letters in the **Letters History** table. You can also cancel the recently created letters using **X**, resend the previously sent letters using 🖃 and view the letters in printable format using 🖨 in the **Actions** column.

Actions	Letter	Created ▼	Sent	To Email	Created By	Status
🖨 🖃 X	WELCOME_LETTER	11/11/2019 03:08 AM	Waiting for response	NA	qa.test.stg qa.test.stg	Requested

The generated letters are released each day and sent to the third party print vendor in batches. To release letters, follow the below steps:

1. Go to **Administration Menu > Operations > Letter Batch Administration**

2. On **LETTER PRINT ADMINISTRATION** page, check the letters and click **Create Print Batch**.

   This creates print batch and send it to the third party print vendor.

The following categories of letters can be sent to the Customers:

• Customer Disconnect Letter

• Welcome Letter

• Disconnect Letter

• Deferred Payment Plan Letter

• Switch Hold Letter

Email & Text Messages

The CIS application allows the Suppliers to send automated e-mails and text messages to their Customers based on their selected preferences during enrollment or later during their accounts' life-cycle. The notifications are initiated either through the event engine or during the process of daily billing operations.

Process flow for emails and text messages for Customer notifications:

- **Payment Confirmation Notification**

  ```
  Payment received >>> Payment evaluated by event engine >>>
  notification sent
  ```

- **Service Interruption Notification**

  ```
  Usage received >>> Billing Processes >>> Notification Sent >>>
  Account evaluated by event engine >>> Event Engine Processes
  650 >>> 650 Disconnect Sent
  ```

- **Service Reinstated Notification**

  ```
  Payment Received >>> Payment evaluated by event engine >>>
  Account evaluated by event engine >>> Event Engine Processes
  650 >>> 650 Reconnect Sent >>> Notifications Sent
  ```

- **Payment Received Notification-Interrupted State**

  ```
  Customer is already disconnected >>> Payment Received >>>
  Payment evaluated by event engine >>> Account evaluated by
  event engine for disconnect status >>> notification sent >>>
  650 reconnect sent
  ```

- **Disconnect Notice (814_24 sent)**

  ```
  Move-Out request is Processed >>> Evaluated by Event engine
  >>> Disconnect Notice Sent
  ```

- **Balance Notification**

  ```
  Usage received >>> billing processes usage >>> notification
  sent
  ```

- **Low Balance Notification**

  ```
  Usage Received >>> Billing Processes Usage >>> Billing engine
  Evaluates against threshold >>> Notification sent
  ```

- **Discretionary Charges Applied**

  ```
  810 TDSP Charge (without usage) received >>> Billing Processes
  Charge >>> Billing engine sends Notification
  ```

Messages on Invoice

CIS provides the functionality of displaying the messages on the invoice of the Customers using the **Invoice Message Administration** interface.

To create a message:

1. Go to **General > Invoice Message Administration**.

2. Click **Message Setup Instructions (Click to Toggle)** to view the instructions for message setup. Set the following fields on the **Invoice Message Administration** page:

Invoice Message Administration

[💾 Save] [✳ New]

Message Setup Instructions (Click to Toggle)

Invoice	Max Message Size
English Standard Invoice	250
Spanish Standard Invoice	250
Spanish Summary Invoice	250
English Summary Invoice	250

Description *

Customer Type
[Select]

TDSP
[Select]

Division
[Select]

TDSP Template
[Select]

Bill Group

Customer No

One Time Message
☐

Effective Date
📅

Expiration Date
📅

Auto Draft
☐

Rate Code

DPP Message
☐

Message Text *

Language *
[Select]

Field	Description
Description	Enter description for the message.
TDSP	Select the relevant TDSP.
Bill Group	Enter the relevant bill group.
Effective Date	Choose the date on which the message takes effects.
Expiration Date	Choose the date on which message expires.
One time message checkbox	Check this if it is a one time message.
Rate Code	Enter the rate code applier for the Customer.
DPP message checkbox	Check this if it is a Deferred payment plan (DPP) message. To learn about DPP, see Deferred Payment Plan on page 215.
Message Section	Select the relevant message box from the dropdown.
Division	Select the relevant division.
Customer no	Enter the Customer number.
Customer Type	Select Customer type from dropdown.
TDSP template	Select the relevant TDSP template.
Auto draft	Select checkbox if auto draft.
Language	Select language from dropdown.
Message Text	Enter the required valid message.

The newly created messages appear in a table below the message setup section.

The **Invoice Message Administration** page also has a section below the message setup section to view the details of previously sent messages.

Description	Section	Cust No.	Bill Group	TDSP	TDSP Template	Division	Effective Date	Auto Draft?	Single Use?	Length	Rate Code	Customer Type	Edit	Remove
All Budget Bill 810s	0			Keyspan LI				False	False	88			[Edit]	[Remove]
Standard Monthly	0			Keyspan LI				False	False	68			[Edit]	[Remove]
True Up	0			Keyspan LI				False	False	74			[Edit]	[Remove]
Final True Up	0			Keyspan LI				False	False	70			[Edit]	[Remove]
Credit True Up	0			Keyspan LI				False	False	132			[Edit]	[Remove]
Final Credit True Up	0			Keyspan LI				False	False	146			[Edit]	[Remove]
All Budget Bill 810s	0			Keyspan NY				False	False	88			[Edit]	[Remove]
Standard Monthly	0			Keyspan NY				False	False	68			[Edit]	[Remove]
True Up	0			Keyspan NY				False	False	74			[Edit]	[Remove]
Final True Up	0			Keyspan NY				False	False	70			[Edit]	[Remove]

< >

CIS also contains two types of reports for Written Correspondence.

- **Letter Report** - it gives details of selected category of letter or invoices.
- **Letter Summary Report** - it gives a summary of all the letters types, their language and count for a given date range.

These reports can be accessed from **Report Menu > Operations** or **Main menu > Operations**.

eCorrespondence Module
Learn how to use the third party eCorrespondence Module.

CIS has partnered with a third-party email service provider to utilize its advanced email exchange capabilities - tracking bounce-backs, unsubscribtions and link open tracking with better support for blacklisting IP monitoring. By default, emails are sent through the existing email exchange service of CIS. The system communicates with the email vendor via a web API.

With the third-party email service integration, Suppliers can send enhanced email notifications to Customers for letters and invoices with layouts based on configurable templates.

The email transmission path can be enabled for the Supplier to take advantage of the third-party email service provider's reporting.

To configure and utilize the eCorrespondence features, you need to set up the following in the CIS:

Adding a new Email Template

To add a new email template:

1. Go to **Administration menu > General > Email Template Manager**.

2. On the **Email Template Management** page, click **Add New Template**.

3. Enter the following details on the **Email: Template Details** page:

Fields	Description
Template Name	Enter the template name.
From Email	Enter the from email address.
Is Active	Select **Yes** if template is active else select **No**.
Available for Ebill	Select **Yes** if the template is for invoice. Select **No** if the template is to be used for letters.
Attach Invoice PDF	Select **Yes** if PDF invoice needs to be attached else select **No**.
Language	Select **English** or **Add other language**

Fields	Description
Email Subject	Enter the subject for the email. **Note:** If your CIS has multiple languages enabled, the Template Editor allows you to specify the **Email Subject** and **Template Content** in each of these languages. The first language tab is always for an English template and must always be filled.
Template Content	Enter the email body. **Note:** To use HTML, click ⟨⟩ Source on the editor.
Send Test Email, Cancel and Save buttons	You can send a test email by clicking **Send Test Email**. Click **Save** to save the template and **Cancel** to cancel the template.

Note: To include Customer specific data into the template, use the Token dropdown list on the editor. Token names are displayed enclosed in percentage signs ("%%") in the **Template Content** and are replaced with the respective Customer data when the email is composed and sent out by the system.
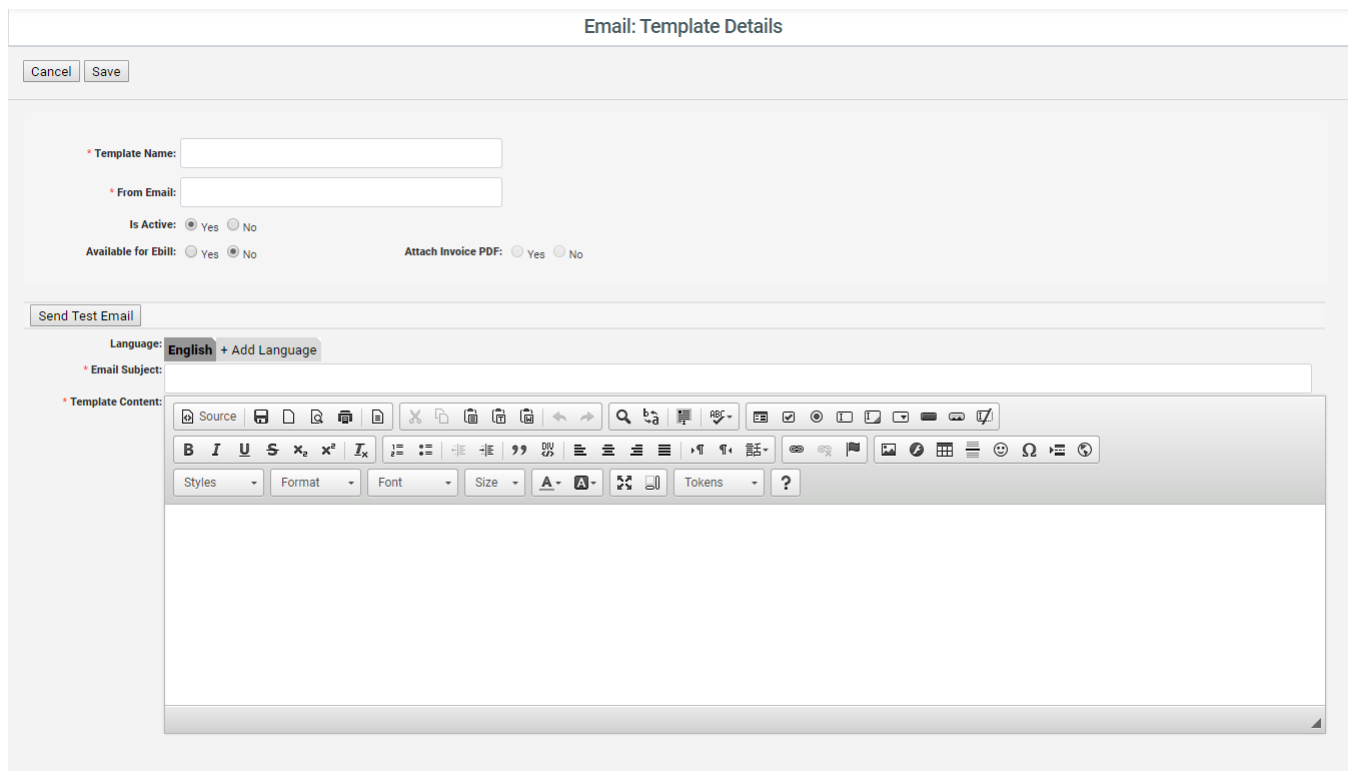
You can include a tokens in the email subject line by copying and pasting a token code (including the percent signs) from the template body into the **Email Subject** field.

To modify the layout or properties of an existing email click ✎ in the respective table row of the **Email Template Management** page. The **Edit Template Detail** page allows you to modify the parameters and contents of an existing email template.

Creating a Template in Multiple Languages

If your CIS instance is set up for Customers with different languages you can define separate **Email Subject** and **Template Content** fields for each of the defined languages. Customers receive emails in the language that has been defined for them in the Customer data.

To create the subject and body in a different language, click `+ Add Language` tab on the editor and then select the desired language from the dropdown list.

To remove a language version from a template, click the **Delete** button on the respective language tab.

Note: The default template English cannot be deleted.

Defining Rules for E-bill

After creating templates for e-bills (e-invoices) you must define rules that determines the email template to be used for Customers that receive e-bills. Follow these steps to define rules for e-bills:

1. Go to **Administration Menu > EBill Email Template Administration**. This page displays all the existing rules for email template for e-bills.
2. Click **Add Ebill Configuration**.
3. In the **Add Ebill Configuration:** panel, enter the **Descripton** for the e-bill configuration and choose the desired **Ebill Email Template**.
4. Set **Rules** using **Customer Parameter**, **Operator** and **Parameter Value** fields. You can also add multiple Rules using **Add And** and **Add OR** operators.

Note: You can also prioritize multiple EBill configuration rules using ▾ or ▴ in the **Actions** column on the **EBill Email Templates:** table. The Default invoice email map is always set to the lowest priority and cannot be promoted higher.

Note: If you are using the **IN** or **NOT IN** operator for the Bill Group parameter, you can enter multiple bill group numbers as a comma separated list.

Note: If you delete a rule that has related rules, the related rules are also deleted.

Setting Customer Correspondence Preferences

You can set a Customer to receive letters and invoices via printed letter or email. By default, all letters and invoices are being sent to Customers in printed format via postal service. Suppliers can define Customers' preferences to have letters and/or invoices to be sent via e-mail.

To set up Customer preference, do the following:

1. Go to the **Customer Summary Screen** and click next to the **Invoice Delivery Type** field in the **Billing Information** section.

2. On the **Correspondence Preferences** window, click .

3. Select **Email** or **Print** corresponding to the invoice and letters.

4. Click **Save**.

Note: Correspondence Preferences for invoices can only be set for Customers with Supplier Consolidated or Dual billing types. This setting does not apply for Bill Ready and Rate Ready Customers. For more information on billing types, see Supported Billing Models on page 131.

Setting up password protection for invoice attached on email

Invoices that are sent to Customers via email attachments can optionally be protected by a password. When enabled, the Customer needs to enter the password to view the attached file .

To set this protection for a Customer's invoice email attachments, select the desired **Password Type** and **Password Custom Value** on the **Correspondence Preferences** window.

Note: If you select the **Password Type** as **Custom**, you must enter the desired password in the **Password Custom Value** field.

Verbal Correspondence

Learn how to set up, manage and view verbal correspondence with Customers in CIS.
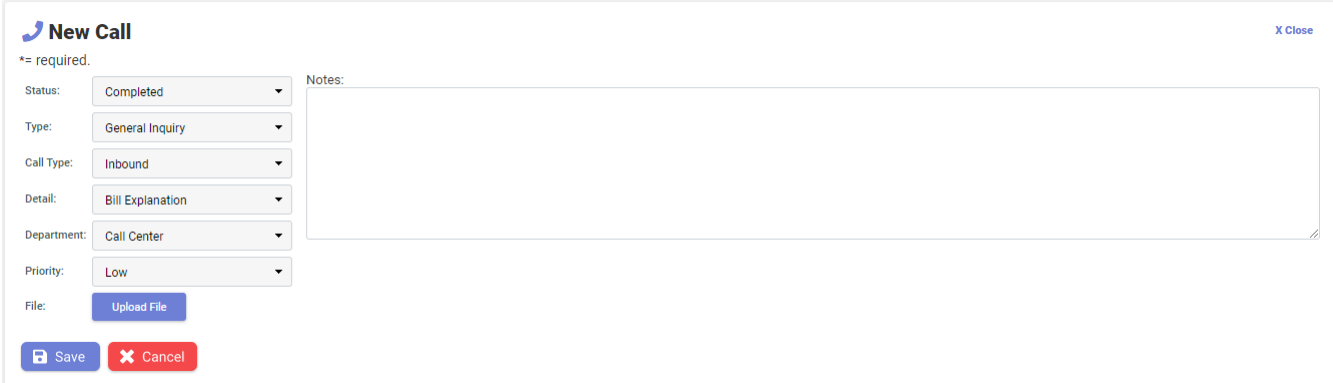
CIS has an integrated third-party IVR system. The CIS application provides the functionality for recording the verbal Customer correspondence information using the methods mentioned below:

Customer call logs

The CIS application provides the functionality for recording the Customer call logs manually via Customer summary screen or automatically via the event engine using the configuration.

A new communication log entry screen can be accessed from the **Customer Sum-mary Screen** using the **New Call** button on the **Common Tasks** bar.

The call logs can be later managed by accessing them from the **Communication Log** tab on the **Customer Summary Screen**. For more information see, Communi-cation Log Tab on page 109.

New call log fields

Fields	Description
Status	Select to choose whether the issue is open or closed.
Type	Select the reason for the call.
Call Type	Select the type of call.
Detail	Select the detail as per the call type. **Note:** The dropdown menu changes as per the **Call Type** selected.
Department	Select the department.
Priority	Select priority level.
File	Attach file, if required.
Notes	Enter the call log notes.
Save and Cancel	Click **Save** to save the log. Click **Cancel** to cancel the call log.

You can view and download **Call Log Report** from **Operations > Call Log Report**. The report can be filtered by the following fields:

- Begin Date and End Date
- Customer Type
- Status
- Priority
- Type

- Detail
- Department
- Created By
- Account Number

The IVR System

The interactive Voice Response (IVR) functionality allows the Customers to access their account information or pay a bill by dialing a phone number provided by the Supplier and then following the voice-guided responses to service their needs.

Generally, the IVR is customized for each Supplier based on their business needs. In case the Customer gets in touch with Customer care representative in order to get service for their account through the IVR system the application provides the functionality to record all such service calls.

Correspondence Configuration Tables

Here you can refer to the correspondence events and key correspondence configuration tables.

The information below is a description of all the different tables used by the correspondence application to record, process and deliver notifications to the accounts.

Following are the key correspondence configuration tables:

(CSD) Delivery Tables

Name	Purpose
Content	Stores the content of a sent message.
ContentHistory	History of the content created.
ContentItem Type	Category or type of message needed, ex. Payment confirmation.
ContentStatus	Status of the content created.
Delivery	Stores the metadata details of the correspondence.
DeliveryBatch	Stores the 'batches' of correspondence created.
DeliveryBatchHistory	History of the batch created.
DeliveryBatchItem	Stores the details of the batch.
DeliveryDemand	The record of what delivery is demanded upon request.
DeliveryHistory	History of the delivery attempt.
DeliveryStatus	All known status for delivery.
DeliveryType	Defines delivery types.
DocumentFormat	Format of the document to be delivered.
Layout	The specific layout to use for notification
LayoutFormat	Location of the layouts on the system.
LayoutFormatHistory	Empty
TechnologyType	Defines if Crystal reports, Active Reports etc.

(CSE) Engine Tables

Name	Purpose
EmailAddress	Stores email addresses and status for all accounts.
EmailAddressStatus	Defines status of the email.
EmailAddressStatusHistory	Historical data for the email address.
EmailRequest	The requested email message is stored here.
EmailRequestAttachment	Currently empty - place to store data for attachments.
EmailRequestValidation	Data storage for email verification requests.
EmailRequestValidationHistory	History for the data storage for email verification requests.
EmailRequestValidationRequestStatus	Defines the different status' for email requests.

(CSP)Preferences Tables

Name	Purpose
Category	Defines category of notice.
CategoryType	Defines type of notice.
CategoryTypeDeliveryFrequency	How often to deliver notice.
CategoryTypeDeliveryType	Links categories to delivery type.
CategoryTypeField	Used to send the 'low balance below $X' notice.
Customer	Stores the Prospect / Customer ID for use and creates a preference Customer id.
DeliveryFrequency	Defines the frequency of delivery for all notices.
DeliveryStatus	Defines the status of delivery for all notices.
DeliveryType	Defines the delivery type (Mail, Email or SMS) for all notices.
Document	Defines the document to use for a specific category.
DocumentLayout	Links Document to Layout to use
DocumentLayoutType	Inserts a page (insert) for promotion purposes apart from the invoice.

Name	Purpose
EmailAddress	Customers email address (can be multiple / account).
EmailAddressStatus	Defines the status of an email address.
EmailDelivery	Record of the email delivered and its status.
MailAddress	Currently empty.
MailAddressStatus	Defines the status of a mail address.
MailDelivery	Currently empty.
PhoneNumber	Stores the phone number for SMS messages.
PhoneNumberStatus	Defines the status of a phone number.
PhoneNumberType	Defines the type of a phone number.
Preference	Stores the preferences of delivery for the account by preference Customer id.
PreferenceCcategoryTypeField	Currently empty.
PreferenceDeliveryType	Links preference ID to delivery type.
PreferenceEmailAddress	Currently empty.
PreferenceMailAddress	Currently empty.
preferencePhoneNumber	Currently empty.
Request	Table that stores all requests sent for notifications.
RequestStatus	Defines the status of the requests.
SmsDelivery	Records delivery of the SMS messages.

(DBO) Tables

Name	Purpose
Note	Stores all the details of call log.
NoteCallType	Defines the type of call.
NoteDepartment	Defines the department responsible for the call log entered.
NoteDetail	Defines the details of the call log.
NoteDocument	Stores the document uploaded with the call log.
NotePriority	Defines the priority of the call log.
NoteStatus	Defines the status of the call log.
NoteType	Defines the type of call log.
NoteTypeDetail	Provides the description of the call log type.

AR/Billing Tab

Learn about the AR/Billing tab to view generated invoice.

The AR/Billing tab is the Accounts Receivable section for the Customer account. This shows the Customer's current account status, as well as the billing history. Navigate from the **Customer Summary** page by clicking on the AR/Billing tab below the **Common Tasks** bar.

Customer Info   Utility Accounts (ESI / LDC)   **AR / Billing**   Communication Log

Note: The data displayed in the Master Customer and Location Master accounts are a summary of AR Balances per Customer Account within the Customer Hierarchy.

AR/ Billing tab

							Payments + Adjustments	Invoice Amount	Amount Due

AR Summary [Print Selected]   [🖶 Print AR History]

To view charges on an invoice, click on the invoice number.

☐ Select/Deselect All	Invoice #	Type	Invoice Date	Due Date	Service Period	Previous Balance	Payments + Adjustments	Invoice Amount	Amount Due
	View Details	Payment			1/30/2019		$238.05		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	32177756		1/15/2019	1/31/2019	12/10/2018 - 1/11/2019	$232.57	$232.57	$238.05	$238.05
	View Details	Payment			12/27/2018		$232.57		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31990746		12/12/2018	12/28/2018	11/7/2018 - 12/10/2018	$220.75	$220.75	$232.57	$232.57
	View Details	Payment			11/26/2018		$220.75		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31827805		11/9/2018	11/26/2018	10/9/2018 - 11/7/2018	$360.06	$360.06	$220.75	$220.75
	View Details	Payment			10/30/2018		$360.06		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31681081		10/11/2018	10/29/2018	9/10/2018 - 10/9/2018	$495.01	$495.01	$360.06	$360.06
	View Details	Payment			9/25/2018		$495.01		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31511497		9/12/2018	9/28/2018	8/9/2018 - 9/10/2018	$465.96	$465.96	$495.01	$495.01
	View Details	Payment			8/30/2018		$465.96		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31327686		8/13/2018	8/29/2018	7/11/2018 - 8/9/2018	$405.47	$405.47	$465.96	$465.96
	View Details	Payment			7/26/2018		$405.47		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	31104440		7/13/2018	7/30/2018	6/11/2018 - 7/11/2018	$449.94	$449.94	$405.47	$405.47
	View Details	Payment			6/29/2018		$449.94		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	30868980		6/13/2018	6/29/2018	5/10/2018 - 6/11/2018	$231.48	$231.46	$449.92	$449.94
	View Details	Payment			5/30/2018		$231.46		$0.02
Ⓐ ☐ 🖶 ✉ 💳 ⬇	30664554		5/14/2018	5/30/2018	4/11/2018 - 5/10/2018	$131.38	$131.38	$231.48	$231.48
	View Details	Payment			5/2/2018		$131.38		$0.00
Ⓐ ☐ 🖶 ✉ 💳 ⬇	30462774 Ⓐ		4/16/2018	5/2/2018	3/12/2018 - 4/11/2018	$0.00	$0.00	$131.38	$131.38
Ⓐ	30428091	Late Fee	4/9/2018	4/2/2018	2/9/2018 - 3/12/2018	$132.58	$126.27	($6.31)	$0.00
	View Details	Payment			3/30/2018		$126.27		$6.31
Ⓐ X	30382490	Late Fee	4/2/2018	4/2/2018	2/9/2018 - 3/12/2018	$126.27	$0.00	$6.31	$132.58
Ⓐ ☐ 🖶 ✉ 💳 ⬇	30256704		3/14/2018	3/30/2018	2/9/2018 - 3/12/2018	$153.12	$153.12	$126.27	$126.27
	View Details	Payment			2/28/2018		$153.12		$0.00

1 2 3 4

- **Account Summary Table** - This shows the summary view of the Customer's current financial status.
- **Accounts Receivable Alert** – This section displays all invoice adjustments/special charges alerts that are currently pending and also those that are applied to the next invoice.
- **Accounts Receivable Summary History** – This section is where you can view and manage financial transactions relating to a specific invoice.

From the AR/Billing tab you can view, print, email and also download AR history for a selected date range.

To view AR History

1. In the **AR Summary** section, click [🖶 Print AR History].
2. On the **Print AR History** page, select **Date Form** and **Date To**.

3. Click to view the AR Summary for the given date range.

To download AR History

1. In the **AR Summary** section, click .

2. On the **Print AR History** page, select **Date Form** and **Date To**.
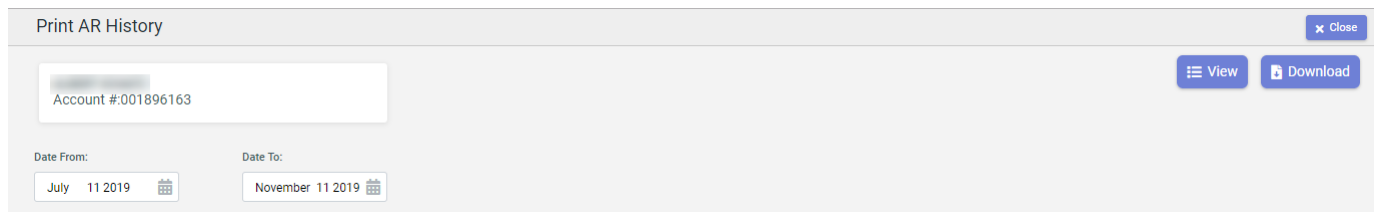
3. Click to download the AR History for the given date range in CSV format.

To email AR History

After fetching the AR Summary for a given date range, click on top of the grid.

The system adds the AR History as an attachment and auto-populates the `To Email Address` (if found under the Customer's account information), the `From Email Address` (logged in user's email address), and a general `Subject` line and `Message`. However, you can still change or update any fields prior to sending the email.

After verifying the email details, just click .

To print AR History

After fetching the AR Summary for a given date range, click on top of the grid.

Activity Menu

The **Activity Menu** is a convenient portal for accessing the many functions within the CIS System.

The following image shows the **Activity Menu**:

Activity	Customer Search
Invoice	
Adjustments	
View Change Log	
View Market Data	
Budget Billing	
View Rates	
Taxes By Customer	
Special Charge	
Post CreditCard / ACH Payment	
Security Deposit	
AGLC Consumption & Meter Administration	
Impersonate	
Customer Events Report	
Service Transfer	
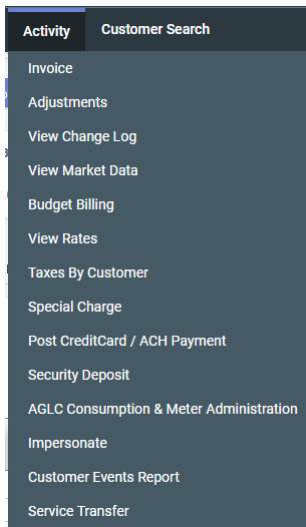
From this menu, users can perform many functions that include:

1. Invoicing

2. Creating adjustments

3. Placing Customers on budget billing or deferred payment plans

4. Posting Customer payments

5. Viewing Customer data such as rates, market data and taxes

3

Billing and Payments

These topics explain the Billing and Payments functionality and the process flow as supported and managed by CIS. Where appropriate, the topics also include sample 'use-case scenarios' to illustrate expected system response(s) based on the actions of the user.

Learn how to set up, manage and perform various Billing and Payment related tasks in CIS.

For details, see the following topics:

- Billing Overview
- Payments Overview

Billing Overview

Learn about billing configuration and management in CIS.

CIS has invoicing functions to support different billing models for the Deregulated Energy Markets, such as Supplier Consolidated, Rate Ready, Bill Ready or Dual Billing.

The billing overview topics includes invoicing user interface, invoice management and invoicing validation interfaces.

Supported Billing Models

Learn about the supported billing model in CIS.

CIS has invoicing functions to support different billing models for the deregulated energy markets - such as *Supplier Consolidated*, *Rate Ready*, *Bill Ready* or *Dual Billing*.

Each billing model has its own billing process. In the Supplier Consolidated, the Utility sends meter data to CIS. CIS then calculates the charges and creates the invoice. In these models, the invoice details are stored in the `invoiceDetail` table before the print engine prints the invoice and sends it to the Customers.

Where as, in the Rate Ready or Bill Ready models, CIS sends the rate code or rate amount to the Utility through `814_C` transaction. The Utility then calculates the bill and sends the invoice to the Customer. The Utility then collects the payments from Customers and sends the invoice to CIS through `810` for energy charges plus taxes and `867` for meter read transactions as references. For details on transactions, see Transactions on page 18.
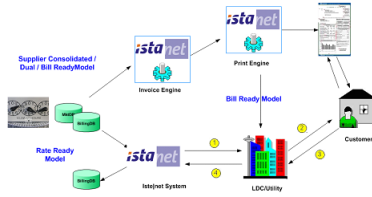
Table 1: Billing models Comparison

Billing Type	Invoice pre-sentation to Customers	Meter Read-ings	PaymentCollec-tion from Cus-tomers	Flow
Supplier Consolidated Bill Ready	Supplier	Utility	Supplier	Utility sends TDSP charges to Supplier along with meter reads > Supplier adds own charges and sends invoices to Customers > Supplier collects payment from Customers > Supplier pays Utility for TDSP charges
Utility Consolidated Bill Ready	Utility	Utility	Utility	Utility sends meter reads to Supplier > Supplier calculates own charges and send the e- invoice back to Utility > Utility adds tdsp charges and sends invoice to Customers > Utility collects payment from Customers > Utility pays the Supplier for its charges
Utility Consolidated Rate Ready	Utility	Utility	Utility	Utility gets Supplier charges from Supplier > Utility adds TDSP charges and sends invoice to Customers > Utility collects pay-ment and pays the Supplier for its charges

Billing Type	Invoice pre-sentation to Customers	Meter Read-ings	PaymentCollec-tion from Cus-tomers	Flow
Dual	Supplier and Utility	Utility	Supplier and Utility	Utility sends TDSP charges invoice to Customer and Suppli-er sends its own charges invoice to Customer > Both col-lect their payments from Customers

The topics below discuss the different supported billing models in detail.

Supplier Consolidated Model

Learn about the Supplier Consolidated model flow.

In the **Supplier consolidated** model, the LDC provides an electronic invoice for distribution services (TDSP charges) to the Supplier along with meter read for each Customer. See Inbound 810 (TDSP Charges) in Transactions on page 18.

The Supplier then calculates its charges and sends a single invoice to the end Customer for an amount covering both energy and distribution costs.

The end Customer sends a single payment back to the Supplier. The Supplier pays the distribution charges to the LDC within a fixed period of time regardless of whether the energy Supplier receives payment from the end Customer or not.

The LDC can pass its TDSP charges at two levels:

• Customer level - TDSP charges for each Customer of the Supplier separately.

• Supplier level - Total TDSP charges consumed by all the Customers of the Supplier together.

Utility Consolidated - Bill Ready Model

Learn about the Bill Ready model flow.

In the **Bill Ready** model, the utility calculates the usage and communicates it to the Supplier. The Supplier then calculates their own charges and sends these line items back to the Utility to be added on the invoice. The Supplier also receives the meter reading and the electronic copy of the invoice from the Utility. When the Customer pays the Utility for all the charges, the Utility sends the payment to the Supplier. The Utility uses "Pay as you go" where the payment is sent to the Supplier as soon as it is received from the Customer.

In some cases, the Utility offers a "Purchases of Receivables" (P.O.R.) program where it guarantees payment of an agreed percentage of the outstanding receivables.

Utility Consolidated - Rate Ready Model

Learn about the Rate Ready model flow.

In the **Rate Ready Model**, the Supplier provides its charges to the Utility. See out bound 810 in Transactions on page 18.

The Utility then calculates the consumption charge and adds the Supplier charges to the invoice.

The Utility then collect the payment from the Customer for all the charges and sends the payment back to the Supplier along with a notification of such payment.

In this model, on receiving the meter reading, CIS sends the rate code or rate amount information to the Utility for billing purposes. Some also provide and import the rate information into CIS and lets CIS submit the rate (code or amount) and Customer information to the Utility upon approval. CIS has a tool called **Rate Submission Tool** to achieve this function.

Rate Ready model has two sub models:

- **Rate Code Based** - In the **Rate Code Based** model, both CIS and the Utility keep a **Rate Code Lookup** table. When CIS receives a meter read from the Utility, it performs certain calculation and submits the proper rate code to the Utility.

- **Rate Amount Based** - In the **Rate Amount Based** model, CIS keeps a **Rate Code/Amount Lookup Table**. When CIS receives a meter read from the Utility, it performs certain logical operations and submits the proper rate amount to the Utility.

POR and Non-POR Payment

Delinquent payments, and write-offs could increase utilities' financial risk, decrease working capital, and degrade Customer services. In some cases within the **Bill Ready** and **Rate Ready** models, the Utility only sends payment to the energy retailer/ Supplier when it receives payment from the end Customer ("Pay as you go"). In other cases, the Utility offers a "Purchases of Receivables" (P.O.R.) program where it should guarantee payment of an agreed upon percentage (up to 97%) of the out-standing receivables for the energy retailer/ Supplier's charge.

Shadow Invoicing

In the **Rate Ready** model, upon receiving the Customer invoice and meter read in-formation, CIS performs its own calculation of the invoice based on the meter read and rate information. This is called **Shadow Invoice**. If the invoice that CIS calcu-lated and the invoice sent by Utility is different, CIS adjusts its own calculation and store the utility invoice into the database. This could happen if wrong rate is used for the calculations. A note is added as invoice discrepancy detail line for reporting purpose.

Dual Billing Model

Learn about the Dual Billing model flow.

In the Dual Billing model, both the Utility and the Supplier calculate their own charges and both send invoices directly to the Customer. The Customer receives two invoices per meter read and remits the payments back directly to both parties. Utility still provides the Supplier with the monthly meter read electronically.

Bill Group Management

Bill Groups manage the billing process. Learn to setup and manage bill groups in CIS.

To access it, go to **Administration Menu > General > Bill Group Setup**.
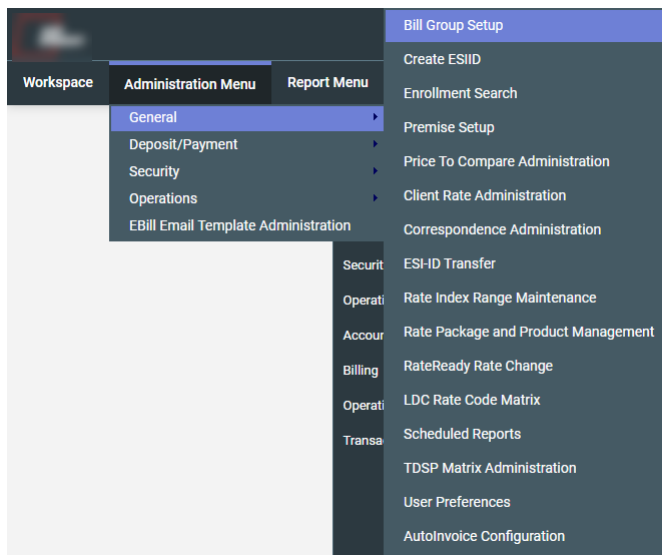
The Bill Groups page displays a grid that contains **Description**, **Additional notes**, **Summary** and **Special Instructions** for all the bill groups that exist in the system. It also contains actions to `Edit` **[E]** a bill group, add `Special Instructions`**[SI]** to a bill group or `Add`**[A]** a new bill group.

BILL GROUPS

Bill Group	Description	Notes	Summary BG	Special Instructions			
55	New Accoounts	script moves these not automat	☐		[E]	[SI]	[A]
206600	AEP PPL Bill Ready	ELECTRIC	☐		[E]	[SI]	[A]
301300	AEP CONED Rate Ready	ELECTRIC	☐		[E]	[SI]	[A]
301301	AEP CONED Rate Ready	GAS	☐		[E]	[SI]	[A]
305901			☐		[E]	[SI]	[A]
306201			☐		[E]	[SI]	[A]
306600	AEP PPL Rate Ready	ELECTRIC	☐		[E]	[SI]	[A]
309101	Columbia Gas OH Rate Ready	Columbia Gas OH	☐		[E]	[SI]	[A]
309201			☐		[E]	[SI]	[A]
401300	AEP CONED Dual	ELECTRIC	☐		[E]	[SI]	[A]
401301	AEP CONED Dual	GAS	☐		[E]	[SI]	[A]
406600	AEP PPL Dual	ELECTRIC	☐		[E]	[SI]	[A]
409101	Columbia Gas OH Dual	Columbia Gas OH	☐		[E]	[SI]	[A]

Adding a Bill Group

To add a Bill Group,

1. Click **[A]**.
2. Enter a Bill Group number in the `Bill Group Field`.
3. Enter a Description, and Notes to further explain.
4. Click `Add Bill Group` when finished.

BILL GROUPS

Add New Bill Group

Bill Group	Description	Notes

Add Bill Group   Cancel

Bill Group	Description	Notes	Summary BG	Special Instructions			
55	New Accoounts	script moves these not automat	☐		[E]	[SI]	[A]
206600		ELECTRIC	☐		[E]	[SI]	[A]

Editing a Bill Group

To edit an existing Bill Group,

1. Click **[E]**.
2. On that same page, it allows you to enter a Description. Add Notes to further explain.
3. Check the box for `Summary BG`.
4. Click `Save` when finished.

Bill Group	Description	Notes	Summary BG	Special Instructions			
55	New Accoounts	script moves these not automat	☐		[Save] [Cancel]	[SI]	[A]
206600	AEP PPL Bill Ready	ELECTRIC	☐		[E]	[SI]	[A]

Adding Special Instructions

To add Special Instructions to an existing Bill Group,

1. Click **[SI]**.
2. Select from the list of Special Instructions.
3. Click **Update** when finished.

BILL GROUPS

Edit Special Instructions for Bill Group 55

Special Instructions
- ☐ Do Not Print
- ☐ Extra Postage
- ☐ Mail in Same Envelope
- ☐ Summary Billing
- ☐ Insert Required
- ☐ Post Card

[Update] [Cancel]

A list of options on Special Instructions include:

- Do Not Print
- Extra Postage
- Mail in Same Envelope
- Summary Billing
- Insert Required
- Post Card

  You can choose all Special Instructions that apply to the Bill Group. The chosen Special Instructions shows under `Special Instructions` column.

BILL GROUPS

Bill Group	Description	Notes	Summary BG	Special Instructions			
55	New Accoounts	script moves these not automat	☐	DNP, EP, SE, SUM, IN, PC	[Save] [Cancel]	[SI]	[A]
206600	AEP PPL Bill Ready	ELECTRIC	☐		[E]	[SI]	[A]
301300	AEP CONED Rate Ready	ELECTRIC	☐		[E]	[SI]	[A]

Setting a Bill Group to Auto-Invoicing

To set a bill group to auto-invoicing,

1. Go to **Operations > Client Invoice Administration**. Click **[Configuration]** from **Quick Links**.

2. On the **Invoice Configuration** page, click **Bill Group Administration**.

3. Click on desired BG (bill group) from **Bill Group** column.

4. Click **Edit** on **Bill Group Administration** and check **Invoice Automated**. Click **Save**.

Consumption Processing

Learn about measurement of consumption by Utility and its transfer to CIS system.

Utilities are responsible for reading the service meters and sending the information via electronic transactions to the Suppliers each month or upon request. See 867 in Transactions on page 18.

These electronic transactions contain, at a high level, the start and end period (dates) for the reading, the amount of the commodity consumed at the meter location (premises), and information regarding the meter itself, such as a multiplier, number of dials etc.

This consumption is received in the market database and then sent to billing database of the CIS system. Once the measurement is received by the CIS billing database and the consumption is reflected on the CSR site, it is ready to be billed/invoiced.

Consumption Processing are of two types:

- **Interval** - The interval meter measures consumption at the interval of 15 minutes (for ERCOT market) and 30 minutes (for COMED market). Each reading is sent to the Supplier. This is according to the Customer's business needs and market requirements.

- **Non-Interval** - The consumption is measured once in a month. The Utility sends a single reading to the Supplier for billing.

The translation of the file information as received from the market into a PRISM format is applicable to all except Texas Utilities. Texas EDI transactions are imported directly into CIS without translation.

The translation can come in CSV, XML, or other formats as needed in different markets.

Consumption Management

Learn about consumption management in CIS.

Consumption are received in the CIS system from the Utility in the form of 867. For Supplier Consolidated billing type the Utility also sends 810 to the Supplier. For details, see Transactions on page 18.

CIS team constantly monitors the consumption flow from Utility to CIS databases and immediately follow up with the Suppliers if any consumption is found missing.

Current Consumption Audit Report is for monitoring unbilled consumption.

To access it, go to **Report Menu > Billing > Current Consumption Audit Report**
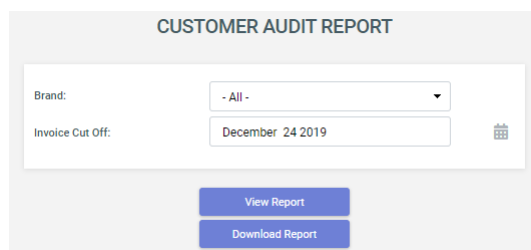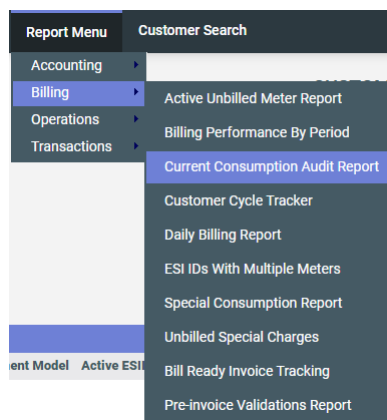
Here you get a Customer wise detailed report of the unbilled consumption for a given **Invoice Cut Off** date.

Invoicing Process Overview

Learn how consumption received from Utility are processed in CIS to generate invoices.

The Invoicing Process within the CIS application consists of many different stages. The different set of billing rules required by each Supplier and validations that need to be performed against received consumption prior to charges and taxes adds to the complexity. Moreover, invoice errors needs to be analysed and resolved as per client rule.

Once generated, the invoice information is shown within the CIS application and can be sent to various markets, depending on billing type.

Invoicing Components and Relationship

Learn about the various components of an invoice and their management.

Invoice processing lifecycle starts with consumption from utility and ends with payment from Customers. The essential components included in creating an invoice are:

- **Customer** - The end user of the commodity (Gas/Electricity) is called Customer. Each Customer could have one or many premises.

- **Premise** - The location where the commodity is consumed. Each Premise can have one or more Meters. Premise is identified by **Premise No.** in CIS. It is same as the ESI ID (Electric Service Identifier) which is unique for a property address.

- **Meter** - Meters are installed on the Customer's premise to measure consumption. Each meter can have multiple reads/consumptions in a month.

- **Consumption** - Each consumption includes Consumption Details about the commodity used for a particular period of time. The consumption is linked to Premise through the Premise no. or ESI ID. In the CIS system premise must exist for each Customer in the billing database for invoicing to occur.

- **Rate** - The RateDetail is Rate provided for account at which the consumption is billed. To view rate details, see View Rate on page 75.

- **TDSP Charges** - This is the transmission and distribution charges for utility. This component is essential only for Supplier Consolidated and Rate Ready billing Models. For details, see Supplier Consolidated Model on page 134.

Invoice generation will fail if any of these components are missing. CIS provides pre-invoice error validations and post-invoice error-handling solutions to the Suppliers. The invoicing errors are analyzed and communicated to the Suppliers and a fix is implemented according to their advice.

Invoice Generation and Management

Learn how invoices are created, managed, released and sent to Customers in CIS system.

You can generate Invoices in bulk through batch invoicing or a single invoice from CSR site.

The CIS Ops team performs several QC checks, on the auto-generated invoices, before sending them to the Suppliers for review. The Suppliers, after reviewing the invoices, release them to the third part print vendor.

Invoicing Process Work Flow

In the CIS system, there are five major services running in the background to complete the Invoice Process Workflow.

Import Engine

This works with external tools to import consumption and TDSP charges from the Utility in the form of EDI files and then store the raw data into market database. The data is then imported to billing database for the Invoice Engine to pick up.

EDI sends electronic invoices for TDSP charges to Suppliers using EDI transaction 810. EDI also sends meter read information to the Suppliers through EDI data transfer. For more information see, Consumption Processing on page 139.

The EDI transaction details can be viewed in the **Utility Accounts (ESI/LDC)** tab on **Customer Summary** screen. Detailed information can be obtained by selecting the **View Raw Market Transaction** link.

Customer EDI Transaction

The image below shows a Customer EDI transaction example per month which are inbound 867_03 and 810 for this Customer.

	Direction	Date	Type	Transaction # Reference #	Description	Key Field	Key Data	Status
🔍	In	1/25/2019	867_03	867030SW00002019024B1032600000		Service To	01/23/2019	
🔍	In	1/24/2019	810	81002B4756952019024B1C *867030SW00002019024B1032600000*		Service To: Amount	01/23/2019: 10.63	

Date From: 1/1/2019   Date To: 12/24/2019   Type: - All -   Search

❓ Icon Legend

EDI 867_03 Meter Read Transaction

The image below is an EDI 867_03 Meter Read Transaction which shows a detailed information including Service Period, Meter Start and End Reads and Quantity.

Invoice Engine

It is a process running in the background to process the 867s and 810s and create invoices. New **Invoice Creation Request** is stored in the `BillingAdmin.Invoice-Queue` table.

CIS creates **Invoice Batch** for small groups of Customers. The **Invoice Engine** processes the **Invoice Batch** to generate invoices in bulk.

Most of the **Invoice Batch(s)** are created automatically by the CIS system. To set a BG to auto-invoicing, see Bill Group Management on page 136.

Incase of any invoice errors the CIS Ops team, after processing such errors as per billing rules, create manual invoices. Suppliers can also log into the CSR site and create manual inovices as per need.

Invoice Batch can be created in one of the following ways:

- By Customer
- By Bill Group
- By 867 Transaction Date
- By Consumption Date To
- By Production Cycle

To create **Invoice Batch** for **Batch Invoicing**, do the following:

1. On the CSR site, go to **Administration > General > Client Invoice Administration**.

2. On the left pane of the page, you can see a list of **BG** (Bill Groups), **Total Customers** and **Billable Customers**. Check **Lock Selected Batches** for the BG you need to create batch and click **Lock Selected Batches**.

3. The selected BGs will appear on the right pane and will be in **Pending Validation** status. After some time the BG status turns to **Validating** and then to **In Review**.

4. Click on **In review** link. Here you can see the pre invoice validations, if any. See Pre-invoice Validation on page 151.

5. Handle the pre-invoice validations as per business rules and click **Invoice** to create batches.

6. From the left pane click on **Batches** from the **Quick Links** section. You see the batch created. It is identified by a number in the **Batch** column.

7. The freshly created **Batch** has status **Pending**. The status changes to **Processing** after few seconds, and then to **Completed** or **Error Occurred**.

Note: Status is **Completed** when all the accounts in the batch are successfully invoiced.

Status is **Error Occurred** when there are post invoice errors for one or more accounts which failed to invoice. See Post-invoice errors on page 153.

The **Invoice Engine** searches the consumption table looking for new meter data that has not been processed. These are identified easily as it has no invoice ID assigned. Once found, a new invoice is created in the invoice table with invoice details information stored in the `InvoiceDetail` table. A new invoice ID is allocated and assigned to the invoice as well as the new consumption data.

To view recently generated invoice for an account, go to **AR / Billing** Tab on CSR screen. The most recently billed invoice is at the top of the list. For details see, AR/Billing Tab on page 126.

Note: Suppliers can create single invoice directly from CSR in the following way:

1. On the Customer summary screen, go to Activity > Invoice.

2. Enter the **Begin Date Range** and **End Date Range** and click **Generate Invoice**.

3. Invoice is generated successfully or invoicing error is thrown if any of the invoicing parameters is not satisfied.

Print Engine

This runs in the background to print invoices using different templates. New **Invoice Print Request** is stored in the `BillingAdmin.PrintQueue` table.

By using Crystal Reports, Active Reports, or Word2PDFs (iPDF) software, the invoice data is used to create an actual invoice. The invoice is saved as a PDF file and made ready either to be delivered directly to Customers by email, or batched and sent to CIS **Print Vendor** by **Export Engine** for it to be printed and delivered to Customers. In addition, **Print Engine** generates the outbound `810` requests in the Market database and the global service picks up and delivers it to the Market.

Below is an example of a PDF version of invoice:

Export Engine

This exports the data to Customers in csv or xml formats or exports data to third party using EDI transactions.

Here is a general overview of the invoice release and print process with the third party print vendor:

1. CIS Ops team sends a confirmation email to the Supplier Ops team requesting to review the invoices within the current day's invoice date.

2. Upon receiving the request, the Supplier Ops team reviews the invoices and provides feedback to the CIS Ops team.

---

3. **Invoice Correction**, if any, is implemented by the CIS Ops team.

4. Once the invoices are ready for release, CIS releases the invoices to the third party print vendor. To release invoice, follow below steps:

   a. Go to Administration **Menu > General > Correspondence Administration**.

   b. Click **Process Today's Invoice** on **Manual invoice processing** page.

   Invoice Administration

   Manual invoice processing

   Process today's Invoices
   Check, approve and release invoices that are ready to be delivered

   Automatic invoice processing

   Validation Rules
   Setup criteria to select invoices.

   Processing rules
   Setup rules for daily automatic approval & release.

   Service logs
   View logs of processed invoices

   Tools

   Reminders
   Setup email reminders.
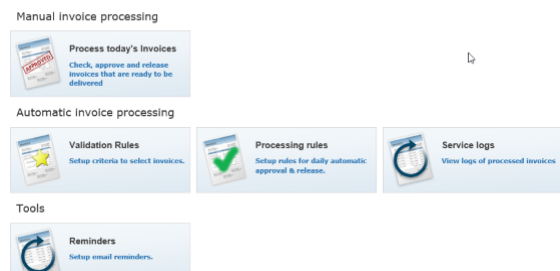
   c. Check the desired records and click **Lock** on **Available for review** tab.

   Invoice Administration

   Available for Review | Locked: Review for Approval | Approved: Ready for Release | Rejected | Release History

   Invoice Count: 18 | Locked Invoice Batches Count: 0   Filter

☐ ▼ Print Format	Bill Group	Customer Type	Billing Type	Delivery Type	Division	Locked by	Invoice type	Locked Count	Invoice Count	Amount	Invoice Date
☐ Invoice Standard English v2	911002	C	Dual				Invoice	0	12	($43.56)	12/23/2019
☐ Invoice Standard English v2	911002	C	Dual				Invoice	0	3	$5.94	12/24/2019
☐ Invoice Standard English v2	911002	C	Dual				Invoice	0	1	$0.00	12/11/2019
☐ Invoice Standard English v2	911002	C	Dual				Invoice	0	2	$11.68	12/18/2019

   « Prev   1   Next »

   Lock   Unlock all invoices

   d. Go to **Locked:Review for Approval** tab. Check the desired records and click **Approve**.

Invoice Administration

Available for Review   **Locked: Review for Approval**   Approved: Ready for Release   Rejected   Release History

Invoice Count: 18 | Locked Invoice Count: 18   [Filter]

	Invoice #	Bill Group	Delivery Type	Print Status	Exception Count	Updated by	Account #	Customer	Division	Invoice Date	Post Date	Amount	ESIID	Previous Invoice #	Previous TDSP Charge Amt	Exception Type	Prem Type
☐	33853921 🔒 🔍	911002	Print		0		003587544	SDRP 1,...	Spark Energy Gas	12/11/2019		$0.00	1332112189		$0.00	No Exceptions	Gas
☐	33853925 🔒 🔍	911002	Print		0		003587544	SDRP 1,...	Spark Energy Gas	12/18/2019		$1.67	1332112189		$0.00	No Exceptions	Gas
☐	33853926 🔒 🔍	911002	Print		0		003587544	SDRP 1,...	Spark Energy Gas	12/18/2019		$10.01	1332112189		$0.00	No Exceptions	Gas
☐	33854028 🔒 🔍	911002	Print		0		003587544	SDRP 1,...	Spark Energy Gas	12/23/2019		($57.42)	1332112189		$0.00	No Exceptions	Gas
☐	33854029 🔒 🔍	911002	Print		0		003587544	SDRP 1,...	Spark Energy Gas	12/23/2019		($1.98)	1332112189		$0.00	No Exceptions	Gas
☐	33854030 🔒								Spark Energy							No	

[Approve] [Reject] [Unlock all invoices] [Change Delivery Type] [Transfer Bill Group]   [Download File]

e. Go to **Approved:Ready for Release** tab. Check the desired records and click **Release Batch.** This releases the selected invoices. Any time during the process you can click **Cancel** to cancel releasing.

Invoice Administration

Available for Review   Locked: Review for Approval   **Approved: Ready for Release**   Rejected   Release History

Invoice Count: 3 | Approved Invoice Count: 3   [Filter]

	Print Format	Bill Group	Customer Type	Billing Type	Delivery Type	Division	Approved by	Invoice type	Invoice Count	Amount	Invoice Date
☐	Invoice Standard English v2	911002	C		Dual	Print	Spark Energy Gas	qa.test.stg qa.test.stg	Invoice	1	$0.00	12/11/2019
☐	Invoice Standard English v2	911002	C		Dual	Print	Spark Energy Gas	qa.test.stg qa.test.stg	Invoice	2	$11.68	12/18/2019

« Prev   1   Next »

[Release Batch] [Cancel Batch]

Note: Alternate functionality to release invoice - Go to **Administration Menu > Operations > Batch Print Administration NEW**. Select **Release** radio buttons in the displayed records and click on click **Process Print Batch**.

INVOICE BATCH PRINT ADMINISTRATION
Letter Batch Print Administration

Need to reprint an invoice?
Enter the Invoice No below:

[Reprint Invoice]

Single Invoice Batches

[Process Print Batch]

Summary Invoice Batches

Type	Bill Group	Billing Type	Delivery Type	Special Instructions	Print Format ID	Invoice Count	Amount	Invoice Date	Printing Actions ⑦
Invoice Summary English v2	100100	Supplier Consolidated	Print ▼		5032	3	$241.69	3/18/2019	⦿ No Action ◯ Release
Invoice Summary English v2	100100	Supplier Consolidated	Print ▼		5032	1	$166.49	8/22/2019	⦿ No Action ◯ Release
Invoice Summary English v2	100100	Supplier Consolidated	Email ▼		5032	1	$53.74	3/18/2019	⦿ No Action ◯ Release
Invoice Summary Spanish v2	100100	Supplier Consolidated	Print ▼		5033	2	$245.84	3/18/2019	⦿ No Action ◯ Release
Invoice Summary English v2	100200	Supplier Consolidated	Print ▼		5032	2	$1,096.16	3/18/2019	⦿ No Action ◯ Release
Invoice Summary English v2	100300	Supplier Consolidated	Print ▼		5032	6	$2,032.03	3/18/2019	⦿ No Action ◯ Release
Invoice Summary English v2	100500	Supplier Consolidated	Print ▼		5032	1	$246.89	3/18/2019	⦿ No Action ◯ Release

[Process Print Batch]

5. Invoices are transmitted to third party print vendor in batches with up to 50 invoice per batch. Batches are also checked with the following criteria:

- The Bill group is correct.
- The Customer Type is correct.
- Duplicate checkers ensure that invoices are never sent twice in the same batch.
- Invoices are never sent twice in different batches.

6. Validators exist to ensure that there is no corruption in both Zip and PDF files.

7. The batches then receive a "Release Time" indicating when they were released.

8. Once downloaded, the batches receive a "Downloaded Time" to confirm receipt by the third party print vendor.

9. A subsequent file is sent to the third party print vendor that contains all batches transmitted for the day as well as the number of invoices contained in each batch.

10. Once done printing, the third party print vendor sends back a confirmation file to CIS. CIS imports the confirmation file with the date in the file as the "Mail Date". The File contains the following information:

- Batch Name
- Number of pages in the batch
- Count of distinct invoices in the batch
- Mail Time

To View the print status report,

1. Go to **Administration Menu > Operations > Batch Print Monitoring**.

2. Set the **Date From** and **Date To** fields. Select **Print Status** from drop down and click **List**. This will display the desired print status report.

Batch Print Monitoring   ☰ List

Print Status

- All -

Date From	Date To
12/17/2019	12/25/2019

Print Status Key

0	Not Printed
1	Pending: Create Report
2	Pending: Download
3	Pending: Print
4	Printed
5	Released, Do Not Print

Event Engine

This creates and handles system events. The following tasks are conducted by the System Maintenance Engine:

- Enroll Customers
- Apply Aging
- Apply Late Fees
- Maintenance Queue
- QA Check
- Generate Events
- MCPE Back Casting
- Log Service

Bulk Invoice Administration

Learn to perform bulk invoice operations in CIS.

Bulk Invoice Administration Display is an operational tool to facilitate quick invoice updates.

To access Bulk Invoice Administration page, go to **Administration Menu > General > Bulk Invoice Administration Client**.
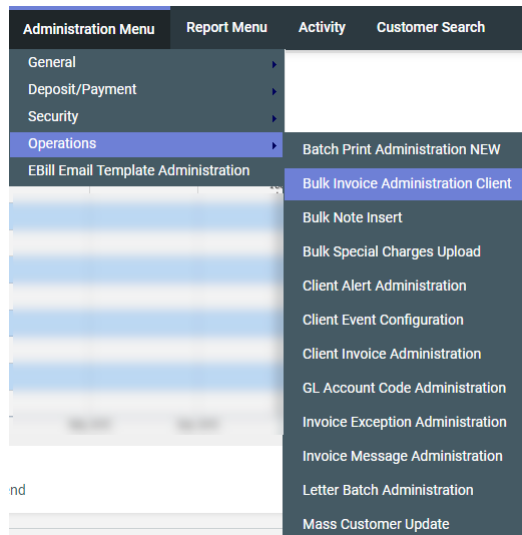
The following actions can be performed in **Bulk Invoice Administration**:

- Regenerate Bulk Invoice XML.
- Regenerate Bulk Invoice XML with New Dates.
- Void Bulk Invoices.
- Void Master Invoice.
- Cancel Invoices.
- Cancel/Re bill Invoices.
- Re bill Invoices as DUAL.
- Set Invoices to Do Not Deliver.

Invoice Validation

Learn about invoice validation and handling those validation as per Supplier's rule.

Invoice validation occurs when bill groups are locked for invoicing (Pre-Invoicing Validations) and when batches are created (Post-Invoicing Validations).
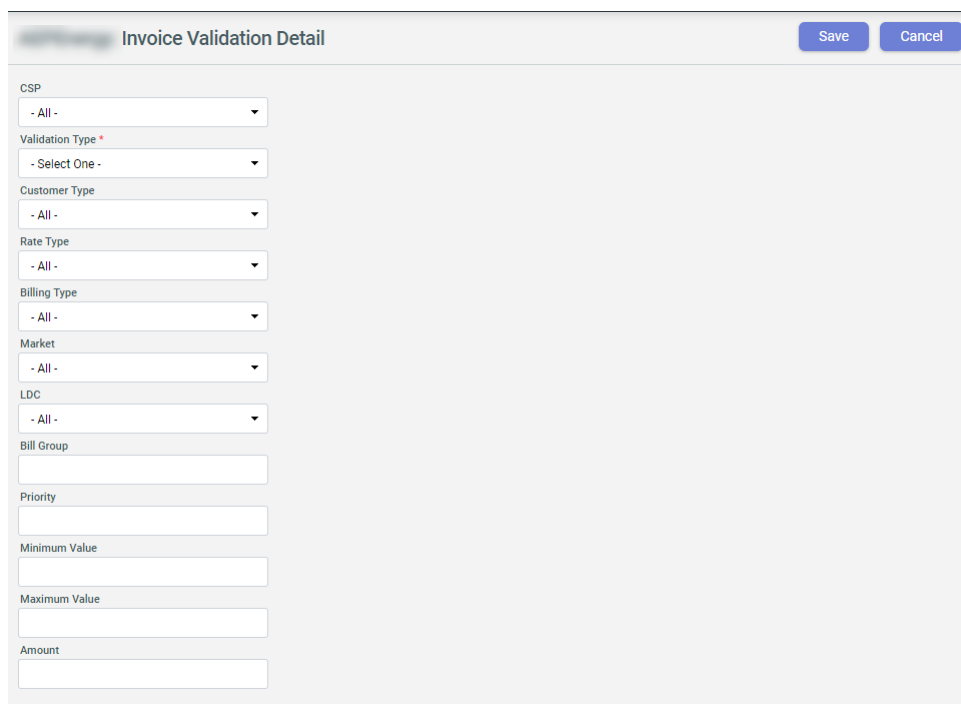
In this section, different validations are discussed depending on the different cases.

Pre-invoice Validation

Pre invoice validation is used to make sure all the required data are valid and available for the Customer Invoice Creation.

To create a new pre-invoice validation, follow the below steps:

1. Go to **Operations > Client Invoice Administration**. Click **[Configuration]** from **Quick Links**.

2. On the **Invoice Configuration** page, click **Invoice Validations**.

3. Click **Add** on **Invoice Validations** page.

4. On the **Invoice Validation Detail** page, set the details as per your requirement and click **Save**.

To access pre invoice validaton report, follow the steps below:

1. On the **Customer Summary** screen, go to **Administration** > **General** > **Pre-invoice Validation**.
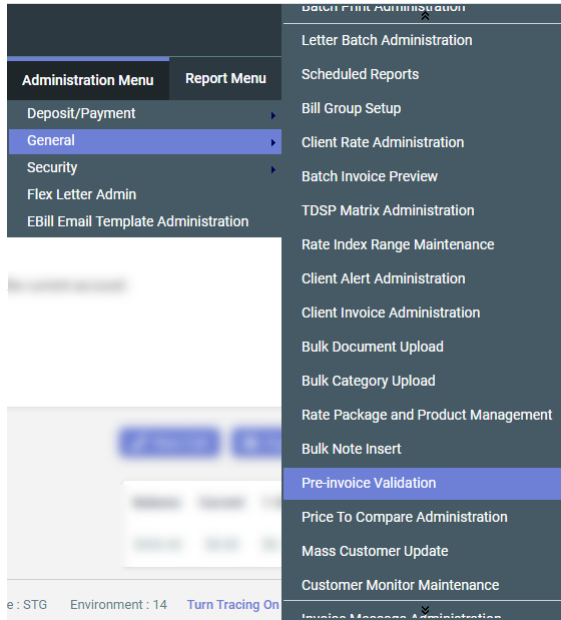
2. On the **Pre-Invoice Validations Report** page specify the **Date range**, **Billing Type**, **LCDName** and **Validation Type** and click **List**.
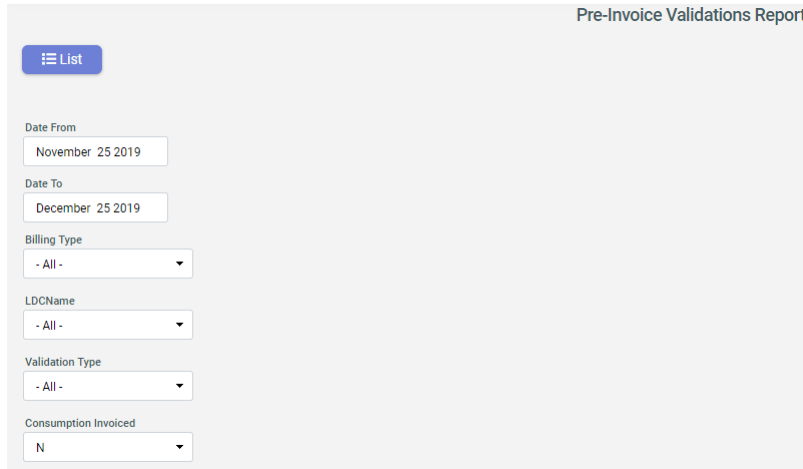
CIS supports 35 different types of pre-invoice validations. The most Common amongst them are:

Validation: Alert Consumption Approval

This type of validation applies when Supplier rules state consumption is not approved. This is currently used only in GMC for MCPE Bill Calculations.

Validation: Alert Consumption Type

This type of validation applies if consumption type is an Adjustment or Rollover. This can also be Supplier-specific. Whatever the procedure returns, log in `Invoice-BatchDetailValidation`.

Validation: Mismatch Meter Reads

This type of validation applies if there is a mismatch in meter reads. It is applicable to the following cases:

- Previous read exists

- Meter is non interval

- Consumption type is not a `Rollover`. To learn more about Rollover, see Creating and Managing Products on page 23.

- Begin read is not equal to previous end read.

Validation: Mismatch Meter Service Date

This type of validation applies if there is a mismatch in Meter Service Date. This applies to the following cases:

- Previous read exists

- `Date From` is not equal to previous `Date To`.

Validation: Missing Consumption and Alert Multiple Consumption

This type of validation applies if there is no billable consumption found in billing database and if a meter contains multiple consumptions.

Validation: Missing Rate

This type of validation applies in the following cases:

- A Customer does not have an active rate.

- A Customer has an active rate but it is not applied. (No product Rollover)

Validation: Missing TDSP Charges and Alert Multiple TDSP Invoices

This type of validation applies if no tdsp charges are found for a Customer on Supplier consolidated billing mode and if more than one tdsp charges are found on an account.

Post-invoice errors

Learn about post invoice errors and their handling.

Post invoice errors occur due to missing invoice components. Such errors are analysed and fixed as per business rule of the Supplier. They are reported in **Daily Billing Report** prepared by the CIS ops team.

No Rate Information

This error occurs when no active rate exists to cover the billable period.

All consumption billed check failed

This error occurs if a rate partially covers the billing period.

TDSP charges not found

This error occurs for Rate Ready Customers when there is no tdsp charges available to be billed.

No premise consumption records found

This error is thrown in two scenarios:

- When you invoice an account that does not have any unbilled consumption.
- When you invoice an account that has a consumption with end service date in the future.

Managing Generated Invoices

Learn about actions that can be performed on an invoice.

To view the list of invoices generated for an account, go to **AR / Billing** Tab on CSR screen. The most recently billed invoice is at the top of the list.

The following actions can be performed on an invoice:

Invoice Emailing

To email the invoice, click the ✉ icon at left side of the Invoice #.
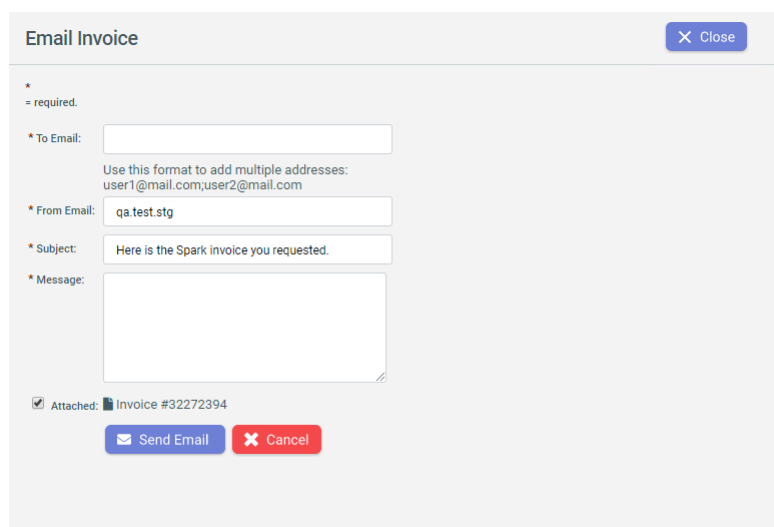
Select/Deselect All	Invoice #	Type	Invoice Date	Due Date	Service Period	Previous Balance	Payments + Adjustments	Invoice Amount	Amount Due
	32272394		1/29/2019	2/19/2019	12/19/2018 - 1/23/2019	$72.82	$0.00	$4.49	$77.31
	32272393		1/29/2019	2/19/2019	12/19/2018 - 1/23/2019	$146.39	$146.39	$72.82	$72.82

AR Summary Print Selected Print AR History

To view charges on an invoice, click on the invoice number.

This opens to another window where you can create an email to send the invoice.

The following fields are required:

- **To Email** - Enter the Customer's email address.
- **From Email** - Enter the Sender's email address.
- **Subject** - There is a default Subject set but can be edited.
- **Message** - Put in the details that are necessary for sending the email.
- **Attached** - This indicates the particular Invoice # is being sent as an attachment to the email.

Invoice Memo

This is used to create off-cycle invoices when necessary. Debit/Credit memos generate a non-printed, manual invoice in the billing system called "Memo Invoices". These are created real-time and affect the Customer receivables automatically.

To generate **Inovice Memo**, do the following:

1. Click the icon located at left side of the Invoice #. Enter the required details on **CREDIT/DEBIT MEMO INVOICE** page.
2. Click **Generate Invoice**.

Fields	Description
Referenced Invoice	Select referenced Invoice for which memo needs to be created
Memo Date	Enter the memo date.
Service From	Enter the consumption service from date.
Service To	Enter the consumption service to date.
Due Date	Enter the memo due date.

To complete the process follow these additional steps:

1. Select a **Rate Description** from the list.
2. Enter a **Memo Description**.

3. Enter a **Memo Quantity**.

4. Enter the **Memo Amount**.

Note: A minus sign in memo amount indicates credit.

---

5. Click **Submit Invoice Detail** to add the invoice details.

6. Submit multiple details, if required.

7. Click **Submit Completed Invoice** to complete the process. You can view the generated Memo inside **AR Summary** section.

CREDIT/DEBIT MEMO INVOICE

Customer No:	
	Get Customer

Atlanta, GA 30337

Referenced Invoice:	▼
Memo Date:	12/25/2019
Service From:	12/26/2018
Service To:	1/24/2019
Due Date:	12/25/2019

Generate Invoice

To view charges on an invoice, click on the invoice number.

Select/Deselect All	Invoice #	Type	Invoice Date	Due Date	Service Period	Previous Balance	Payments + Adjustments	Invoice Amount	Amount Due
Ⓐ	23551814	Debit Memo	12/25/2019	12/25/2019	12/26/2018 - 1/24/2019	$326.44	$0.00	$414.62	$741.06

Invoice Adjustment

To add adjustment to an invoice, click Ⓐ to show the Adjustment Note. Enter the required details on the **Special Charges** pop up.

Ⓐ **Invoice Adjustment: Special Charge**

*= required.

*Utility Account:	00000000000645143228 ▼
*Adjustment Type:	Adjustment - rate error ▼
*Amount:	
	☐ This adjustment is Tax Exempt.
Description / Note:	

💾 Save   ✖ Cancel

Fields	Description
Utility Account number	Enter the specific Account number where Adjustment applies.
Referenced invoice number (if applicable)	This is unique to the invoice.
Charge type	Choose from the list whether it is an adjustment, a refund, or fee.
Adjustment amount	The specified amount depends on the type of adjustment or charges.
Description/Note	Put in a short description of the adjustment being applied.
Tax Exempt	There is an option to indicate if adjustment is Tax Exempt.
Bill Now	Click Yes to apply the adjustment to the bill immediately.
Save and Cancel buttons	Click **Save** to save the entry. Click **Cancel** to cancel the entry.

To upload special charges in bulk use the CIS **Bulk Special Charges Upload** feature. To access this feature:

1. Go to **Administration Menu > Operations > Bulk Special Charges Upload**.

2. On **Process Special Charges Upload** page browse the special charges in excel format and click **Upload**.

Note: Sample Excel File to upload special charges can be downloaded from **Process Special Charges Upload** page.

Invoice Printing

To print invoice, click 🖨 to the left of the invoice number to view or print a copy of the invoice mailed to the Customer.

Reverse Charges

To reverse charges on invoice, do the following

1. Click on the Invoice#, then click ↩.

2. To reverse a single charge, click on the charge amount itself. To reverse all charges for the entire category, click on the column header.

Details about the Charges are arranged according to the Charge Type and Amount.

Note: Charges that you reversed appears crossed out.

Invoice Payment

To make payment, click the 🔲 icon to the left side of the invoice number. To learn more about payments, see Payments Overview on page 189.

Invoice Message Processing

Learn to display Supplier-specific message on the Customer invoices.

From the **Customer Summary** screen, click on **Administration Menu** > **General** > **Invoice Message Administration**. Suppliers can customize their own message using this feature. For details, see **Message on Invoice** section on Written Correspondence on page 112.

CSA Accounts (Property Management)

Below is an example of **CSA Invoice List**:

The Property Invoice List allows you to search for invoices under a single property. Enter the specific dates in the `Date From` and `Date To` fields and click `List`.

Master Invoice

Learn about Master Invoice for Summary Customers.

Master Invoicing allows special invoicing functions to be performed applicable to Customers with multiple premises or accounts.

Customers can request to create one invoice for each of their premises or accounts. Also, a Customer may want to have one master invoice with the summary of all sub invoices. With this, it is also possible to print the Master Invoice and then send it to one person only.

To know more about Master Customer, see Customer Hierarchy Trail on page 90.

Invoice Exception Administration

Learn to find exception on the generated invoices.

You can perform your quality check on the generated invoices using the Invoice Exception Administration. To use this functionality, do the following:

1. Go to **Administration Menu > Operations > Invoice Exception Administration.**

2. Use **Filter By:** to filter choose the desired exception and click **List**.

3. From the displayed records you can choose the checkbox on the left and select **Print Status Update:** then click **Update**. This updates print status of the chosen invoices.

Invoice Presentation Interface

Learn about how invoices are presented once they are generated.

The **Invoice Details** is viewed via **Customer Summary > AR/Billing tab** and selecting the Invoice ID. The image below shows an example of the **Supplier Consolidated Model** invoicing detail.

Invoice Details

		Invoice Summary	
		Print Status:	Delivery confirmed
Charge Summary ↺		Email Status:	
		Created By User:	System
Energy Charge	$13.18	Post Date:	1/25/2019
Utility Pass Through Charges	$17.62	Billing Type:	Supplier Consolidated
Monthly Fee	$8.99	Delivery Type:	Print
City Tax	$0.77	Days In Service:	34
Gross Receipts Reimb.	$0.75		View Utility Charges ✉
PUC Assessment	$0.06		
Invoice/Charges Total:	$41.37		

Usage Summary

Utility Account	Meter #	Rate Code	S	C	Ci	Sp	Usage	Demand	Service Period	Days
10032789438216500	150037641	PREM_2423390	Y	Y	Y		216.00	0.00	12/21/2018 - 1/24/2019	34

Some Customers may have only one premise and one meter as shown above, while other Customers might have multiple premises and meters as shown in the image below. Invoicing details of each meter are listed.

Invoice Details

Charge Summary ↺

Energy Charges	**$536.04**
100890100919063118100 (1029.00 kWh x 0.10600000)	$109.07
100890100919063120100 (4028.00 kWh x 0.10600000)	$426.97
Transmission and Distribution Charges	**$176.70**
TDSP Charge (100890100919063118100)	$62.74
TDSP Charge (100890100919063120100)	$113.96
Sales Tax	**$58.80**
HOUSTON MTA ($712.74 x 0.01000000)	$7.13
CITY SALES TAX ($712.74 x 0.01000000)	$7.13
STATE SALES TAX ($712.74 x 0.06250000)	$44.54
Regulatory Charges	**$15.41**
Public Utility Assessment (712.74 x 0.00166700)	$1.18
Texas Gross Receipts (712.74 x 0.01997000)	$14.23
Invoice Total:	**$786.95**

Invoice Summary

Print Status:	Printed
Rate Code:	C10600
Post Date:	12/14/2007
Billing Type:	Supplier Consolidated
Days In Service:	32
	View Utility Charges ✉

Usage Summary

Utility Account	Meter #	S	C	Ci	Sp	Usage	Demand	Service Period	Days
100890100919063118100	S31727253	Y	Y	Y	Y	1029.00	0	11/8/2007 - 12/10/2007	32
100890100919063120100	S35269248	Y	Y	Y	Y	4028.00	0	11/8/2007 - 12/8/2007	30

Invoice Details page contains the following functional information:

- Invoice Summary
- Invoice Charge Summary
- Invoice Usage Summary

Invoice Summary

The **Invoice Summary** section presents the invoice information such as the Print Status, Rate Code, Post Date, Billing Type, Days in Service etc.

Invoice Summary

Print Status:	Delivery confirmed
Email Status:	
Created By User:	System
Post Date:	1/25/2019
Billing Type:	Supplier Consolidated
Delivery Type:	Print
Days In Service:	34
	View Utility Charges ✉

By selecting **View Utility Charges** link, **TDSP Charges** details is displayed as shown below.

Invoice #: 32249045 TDSP Charges						✕ Close

Account #: 002899884
Invoice #: 32249045

TDSP Invoice #	Utility Account #	Charge Code ▲	Amount	Prorated Amount	Unit	Description	Invoiced
94X1190125005601000057	10032789438216500	BAS001	$3.19	$3.19	EA	Customer charge - Basic Customer charge	Y
94X1190125005601000057	10032789438216500	BAS003	$3.55	$3.55	EA	Meter charge	Y
94X1190125005601000057	10032789438216500	DIS001	$3.01	$3.01	KH	Distribution System charge - Distribution charge	Y
94X1190125005601000057	10032789438216500	DSC002	($0.33)	($0.33)	MO	Transition charge-Off Allowance (COA2 0) Used only when IT109 = B2B Discount for charge Off Allowance for TC2	Y
94X1190125005601000057	10032789438216500	DSC003	($0.03)	($0.03)	MO	Transition charge-Off Allowance (COA3 0) Used only when IT109 = B2B Discount for charge Off Allowance for TC3	Y
94X1190125005601000057	10032789438216500	MSC036	$1.80	$1.80	KH	Transition charge (TC2 0)	Y
94X1190125005601000057	10032789438216500	MSC037	$0.64	$0.64	KH	Transition charge (TC3 0)	Y
94X1190125005601000057	10032789438216500	MSC039	$2.26	$2.26	MO	Advanced Metering Surcharge	Y
94X1190125005601000057	10032789438216500	MSC041	$0.12	$0.12	KH	Energy Efficiency Cost Recovery Factor	Y
94X1190125005601000057	10032789438216500	MSC042	$0.47	$0.47	KH	Distribution Cost Recovery Factor	Y
94X1190125005601000057	10032789438216500	TRN001	$1.12	$1.12	KH	Transmission Service charge - Transmission charge	Y
94X1190125005601000057	10032789438216500	TRN002	$1.82	$1.82	KH	Transmission Cost Recovery Factor	Y

Note: The summation of each item should be equal to the total TDSP charges listed on the invoice.

Click the ✉ icon next to **View Utility Charges** link for an option to send the TDSP Invoice details via email.

Invoice #: 32249045 TDSP Charges	✕ Close

Account #: 002899884
Invoice #: 32249045

* = required.

* To Email:	\\\

Use this format to add multiple addresses:
user1@mail.com;user2@mail.com

* From Email:	qa.test.stg
* Subject:	
* Message:	

Attached: ▌ Invoice #: 32249045 TDSP Charges

✉ Send Email   ✕ Cancel

Invoice Charge Summary

CIS calculates the total charges and breaks it into different items depending on meter reads and charges. The **Invoice Total Charges** include:

- **Energy Charges** This is based on meter consumptions and Customer rate as illustrated in **Invoice Summary** section.

- **TDSP Charges** These are charges on Transmission and Distribution services and applies only to Supplier Consolidated Billing Model.

- **Sales Tax** It is calculated based on GeoCode, and Tax Rate. Different tax may apply to different Customers based on the applicable Tax information in the Invoice Usage Summary (state, city, county levels).

- Other charges include **Regulatory Charges**, **Budget** or **Average Billing**, etc.

Charge Summary	
Energy Charge	$13.18
Utility Pass Through Charges	$17.62
Monthly Fee	$8.99
City Tax	$0.77
Gross Receipts Reimb.	$0.75
PUC Assessment	$0.06
Invoice/Charges Total:	$41.37

In the example shown above, the Customer has two meters. The total `Energy Charges` are $536.04, `Total TDSP Charges` are $176.70, `Sales Taxes` are $58.80, `Regulatory Charges` are $15.41, and the `Invoice Total` is $786.95.

Invoice Usage Summary

Usage Summary										
Utility Account	Meter #	Rate Code	S	C	Ci	Sp	Usage	Demand	Service Period	Days
00000000009535204343	003483903	PREM_575016	Y	Y	Y	Y	33.00	0.00	6/8/2018 - 7/10/2018	32

The **Usage Summary** section includes the following details:

- **Utility Account** - This is the same as the ESI ID.
- **Meter #** - The metering device or source of meter reads.
- **Rate Code** - The specific Rate Code applied to the account.
- **Total Usage** - This is the measured consumption.
- **Demand** KW of KVA quantity
- **Service Period** The covered dates for the consumption.
- **Days** Total # of days based on the Service Period.

Usage Summary also shows the Tax Flags per ESI ID information where `N` = not taxable and `Y` = taxable. The different taxes that can be applied to Customers include:

- `S` = State
- `C` = County
- `Ci` = City
- `SP` = Local or Special Districts

Invoicing Late Fee Assessment

The **Late Fee Assessment** functionality in CIS is designed to comply with the Texas Market Rules.

These rules are documented in PUCT Senate Bill 7 Ch. 25 Substantive Rules Applicable to Electric Service Providers, Sub Chapter R Customer Protection Rules for Retail Electric Service, section 25.480 Bill Payment and Adjustments, paragraph (c), which is stated below:

- **(c) Penalty on delinquent bills for electric service.**

  A one-time penalty not to exceed 5.0% may be charged on a delinquent bill for electric service. No such penalty shall apply to residential or small commercial Customers served by the provider of last resort (POLR), or to Customers receiving a low-income discount pursuant to the Public Utility Regulatory Act (PURA) §39.903(h). The 5.0% penalty on delinquent bills may not be applied to any balance to which the penalty has already been applied. A bill issued to a state agency, as defined in the Government Code, Chapter 2251, shall be due and bear interest if overdue as provided in Chapter 2251.

- **Current Design:**

  The **Late Fee Assessment** service runs each night. The service looks at each Customer's account where:

  - The Late Fee Flag is set to "Y" (meaning yes to allow the assessment).
  - The most recent invoice that is both unpaid and past due.

Upon these occurrences, a late fee of 5% is calculated on that invoice's unpaid balance. Once an invoice has received a **Late Fee Assessment** it is flagged so that no additional assessments can be levied against it. The **Late Fee Assessment**, after receiving its own invoice ID, is associated to the invoice for which the fee was assessed, and is stored in the `Invoice Details` table.

Currently there is no provision within the **Late Fee Assessment** process to systematically determine whether or not a Customer is a LIDA Customer prior to generating the Late Fee. So, in order to prevent the **Late Fee Assessment** from occurring, it is up to the Client or CIS to manually set the Late Fee Flag to N for those types of Customers in order to prevent this type of charges from being levied.

The **Late Fee Reversal** functionality allows the Client to reverse a Customer's late fee at any time. If the **Late Fee Reversal** occurs prior to the next invoice being generated then the original Late Fee and the subsequent **Late Fee Reversal** net against each other for a Zero $ result on the next invoice. If the **Late Fee Reversal** is created after the Customer's next invoice is generated, then the Late Fee charge shows up on the next invoice. The invoice generated after the invoice that carries the Late Fee charge has the **Late Fee Reversal** showing up as a credit amount.

CIS recently modified the **Late Fee Assessment** functionality to resolve the issues some Clients are having as a result of providing their Customers with 30 Day Terms. The **Late Fee Assessment** service runs each night. The service looks at each Customer's account where the following are true:

- The Late Fee Flag is set to "Y" (meaning yes to allow the assessment)
- If the Customer's Terms are less than 30 Days, system evaluates only the most recent invoice that is both unpaid and past due.
- If the Customer's Terms are equal to or greater than 30 Days, the system evaluates the most recent invoice plus one additional invoice that is both unpaid and past due

Upon that occurrence, a late fee of 5% is calculated on that invoice's unpaid balance. Once an invoice has received a **Late Fee Assessment**, it is flagged so that no additional assessments can be levied against it. The **Late Fee Assessment** receives its own invoice ID, is associated to the invoice for which the fee was assessed, and is stored in the `Invoice Details` table.

The **Late Fee Reversal** functionality allows the Client to reverse a Customer's late fee at any time. If the **Late Fee Reversal** occurs prior to the next invoice being generated then the original Late Fee and the subsequent Late Fee Reversal net against each other for a Zero $ result on the next invoice. If the **Late Fee Reversal** is created after the Customer's next invoice is generated, then the Late Fee charge shows up on the next invoice. The invoice generated after the invoice that carries the Late Fee charge has the **Late Fee Reversal** showing up as a credit amount.

Adjusting Customer Billing and AR

Learn about the financial transactions for adjusting Customer Billing and AR.

You can adjust Customer billing and AR by following the method described in .

There are three types of billing adjustments in CIS:

- **Debit/Credit Memos** - Debit/Credit memos generate a non-printed, manual invoice in the billing system. "Memo Invoices" are created real-time and affect the Customer receivables immediately. Typically used to create Customer balances during system conversion of an existing AR in the Legacy system. This normally

should be used for Customer account migration. Some also use it for write off or reverse payment. It normally not used during the normal life of a Customer.

- **Special Charges** - Used to create various line items on a Customer's bill (e.g. Contract Cancel Fee, Misc. Charge) When a Special Charge is created, it is held in a temporary table until the next bill is created. It is used for existing Customers who are active and going to receive invoices for the next cycle. It does not affect the current AR. Special charges include everything but late fee.

- **AR Adjustments** - These transactions do not show up on Customer bills or in the revenue reports. Typically used for writing off A/R balances or when refunding money to a Customer. With no special details, just adjustment.

Commonly Used Database Tables

Learn about the commonly used database tables and their functions.

Below are the commonly used databases and their description:

Table Name	Description
Customer	Contains information related to a Customer, including: **Customer Name** - This could be a Company Name. **CustID** - This is also the Record ID. **CustNo** - This is the Customer Account Number. **:** The phrases Customer Number and Account Number are often used interchangeably. They all refer to the CustNo.
CustomerAdditionalInfo	This links this Customer to other valuable information such as their DUNS ID, their Billing Date, Billing Type, and other account state information.
Premise	This is a representation of a physical property which can be a single home, a building, an entire apartment complex, a single unit in an apartment complex. **:** A **Premise** is associated with a Customer, and a Customer can have 0-n premises.
Address	This provides physical mailing addresses for several tables in the system. Premise, Customer, LDC, and other tables store address information in this table. An **Address** is mostly used to get the mailing address for a Premise.

Table Name	Description
Meter	It measures the consumption of gas or electricity on a premise. A **Meter** has an `ESIID` and a `Meter Number` (MeterNo). A meter is linked to a Customer, a premise, and an address. **:** A premise can have 1-n meters.
Consumption	This refers to gas or electricity usages as measured by a meter. Associated with a **Meter** and an **Invoice** (if the consumption has been billed to the Customer yet). The consumption record tracks when the consumption was read, energy usage either as a begin-end value or as a usage value for the term, and the begin and end date of the consumption.
ConsumptionDetail	This contains data read from meter registers. The new electronic meters have a small bit of memory called a **Register**, which can be programmed to store or accumulate certain kind of data. When meter data comes with register data values, those values are stored here. If a meter has more than one register, each register value is written as a record in this table. Thus, there may be many **ConsumptionDetail** records for each Consumption record.
Invoice	The Invoice Table stores information related to an individual invoice. An invoice is linked to a Customer. The complete amount of the invoice is stored in this record. Each line item on the invoice is stored in **InvoiceDetail**.
InvoiceDetail	An Invoice contains line items. **InvoiceDetail** contains a record for each line item in an Invoice. Each line item is linked to a meter, premise, county, and state.
Rate	Customers are charged for electricity and gas that they used. The price they pay depends on the rate plan they have signed up for, which is created by the reseller. The **Rate Table** keeps track of the different rate plans, their effective and expiration dates, and any information related to identifying the rate plan itself. It does not contain the actual rate charged for the consumption.

Table Name	Description
RateDetail	The RateDetail table contains specific information about the rate plan, the charged rate, the rate for a particular period of time, profit margins, etc. The structure permits the rate to change over time, thus multiple records can detail what the current rate is, when it changes, and what it changes to.
Payment	The records in the Payment table keeps track of payments from Customers. When the payment is received, it is noted in a bank transaction which generates an 820 message to the market stating the Customer paid their bill. A payment is linked to a **LockBox** by `LockBoxID`. The record contains the check amount, the date the check was posted and when it was paid, etc.
PaymentDetail	The **PaymentDetail** contains specific payment information about a payment such as the payment amount, and the date the payment was posted. It is linked to a Customer by `CustID` and `CustNo` and to an Invoice by `InvoiceID`.
CustomerTransaction-Request (CTR)	The imported data coming from the Global Service EDI documents passing through the **<ClientN>Market** database and then to the **<ClientN>** database is sent to the **CustomerTransactionRequest** (CTR) table. The CTR table links the Market Transaction to the Customer by `CustID`, to the Premise by `PremID` and `PremNo` which is the same as ESIID. Each record in CTR contains the following: • Transaction Type (810, 820, 824) • Action Code (A, B, CF, 10, etc.) • Transaction date • Direction (inbound or outbound). Transactions from the market have a `TransactionNumber`, which is stored in CTR. Each CTR record has a `RequestID`, which links it back to the original raw data in the `BillingAdmin` database and to the `ChangeRequest` table.
ChangeRequest	

Table Name	Description
BillingAdmin..EventActionQueue	Used by the Event Engine to perform operations on data as requested by the Supplier application/CSR.
BillingAdmin..EventingQueue	Used by the Event Engine to perform operations on data as requested by the Supplier application/CSR.
<ClientN>Market..<tables>	This stores incoming messages from the market and populated by the Global Service.

Budget and Average Billing Plans

Learn about Budget and Average Billing plans in CIS.

CIS application has the feature to support Budget and Average Billing plans. The topics below discuss Budget and Average Billing in detail.

Billing Plan	Description
Average Billing	Customers are billed taking in account the average charges for a rolling 12-month period, or based on the number of active months for those that have less than 12 months of service. A Customer defined % of their outstanding rolling balance (may be positive or negative) is added.
Budget Billing	Customers pay an equal amount each month (regardless of usage). Each month the Customer is billed their actual charges based upon the monthly usage (867) received from the Market. While the actual charges are billed to the Customer's account, the amount invoiced is the **Budgeted Amount**. The Customer's invoice shows the normal usage and charges incurred, but the Amount Due is equal to the **Budget Billing Amount**. Each month the Budget Balance goes up or down depending upon the difference between actual charges and the budget amount billed.

The ability to set a Customer on either billing plan is established per the client's request. Some parameters that need to be considered when processing the billing plan are:

- An Individual Customer cannot be on both **Budget Billing** and **Average Billing** plans at the same time for single premises.

- If the Customer has multiple premises, one premise can be on **Average Billing** and others can be on **Budget Billing**. This is based on how the invoice charges need to be calculated during the application.

Budget Billing

In Budget Billing, CIS provides Customers with levelized billing each month.

Following are the salient features of Budget Billing:

- It is available for both **Residential** and **Commercial** Customers.

- It is available for both **Single ESI ID** and **Multiple ESI ID** invoicing. If Customer has **Multiple ESI IDs**, all ESI IDs are included in the **Budget Billed Amount**.

- The **Budget Billing Calculator Tool** provides the user means to calculate the Monthly Budgeted amount. This tool uses the last 12 months of historical usage and/or `810` market data if available in the market database. Otherwise, if data is not available, the Client can input data in the User Interface.

- The system bills the actual monthly `kWh` received in the `867`, but the **Invoice Amount Due** is the **Budget Billing Amount** set for the Customer.

- **Actual Reads** billed each month is applied with taxes.

- **True-Up** occurs based on Customer configuration or upon receipt of a final read, whichever occurs first. It can be done Annually, Quarterly and Semi-annually.

  - **True-Up** invoices are billed at actual charges plus the Budget Billed balance.

  - You can force a **True-Up** for a Customer upon demand.

- **AR Summary Information** includes the **Budget Billed Amount**, and not the actual charges.

- Customer may be removed from **Budget Billing** upon demand. Upon removal from **Budget Billing**, the **True-Up** Process occurs at Customer's next billing.

The topics below discuss Budget Billing in detail.

Configuring Budget Billing

The **Budget Billing** screen provides the current status of the Customer. To access it, go to **Customer Summary** > **Activity Menu** > **Budget Billing**.
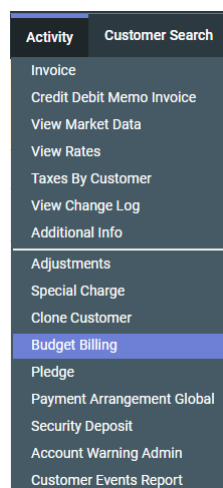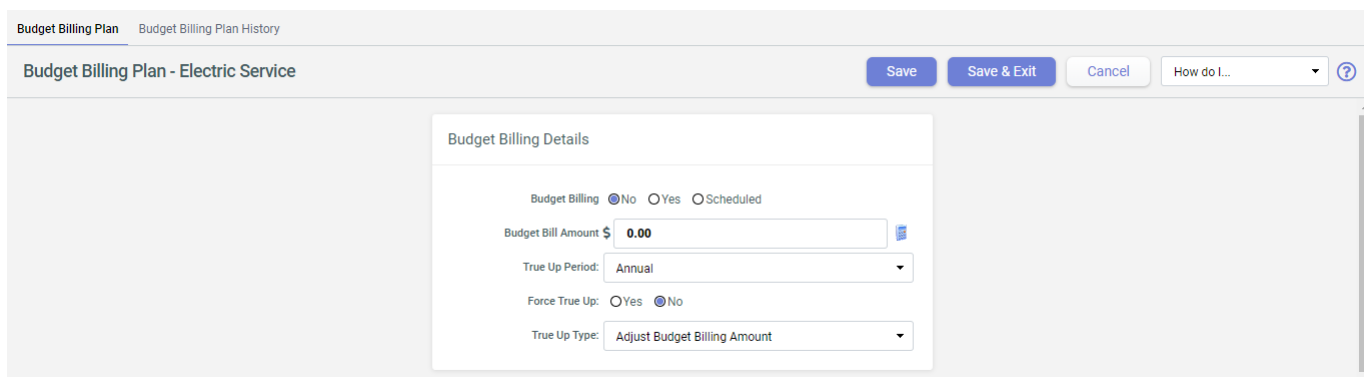
Default Values

When a Customer is not yet on a Budget Billing plan, the default values are as follows:

- **Budget Billing:** No

- **Budget Bill Amount:** $0. Click to show the **Budget Billing Calculator** icon.
- **True-up Period:** Annual
- **Force True-up:** No
- **True-up Type:** Bill True-up Amount

Configuring Budget Billing

To properly set up a Customer on the plan, the following process should take place:

1. In the **Budget Billing Details** screen, choose from the following **Budget Billing** options:

   - `Yes` - This is for the changes to take effect immediately on the next invoice.

   - `Scheduled` - Choose this if you want the plan to start at a future date. Choosing this option opens the **Effective (Scheduled) Date** window. Enter the preferred date using the `Calendar` icon.

Effective (Scheduled) Date:		📅

2. Enter the **Budget Bill Amount** in dollars and cents. No need to enter the $ sign. If the Budget Bill Amount is unknown, you can use the Budget Billing Calculator instead. For more information, see Budget Billing Calculator Tool on page 172

3. Select the **True-up Period**. Choose from `Annual`, `Semi-annual` or `Quarter`.

4. Set **Force True-up** to its default setting `No`.

5. Select the **True-up Type**:

   - `Bill True Up Amount` - This adds the Budget Billing Balance in the next billed invoice following the end of the True-up period.

   - `Adjust Budget Billing Amount` - This adjusts the Budget Billing Balance over the True-up period.

     For more information, see Balance True-up on page 174.

6. Click `Save`.

This displays the **Budget Billing Details** screen indicating that the account is now on Budget Billing.

You can also use the **Payment Plan** field within the **AR Aging** section on the **Customer Summary** screen to identify if the account is on Budget Billing. This is the **Monthly Budget Billing Amount** for the Customer while they are active on the Plan. The **Budget Balance** is displayed in the adjacent box to the right of the Billing amount.

Once the account is no longer on **Budget Billing**, these fields are no longer visible.
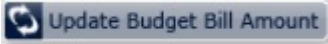
Balance	Current	1-30	31-60	61-90	91-120	121-210	211+	AR Terms (Days)	Budget Billing	Budget Variance
$41.37	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$41.37	16	$5.00	$0.00

Budget Billing Calculator Tool

One of the functionalities of Budget Billing is the **Budget Billing Calculator Tool** that allows easier calculation of the monthly budgeted amount.

To use this tool:

1. On the Budget Billing screen, click icon to open the **Budget Billing Calculator**.

2. Enter the values in each criteria that you want the calculator to use to create the **Budget Usage Table**:

   - **Energy Price**
   - **Profile** - Choose from `Electric Residential`, `Gas residential` or `Georgia`.
   - **Calculate Usage** - Choose either `Use Profile Usage Only` or `Fill-in Usage with premise consumption`.
   - **Risk Factor**
   - **Monthly Charge**
   - **Monthly Utility Charge**

3. Click `Build Usage Table` to display the table containing usage break-up for each month and the respective billed amount. Select the months of consumption to add when calculating the budget.

4. Click `Calculate Budget` to show the value for the **Calculated Budget Billing Amount**.

5. Click to save the changes.

Budget Billing Plan History

The **Budget Billing Plan History** tab stores log of all Budget Billing changes made on the account.

Monthly Billing

As the Customer account is moved on the Budget Billing plan, it starts getting billed on monthly usage (`867_03`) on a configured Budgeted Amount. The invoice break-up display actual charges incurred while the total invoice amount is.

The Customer's invoice shows the normal usage and charges incurred, but the amount due will equal the Budget Billing Amount. Each month the Budget Balance goes up or down depending upon the difference between actual charges and the budget amount billed.

The image below shows the **Budget Billing** column on the **Customer Summary** screen.

Note: The **Invoice Total** is the amount of the Budget Billed Amount, not the total of the actual charges calculated.

Monthly Billing of Budget Billing Customers

Once received from the Market, the monthly usage (`867_03`) determines the actual charges that the Customer is billed for each month but the **Budgeted Amount** determines the amount invoiced. Each month the **Budget Balance** goes up or down depending upon the difference between actual charges and the **Budget Billed Amount**.

The image below shows the **Budget Billing** column on the **Customer Summary** screen.

Note: The **Invoice Total** is the amount of the Budget Billed Amount, not the total of the actual charges calculated.

Removing Customers from Budget Billing

On a client's request, you can remove a Customer from the **Budget Billing Plan**.

To do that:

1. Go to **Customer Summary** > **Activity Menu** > **Budget Billing**.

2. Click `Edit`.

3. Select `No` from the **Budget Billing** drop-down list.

4. Click `Save` button.

You can validate the change on the **Customer Summary** screen where the **Payment Plan** field would no longer be visible.

As the Customer is removed from Budget Billing, the account is expected to go through certain adjustments in the next billing. For more information see, Balance True-up on page 174.

Balance True-up

The Customer's account needs an adjustment to reconcile upon receipt of a final read during the configured period.

True-Up can be configured to be done `Annually`, `Quarterly` and `Semi-annually`. **True-Up** invoices are billed at actual charges plus the Budget Billed balance.

You can force a **True-Up** on a Customer account.

1. Go to **Budget Billing Plan** tab from the **Activity** menu.

2. Change the **Force True-up** field to `Yes` and select the `Save` button.

The changes takes effect at the Customer's next account billing. The **True-up** amount shows as a `Special Charge` detail on the next invoice.

Use the Budget Billing Detail Report on page 179 to review the complete details of a particular Customer who has been on the **Budget Billing Plan**,

The True-up adjustment is displayed as **Payment Plan True Up Charges** under **Charge Summary**.

Budget Billing Reports

The reports pertaining to the **Budget Billing** Customers can be accessed via **Report > Accounting > Budget Billing Detail Report**.
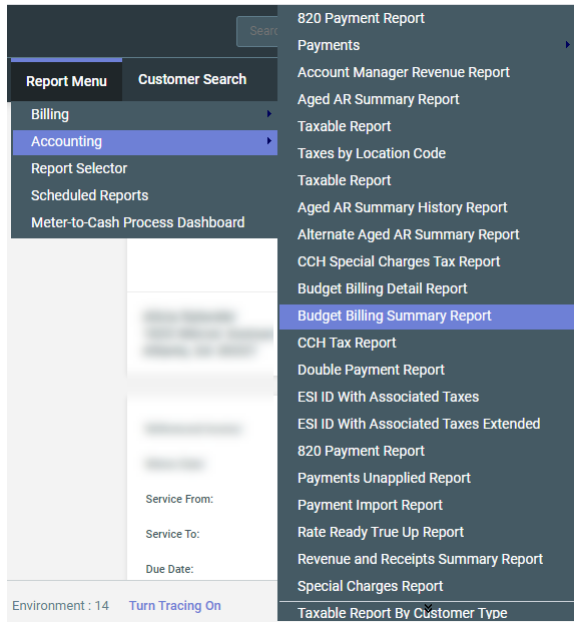
There are two reports available for managing the **Budget Billing** Customers and process.

Budget Billing Summary Report

The **Budget Billing Summary Report** provides information on all Customers who are currently in the **Budget Billing Plan**.

The report lists the following details:

- **Current Budget Billing Amount** - This shows the amount to be paid while in the Budget Billing Plan.

- **True-up Period** - This shows the number of months that account is in True-up.

- **Invoice Count in this True-up Period** - This shows the number of invoices that were in True-up.

- **True-up Amount Due** - This is the current true-up amount due to be paid.

Budget Billing Detail Report

The **Budget Billing Detail Report** provides invoice-level information on Customers who are either currently on **Budget Billing** or on the **Budget Billing** plan during the time period selected for the report.

To review the complete details of a particular Customer who has been on Budget Billing:

1. Go to the **Budget Billing Detail Report**.

2. Select `By Customer` in the Type field.

3. Enter the `Customer Account Number` in the **Account No.** field.

4. Click `List` to generate the report.

   This report shows the following Customer information:

- **Invoices that were billed with a Budget Billing Amount** - These are all the invoices on Budget Billing for the account within the period set.

- **Invoice Number and Date** - These are invoice details to identify the specific invoice and its issued date.

- **Invoice Amount** - This is equal to the Budget Billed amount.

- **Budget Billed Amount** - This is the amount set for the account while on Budget Billing plan.

- **Current True-up Balance** - This is the True-up amount due which is the result of Actual Charges less the Budget Billed Amount.

- **Estimated True-up Date** - The provisioned date that account moves to True-up by the end of the Budget Billing plan.

Average Billing

In Average Billing, CIS calculate a Total Average Charge when a Customer is enrolled.

In Average Billing, the Customers are billed:

- The average of their charges for a rolling 12-month period, or the number of active months if they have less than 12 months of service,

- A Customer defined % of their outstanding rolling balance (may be positive or negative).

The **Total Average Charge** is defined as:

```
(Average Daily Amount) x (# of days in the current service peri-
od) +/- (the configured percentage of the rolling balance)
```

The feature contains rules for eligibility that are configured by the Supplier. These configurations, once established, affect all Customers within a defined market. **Utility Consolidated** and **Supplier Consolidated** market types can use this feature.

Taxes

CIS calculates taxes on goods and services provided to Customers as part of the billing process. Part of this invoice calculation is the use of CCH Tax product to import tax rates, fees, and jurisdictions.

The main functions of CCH Tax are:

- **Provide tax rates**: CCH Tax has "legislation teams" that monitor new laws and provide updates monthly.

- **Provide tax algorithm advice**: CCH Tax has usage guides to calculate certain types of taxes. Some of the more complex tax scenarios are tiered taxes, yearly thresholds, and "tax on tax" scenarios.

- **Provide Zip/Plus4 information**: CCH Tax provides good geographical information for Customer's service locations.

This topic provides an overview of CCH Tax usage and the following concepts:

- What taxes apply to which accounts?

- What taxes were charged on a particular invoice?

- The FAQ about taxes from our clients

CCH Tax Introduction

Learn about CCH Tax implementation on invoices generated in CIS.

Using CCH, CIS is able to implement the latest tax changes with monthly updates from the internet. CCH is a rate look up system for all utility taxes that also reviews the latest tax changes.

CCH Incorporated is a third party company that offers a suite of sales tax options with the latest sales and uses tax rates and forms for United States and Canada.

Benefits of Using CCH

- Reduces the number errors
- Ensures that you are in compliance with the state laws
- Saves your company time and money
- CCH uses the precise tax calculation. The Common Tax System provided by the state has a tendency to round the tax calculation.

Difference between CCH and Common Tax System

The Common Tax system does not collect Miscellaneous Gross Receipt Tax (GRT) and Public Utility Commission Tax (PUC). Currently we are including the GRT and PUC taxes by creating rates codes manually.

Using CCH, Viterra is able to gather the GRT and PUC tax information automatically using the Geocode and Location Code. This ensures the current tax information without having to create rate codes.

CCH also uses the Geocode when looking up tax information for a Location Code. The Common Tax system only uses the ZIP. The ZIP+4 identifies a geographical segment within the geographical delivery area.

Definition of terms

- **Geocode** - A code based on the coordinates of a location given by an address.
- **Location Code** - A Location Code is a code based on the City, County, State, and local grouping.
- **Miscellaneous Gross Receipts Tax** - This is a tax imposed on each utility company located in an incorporated city or town having a population greater than 1,000, according to the federal census. The amount of this tax adjustment is determined by the formula:

  ```
  FTA = TAB x GRTR
  ```

- **FTA** - Gross Receipts Tax Adjustment
- **TAB** - Total amount billed for electric service (excluding sales tax and any other amounts deductible under provisions of the cooperative's franchise with the municipality)
- **GRTR** - Gross Receipts Tax Rate levied by the municipality
- **Public Utility Commission Tax (PUC)** - This regulates the Utilities and resolves consumer issues. The PUC Tax is a fee imposed on each public utility within the jurisdiction of the Public Utility Commission. State regulatory agencies impose the PUC tax charge to fund their operations.

GRT and PUC updates or changes

All changes can be made in the Premise control on the **Customer Summary** page. In the future, Viterra will also allow GRT and PUC tax changes to be made during enrollment.

Below image is a Premise Detail Interface.

Note: All Customers that are currently getting their PUC and GRT tax information from the rate details continues to use the rate details for this information. Viterra is scheduling a time to convert these Customers to CCH by ending their current rate details and updating the Premise control to reflect the new changes.

CCH Tax Report Types

There are different CCH Tax Reports that can be used in CIS depending on mode of payment and if Geo code information is required.

These CCH Tax Reports are:

- Accrual Based

- Accrual Based with Geo codes Breakdown

- Cash Based

- Cash Based with Geo codes Breakdown

CCH Tax Report – Accrual Based

The CCH Tax Report – Accrual Based, shows all of the taxes that were invoiced during a defined period of time. This report only looks at that taxes that have been invoiced.

The image below shows a **CCH Tax Report Interface Accrual Based.**

CCH Tax Report – Accrual Based with Geo codes Breakdown

The CCH Tax Report – Accrual Based with Geo codes Breakdown, displays the same information as the CCH Tax Report – Accrual Based along with the Geo code information for the taxes. The GRT and PUC taxes are based on the geographical information from the Geo code.

The image below shows the **CCH Tax Report Interface - Accrual Based with Geo code**.

CCH Tax Report – Cash Based

The CCH Tax Report – Cash Based, shows all of the taxes that were invoiced and paid during a defined period of time.

The image below shows the CCH Tax Report – Cash Based.

CCH Tax Report – Cash Based with Geocodes Breakdown

The CCH Tax Report – Cash Based with Geocodes Breakdown, displays the same information as the CCH Tax Report – Cash Based along with the Geocode information for the taxes. The GRT and PUC taxes are based on the geographical information from the Geocode.

The image below shows the **CCH Tax Report Interface – Cash Based with Geocode**.

CCH Tax Report

[≡ List] [⬇ Download] [⚙ Schedule]

Date From *

11/25/2019

Date To *

12/25/2019

Brand

- All - ▼

Customer Type

- All - ▼

Report Type

Cash Based with Geocodes Breakdown ▼

Location Code	Description
N/A	GROSS RECEIPTS TAX

Account Taxation

Learn how taxes are applied on invoices in CIS.

Taxes are applied at the time of invoicing. Tax rates are updated once a month on the night of the last day of the month.

There are various aspects that control how taxes are charged.

Customer Type - The following Customer Type associated with the account affects how it is taxed:

- Commercial
- Residential
- Industrial
- Manufacturing

Note: Tax Exemption - This is expressed via the `Tax Assessment` or `Tax` flags. Tax exemption can be full or partial. For example, a farmhouse gets 40% tax exemption.

Note: Customer Taxable - Taxes can be turned off at the Customer level if needed.

Charges Invoiced

- **RateDetail.Taxable** - Different rates can be taxable or nontaxable.
- **Charge type** - The `RateDetail > RateDescription.ItemCode` and `GroupCode` specify the type of charge that is being processed. For example, an energy charge is different from a gas charge and a gas charge is different from a utility delivery charge. When creating or setting the Rate Description in a new billing scenario, these two fields map to Item and Group in the CCHTax database.

Location

The service location's geocode (Premise - Address. Geocode) is where the good is consumed. These tax rates differ based on locations.

Taxable Flag

A Taxable flag should be set to either a Yes or No to ensure that taxes are charged properly.

There are three places in the system to manage tax flags:

1. **Property Set-up screen** - This screen contains two separate flags to accommodate the two different types of ESI IDs - Continuing Service Agreement (CSA) units and Common Area Agreement (CAA) locations.

2. **Customer Level Default Tax Flags** - This acts as the default value for ESI IDs once the Property goes live in the system and CSA units are flowing on and off with the Property.

3. **Premise Control** - This contains the ESI IDs that are enrolled on the Property. Each ESI ID contains its own set of tax flags. ESI ID level flags determine whether or not a Customer receives taxes for that particular ESI ID. See Edit Premise Information in Using Utility Accounts Tab on page 102.

The **Tax Flags** work in the following manner:

- When a property is established initially, the Property Set-up flags are set to indi-cate the tax status for the CSA unit Default Tax Flags located on the Customer Summary screen. It also sets the tax status for both the CSA and CAA flags at the ESI ID level.

- Changing the Property Set-up flags only affects the CSA unit Default Tax Flags on the Customer Summary screen. Once the ESI ID flags are set, either open the ESI ID Detail box for each ESI ID and change the flags one at a time or open a CM request with a spreadsheet attached to it. The spreadsheet has Customer account numbers listed whose ESI IDs need to be changed.

- Changing the CSA unit Default Tax Flags on the Customer Summary screen causes the Property Set-up flags CSA unit flags to change as well. These two should always stay in sync.

Tax exemption certificates serve as proof that a Customer is exempted from Sales tax. If a property is tax exempt when it was initially set up, the ESI ID flags should be set correctly from the start. If you have to change the tax exemption status after you set up the property, change the flags on the Property Set-up screen and open a CM request to have the ESI ID flags changed by CIS.

A Property who provides proof of tax exemption status has the following configuration of taxes:

- `State` - appears unchecked

- `County` - appears unchecked

- `City` - appears unchecked

- `Local (MTA/SPD)` - appears unchecked

- `PUC` - appears checked

- `GRT` - appears checked

Default Tax Flags					
State	County	City	Special	PUC	GRT

Note: PUC and Gross Receipts Taxes (GRT) are not considered sales taxes to the end consumer and therefore are not exempted from taxes.

Taxes FAQs

This topic contains some common questions that you may have regarding Taxes.

1. *If I can't figure out why a tax was charged, who should I contact?*

   We have a support contact with CCHTax, use support@cchtax.com to send an issue to them. Before doing this, please use the resources listed to try and determine what is going on.

2. *What is location code?*

   Location Code is a non-system-used bit of data that CCHTax provides to help us in filing. It is different across markets and is not used in tax calculation. It is mainly used by the client to group similar tax rates together for filing. In some markets, it is a numeric value such as 123 that indicates the IRS tax code for a particular county. In other markets, it is a description such as "MTA tax" to separate out which tax type is being charged.

3. *How do reversals work? When I do a 'Tax Adjustment' special charge or an AR Adjustment of Type 'Tax' does this reflect correctly in the CCH Tax* reports?*

   No. Those reports are based off on the InvoiceTax and InvoiceTaxDetail tables, which are only used by invoice generation (including credit/debit memos). Most clients when filing total up their Adjustments and special charges to figure out how much tax to owe. (This is a gap in our product - we should be able to reverse an invoice and it reverses the corresponding taxes correctly).

4. *How does GRT/PUC/Tax On Tax work?*

   Some taxes are "TaxOnTax". This just means that the tax needs to be charged on what is a good/service, and then another tax needs to be charged on that total. The way we have implemented this (per CCHTax recommendation) is that we return a list of taxes that are of this type and do a second pass at the total. Both GRT and PUC are TaxOnTax, and they are commonly billed in markets we support. This is due to the fact that these are taxes issues on the Supplier that may or may not be issued to the consumer. Since they are to the Supplier they are regular revenue and thus applicable for sales tax.

Payments Overview

This topic provides an overview of payments and its various related tasks, setup, and management.

The payments made by Customers against their invoices are vital to managing Account Receivables (AR) in CIS.

This group of topics discusses various supported payment types and modes of collection. You can also use these topics to learn to post payments to the Customer's account and generate a variety of payments-related reports.

Web Services

Learn about CIS Web Services.

A Web service is a method of communication between two electronic devices over the World Wide Web. Web Services provide a network address over the web and is a service that is always ON. Customers can make payments external to the CIS application from BillPay, Pay stations and IVR using web services.

This is how the Web service payment transaction works:

WCF Payment Service

The WCF payment provides an interface to payment related data. It is dependent on the Core component to make payments and provide data.

Core

Provides an interface to retrieve payment data and make payments. This layer contains the business logic for making payments. It coordinates payment requests to the appropriate payment vendor for each client.

DAL

The data access layer provides simplified access to retrieve and store data. It is built using Entity Framework and is designed so that the data source can be changed without having to update client code.

Logging

Logging provides a means to log messages to the database or other target for payment transactions. It currently uses log to provide the logging implementation. The component has been designed so that the logging component can be changed without having to update client code.

Payment Modes

Learn about the different payment collection methods in CIS.

Customers can use the following interfaces to make payments:

Bank Lockbox

This is the most popular mode of payment. Under this service, the payments made by Customers are directed to a special post office box instead of going to the company. The bank goes to the box, retrieves the payments, processes them and deposits the funds directly into the company's bank account. During the end of day processing, the bank sends the payment details in an electronic file format to the CIS system and as the payment details are received, they get posted to the individual Customer account. For more information, see Non-Electronic manual payments on page 192

The **Pending Payments** functionality allows the user to process payments exceptions that did not load to a Customer's account for a variety of reasons. For more information, see Pending Payments on page 206.

Interactive Voice Response (IVR)

Here the end-user dials a phone number provided by the Supplier and then follows the voice-guided responses to make the payment for the bill due using direct debit or ACH payment type.

IVR can be customized according to the business needs of Suppliers.

Bill Pay

Residential or small commercial Customers can access their account, view their bill and make electronic payment using the Bill Pay website.

The Bill Pay site is designed to be run in a frame on the Supplier's Customer-facing website. The Customers may access the Bill Pay site using their credentials.

Customers can make the payments through different payment methods based on client configuration, which automatically deposits to the clients specified account. Transactions are passed through the CASH module or the direct debit tables which are part of the application.

B2B

This CIS application offers important features relevant to commercial Customers who have multiple locations and complex organizations.

The B2B site is a web-based application that allows your Customer to save their payment information, setup a scheduled payment and run customized reports. Customers can make payments using different payment types supported by CIS.

The Customers accessing the B2B site are identified by their unique credentials.

B2B2

This is an updated version of the B2B portal with new look and feel. The functionality remains same as B2B.

CSR Site

Using this method, the Customer contacts the Customer service representative (CSR) via phone and provides payment details. The CSR uses the Customer Summary Screen to collect and record the Customer's payment.

Walk-ups

The Customer can also walk into the office of the Supplier and makes the payment over the cash-counter to the designated person.

Pay- Stations

Pay stations are established at various convenient vendor locations where the Customer makes the payment through a self-service kiosk.

Customers might be charged an additional convenience fee if they choose to pay using this mode. All the payments processed by the vendors are then consolidated in a file and sent to CIS for it to update to the respective Customer accounts.

Payment Types

Learn about the types of payments supported in CIS.

Suppliers allows their Customers to make payment using multiple payment types - manual and electronic.

Bank Lockbox

Learn about Lockbox payment type.

Cheques are the most favored mode of payment used. The Supplier's bank receives Customer payments via a lockbox file. Each night the bank sends an electronic file to CIS where the payment details are received and posted to individual Customer accounts.

If any exceptions occur while posting the payments to Customer accounts, it can be handled through **Pending Payments** functionality. For more information, see Pending Payments on page 206.

The **Pending Payments** functionality allows the user to process payments exceptions that did not load to a Customer's account for a variety of reasons.

Non-Electronic manual payments

Learn about manual payment type supported in CIS.

Non-Electronic manual payments can be made using cash, check, money orders by depositing these in pay-stations or walk-ups.

Such payments are manually processed and posted to the Customer's account. For information on payment processing, see Payment Processing Overview on page 198.

Credit Card/ACH Payment

Learn about payment using Credit/Debit Card in CIS.

To process a Customer's payment via credit card on a real-time basis, follow the steps below:

1. Go to **Administration Menu > Deposit/Payment > Post CreditCard / ACH Payment**.

2. Enter the Customer account number in the **Account No**. field on the **REAL-TIME CREDIT CARD / ACH PAYMENT POSTING** page and click on **Add** button.

> **Note:** Alternatively, you can access the **REAL-TIME CREDIT CARD / ACH PAYMENT POSTING** page by searching for the Customer and then navigate to **Activity > Post Creditcard / ACH Payment**.

3. Click **Make a Payment** and select **Payment Type**.

4. A form requesting payment details and invoice list is displayed. Enter the following details on the form.

Make a payment

Select from one of the following payment options

* Payment Type:	New Credit Card ▼
* Amount:	
* Card Type:	- Select - ▼
* Name on Card:	Ann Flemming
* Card Number:	
* CVV / CID:	
* Expiration Date:	January ▼ 2019 ▼
* First Name:	Ann
* Last Name:	Flemming
Email:	\\\
Phone Number:	4843883561
* Billing Address:	14 Moore Rd
* City, State, Zip:	Mohnton PA ▼ 19540
* Save Options:	⦿ Do not save ◯ Save for later use ◯ Save and use for Auto Pay

Submit Cancel

Fields	Description
Payment Date	This is pre-populated as per current date.
Payment Type	Select the payment type.
Batch No.	Enter batch number.
Name	Enter first and last name in their respective fields.
Address	Enter address details.
Email and Phone number	Enter email and phone number.
Card Details	Enter card details of the Customer for whom the payment is being processed.
Amount	This displays total pending amount.
Applied	This is the payment being applied.
Balance	Balance after payment is applied.

Fields	Description
Allow unapplied Balance	Check this if payment is not applied to individual invoices. **Note:** If the payment needs to be applied to individual invoices then the fields corresponding to the invoices needs to be filled in the Invoice list. **Note:** If this field is left unchecked then the total of amount corresponding to each invoice must be equal to the applied payment.
Schedule Future Payments	Check this field if the payment is to be applied on a future date. Enter the future date in the date field.
Post and Clear buttons	Click **Post** to post payment and **Clear** to clear the form.

Payment using Credit / Debit card need to be secure to avoid misuse of Customer payment information.

PCI-DSS Compliance and CIS Solution - CASH

Learn about CASH - a secure payment system.

CASH is an innovative and secure payment interface integrated by CIS.

Customers can use the CASH (Credit Card and ACH Secure Handling) interface to make payment using Credit/Debit card.

CASH changes the way CIS collects, stores and processes credit card and ACH payment information. Instead of storing credit card information in the databases, when a user enters payment information, CASH immediately send the credit card / ACH data over to the Supplier's payment vendor (also called a Payment Gateway). The payment gateway in return sends a token that represents a profile of the Customer and their payment information for that vendor. This token is stored in CIS and can be used for future payments with that vendor.

Note: CIS only stores the token and not the actual payment information.

For Customers who do not choose to save the card information, no token is gener-ated by the Payment Gateway and the Customer's payment card data is securely stored in our databases according to PCI-DSS guidelines for a record of the trans-action. This information is not re-used in any manner after the one-payment and the Customer needs to enter their information again for future transactions.

For further reading on PCI-DSS guidelines, see https://en.wikipedia.org/wiki/Payment_Card_Industry_Data_Security_Standard.

CASH Payment Process Flow

The payment sequence or process flow when CASH is enabled is as follows:

1. User makes a payment on internal or external web page or through the IVR system.
2. The WCF Service receives a request for the Payment Form.
3. The service then passes the client, Customer, and application data to the controller to retrieve the fields required for payment.
4. This information is then passed to the HTML engine that transforms the data into an html form string.
5. The response is sent back to the WCF service and then the calling application as a response string.
6. The WCF Service receives a request to process a payment. The request contains the field and value entered on the payment form.
7. The data is used to create a payment request. This request is passed to the controller.
8. The controller creates the appropriate payment processor and calls the payment gateway for the appropriate vendor.
9. The response is processed by the controller and sent to the HTML generator to get the html response for the payment response.
10. The WCF Service receives the response and passes it back to the client as a response string.

Direct Debit/ACH Payments

Learn about Direct Debit/ACH Payment type.

Direct Debit/ACH payments is an old method of performing payments and is non PCI compliant. This is the existing functionality for Suppliers who are not using the CASH module. To learn more about CASH, see PCI-DSS Compliance and CIS Solution - CASH on page 194.

To process a Customer's payment via credit/debit card or ACH, follow the steps below:

1. Go to **Administration Menu > Deposit/Payment > Post CreditCard / ACH Payment**.

2. On the **REAL-TIME CREDIT CARD / ACH PAYMENT POSTING** page, enter the Customer account number in the **Account No**. field and click **Add**.

3. Click **Post Payment** or **Manage Autopay** depending on the need:

To Post a Payment

1. Click on **Post Payment** button to make a payment.

2. Select the already added payment type from the dropdown and enter the amount then click on **Submit** button on **Make a payment** page.

3. If no payment type is added, select **New ACH** or **New Credit Card** from **Payment Type** dropdown.

4. On the **Make a payment** form, set the following fields:

Fields	Description
Payment Type	Select payment type.
Amount	Enter the amount.
Card Details	Enter the card details. **Note:** If you select **New ACH** from **Payment Type** dropdown, you need to enter bank details instead of card details.
Name	Enter the first and last name.
Email	Enter the e-mail address.
Phone number	enter the phone number.
Address	Enter the address.

Make a payment

Select from one of the following payment options

* Payment Type:	New Credit Card ▼
* Amount:	
* Card Type:	- Select - ▼
* Name on Card:	Western Manor Inc
* Card Number:	
* CVV / CID:	
* Expiration Date:	January ▼ 2019 ▼
* First Name:	
* Last Name:	Inc
Email:	
Phone Number:	4124914782
* Billing Address:	2851 Western Manor
* City, State, Zip:	Pittsburgh
	PA ▼ 15219
* Save Options:	⦿ Do not save
	○ Save for later use
	○ Save and use for Auto Pay

Submit | Cancel

5. To save, use one of the following options:

   - Select **Do not save** for real time payment.

     Here the amount gets applied to the list of invoices or is left as an unapplied payment for the future invoices if there are no current invoices with pending payment. The transaction is then posted to customer's account and it starts reflecting in the AR balance. The payment detail is also assigned to be included in the next file export.

   - Select **Save for later use** to save card details for later payments.

     A scheduled payment is handled just like real-time payment. The only difference to the user is that the **Scheduled Future Payment** checkbox must be checked from the payment screen, and the **Scheduled Date** must be included. This payment is not immediately posted against the Customer's AR, but instead waits for the payment service to collect the payments that are due.

   - Select **Save and use for Auto pay** for recurring payments.

     A Customer can schedule recurring payments which is then applied to invoices after a fixed number of days, as per business rule, after they are posted. Once recurring payment is configured, the payment service monitors the system for invoices that need to be paid, and collect them to include in the daily export file.

     Note: The payment service monitors the system for invoices that need to be paid, and collects them to include in the daily export file.

6. Click **Submit** to process payment. Click **Cancel** to close the **Make a payment** page.

To Manage Autopay

1. Click on **Manage Autopay** button. **Manage Auto Pay** page is opened. This page displays the existing autopay, if present.
2. If you want to disable auto pay, click on **Stop using Auto pay** button.
3. Click on **Add payment Method** to add a new auto pay.
4. A new form to add and save the payment method opens. This form should be filled in the same way as **Post Payment** form.

Payment Processing Overview

Learn about the payment processing life cycle.

There can be three types of payment scenarios depending on the billing type:

- Customer paying Supplier.
- Supplier paying LDC – For Supplier Consolidated billing type. (820 Outbound)
- LDC paying Supplier – For Utility Consolidated billing type. (820 Inbound)

To know about the various billing types, see Supported Billing Models on page 131.

Payment Services

Learn about payment services function.

The payment services are scheduled to run nightly based on Supplier's business rules and configured values. It includes the following functions:

- Apply any scheduled payments that are now due to the Customer's AR balance, and mark them for export.
- Apply any recurring payments to invoices that are due, update the Customer's AR balance and mark them for export.
- Create an export file in the NACHA format, and include the recurring and scheduled payments, as well as any real-time payments that were made that day.
- Send the file via FTP to the configured address.

When applying a recurring payment to the invoice due, the service compares the invoice amount, the invoice balance due, and the AR balance, and apply the least of the three amounts to that invoice. This ensures that the Customer does not have a negative AR or invoice balance.

820 EDI Payment

Learn about 820 EDI payments - Inbound and Outbound.

The X12 820 transaction set provides the EDI format for transmitting information relating to payments. It is used together with an electronic transfer of funds for payment of goods and services. The actual funds transfer is often coordinated through the Automated Clearinghouse (ACH) system.

CIS system handles 820 payments to and from the utility depending upon the billing type.

Processing 820 Payments from Utility

Learn Inbound 820 - utility to Supplier.

When the utility bills the Customer on behalf of the Supplier for its charges, the utility collects the payment from the Customer and remit the payment back to the Supplier via EDI 820 transaction.

CIS processes these payment types automatically upon receipt of the 820 file. If for some reason the payment is not applied in this manner, it is held in a table and marked with an Exception status. Such payments are processed using the Pending Payments functionality. For more information, see Pending Payments on page 206.

Processing 820 Payments to Utility

Learn Outbound 820 - Supplier to utility.

When the Supplier invoices the Customer on behalf of the utility for its charges, the Customer remits the payment to the Supplier. It is the Supplier's responsibility to pay the utilities their charges.

In this billing type scenario, the utility sends the Energy Provider an 810 EDI transaction each month for every Customer that received services.

CIS provides a UI (TDSP 820) that allows Suppliers to create the 820 transaction that creates batches for the 810 payments that are owed to the Utility. For more information, see TDSP 820 on page 200.

The sending of the 820 transaction must be done in conjunction with the sending of the actual ACH payment from the bank. CIS does not have functionality (UI) that facilitates the sending of the ACH. That task is performed by the Supplier's bank.

TDSP 820

Learn about TDSP 820 transactions processing.

To create 820 transactions, that creates batches for the 810 payments owed to the Utility, do the following:

1. Go to **Administration Menu > Deposit/Payment > TDSP 820 Payment**.

2. Enter a future date in the **Due Date** field on **TDSP 820 PAYMENT** page.

3. Click on the **Get Charges** button. The system returns the same screen with a table having **TDSP** name, the **Amount Due** as of the date in the **Due Date** field, total due and **Amount Excluded**.

4. Click on the **TDSP** name. A table with a list of unpaid invoices is displayed. The total amount for all the invoice is automatically summed up and displayed in the **Payment Total** field below the list of invoices.

5. Enter the payment date.

6. Enter the **ACH Tracking Number** that was used in the ACH payment made to the bank.

7. Click on the **Save** button to initiate the transaction.

Note: You can exclude invoices for which payment is not to be made using the checkbox in the **Exclude** column of the table. Click on the **Recalculate** button if any invoices are excluded then click on the **Save** button.

Batch Payment

Learn how to perform Batch Payment in CIS.

The CIS application has a feature where payments collected by a third party can be manually uploaded into the system using a ".csv format" file. In order to upload a payment file, the file must be created as per Batch Payment Data Exchange Format - CSV Specification.

Batch Payment Specifications

Learn about Batch Payment Data Exchange Format - CSV Specification.

This format defines the ASCII file format for exchanging data with the Batch Payment Upload interface. Batch Payment data can be uploaded in the comma separated value (CSV) format.

ORDER	FIELD	TYPE (max length)	DESCRIPTION	REQUIRED/ OPTIONAL
1	CUSTOMERNUMBER	STRING (20)	Customer Account Number in *cis* system	CONDITIONAL
2	CUSTOMERID	INTEGER	Customer ID in *cis* system	CONDITIONAL
3	INVOICEID	INTEGER	Invoice ID in *cis* system	REQUIRED
4	PAYMENTAMOUNT	DECIMAL (14, 2)	Amount of submitted payment	REQUIRED
5	PAYMENTTYPE	STRING (20)	Type of payment. Possible values include: • Cash • CC • Check • Collection • Coupon • ECheck • EFT • MoneyOrder • NSF • Reallocation • TeleCheck	REQUIRED
6	CHECKNUMBER	STRING (20)	Identifier for payment (check number, transaction number, etc.)	OPTIONAL
7	PAYMENTDATE	DATE	Date of payment in the system (MM/DD/YYYY)	OPTIONAL

Batch Payment Data CSV Specification Rules

- No Header Record is used in the file
- The CSV File should not have a Trailer
- The CSV File should not use Text Qualifiers
- The file requires using ANSI characters with CRLF to separate records
- Either Customer Number or Customer ID is required
- Current date should be used if Payment Date is not provided

Upload/Download File Naming Convention

- Each inbound file must have a unique name
- Inbound file extension must be .CSV
- File-name length must not exceed 30 characters, including the extension

Batch Payment Upload

Learn how to upload batch payment using CIS application.

Follow these steps to upload Batch Payment:

1. Go to **Administration Menu > Deposit/Payment > Batch Payment upload**.

2. On the **BATCH PAYMENT UPLOAD** page, click **Upload File(s)** in the **Current File(s)** field.

3. Use the **Document(s) Upload** wizard to select and upload the payment files.

Fields	Description
Label	Enter label to identify the batch.
File(s)	Click on browse button and select the relevant .csv file(s) from your local drive.
Description	Enter description about the batch.
Upload	Click to upload the .csv files.
Cancel	Click to close the **Document(s) Upload** window without uploading file.

4. A list of payments for the file(s) you are attempting to load appears. Use the check-box on the top-right to select all the records. A green check mark appears on all the selected payment records.

5. Click on the **Validate** Button. A list of messages may be displayed for the files you are attempting to process. Edit the data by clicking on the **Edit** link corresponding to the file, if required. Click **Update** to save the change.

6. Confirm that all the data are correct. Select all records and click on the **Process Batch** button. This completes Batch payment upload.

Payment Posting Options

Learn about the payment posting options available in CIS.

You can access the **Payment Posting** functionality by clicking on the **Post Payment** button located on the **Common Tasks** bar on the **Customer Summary Screen**. For details, see

Workspace | Administration Menu | Report Menu | Activity | Customer Search | A/R Ledger Detail

Gas Service (Active)
Current Bill Due: 1/29/2019
Current Balance: $0.00

Account #:000108820

New Call | Post Payment | Special Charge | Letters | Emails

How do I...

Balance	Current	1-30	31-60	61-90	91-120	121-210	211+	AR Terms (Days)	Deposit
$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	19	$65.00

Customer Info | Utility Accounts (ESI / LDC) | AR / Billing | Communication Log

Additional Info | User Prefs

Spark Energy Portal - PayStar

CONTACT INFORMATION [Edit]

Name:	
Customer Type:	Small Commercial
DBA:	
Company Name:	
Passcode:	

Billing Address

Contact:	
Address:	
Home Phone:	

Special Needs Address

Secondary Contact Information

First Name:	
Last Name:	
Phone #:	
Relationship:	UnKnown
My Refer a Friend ID:	Kuwa57395

BILLING INFORMATION [Edit]

Bill To Customer:	None
Billing Type:	Rate Ready
Rate Code:	PGE_G_COMM_Evergreen_MSF [FC000002] (FC000002)
Product Name:	
Bill Group:	304001
Production Cycle:	55
Print Layout:	Standard
Language:	English
TDSP Template:	Rate Ready
Terms:	19
Taxable:	Yes
Late Fees:	No
Billing Day of Month:	0
Delivery Type:	Standard
On Switch Hold:	No
Future Rate Transition Segmentation Label:	Gold
Future Rate Transition Segmentation Rate:	
Rollover Product Name:	Commercial Evergreen

Latest Product Change

Product Name:	
Product Segmentation:	
Change Type:	
Requested Effective Date:	
Actual Effective Date:	

ACCOUNT INFORMATION [Edit]

Master Customer:	
Status:	Active
AR Status:	Ok
Csr Info:	Third Party
Collection Status:	0
Contract Date From:	9/26/2008
Contract Date To:	
Contract Term:	0
Credit Hold(In Dispute):	No
Life Support:	No
Customer Group:	
Division Code:	SKG
Federal Tax ID:	
Date of Birth:	
Promise To Pay:	No
PUC Complaint:	No
Cancel Fee:	0.00
DPP Status:	Not Active
Special Needs:	No
Special Needs Date:	
Special Needs End Date:	
Special Needs Qualifier Type:	NONE: None
Collections Agency:	None []
Contract Path:	CommercialAndIndustrial
Marketer Code:	CSS
Promo Code:	
Sales Agent:	
External Sales Id:	
Enroll Category:	
Enroll Transaction Release Date:	
Est. Onflow Date:	
Service Class:	Small Commercial
Referrer's RFID:	
AutoPay Status:	Not Enrolled

Posting payment to Customer account

Learn how to post payment to an account on CIS.

Follow the steps to post payment to an account:

1. On the Customer summary screen, click on the **Post Payment** button on Common Task Bar.

2. On the **Post Payment** box, enter the following details in **Step 1. Enter Payment Details**.

Field name	Description
Payment Type	Select the type of payment from drop-down.
Check / M.O. #	Enter the check no. or money order number, if required.
Payment Amount	Enter the amount to be posted.
Date of Payment	Enter the date on which payment was made.
Batch Number	Enter batch no. assigned by the bank, or the batch no from batch payment up-load.

3. Select **Apply payment to account- not to invoices.** radio button from **Step 2. Select how do you want to apply this payment.**section.

4. Click on the **Save** to add the payment. Click on **Cancel** to close the **Post Payment** box without saving.

Payments posting on Invoices

Learn how to post payment to a specific invoice of an account on CIS.

Follow the steps to post payment to a specific invoice of an account:

1. On the Customer summary screen, click on the **Post Payment** button on Common Task Bar

2. On the **Post Payment** box, enter the following details in **Step 1. Enter Payment Details**

Field name	Description
Payment Type	Select the type of payment from drop-down.
Cheque / M.O. #	Enter the check no. or money order no., if required.
Payment Amount	Enter the amount to be posted.
Date of Payment	Enter the date on which payment was made.
Batch Number	Enter batch no. assigned by the bank, or the batch no from batch payment up-load.

3. Under **Step 2. Select how do you want to apply this payment**, select **Apply payment to specific invoices**. This displays **Step 3. Enter the amount you want to apply to each invoice**.

4. Enter the amount you want to post for given invoices in the **Amount To Apply** field.

Note: To save the entry you must ensure the total of **Amount to Apply** field must be equal to the **Payment Amount** entered in step 2.

Note: An information box displays the amount that has been applied and the balance remaining. Check the checkbox **Apply remaining balance to account**, if required.

5. Click on the **Save** to add the payment. Click on **Cancel** to close the **Post Payment** box without saving.

Pending Payments

Learn to process pending payments.

Customer payments are received via lockbox file from the Supplier's bank every afternoon. The **Pending Payments** functionality allows the user to process payments exceptions that did not load to a Customer's account for a variety of reasons.

To process pending payments, do the following:

1. Go to **Administration Menu > Deposit/Payment > Pending Payments**.

2. On the **Pending Payments** page, select the dropdown values for the fields as per your requirement.

Pending Payments		List	Download
Division: - All -	**Source**: 820	**Status**: Exception - Premise/820 DUNS	**Summary**: 820 Exception: 2848, 820 Pending Post: 0003, Fiserv Pending Post: 0010, Remittance Exception: 3296
Trace Reference No			

Dropdowns	Description
Division	Select the Customer division.
Source	Select the source of payment for which you want to post payment.
Status	Status of the payment - Select **Exceptions** to see the records not posted due to some exception.
Validation Type	Select the desired validation to filter the result as per the exception validation.
Trace Reference no.	It is a number to trace the payment.
List and Download button	List button displays the list of exceptions. Download button downloads the exceptions in .csv format.

3. Click on **List** button. This displays the exceptions.

4. Click on **Action** button. Set the following on the list of exceptions that appears.

Pending Payments

→ List ☐ Action ⬇ Download

Division	Source	Status	Summary
- All - ▾	820 ▾	Pending ▾	820 Exception: 4929
Trace Reference No			820 Pending: 2192
			820 Pending Post: 0002
			Lockbox Exception: 0028

1 2 3 4 5 6 7 8 9 10 ...

Source	Division	Bank	Account No	Premise No	Lockbox Customer	Matched Customer5	Balance	Invoice No	Payment Amount	Payment Date	Trace No
820	SGE Normal customer		4001807468	3080365002		20 Brix	173.69	23297081	173.69	2/12/2019	78042565-
820	SGE Normal customer		4001807469	5080365002		20 Brix	344.04	23297082	344.04	2/12/2019	78042565-
820	SGE Normal customer		4001807470	4080365002		20 Brix	294.10	23297083	294.10	2/12/2019	78042565-
820	SGE Maryland		3001500064	055022239309700204595		Abebe Alemu	26.79	23110427	26.79	2/8/2019	MD20190208190136S0085700196839-
820	SGE Normal customer		3001766504	PE000009126137009511		ABIGAIL ANIAGYEI	150.69	23277157	150.69	2/7/2019	20190208032264068-

Field	Description
Apply To	Select **All payments** from dropdown if action needs to apply on all the records in the list. Otherwise select the records by checking on the corresponding checkbox.
Post Date Override	Enter post date
Payment Action	Select the desired payment action from the dropdown.
Apply and Cancel button	Click on **Apply** button to apply the action. Click **Cancel** button to exit the action section and cancel payment posting.

Note: A summary box on the right of the page gives the count of following:

• 820 Exception:

• 820 Pending:

• 820 Pending Post:

• Lockbox Exception:

Switch Holds
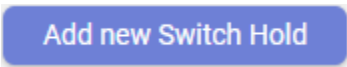
Learn about managing Switch Holds in CIS.
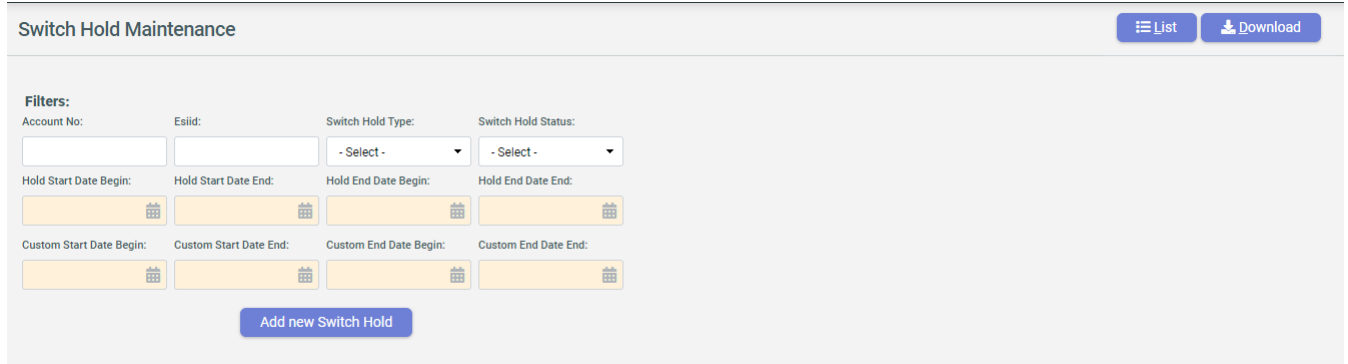
In the Texas Market, the PUCT rules allow a Supplier to place a switch-hold on a Customers who are delinquent to prevent them from switching to another Supplier without paying their bill. Switch Hold is applied on delinquent Customers who are on deferred payment plan (DPP).

A switch-hold is removed after the deferred balance is paid and processed.
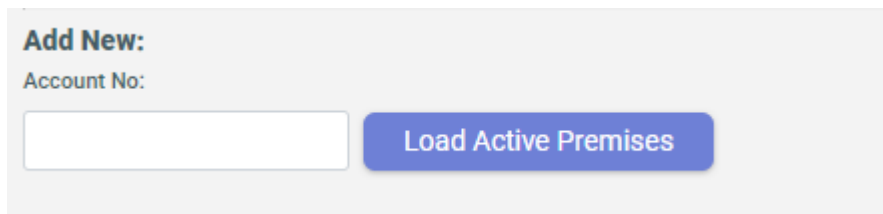
To place a switch hold, do the following:

1. Go to **Operations > Switch Hold Maintenance**.

2. Click **Add new Switch Hold** on the **Switch Hold Maintenance** page.
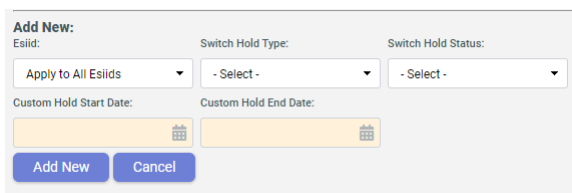
3. Enter the **Account No** in the **Add New** Panel and click **Load Active Premise** button.

4. Select the fields on **Add New Panel**.

Fields	Description
ESI ID	Enter the ESI ID for switch hold needs to be applied.
Switch Hold Type	Select the switch hold type.
Switch Hold Status	Select the switch hold status.
Custom Hold Start date	Enter the Custom Hold start date.
Custom Hold End date	Enter the Custom Hold end date.
Cancel and Add New	Click Cancel to cancel and Add New to save the settings.

Use **Filters** on the **Switch Hold Maintenance** page to get the list of existing Switch Holds.

Payment Reporting

Learn about the various payments related reports in CIS.

Go to **Report Menu** to access payment reports.
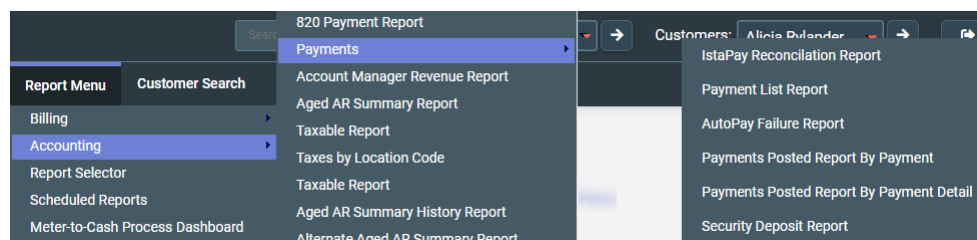
You can click on the name of the report to choose it. Following payment report are available:

Report	Description
Payment List	List of electronic payment details by Customer filtered by payment type (ACH or Credit Card).
Payments Posted Report- by Payment	This report provides a list of payments that have been posted for a given date range by **payment ID**.
Payments Posted Report- by Payment Detail	This report provides a list of payments that have been posted for a given date range by **payment ID**, **Customer Name**, **Customer number** and **Invoice Number**. This report is used to reconcile against the bank statement.
Payments Unapplied Report	This report provides a list of payments that are applied to a Customer's account but not specifically to an invoice.
820 Payment Report	This report provides a listing of 820 payments sent to the LDCs. **Note:** The 820 transaction is used when the billing type for a Customer is Supplier Consolidated.

Report	Description
820 Payment Report Extended	This report provides a summary listing of 820 payments made in the given date range. There is a hyperlink for each payment file that provides an extended report of the payment details. Suppliers who bill Customers under a Supplier consolidated billing type utilize this report.
Scheduled Reports	These are too large to run real time, so it runs in the background and can be access via the **Scheduled Reports** link located on the Administration Menu. If you run the report via the Schedule Download feature, the report goes through three stages before it is complete: 1. **Pending** – waiting for the service to pick it up and run it. 2. **Processing** – service is running the report in the background. 3. **Complete** – the report is ready to be viewed/downloaded. Most reports only take a few minutes to process. To access a report that you have scheduled, click on the report name. Either open to view, or save onto your computer.

Security Deposits

Learn about managing Security Deposits in CIS.

In some markets, Security Deposits are required as collateral for doing business with a Supplier. These funds become part of the Customer enrollment, renewal and termination business processes. The functional areas that are involved in Security Deposit Management:

Requesting the Security Deposit

To request security deposit from CSR site, follow the steps below:

1. Go to **Activity Menu > Security Deposit.**

Deposits				Request
	Customer Number:	000108820		
	Customer Name:			
	Due Date	**Last Payment Date**	**Amount Requested**	**Amount Collected**

2. Click on **Request** button. Fill in the details on **Deposit Transactions** form.

Deposit Detail		Save	Cancel

Deposit Transactions

Customer Number: 000108820
Customer Name:
Deposit Collected Date: November 19 2019
Due Date: November 19 2019
Deposit Required: $
Deposit Collected:
Interest Accrued:
Deposit Account Balance:
A/R Balance:

Field	Description
Deposit Collected Date	Date on which request for security deposit is made.
Due Date	Date on which Customer is required to pay the security deposit.
Deposit Required	The amount of security deposit.
Save and Cancel Button	Click **Save** to save the entry. Click **Cancel** to cancel.

Collecting the Security Deposit

Pre-requisite: A request for security deposit must exist.

To collect security deposit from CSR site, follow the steps below:

1. Go to **Activity Menu > Security Deposit**. Select the deposit amount and click **Collect**.

2. On **Deposit Detail Transaction** page select the **Payment Type**, **Check/M.O Number**, **Paid Date and Amount.** and click **Save** to collect payment.

> **Note:** You can click **Edit** to make changes to the entry.

Refunding the Security Deposit

To refund security deposit from CSR site, follow the steps below:

1. Go to the **Activity > Security Deposit**.

2. Select the deposit amount to be refunded (highlighted in blue) on the **Security Deposit Request** screen.

3. Select **Refund/Apply** from the Security Deposit detail screen.

4. Click **Post**.

> **Note:** When the Security Deposit balance is greater than the outstanding AR balance, the refund amount to the Customer populates automatically in the **Amount Refunded** field. The amount in the field **Apply A/R Balance** is equal zero. Selecting the Post button creates creates two AR transactions automatically:
>
> • Payment – to show that the money is applied to the Customer's account.
>
> • Adjustment – to show that the remaining balance is refunded to the Customer.

Note: When the Security Deposit balance is less than the outstanding AR balance, the amount displayed in the **Amount Refunded** field is zero and the amount in the field **Apply A/R Balance** is equal to the Security Deposit balance. This means that the Security Deposit balance is applied to the Customer's outstanding balance owed. Selecting the Post button creates one AR transactions automatically:

• Payment - to show the amount is applied to the Customer's account.

Deleting Security Deposit Records

To delete security deposit from CSR site, follow the steps below:

1. Go to the **Activity > Security Deposit**.

2. Click 🗑.

Deposits					Request
	Customer Number:	000108820			
	Customer Name:	OCTANE INC			
Due Date	**Last Payment Date**	**Amount Requested**	**Amount Collected**		
11/26/2019	11/19/2019	$65.00	$65.00	🗑	
11/26/2019		$500.00		🗑	

Viewing Payment Details

Learn how to view Payment Details on CIS.

Follow these steps to view payment details:

1. On the Customer Summary Screen, click on **AR / Billing** Tab.

2. Click on the Invoice number in **Invoice #** to display **Payment Details** box.

Note: Invoice with payments can be identified by "Payment" mentioned in the **Type** column. Same day invoice may not have Payments.

Payment Details fields

Field Name	Description
Payment Type	Payment type used.
Check / MO #	Check number or money order number, if required.
Paid Date	Date of payment.
Post Date	Date on which payment was posted.
User	The user who posted the payment.
Previous Balance	Balance before the payment was posted.
Payment	The amount paid.
Balance Due	Balance after payment was posted.
Batch Number	Batch number entered while making batch payment. For information on Batch Payment, see Batch Payment on page 201.

Payment Details

Payment Type:	Check	**Previous Balance:**	$36.26
Check / MO #:	0	**Payment:**	$36.26
Paid Date:	1/10/2019	**Balance Due:**	$0.00
Post Date:	1/10/2019	**Batch Number:**	1
User:	System User		

Payment Reversals

Learn about Payment Reversals in CIS.

When a Customer's payment is returned by the bank as NSF (Not Sufficient Fund), or payment is entered incorrectly for any reason, a payment record can be reversed to reflect that the check from the Customer is not cleared by the bank. This reversal only applies to the CIS application and no confirmation is sent to the Supplier's Bank.

You can reverse the processed transactions passed in AR by following the same step as in Payment Posting Options on page 202.

Note: For reversals, enter a negative value in **Payment Amount** field.

To reverse payment on specific invoices, enter a negative value on **Amount To Apply** column against each invoice.

Deferred Payment Plan

Learn how to set up deferred payment plan on CIS.

In the Texas Market, the PUCT rules allow Customers who are not able to make a payment on time to make arrangements with their Supplier for the Deferred Payment Plan (DPP).

To know more about DPP, see

Pre-requisites for DPP:

• Customer must be active.

• Customer cannot be a large commercial account- defined as more than 50 KW.

• Must be a Customer for over three months. A Customer who is transferred to a different ESIID and is a Customer for over three months at the previous ESIID is

eligible. However, a Customer that has re-enrolled after leaving is treated as a new Customer.

- Customers with more than 2 disconnect letters within 12 months are NOT eligible for deferred payment plans.

- The minimum acceptable payment to start a DPP is 25% of the outstanding balance.

- The Customer has not defaulted on a DPP within the past 12 months.

Setting up Deferred Payment Plan

To set up Deferred Payment Plan, follow the steps below:

1. Go to **Administration Menu > DPP > Deferred Payment Plan Configuration Maintenance.**

2. On **DPP Configuration Maintenance** page configure DPP settings and **Save**.

3. Go to **Administration Menu > DPP > Deferred Payment Plan Evaluator Maintenance**. Setup evaluators and **Save**.

Note: The **CIS.Element.AR.DPPPayArrgmtActiveEvaluation** evaluator must be enabled.

---

4. Go to **Administration Menu > DPP > DPPEligibility Maintenance**. Set up eligibility rules and **Save**.

5. Set up invoice message. To know more on setting invoice message, see Written Correspondence on page 112.

4

Reports

Reporting functionality is an important part of CIS application. It provides standard-ized and customized reports to the Suppliers. These reports support business re-porting needs.

The reports menu located on the Customer Summary Screen provides access to all the reports grouped based on the following categories:

- Accounting
- Billing
- Operations
- Property Management

CIS offers you to:

- **View Reports**: Certain reports that are already available on screen for immediate viewing.
- **Download Reports**: You can download any report in `.csv` format.
- **Schedule Download**: Reports that are too large to be viewed immediately run in the background and can be scheduled using the **Scheduled Reports** link located in the **Administration Menu**. The scheduled report goes through three stages:-
    - **Pending** - At this stage, the report waits in a queue to be picked up by the service.
    - **Processing** - At this stage, the report is being processed by the service in the background.
    - **Complete** - At this stage, the report is ready to be viewed and downloaded.

Learn about the reporting functionality in CIS.

For details, see the following topics:

- Accounting Reports
- Billing Reports
- Operations Reports
- Property Management Reports

Accounting Reports

Learn about the various Accounting related reports in CIS.

The list provides the name of accounting reports and a brief description of the reports:

Report name	Description
820 Payment Report	This report provides a list of 820 payments sent to the utilities when the billing type for a Customer is Supplier Consolidated.
820 Payment Report Extended	This report provides a summary list of 820 payments made by the given date range. There is a hyperlink for each payment file that provides an extended report of the payment details. Suppliers who bill Customers under a Supplier consolidated billing type utilize this report.
Account Manager Revenue Report	This report provides a list of Summary Customer invoices by Account Manager for a given date range. An Account Manager is a role in the Retail organization whose purpose is to support Commercial Customers.
Adjustment Report	This report provides a list of Customers who received AR Adjustments during a given date range. AR Adjustments are primarily used for writing off account balances due to bad debt.
Aged AR Summary Report	This report provides a list of the Aging of each Customer's account. The view version of this report also has a hyperlink to the Customer's account located on the left side of the screen and highlighted in blue. Clicking on the link takes you to the Customer's Account Summary page.
Aged AR Summary History Report	This report is similar to the AR Aged Summary Report in that it provides the same results. The difference in this report is that it allows you to get report on the AR Aging balances for a given time.
Aggregator Fee by ESIID Report	This report provides a list by Customer and ESI ID/Utility the aggregator fee (rate) and amount due as a result of the invoice generated. This report is used by Suppliers who record the Aggregator Fee information in the Aggregator table.
Aggregator Fee Report	This report provides a list by Customer the Aggregator fee associated with the invoice generated. This report is used by Supplier who record the Aggregator Fee information in the Aggregator table.
Alternate Aged AR Summary Report	This report provides a list of AR Aging balances by Customer based upon the day the report is generated. This report is unique and allows the user to define the dates of the aging buckets.

Report name	Description
Budget Billing Detail Report	This report provides the Budget Billing Detail invoice-level information on Customers who are either currently in the Budget Billing Plan or were during the time period selected for the report. The report lists following Customer information: 1. Invoices that were billed with a Budget Billing Amount 2. Invoice number and date 3. Invoice amount 4. Budget Billed Amount 5. Current True-up balance
Budget Billing Summary Report	This report provides a list of the Budget Billing Summary information on all Customers who are currently in the Budget Billing Plan. The report lists the Customer's Budget Billing Amount, True-up Period, how many invoices that have been billed during the period and the current True-Up balance.
CCH Special Charges Tax Report	This report provides a list of tax detail report of taxable amount of special charges listed by county, city, state and local taxing authorities. This report is used to file quarterly taxes.
CCH Tax Liability	This report provides a list of tax details by Location Code. It includes taxable revenue for each county, city, state and local taxing authorities. This report is used to file quarterly taxes.
CCH Tax Report	This report provides a list of tax details. It includes taxable revenue by county, city, state and local taxing authorities. This report is used to file quarterly taxes.
CCH Tax Report by Service To	This report provides a list of tax details. It includes taxable revenue by county, city, state and local taxing authorities. This report is filtered by the Service To Date rather than by the Invoice Date.
Direct Debit Cards near Expiration	This report provides a list of Customers with credit cards used in the auto-drafting payment process and that are nearing their expiration date. Report is only used by Supplier that are using the Credit Card and Direct Debit payment functionality.
Direct Debit Payment List	This report is the same as the Payment List Report. It includes a list of electronic payment details by Customer filtered by payment type (ACH or Credit Card).
ESIID with Associated Taxes	This report provides a list of Daily Billing Report invoices by ESIID/Utility.

Report name	Description
General Ledger by Category	This report provides a list of real-time presentment of financial transactions summed by GL Accounts for a given period selected.
GL Account Code	This report displays GL Mapping by utility. It includes a list of the GL Mappings to Rate Descriptions and Invoice Categories. The report is filtered by utility.
GL Mapping by Division	This report displays GL Mappings to Invoice Details, Payments, and Adjustments. The report is filtered by Division.
GL Mapping by TDSP	This report displays GL Mapping by utility. It includes a list of the GL Mappings to Rate Descriptions and Invoice Categories. The report is filtered by utility.
GL Recon Report	This report provides a list by GL Description listing total GL items by day for a given date range.
Invoiced TDSP Charges	This report provides a list of 810 Charges invoiced to the Customer.
Payment List	This report provides a list of electronic payment details by Customer filtered by payment type (ACH or Credit Card).
Payments Posted Report by Payment	This report provides a list of payments that have been posted for a given date range by payment ID.
Payments Posted Report by Payment Detail	This report also provides a list of payments that have been posted for a given date range by payment ID, but also provides more details of the payments such as Customer Name, Customer Number and Invoice Number. This report is typically used to reconcile against the bank statement.
Payments Unapplied Report	This report provides a list of payments that are applied to a Customer's account but not specifically applied to an invoice.
Revenue and Receipts Summary Report	This report provides a list of all invoicing details by Customer for a given date range. Report has a 35-day range limitation.
Security Deposit Refunds	This report provides a list of Customers whose deposits were applied and/or refunded.
Security Deposit Summary Report	This report provides a list of Summary version of security deposits refunded for a given period of time selected.
Security Deposits Terminating (Over 360 Days Old)	This report provides a list of Customers' security deposits that have been held for at least 361 days.

Report name	Description
Special Charges Report	This report is a list of all Customers who have had received adjustments to their invoices (Special Charges). The report can be filtered by Billed or Unbilled charges. **Note:** Special Charges is a CIS term for Customer Adjustments.
Taxable Report	This report is a list by Customer, the value of the Customer Taxable Flag and Premise tax Assessment value.
Taxable Report by Customer Type	This is the same report as the Taxable Report, but contains a filter by Customer Type. In includes a listing by Customer the value of the Customer Taxable Flag and Premise tax Assessment value.
Taxes by Customer	This report is filtered by Customer and lists by Premise the taxes applicable to the service address. Report includes tax rate and effective dates.
TDSP Charges Invoiced Detail	This report is a list by Utility, the 810 charges that have been invoiced to the Customer and paid by the Customer.
Unbilled Special Charges	This report is a list of all unbilled Special Charges. This report is replaced with the Special Charges report, which can be filtered by Billed or Unbilled Special Charges.

Billing Reports

Learn about the various Billing related reports in CIS.

The list provides the name of billing reports and a brief description of the reports:

Report Name	Description
Active Unbilled Meter Report	This report allows the user to see at a glance which Customers haven not been billed for consumption that has been received. It includes the active meters and the last time those meters were invoiced. Helps track if any active Customers are not getting invoiced timely.
Billing Performance by Period	This report displays the summary-level billing information by month selected. It tracks billing performance by each day of the month. User enters a monthly goal of total number of premises to be billed and a goal of total charges to be billed to get proper results.

Report Name	Description
Billing QA Sampling	This report shows a listing of invoices not yet printed for client and CIS QA to visually inspect a sampling of invoices before print batch is released.
Current Consumption Audit Report	This report provides a listing of all Customers who have received usage but have not been billed.
Customer Cycle Tracker	This report is a great summary-level list that displays Customer count with active meter counts. Report also shows the number of Customers by bill group with unbilled consumption. Report shows second level of detail when the Bill group is selected, the Production Cycles are displayed with Customer count information.
Daily Billing QA Report	This report is a modified version of the Billing QA Sample report. It is a merge of the QA report and Daily Billing report.
Daily Billing Report	This report displays invoices by Customer generated within a date range. It includes the invoice category-level charges broken out for quick review. Used for Billing QA and Accounting purposes.
Estimates	This report provides a listing of Customers who have been invoiced based upon estimates. **Note:** Sometimes Customers need to be billed but their consumption or the 810 invoice has not arrived timely. CIS generates an estimated invoice based upon certain Customer rules
First Time Bill Report	This report is a list of Customers who are being billed their first invoice. It is used to provide added QA for first-time billed Customers. Also used to verify that the Customer is set up and enrolled properly in the system.
Invoices Not Printed	This report displays a list of Customers' invoices that were generated but not printed.
Production Cycle Customer Listing	This report is a list of Customers within Bill Group and by Production Cycle. Production cycles are the Meter Read Service Cycles assigned by the LDC. Bill Groups are a CIS term used to group Customers that should be billed in the same manner.

Report Name	Description
Special Consumption Report	This report displays Customers' consumption information by consumption type and allows you to select invoiced or non-invoiced consumption by a date range. Used for tracking billing timeliness as well as the invoicing of the different types of consumption. It includes a listing of consumptions for a given time frame that are of a certain type. These types included are estimates by CIS operations, meter roll-overs, and true-up adjustments.
Summary Billing Report	This report is same as the Revenue and Receipts Report, but filtered by Master Customer.

Operations Reports

Learn about the various Operations related reports in CIS.

The list provides the name of operations reports and a brief description of the reports:

Report name	Description
650 Disconnect / Reconnect	This report is a listing of Customers where 650 Disconnects have been sent and includes the 650 response received.
Alert Audit	This report used to track and verify the alerts generated from the event engine process.
All Rate Codes	This report provides a listing of all Rate Codes available. The report also takes you to the Rate Details report when you click on the rate code highlighted in blue on the left side of the screen.
Billing File Import	This report provides a listing of file names that are received and processed by CIS from various sending points, such as lockboxes, client enrollment systems and payment processing centers.
Call Log	This report provides a listing of all Customer calls that have been logged during the date range entered. The report also allows the user to filter on each of the fields provided in order to narrow the search. This report also allows the user to view any letters generated and held on the Customer's account.
Cancelled Transaction	This report used to monitor cancels received for 867s or 810s.
Churn	This report provides a listing of Customer information for the purpose of monitoring Customer drops and move-outs.

Report name	Description
Current Usage	This report provides a list of Customer usage invoiced for date range selected.
Customer / Premise Tax Flag	This report is the same report as the Taxable Report. It includes a listing by Customer, the value of the Customer Taxable Flag and Premise Tax Assessment value.
Customer / TDSP Template	This report provides a listing of the Customer's TDSP/LDC template, which provides the means for determining which 810 charges are passed through to the Customer and which ones are not. **Note:** For Customers who have a Supplier Consolidated billing type.
Customer Information Listing	This report provides a listing of Customers by ESIID/LDC account and contains much of the information from the Customer table.
Customer Tracker	This report is the same as the Customer Information Listing Report with slight modifications.
Duplicate ESI ID Report	This report provides a listing of Customers sharing the same ESIID/LDC.
Disconnect for Non-pay	This report provides a listing of disconnect activity by utility and Customer Protection Class. This is a Texas PUC-mandated report.
ESI ID Final Reads	This report provides a listing of Customers with ESIID/LDCs that have received a final read within the given date range.
ESI IDs with Multiple Meters	This report provides a listing of ESIID/LDCs with more than one meter.
Events	This report provides a listing of all Event Engine events that have occurred during a specified timeframe.
Final Read	This report provides a listing of Customers who have received a final read within the given date range.
Letter	This report is filtered by letter type, it provides a listing of Customers who were sent letters.
Letter Summary	This report provides a summarized count of each letter type generated.

Report name	Description
Market Transaction Audit	This report provides a list of transactions by Customer and ESIID/LDC. It is used to monitor transaction activity on the Customer's account. This activity can also be accomplished with the event engine.
Monthly Charges	This report provides a list of Customers who get billed for monthly Customer or premise charges.
PUC Disconnect for Non-pay Report	This report provides a list of Disconnect Activity by TDSP/LDC and Customer Protection Class. This is a Texas PUC-mandated report.
Recent 650 Activity	This report provides a list of Customers who have received the various types of 650 transactions.
Recent Market File Import Report	This report provides a list of market file imported into the CIS Market Database. It includes EDI transaction information.
TDSP Charge Code Customer Listing	This report is a list by a specific 810 Charge code and whether or not it is invoiced to the Customer. Used in Supplier Consolidated Billing.
TDSP Charges by Customer	This report is filtered by a specific Customer and lists 810 charges invoiced to the Customer. Used in Supplier Consolidated Billing.
TDSP Charges Download	This report provides a listing by 810 invoice the details of the invoice and its 820 payment details. Used in Supplier Consolidated Billing.
TDSP Charges Download Market	This report provides a listing of all 810 invoices received from the market invoice including the details of charges. Used in Supplier Consolidated Billing.
TDSP Matrix Report	This report provides the details of the Customer's TDSP/LDC Templates that shows which 810 charges are passed through to the Customer and which ones are not passed through. **Note:** For Customers who have a Supplier Consolidated billing type.
User Login Tracking	This report displays a list of users who have logged into the system with the date-stamp time of each occurrence.

Report name	Description
User Tracker Report	This report shows user activity to the Customer's Information Tab on the Customer Summary Screen. When you click on the hyperlink, a secondary report gets listed which Customer is accessed the date accessed, and whether or not a note is entered.
View Rates	This report provides the Rate Codes Details.

Property Management Reports

Learn about the various Property Management related reports in CIS.

The list provides the name of property management reports and a brief description of the reports:

Report name	Description
Management Summary	This report provides summary information about the Property or properties selected. If "All" is selected from the Property filter, the report provides summary information on all the properties.
Unit Summary	This report is to monitor and manage the possibility of Energy Theft. This report provides the Status of each unit within a specific property. This helps the Property Manager keep track of the CSA units that are truly vacant according to the Rent Rolls.
CSA Roll-in	This report is to monitor the dates when electricity begins to flow for vacant units. This report provides the CSA Move-in Date of each unit within a specific property. This helps the Property Manager keep track of the dates the CSA units become vacant.
CSA Roll-out	This report is to monitor the dates when electricity ceases to flow for vacant units. This report provides the CSA Move-out Date of each unit within a specific property. This helps the Property Manager keep track of the dates the CSA units are not longer vacant.
Usage Summary	This report assists Management to detect any anomalies with Energy Usage from either month-to-month or for the same time compared to the previous year.

Report name	Description
Accounts Receivable Summary	This report provides the AR Summary information for the Property or properties selected. If "All" is selected from the Property filter, the report provides AR Summary information on all the properties.
Invoice List	This report provides a list of all invoices that have been generated, printed and mailed to each property.
Credit Check Log Report	This report provides summary information on the credit checking process of the each applicant.

5

Collections

The Collections Module is an important feature of the CIS application that allows Suppliers to effectively manage their financial risk by being informed about the status of their accounts receivable on a timely basis. It allows sending timely notification to the Customers of their delinquent balances.

The Collections module is driven by the Event Engine. The Events are configured to monitor the Customer's **Accounts Receivable** balance and **Payments** that are posted.

The Actions are configured to:

- Track non-payment by Customers.
- Send dunning letters.
- Manage disconnect/drop processes.

The PUC rules vary between different types of Customers. Two common levels are as follows:

- By Customer type (commercial vs. residential)
- By market served (Texas vs. New York)

Learn how to manage the collection process in CIS.

For details, see the following topics:

- Collection Process by Customer Types
- Collection Process by Market Served

Collection Process by Customer Types

Learn about collection process flow for residential and commercial Customers.

Residential and Commercial customers may have different collection process and rules because of the difference in volume of consumption.

For Residential Customers

Learn about collection process flow for residential Customers.

This table defines the relevant conditional variables values used by the event engine in the collection/disconnect process and a description of each value for residential Customers.

Disconnect Status	
Value	**Description**
0	The Customer is paid or clear
1	The Customer is sent a disconnection notice
2	The Customer is ready for disconnect, pending approval
3	A 650 DNP request is sent
4	The 650 DNP is accepted and the Customer is disconnected
5	Reconnect request sent
6	The Customer is successfully moved out

Collections Status	
Value	**Description**
0	AR Buckets 1+ are clear
1	The Customer has over $xx in Aging Bucket 1
2	The Customer has over $xx in Aging Bucket 2
3	The Customer has over $xx in Aging Bucket 3
4	The Customer has over $xx in Aging Bucket 4
5	The Customer has over $xx in Aging Bucket 5

Residential Customer with Past Due Invoice

This alert is designed to identify residential Customers who have due invoices.

Transaction Type: Customer Evaluation

Actions:

1. **Create Workspace Alert entitled "Residential Customers with past due invoices".**

   a. This alert is designed to identify residential Customers who have over $xx (value may differ for different Suppliers) in AR Buckets 1-4 and have not been flagged previously by the system.

   b. The primary purpose of this alert is to give Suppliers the ability to see which Customers have past due invoices. Based on the information provided in the

alert, the Supplier can inform the Customer by phone, email, fax, or standard mail.

2. **Update the Collections Status to 1.**

   a. Changing the collections status from 0 to 1 allows the system to identify Customers that have over $xx in AR buckets 1-4.

   b. The update to the collections status prevents the "Residential Customers with past due invoices" workspace alert from generating duplicate alerts.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 2	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 3	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 4	Alt or Standard	Yes	Aging up from greater than	xx
Customer Type		Yes	=	R
Collections Status		Yes	=	0
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		No	NA	NA
Days to Disconnect		No	NA	NA
Pre Payment Flag		No	NA	NA

Residential Customers ready for Disconnect Letter

This alert is designed to identify residential Customers who have past dues.

Transaction Type: Customer Evaluation

Actions:

1. **Create Workspace Alert entitled "Residential Customers ready for Disconnect Letter Alert"**

   a. This alert is designed to identify residential Customers who have been past due on an invoice for a specific period of time.

   b. The time in which the system waits before generating this alert depends on the time in between AR Bucket 1 and AR Bucket 2.

   c. This alert gives the Supplier the option to approve the alert, which generates another event entitled "Alert Approval to send Disconnect Letter". Refer Alert Approval to Send Disconnect Letter on page 234.

2. **Update the Collections Status to 2.**

   a. Changing the Collections Status to 2 allows the system to identify Customers that have over $xx in AR buckets 2-4.

   b. The update to the collections status prevents the "Residential Customers ready for Disconnect Letter Alert" from generating duplicate alerts.

3. **Update the Disconnect Status to 1.**

   a. Changing the disconnect status from 0 to 1 helps the system identify Customers that have entered the disconnect process.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No		
AR Bucket 2	Alt or Standard	Yes	Aging up from Greater Than	xx
AR Bucket 3	Alt or Standard	Yes	Aging up from Greater Than	xx
AR Bucket 4	Alt or Standard	Yes	Aging up from Greater Than	xx
Customer Type		Yes	=	R
Collections Status		Yes	=	1
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		No	NA	NA

Data Point	Type	Is Used?	Operator	Values
Days to Discon-nect		No	NA	NA
Pre Payment Flag		No	NA	NA

Alert Approval to Send Disconnect Letter

This generates disconnection notice that is sent out to applicable Customers.

Transaction Type: Workspace Alert Approval

Actions:

1. **Create Disconnect Letter**

   a. This action generates a disconnection notice that is sent out to applicable Customers. In order for the system to generate the notice for a Customer, the following conditions must be met:

      a. The Customer is included in the "Residential Customers ready for Disconnect Letter Alert".

      b. The Customer is approved to receive the disconnect notice.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

Residential Customers Ready for 650 DNP

This alert is designed to identify Customers that are sent disconnection notice.

Transaction Type: Customer Evaluation

Actions:

1. **Create Workspace Alert entitled "Approve Alert to send 650 DNP"**

   a. This alert is designed to identify Customers that are sent disconnection notice and are within 2 days to disconnect. The actual disconnect date depends on the date on which the disconnection notice is sent out to the Customer.

   b. This alert gives the Supplier the option to approve the alert, which generates another event entitled "Alert Approval for 650 DNP" (Refer to E).

2. **Update the Collections Status to 3.**

   a. The Collections Status is changed to prevent the "Approve Alert to send 650 DNP" from displaying duplicate alerts for a particular Customer, which also prevents duplicate 650 DNP transactions from being sent to the TDSP.

   b. Changing the collections status to 3 allows the system to identify Customers that have over $xx in AR buckets 3-4.

3. **Update the Disconnect Status to 2.**

   a. The Disconnect Status is changed to indicate that the Customer is ready for a 650 DNP and is pending approval.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No	NA	NA
AR Bucket 2	Alt or Standard	No	NA	NA
AR Bucket 3	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 4	Alt or Standard	Yes	Aging up from greater than	xx
Customer Type		Yes	=	R
Collections Status		No	NA	NA
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		Yes	=	1
Days to Disconnect		Yes		2
Pre Payment Flag		Yes	False	NA

Alert Approval for 650 DNP

This sends alert for approval of electric service disconnection.

Transaction Type: Workspace Alert Approval

Actions:

1. **Send 650 DNP**

    a. This action sends a 650 DNP transaction to the TDSP. When approved, the Customer's electric service is disconnected.

2. **Update Disconnect Status to 3**

    a. This action updates the disconnect status to indicate that the Supplier has approved the disconnection of this Customer. A disconnect status of 3 indicates that a disconnect request is sent.

3. **Customer Note for DNP**

    a. This action creates a note in the call log history to indicate that the Customer is dropped for non payment of service.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

650 DNP Complete Received

This indicates electric service is successfully disconnected.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. **Update Disconnect Status to 4**

   a. This action updates the disconnect status to indicate that the Customer's electric service is successfully disconnected.

   b. A Customer is required to have a disconnect status of 4 before he/she is able to proceed in the disconnection process.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	650
Action Code	Yes	=	02
Service Action Code	Yes	=	51
Direction	Yes	=	In
Service Action	Yes	=	72
Status Code	Yes	=	DC001

Alert for 650 DNP Reject: You get this alert if disconnection process is rejected by the Utility.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. **Create "650_02 Reject Received" Workspace alert.**

   a. This action creates an alert in My Workspace which describes the status code and reason that a 650 DNP request is rejected by the TDSP.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	650
Action Code	Yes	=	02
Service Action Code	Yes	< >	51
Direction	Yes	=	In

Residential Customers ready for 814_24 Move-out

This creates an alert to identify Customers that are ready to move out.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. Alert Approval to send 814_24 Move-out

a. This action creates a workspace alert which identifies residential Customers that are ready to be moved out. Customers who are eligible for move out must meet the following criteria:

   a. Alternative AR Bucket 4 contains over $xx.

   b. Customer's disconnect status is 4.

   c. Customer type is R for residential.

a. This alert gives the Supplier the option to approve the alert, which generates another event entitled "Alert Approval to send 814_24 Move-out". Refer Alert Approval to send 814_24 Move-out on page 241.

2. Update Collections Status to 4

a. A collection status of 4 indicates that AR bucket 4 contains over $xx.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No	NA	NA
AR Bucket 2	Alt or Standard	No	NA	NA
AR Bucket 3	Alt or Standard	No	NA	NA
AR Bucket 4	Alt or Standard	Yes	>	xx
Customer Type		Yes	=	R
Collections Status		No	NA	NA
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		Yes	=	4
Days to Disconnect		No	NA	NA
Pre Payment Flag		No	NA	NA

Alert Approval to send 814_24 Move-out

This sends Move out request to TDSP for a Customer.

Transaction Type: Workspace Alert Approval

Actions:

1. Send 814_24 Move-out

   a. Upon approval by an authorized user, this action sends an 814_24 Move-out request for a particular Customer to the TDSP.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

Move-out Transaction Accepted

This indicates that a move out request is accepted by the Utility.

Transaction Type: Simple Market Transaction Evaluation

Actions:

The Customer's Disconnect Status is not 0:

1. **Update Disconnect Status to Moved Out**

   a. This action changes the disconnect status to Moved out to indicate that a move-out request is sent out to the TDSP, and that the transaction is accepted.

2. **Customer Note for 814_24 Move-out Complete**

   a. This action creates a note in the call log history to indicate that the Customer is successfully moved out.

The Customer's Disconnect Status = Paid/Clear:

1. **Customer Note for 814_25 Move-out Complete**

   a. This action creates a note in the call log history to indicate that the Customer is successfully moved out.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	814
Action Code	Yes	=	xx
Direction	Yes	=	In
Service Action Code	Yes	=	A

814_25 Move-out Rejects: You get this alert when a move-out request is rejected by the TDSP

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. **Create "Move-out Rejects" Workspace Alert**

   a. This action creates an alert in My Workspace when a move-out request is rejected by the TDSP. The alert lists the reject code to help the Supplier understand why the transaction is rejected.

   b. The move-out rejects workspace identifies all move-out transactions that are rejected by the market and is not specifically for Customers who are in the disconnect process.

   Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	814
Action Code	Yes	=	25
Service Action Code	Yes	=	R

For Commercial Customers

Learn about collection process flow for residential Customers.

This table defines the relevant conditional variables values used by the event engine in the collection/disconnect process and a description of each value for residential Customers.

Disconnect Status	
Value	**Description**
0	The Customer is paid or clear
1	The Customer is sent a disconnection notice
2	The Customer is ready for disconnect, pending approval
3	A 650 DNP request is sent
4	The 650 DNP is accepted and the Customer is disconnected
5	Reconnect request sent
6	The Customer is successfully moved out

Collections Status	
Value	**Description**
0	AR Buckets 1+ are clear
1	The Customer has over $xx in Aging Bucket 1
2	The Customer has over $xx in Aging Bucket 2
3	The Customer has over $xx in Aging Bucket 3
4	The Customer has over $xx in Aging Bucket 4
5	The Customer has over $xx in Aging Bucket 5

Commercial Customer with Past Due Invoice

This alert is designed to identify commercial Customers who have due invoices.

Transaction Type: Customer Evaluation

Actions:

1. Create Workspace Alert entitled "Residential Customers with past due invoices".

   a. This alert is designed to identify commercial Customers who have over $xx in AR Bucket 1, less than $1 in AR Buckets 2-4, and have not been flagged previously by the system.

   b. The primary purpose of this alert is to give Suppliers the ability to see which commercial Customers have past due invoices. Based on the information provided in the alert, the Supplier can inform the Customer by phone, email, fax, or standard mail.

2. Update the Collections Status to 1.

   a. Changing the collections status from 0 to 1 allows the system to identify Customers that have over $xx in Aging Bucket 1.

   b. The update to the collections status prevents the "Commercial Customers with past due invoices" workspace alert from generating duplicate alerts.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 2	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 3	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 4	Alt or Standard	Yes	Aging up from greater than	xx
Customer Type		Yes	=	C
Collections Status		Yes	=	0
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		No	NA	NA
Days to Disconnect		No	NA	NA
Pre Payment Flag		No	NA	NA

Commercial Customers ready for Disconnect Letter

This alert is designed to identify commercial Customers who have past dues.

Transaction Type: Customer Evaluation

Actions:

1. Create Workspace Alert entitled "Commercial Customers ready for Disconnect Letter Alert"

   a. This alert is designed to identify commercial Customers who have been past due on an invoice for a specific period of time.

   b. The time in which the system waits before generating this alert depends on the time in between AR Bucket 1 and AR Bucket 2.

   c. This alert gives the Supplier the option to approve the alert, which generates another event entitled "Alert Approval to send Disconnect Letter".

2. Update the Collections Status to 2.

   a. Changing the Collections Status to 2 allows the system to identify Customers that have over $xx in AR buckets 2-4.

   b. The update to the collections status prevents the "Commercial Customers ready for Disconnect Letter Alert" from generating duplicate alerts.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No	NA	NA
AR Bucket 2	Alt or Standard	Yes	Aging up from Greater Than	xx
AR Bucket 3	Alt or Standard	Yes	Aging up from Greater Than	xx
AR Bucket 4	Alt or Standard	Yes	Aging up from Greater Than	xx
Customer Type		Yes	=	C
Collections Status		Yes	=	1
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		No	NA	NA
Days to Disconnect		No	NA	NA
Pre Payment Flag		No	NA	NA

Alert Approval to Send Disconnect Letter

This generates disconnection notice that is sent out to applicable Customers.

Transaction Type: Workspace Alert Approval

Actions:

1. Create Disconnect Letter

   a. This action generates a disconnection notice that is sent out to applicable Customers. In order for the system to generate the notice for a Customer, the following conditions must be met:

      a. The Customer is included in the "Commercial Customers ready for Disconnect Letter Alert".

      b. The Customer is approved to receive the disconnect notice.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

Commercial Customers Ready for 650 DNP

This alert is designed to identify Customers that are sent disconnection notice.

Transaction Type: Customer Evaluation

Actions:

1. Create Workspace Alert entitled "Approve Alert to send 650 DNP"

    a. This alert is designed to identify Customers that are within 2 days to disconnect. The actual disconnect date depends on the date in which the disconnection notice is sent out to the Customer.

    b. This alert gives the Supplier the option to approve the alert, which generates another event entitled "Alert Approval for 650 DNP" (Refer E).

2. Update the Collections Status to 3.

    a. The Collections Status is changed to prevent the "Approve Alert to send 650 DNP" from displaying duplicate alerts for a particular Customer, which also prevents duplicate 650 DNP transactions from being sent to the TDSP.

    b. Changing the collections status to 3 allows the system to identify Customers that have over $xx in AR buckets 3-4.

3. Update the Disconnect Status to 2.

    a. The Disconnect Status is changed to indicate that the Customer is ready for a 650 DNP and is pending approval.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No	NA	NA
AR Bucket 2	Alt or Standard	No	NA	NA
AR Bucket 3	Alt or Standard	Yes	Aging up from greater than	xx
AR Bucket 4	Alt or Standard	Yes		
Customer Type		Yes	=	C
Collections Status		No	NA	NA
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		Yes	=	1
Days to Disconnect		Yes	<	2
Pre Payment Flag		Yes	=	False

Alert Approval for 650 DNP

This sends alert for approval of electric service disconnection.

Transaction Type: Workspace Alert Approval

Actions:

1. Send 650 DNP

   a. This action sends a 650 DNP transaction to the TDSP. When approved, the Customer's electric service is disconnected.

2. Update Disconnect Status to 3

   a. This action updates the disconnect status to indicate that the Supplier has approved the disconnection of this Customer. A disconnect status of 3 indicates that a disconnect request is sent.

3. Customer Note for DNP

   a. This action creates a note in the call log history to indicate that the Customer is dropped for non payment of service.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

650 DNP Complete Received

This indicates electric service is successfully disconnected.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. Update Disconnect Status to 4

   a. This action updates the disconnect status to indicate that the Customer's electric service is successfully disconnected.

   b. A Customer is required to have a disconnect status of 4 before proceeding with the disconnection process.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	650
Action Code	Yes	=	02
Service Action Code	Yes	=	51
Direction	Yes	=	In
Service Action	Yes	=	72
Status Code	Yes	=	DC001

Alert for 650 DNP Reject: You get this alert if disconnection process is rejected by the Utility.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. Create "650_02 Reject Received" Workspace alert.

   a. This action creates an alert in My Workspace which describes the status code and reason that a 650 DNP request is rejected by the TDSP.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	650
Action Code	Yes	=	02
Service Action Code	Yes	< >	51
Direction	Yes	=	In

Commercial Customers ready for 814_24 Move-out

This creates an alert to identify Customers that are ready to move out.

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. Alert Approval to send 814_24 Move-out

   a. This alert is designed to identify and display Customers who are ready to be moved out. In order for Customers to be qualified for a move-out, the following conditions must be met.

      a. The Customer has over $xx in Alternative AR Bucket 4.

      b. The Customer must have a disconnect status of 4, which indicates that the Customer is disconnected for non-payment.

2. Update Collections Status to 4

   a. This action updates the collection status to 4 to prevent the "Commercial Customers ready for 814_24 Move-out" alert from displaying duplicate Customer alerts, which also prevents duplicate 814_24 Move-out transactions from being sent to the TDSP.

   b. A collection status of 4 indicates that Alternative AR bucket 4 contains over $xx.

Data Points:

Data Point	Type	Is Used?	Operator	Values
AR Bucket 1	Alt or Standard	No	NA	NA
AR Bucket 2	Alt or Standard	No	NA	NA
AR Bucket 3	Alt or Standard	No	NA	NA
AR Bucket 4	Alt or Standard	Yes	>	xx
Customer Type		Yes	=	C
Collections Status		No	NA	NA
Promise to Pay		Yes	=	False
Credit Hold		Yes	=	False
Critical Care		Yes	=	False
Disconnect Status		Yes	=	4
Days to Disconnect		No	NA	NA
Pre Payment Flag		No	NA	NA

Alert Approval to send 814_24 Move-out

This sends Move out request to TDSP for a Customer.

Transaction Type: Workspace Alert Approval

Actions:

1. Send 814_24 Move-out

a. Upon approval by an authorized user, this action sends an 814_24 Move-out request for a particular DNP Customer to the TDSP.

Data Points:

Data Point	Is Used?	Operator	Values
AR Bucket 1	No	NA	NA
AR Bucket 2	No	NA	NA
AR Bucket 3	No	NA	NA
AR Bucket 4	No	NA	NA
Customer Type	No	NA	NA
Collections Status	No	NA	NA
Promise to Pay	No	NA	NA
Credit Hold	No	NA	NA
Critical Care	No	NA	NA
Disconnect Status	No	NA	NA
Days to Disconnect	No	NA	NA
Pre Payment Flag	No	NA	NA

Move-out Transaction Accepted

This indicates that a move out request is accepted by the Utility.

Transaction Type: Simple Market Transaction Evaluation

Actions:

The Customer's Disconnect Status is not 0:

1. Update Disconnect Status to Moved Out

   a. This action changes the disconnect status to Moved out to indicate that a move-out request is sent out to the TDSP, and that the transaction is accepted.

2. Customer Note for 814_24 Move-out Complete

   a. This action creates a note in the call log history to indicate that the Customer is successfully moved out.

The Customer's Disconnect Status = Paid/Clear:

1. Customer Note for 814_25 Move-out Complete

   a. This action creates a note in the call log history to indicate that the Customer is successfully moved out.

Data Points:

Data Point	Is Used?	Operator	Values
Transaction Type	Yes	=	814
Action Code	Yes	=	25
Direction	Yes	=	In
Service Action Code	Yes	=	A

814_25 Move-out Rejects: You get this alert when a move-out request is rejected by the TDSP

Transaction Type: Simple Market Transaction Evaluation

Actions:

1. Create "Move-out Rejects" Workspace Alert

    a. This action creates an alert in My Workspace when a move-out request is rejected by the TDSP. The alert lists the reject code to help the Supplier understand why the transaction is rejected.

    b. The move-out rejects workspace identifies all move-out transactions that are rejected by the market and is not specifically for Customers who are in the disconnect process.

Collection Process by Market Served

Learn about collection process by Customer type.

Different markets (states) have different rules setup by the Public Utility commission (PUC). PUC's are state agencies that regulate the utilities in their respective states and are responsible for enforcing Customer protections.

To show how rules differ between the different markets the examples for states of Georgia and Texas are given below:

Rule setup by PUC	Georgia	Texas
Invoice Due	20 days from the previous invoice sent to the Customer.	16 days from the previous invoice sent to the Customer.
Disconnection letter and Reminder Call	No disconnection letter can be sent and reminder call can be made 3 days after the invoice due date i.e. on or after 23 days from the previous invoice sent to the Customer.	Disconnection letter can be sent and reminder call can be made 3 days after the invoice due date i.e. on or after 19 days from the previous invoice sent to the Customer.
Shutoff for Non-payment (SONP) Letter	SONP Letter can be issued 7 days after the call reminder i.e. on or after 30 days from the previous invoice sent to the Customer.	N/A
Disconnect Warning Call	Disconnect warning call can be made 13 days after the SONP letter is sent i.e. on or after 43 days from the previous invoice sent to the Customer.	Disconnect warning call can be made 9 days after the SONP letter is sent i.e. on or after 28 days from the previous invoice sent to the Customer.

Rule setup by PUC	Georgia	Texas
SONP Schedule/ Disconnection	SNOP can be scheduled after 2 days of disconnection warning call i.e. on or after 45 days from the previous invoice sent to the Customer.	Disconnection can be scheduled after 2 days of disconnection warning call i.e. on or after 30 days from the previous invoice sent to the Customer.
Move out	Move out can be done 11 days after the disconnection process i.e. on or after 56 days from the previous invoice sent to the Customer.	Move out can be done 8 days after the disconnection process i.e. on or after 38 days from the previous invoice sent to the Customer.
Final Bill Sent	Final bill can be sent 2 days after the move out has happened i.e. on or after 58 days from the previous invoice sent to the Customer.	Final bill can be sent 6 days after the move out has happened i.e. on or after 44 days from the previous invoice sent to the Customer.
Final Bill Due	Final bill is due after 20 days from the date is is sent i.e. on or after 78 days from the previous invoice sent to the Customer.	Final bill is due after 16 days from the date it is sent i.e. on or after 60 days from the previous invoice sent to the Customer.

Note: Suppliers can set-up the collections process differently in different markets but they have to abide by the PUC rules in that state of operation.

Collections Process and Deferred Payment Plans

Learn about Deferred payment plan and how it affects collection process.

In Texas Market, the Customers who cannot make on-time payment for the services utilized can opt for the deferred payment plan (DPP). It provides a way for a Customer to pay off an overdue balance over a period of time.

The overdue balance is broken down into monthly installments and a schedule is created for these installments. One of the below mentioned scenario may arise once DPP is initiated:

- If a Customer pays off his plan by the determined final date, the DPP is said to be "complete" or "honored".

- If the DPP is not completely paid off by the final date or any of the installments are not paid by the required date, the DPP is considered "broken" or "dishonored". Customers that break their DPP goes through the disconnect process.

When a Customer opts for Deferred Payment Plan, the Supplier sends a DPP letter to the Customer communicating the agreement. In the event the Customer dishonors the agreement, a disconnect letter is sent communicating the default and that the disconnect process has begun.

DPP Plan Types

There are currently three types of DPP that a Customer can be enrolled in:

1. **Payment Arrangement:** This type allows for a number of installments (typically from 2 to 12) to be created from the Customer's overdue balance with the installments due in a sequential order.

2. **Payment Plan:** This type is similar to the **Payment Arrangement** but only has two installments. The first must be paid within the few days of the start of a plan. The plan is in a "Pending" status until that first installment is paid then it moves to an "Active" status. The final installment must be paid on the plan end date.

3. **Pledge:** This type is not a typical DPP in that instead of setting up a schedule of payments this DPP tells the amount that is to be paid by a third party. The **Pledge** indicates the third parties and the amount to pay by a certain date. If the pledges are not paid by the indicated date, the DPP is considered "broken".

For more information on Deferred Payment Plan, see Deferred Payment Plan on page 215.

Collections Process and Switch Holds

Switch Holds is a market-driven rule in Texas. This means that a Customer is not able to switch to another Supplier until they pay their overdue balance with their current Supplier. If a switch-hold is placed on their account, it is removed after the overdue balance is paid and processed. While a switch-hold applies, if the Customer is disconnected for not paying, they need to pay the Supplier their overdue balance to get their electricity turned back on.

CIS provides the functionality for Suppliers to apply switch holds to their Customer's account. For more information on Switch Holds, see Switch Holds on page 207.

Key Terms and Acronyms

The acronyms and terms defined on this page are commonly used terms in CIS.

Note: For a list of energy related abbreviations, see wikipedia.org/wiki/List_of_energy_abbreviations.

A

Term	Description
Account	For accounts in CIS.
Accounts Receivable (A/R)	Technically: A series of accounting transactions that record the debits/credits for the services associated with a Customer Account. Financially: Money owed to the business by its clients and/or Customers.
ACH	Automated Clearing House (ACH) is an electronic network for financial transactions in the United States. ACH processes large volumes of credit and debit transactions in batches. ACH credit transfers include direct deposit payroll and vendor payments. (See http://en.wikipedia.org/wiki/Automated_Clearing_House.)
Activation Fee	New Account Set Up Fee.
Adders	Additional component of a rate detail.
Adjusted Metered Load	Retail Load Usage data that has been adjusted for UFE and Transmission and/or Distribution Losses.
Adjustment Period	The Adjustment Period for any given Operating Hour is the time period following the close of the Day-Ahead market and extending up to each Operating Period.
Admin UI	Administration Portal.
Administration Portal	An CIS internal application that is used by the billing analysts to carry out the tasks necessary to produce a bill.
ADU	Average Daily Usage
Advanced Metering System	A Utility metering system that is capable of measuring interval or time based on energy Consumption.

Term	Description
Advisory	The second of four possible levels of communication issued by ERCOT in anticipation of a possible emergency condition.
Affiliated Retail Electric Provider	A Retail Energy Provider (REP) that is owned, but separately operated, by a former monopoly electric Utility.
Aggregated Retail Load Data	Adjusted Metered Load that has been aggregated.
Aggregator	An entity registered with the PUCT to bring a group of Customers together to buy electricity in bulk.
Aggregator/Sales Agent	External organization responsible for bringing Customers to the ESP and potentially receiving compensation for such performance. Tied to Agreements/Contracts.
Aging	Aging, or Aging of Accounts, refers to the process of classifying accounts by the time elapsed after the date of billing or the Due Date. An aging schedule of accounts receivable typically breaks down receivables from 1-30 days, 31-60 days, 61-90 days, and over 90 days.
Agreement	Standard form Agreement executed between ERCOT and Market Participants.
Alert	The third of four possible levels of communication issued by ERCOT in anticipation of a possible emergency condition. For alerts in CIS, see Customer Alerts and Workspace Alerts.
AC	Alternating Current - electricity that changes direction periodically. The period is measured in Cycles per Second (Hertz, Hz).
Alternative Dispute Resolution	Procedures, for settling disputes by means other than litigation.
Ampere, Amp (A)	The unit that measures the rate of flow of an electrical current.
AMR	Automated Meter Reading.
AMS	Advanced Metering System.
MAMSM	Indicates AMS (Advanced Metering System) meter without remote connect or disconnect capability.

Term	Description
AMSR	Indicates AMS (Advanced Metering System) meter with remote connect or disconnect capability.
Ancillary Charges	TDSP Charges.
Ancillary Services	Services necessary to support the Transmission of energy from Resources to Loads while maintaining reliable operation of transmission provider's transmission systems in accordance with Good Utility Practice.
Ancillary Services Plan	ERCOT produced plan, Ancillary Services, that identifies the types and amount of Ancillary Services necessary for each hour of the next day, or next two (2) days, to operate the ERCOT Transmission Grid reliably in accordance with Operating Guides, and which includes the allocation of types and amounts of the Ancillary Services Obligations for each QSE.
ANSI	American National Standards Institute. An organization that maintains standards on many different topics.
ANSI ASC X12	ANSI Accredited Standards Committee X12. The ANSI subcommittee appointed to develop standards for EDI in North America.
API	An automated interface that allows companies to communicate with each other through a business-to-business (B2B) connection.
AREP	See Affiliated Retail Electric Provider.
Atlanta Gas & Light (AGL or AGLC)	Atlanta Gas Light provides gas service in Georgia, which is a fully deregulated market. AGLC utilizes a Supplier consolidated Rate Ready model where the Utility sends the rates to the Supplier for Customer billing. AGLC sends the Ancillary Servicecharges and Consumption reads to the Supplier and the Supplier, known in Georgia as a Marketer, is responsible for preparing the consolidated Customer invoice.
Automated Meter Reading (AMR)	Reads are gathered electronically, not manually looked at by a Meter reader.
Automatic Voltage Regulator	Device used on Generation Resources to automatically maintain a voltage set point.

Term	Description
AutoPay	A Bill Payment feature which utility Customers can set up giving CIS permission to automatically debit/draft a Customer's payment account and to deposit the funds with the utilities payment processing vendor.
Average Daily Usage (ADU)	The ratio of the total Consumption divided by the number of days the consumption covered. (ADU = Monthly kWh/# of days).

B

Term	Description
B2B / B2B2	Business to Business. A "computer to computer" connection established so that data and other information can be exchanged between two companies. The CIS client B2B site is a Web Portal created to view CIS information. The main B2B/ B2B2 end users are commercial Customers of the Retail Energy Providers (or CIS Clients). B2B2 is a more current UI for the same or similar functionality as the B2B site.
Backcasting	Process of converting monthly Consumption data into "interval" data based on the Load Profile and Weather Zone.
Balanced Payment Plan	A Utility can offer their Customers to average their home or business energy costs over a 12-month period to arrive at their monthly "balanced payment amount."
Base Charges	TDSP Charges.

Term	Description
Bill Group	A Bill group is a number which typically describes a collection of accounts. Bill Groups can be grouped together by any criteria the user would prefer.
	Certain clients use the Bill Group number to correspond the date of the month the Bill Group should be invoiced on. Some create a Bill Group to only be invoiced when all consumption records arrive. There are many ways to group accounts together, and then these groups of accounts are put into a distinct Bill Group.
	A Customer is assigned to a Bill Group when the account is enrolled in CIS. Historically, Customers were initially enrolled with Bill Group 55 and then moved to the final Bill Group after the first invoice. For newer client implementations, Customers are typically assigned to a Bill Group per Billing Type per LDC, with the following rules applicable to the Bill Group number:
	Bill Groups are 6 numbers in length. The first number is for the Bill Type, next 3 numbers for LDCID in the Database, last 2 numbers for Normal BG description purposes.
	For example CPL would be 305800:
	• 3 = Rate Ready
	• 058 = LDCID in the Database
	• 00 = Normal
	The Customer's Bill Group number is listed in the Customer table in the BillCycle column.
Bill Ready	One of the energy Billing Models supported by CIS.
	When we talk about "Bill Ready" at CIS we always mean the Utility Consolidated Bill Ready model. In this model, the Distribution utility transmits the Meter read to the energy Retailer/Supplier to calculate their energy charges. The Supplier sends back an electronic invoice within a fixed number of days. The distribution utility passes through the Supplier's charges on the invoice sent to the end Customer.

Term	Description
Bill Window	The Bill Window is the specific time frame in which an electronic invoice (810) must be sent to the Utility. If the electronic invoice (810) is not sent to the utility by the date/time due the electronic invoice (810) is rejected by the utility, and CIS has to wait until the following month to send the electronic invoice (810).
Billing Admin Database	CIS database used for all Clients, containing mostly configuration data.
Billing Cycle	The time frame in which CIS is currently billing.
Billing Model	CIS supports the following billing models: Utility Consolidated Bill Ready, Rate Ready, Supplier Consolidated and Dual.
Billing Type	Another term for Billing Model.
BillPay	CIS web application enabling Customers to pay their energy bills.
Black Start Service	Contracted Ancillary Service acquired by ERCOT for the benefit of all Loads, provided by Resource capable of starting without support of the ERCOT Transmission Grid.
BPO	Business Process Outsourcing.
BPP	Balanced Payment Plan.
BPS	Bundled Portfolio Service.
BR	Abbreviation for the Bill Ready billing model.
Brand	Division.
BTU	British Thermal Unit - a measure of heat equal to the amount of heat necessary to raise the temperature of one pound of water one degree F.

Term	Description
Budget Billing	A budget billing plan allows Customers to pay an equal amount each month (regardless of Usage). This avoids high winter bills and low summer bills. Each month the Customer is billed their actual charges based upon the monthly usage (867) received from the Market. While the actual charges are billed to the Customer's Account, the amount invoiced is the Budgeted Amount. The Customer's invoice shows the normal usage and charges incurred, but the amount due equals the Budget Billing Amount. Each month the Budget Balance goes up or down depending upon the difference between actual charges and the budget amount billed.
Budget Billing True-Up (Date)	True-up for Budget Billing occurs based upon Customer configuration or upon receipt of a final read, whichever occurs first. Options are Annually, Quarterly and Semi-annually. True-up invoices are billed at actual charges plus the Budget Billed balance. Finalization and Settling up of the Customer's account balance before the new Budget Billing period starts.
Budgeted Amount	See Budget and Average Billing Plans on page 168.
Bundled Portfolio Service	A Bundled Service is the combination of generation and other Utility services, such as Transmission, Distribution, etc.

C

Term	Description
CAB	Change Advisory Board – CIS management team approving new Jira tickets to be worked on.
California Alternate Rates for Energy	The California Alternate Rates for Energy (CARE) program provides a monthly discount on energy bills for income-qualified (i.e. low income) households and housing facilities.

Term	Description
California Public Utilities Commission (CPUC)	The California Public Utilities Commission (CPUC) is a regulatory agency that regulates privately owned public utilities in the state of California, including electric power, telecommunications, natural gas and water companies. In addition, the CPUC regulates common carriers, including household goods movers, passenger transportation companies (like limousine services) and rail crossing safety.
Call Log	CIS supports a Call Log feature that allows keeping track of Customer calls. The logged data includes a call status that can be set to Open, Pending, or Closed.
CARE	California Alternate Rates for Energy.
CASH or C.A.S.H.	Credit Card and ACH Secure Handling. CIS module to collect, store and process credit card and ACH payment information. See PCI-DSS Compliance and CIS Solution - CASH on page 194.
Chase PaymenTech	Chase PaymenTech is a Payment Provider used by some CIS Clients.
Child Account	Another term for a Customer Account in a Customer Hierarchy.
CIS	Customer Information System. See CIS.
City-Owned Utility	A non-profit Utility that is owned and operated by the city it serves. In Texas, city-owned utilities may opt into the competitive retail electric marketplace.
Client	CIS's business Customers are referred to as "Supplier" (Retailers/ Suppliers/ Marketers) that are buying CIS's product. Customer means Supplier's client (End user of commodity)
Client Database	CIS operational database for Supplier.
Client DUNS	Unique identifier for a single business entity using the Data Universal Numbering System regulated by Duns and Bradstreet. A required element in the CIS prism file (ESP_DUNS). Sometimes referred to as the CSPDUNS.

Term	Description
ComEd	Commonwealth Edison. **Note:** Note: This is different from ConEd!
Commercial Customer	One of three commonly used designations for classes of Customers. The others are Residential and industrial. Commercial Customers are not involved in manufacturing. Examples of commercial Customers are retail stores, restaurants and educational institutions.
Commercial Model	Transmission model developed by ERCOT that arranges groups of Generation Resource and Load busses into Congestion Zones that have similar impacts on Commercially Significant Constraints.
Commercially Significant Constraint (CSC)	A constraint in the ERCOT Transmission Grid that is found to result in Congestion which limits the free flow of energy within the ERCOT market to a commercially significant degree.
Commercially Significant Constraint (CSC) Limit	The maximum power flow across a CSC allowed maintaining reliable operation.
Commodity	Any Utility: water, gas, electric, HVAC.
Commonwealth Edison	Commonwealth Edison, also called ComEd is a Utility in Illinois.
ConEd or Con Ed	Consolidated Edison.
Consolidated Edison	Consolidated Edison, also called Con Edison, ConEd or Con Ed, is a Utility in New York.
Consolidated Utility Billing (CUBS)	Consolidated Utility Billing (CUBS) program PowerYourWay Customers have the option of receiving a consolidated bill from Consolidated Edison, which combines the detail of Con Edison's delivery charges and the ESCO's supply charges. This billing option is known at Con Edison as Consolidated Utility Billing (CUBS). Con Edison calculates the CUBS bill with the information provided by the ESCO.
Consumption	The amount of water, gas, electricity consumed or used by the resident.

Term	Description
Continuous Service Agreement (CSA)	An arrangement between the owner or controller of a leased Premise and a CR wherein the CR provides service to the leased Premise between tenants so that the Premise does not experience discontinuation of electric service during vacancy.
Contract	Agreement between the Supplier and the Customer to provide services at a price over time. Alternate definition: Representation of the specific Product/services selected by the Customer for a given period of time.
Contract Renewal	A process to create a new Contract to an existing Customer when their existing contract is about to expire.
Contract Term	Number of months that a Customer has signed up for service.
Core Transport Agent	Another term for a Supplier of gas.
CPUC	California Public Utilities Commission.
CR	Competitive Retailer. This is another term for a Supplier, typically only used in Texas.
CSA	Continuous Service Agreement.
CSC	Commercially Significant Constraint.
CSP	Customer Service Provider. Synonym for ESP.
CSR	Customer Service Representative
CSR UI	CIS web application for CIS's Clients. Also called CSR UI portal.
CTA	Core Transport Agent.
CUBS	Consolidated Utility Billing.
CustId	CIS's internal Client Database ID field for the Customer Account Number, which is stored in the CustNo field.
CustNo	CIS's Client Database field for the Customer Account Number; also called ESP Account Number.
Customer	Entity that receives and pays for services.

Term	Description
Customer Account	The Customer Account is the lowest level in a Customer Hierarchy. The "Customers" as defined here would be assigned one Meter each. Each "Customer" location would receive the meter reads for its service location. An invoicing calculation would be done by the system for each Customer. Previous balances, payments, balance forward, new charges invoices, and total balance due would be tracked for each Customer.
Customer Account Number	CIS's unique number for the Customer; also called ESP Account Number. In the Client Database, it is stored in the CustNo field.
Customer Alert	CIS supports Alert messages that can be configured to appear on the CSR UI portal as messages on the Customer Information screen.
Customer Hierarchy	CIS provides functionality to organize Customers into logical hierarchies of Master Customer Accounts (also called Parent Accounts) and Customer Accounts (also called Child Accounts).
Customer Type	The category to which a Customer falls under, such as Residential or Commercial.

D

Term	Description
DASR	A Direct Access Service Request is a request submitted by a Service Provider to the Utility, to notify the utility of a Customerswitching to be serviced by them.
Data Aggregation	The process of netting, grouping and summing Load Consumption data, applying appropriate profiles, Transmission Loss Factors, and Distribution Loss Factors and calculating and allocating UFE to determine each QSE and/or Load Serving Entityresponsibility by Settlement Interval by Congestion Zone and by other prescribed aggregation determinants.
Data Conversion	Data Mapping.

Term	Description
Data Mapping	Provides significant enhancement and transformation of data from multiple sources to multiple target formats. For example, converting a purchase order file in a proprietary format to a set of EDI purchase order transactions.
Data Transformation	Data Mapping.
Day-Ahead	The 24-hour period before the start of the Operating Day. The Day-Ahead Energy Market is a financial market where buyers and sellers of electricity can agree upon the price at which they are willing to purchase and deliver electricity for the following day. The Day-Ahead Market allows buyers and sellers to lock in their price and hedge against volatility in the Real-Time Energy Market. Customers develop and submit an "offer" to the Supplier. The offer specifies the price, amount of curtailment, minimum duration and an optional start-up/shut-down cost at which the Customer is willing to reduce their electricity consumption for the following day.
Deferred Payment Plan	Plan required in the Texas Market by the PUCT to give Customers that get behind in their payments a chance to catch up before being disconnected.
Deregulation, deregulated	Removal or relaxation of regulations or controls governing a business or service operation such as utilities.
Demand	Electric demand refers to the maximum amount of electrical energy that is being consumed at a given time. It is measured in both kilowatts and kilovolt amperes, depending on the rate tariff. The difference between the two terms is power factor. The rate at which electric energy is delivered to or by a system, part of a system, or a piece of equipment. Demand is expressed in kW, kVA, or other suitable units at a given instant or over any designated period of time. The primary source of "demand" is the power-consuming equipment of the Customers.
Distribution	In the energy business, the term refers to Low Voltage lines.

Term	Description
Distribution Loss Factor	The ratio of the Distribution Service Provider's estimated Distribution Losses to the total amount of energy deemed consumed (IDR plus profiled Consumption) on the Distribution Service Provider's system.
Distribution Losses	The difference between the energy delivered to the Distribution System and the energy consumed by Loads connected to the Distribution System.
Distribution Service Provider (DSP)	An Entity that owns or operates a Distribution System for the delivery of energy to Customer.
Distributor	Company that manages and maintains the infrastructure used to deliver a Utility Commodity to its consumers. They repair gas lines and power lines and they are responsible for keeping the system in working order.
Division Code	Divisions can be used by clients in CIS to group Customers together. The Division Code is the identification of the Division to which the Customer belongs to. Divisions are used to filter on some reports, to group Customers for different letters and invoices, and as Event parameters. On Reports, a Division is usually called "Brand."
DNP	Disconnect for Non-Pay.
Do Not Call List	The PUCT establishes a list for Customers who do not want to receive telemarketing calls from REPs.
DOA	Denial of Access to the meter
DPP	See Deferred Payment Plan.
Drop Transaction	An 814 EDI transaction that notifies the Supplier that a Customer's service has been disconnected. See Transactions on page 18.
DSP	Distribution Service Provider.

Term	Description
Dual	One of the energy Billing Models supported by CIS. In the Dual model, both the Distribution Utility and the energy Retailer/Supplier each calculate their own charges and both parties send invoices directly the end Customer. The Customer therefore receives two invoices per Meter read and remits payments back directly to both parties. Typically, the distribution company provides the Supplier with a monthly meter electronically, but does not expect any responses related to billing.
Due Date	This is the date that the payment is due to the Utility.
DUNS Number	Data Universal Numbering System number. A unique nine-digit common company identifier used in electronic commerce transactions.

E

Term	Description
EDI	Electronic data interchange (EDI) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention. (See http://en.wikipedia.org/wiki/Electronic_data_interchange.) CIS uses EDI to communicate with the energy Market. See also Market Transactions.
EDI Document	An EDI transaction set.
EFL	Electricity Facts Label – EFLs are part of the Enrollment Welcome package sent to 4Change Customers.
EFT	Electronic Funds Transfer (EFT) is the electronic exchange, transfer of money from one account to another, either within a single financial institution or across multiple institutions, through computer-based systems.

Term	Description
EMS	Energy Management Services.
Encryption	A procedure for scrambling data to make it indecipherable to an outside observer. The receiver of the encrypted data must use a decryption procedure to unscramble the data.
Energy Management	Monitoring, analyze and report Usage against a defined budget for a given time.
Enrollment	A Customer enrollment is typically a transaction sent to a Utility to activate different types of utilities like Electric, Gas, or Water. It is usually sent in the form of an 814 Move-In or Switch transaction. The Enrollment can be sent requesting the activation date on or off cycle. Some Clients also place enrollments manually on the CSR UI, or send a batch file to CIS.
Enrollment Wizard	Feature on the CSR UI that allows Client users to search for and enter new Customer Enrollments.
ERCOT	Electric Reliability Council of Texas. A private industry group that monitors electric energy supply in the state.
ESCO	Energy Supply Company. This is another term for a Supplier, used in a variety of markets outside of Texas.
ESIID	Electric Service Identifier. The basic identifier assigned to each Service Delivery Point used in the registration and settlement systems managed by ERCOT or another Independent Organization. ESIID is a term used in Texas. For other states, it is called LDC Account Number or Premise Number.
ESP	Energy Service Provider. The proper name of an energy reseller in a Utility market.
ESP Account Number	CIS's Customer Account Number; stored in the Client Database in the CustNo field.
Establishment Fee	New Account Set Up Fee.
Estimated	Estimations.

Term	Description
Estimations	The process by which Consumption is created for units for which there is not consumption for part or all of the current Service Period.
ETF	The Early Termination Fee (EFT) is a charge assessed by Supplier when a Customer switches their service to another Supplier before the end of their contract term.
Event	Events are system conditions or user-initiated actions to which additional actions or responses can be tied. See also Client Configuration - Events

F

Term	Description
FERC	The Federal Energy Regulatory Commission (FERC) is the United States federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates.
Final True Up	Account settlement for a Budget Billing Customer that is no longer going to be on a Budget Billing Plan.
FTP	File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host or to another host over a TCP-based network, such as the Internet. (See http://en.wikipedia.org/wiki/Ftp.)
Fixed Price Rate	For Fixed Price Rates, the rate is fixed within certain period of time. In the Customer invoice calculation, the energy charge is calculated as Fixed Rate * Energy Consumption.
Fuel Factor	An electric Utility is allowed to recover its costs for the fuel used to generate electricity, such as coal, natural gas, wind, water, nuclear, etc., through the fuel factor. This cost is set by the PUCT and charged on each Customer's bill, based on kWh Usage. A utility is prohibited from making a profit on fuel costs.

Term	Description
Fuel Index	An electronically-published index that reflects the price of fuel as determined by a fuel industry organization using available Market information.
Functional Acknowledgment	997. See Transactions on page 18.

G

Term	Description
Gas Industry Standards Board (GISB)	Organization that defines the messages used to communicate among entities in the deregulated Utility Market. Also the name of the communication standard in N.Y.
Generator	Source of electricity/gas, sells to Retailer.
GISB	Gas Industry Standards Board.
GRT	Gross Receipts Tax - A tax on the total gross revenues of a company, regardless of their source. GRT is similar to a sales tax, but it is levied on the seller of goods or service consumers. It is common practice, for example in PA, for electricity Suppliers to use an adjusted rate to ensure they are billing the appropriate revenue to cover business costs. This practice is called "grossing up."

H

Term	Description
HI	Historical Usage Interval Detail - a report that can be requested via an 867 EDI transaction.
Hierarchy	Customer Hierarchy.
HU	Historical Usage – a report that can be requested via an 867 EDI transaction.

I

Term	Description
IDR	Interval Data Recorder.
Implementation Guide	A publication that documents the EDI messages used by a particular industry or company.

Term	Description
Independent System Operator (ISO)	The Independent System Operator is an organization formed at the direction or recommendation of the Federal Energy Regulatory Commission (FERC). In the areas where an ISO is established it co-ordinates, controls and monitors the operation of the electrical power system, usually within a single US State, but sometimes encompassing multiple states.
Index Price Rate	For Index Price Rates the rate is supplied by data stored in tables instead of in the rate details. These tables are intended to be updated on a regular basis either by user interface, file upload, or automated data retrieval mechanism.
Integrated EDI	An approach to EDI implementation requiring no human involvement in the computer-to-computer exchange of data.
IVR	Interactive Voice Response
Interconnect	The transmission of EDI data from one VAN to another. Enables trading partners to use different VANs.
International Standards Organization (ISO)	The International Standards Organization is an organization that works with the UN to maintain the standards for all applications of technology and mechanics for furthering global industry.
Interval Data Recorder (IDR)	A metering device that is capable of recording energy in each Settlement Interval under Section 9, Settlement and Billing, and Section 10, Metering in Texas.
INV	Invoice – An invoice or bill is a commercial document issued by a seller to the buyer, indicating the products, quantities, and agreed prices for products or services the seller has provided the buyer. (See also http://en.wikipedia.org/wiki/Invoice.)
Invoice ID	CIS's Client Database field "InvoiceID" is CIS's internal identifier for the Customer's invoice. The number is different from the Invoice Number, which is the Utility's identifier for the invoice.

Term	Description
Invoice Number	CIS's Client Database field "InvoiceNbr" is the Utility's identifier for the Customer's invoice, sent to CIS via EDItransaction. The number is different from the Invoice ID, which is the CIS internal identifier for the invoice.
ISO	See Independent System Operator or International Standards Organization.
CIS	Customer Infromation and Billing system. The CIS platform is the system that CIS North America uses to bill Customers for their Consumption of utility services.
CIS|xchange	Hosted EDI and On-Demand Information Exchange.CIS|xchange provides CIS's connection with trading partners.
IU	Abbreviation for Interval Usage.
IVR	Interactive voice response (IVR) is a technology that allows a computer to interact with humans through the use of voice and DTMF tones input via keypad. (See http://en.wikipedia.org/wiki/Ivr)

K

Term	Description
kW	Kilowatt - a unit for measuring electrical power, or the rate at which energy is consumed. One kilowatt is 1,000 Watts and equal to 3,413 BTUs. A Kilowatt Hour equals one kilowatt of electrical power taken from an electrical circuit steadily for one hour.
kWh	Kilowatt Hour - a unit of energy equal to 1,000 Watt hours or 3.6 megajoules, which is the amount of energy converted if work is done at an average rate of one thousand watts for one hour. It is equivalent to ten 100 watt light bulbs burned simultaneously and continuously for one hour.

L

Term	Description
Late Fee	A charge that the Utility puts on the next bill if the current bill is paid after the Due Date given by the utility.
LDC	Local Distribution Company - the company that delivers electricity to a Customer's home or business along the poles and wires. Also called Service Provider. In Texas, a service provider is called a TDSP.
LDC Account Number	The LDC's identification of a Customer Account. Also called Premise Number. In Texas it is called ESIID.
LMP	LMP (Location Marginal Pricing) is an hourly index price provided by PJM that is broken down per Zone, Aggregate Zone, and Node. LMP allows CIS to bill ComEd Customers at an hourly index. This is similar to the MCPE price in the ERCOT market. In ComEd, interval data is provided in 30 minutes intervals, however, for non-interval meters, CIS must "backcast" the Customers' usage against a profile to determine the hourly usage (aka "shaping" the usage).
Load Forecasting	Projecting future Usage from analysis of historical usage and current usage patterns.
Load Profile	Used to convert the monthly Consumption data into estimates of hourly or sub-hourly consumption in order to lookup the MCPE price. ERCOT provides the Customer's Load Profile as well as the Load Profile prices.
LSE	Load Serving Entity - an Entity that sells energy to Customers or Wholesale Customers and that has registered as an LSE with ERCOT.
Load Zone	Electric Load Zone within Texas used to lookup the MCPE price for an Account.

Term	Description
LBMP	Locational Based Marginal Pricing - a pricing mechanism that prices energy congestion and marginal losses at every generator bus in the control area.
LockBox Payment	Lockbox is a common name for bank operations where large volumes of Customer payments made by check sent via mail are received, processed and deposited into a Client's bank account. Clients who collect Customer payments via a bank lockbox receives a daily file from the bank containing the deposit details. This file allows CIS to post the payments directly to the Customer's account. **Note:** Some Lockbox Payments are not Checks but EFT.

M

Term	Description
Maintenance fee	This is a full service maintenance fee that is charged for us to service the Meters at the property on a quarterly basis.
Mapping	See data mapping.
Market	A geographic area services by a Regional Provider of services. The state of Texas has its own power grid, and so Texas is a single Market. The Northeast US has a power grid that spans several states (New York, New Jersey, Pennsylvania) and so several states participate in that market.
Market Brief	A market brief is an CIS document that serves as a reference guide for specific market nuances for the implementation of interfaces with a Utility.
MCPE	Market Clearing Price for Energy
Market Database	CIS database containing EDI transactions sent in behalf of CIS's Clients.
Market Transactions	EDI transactions types are given a three-digit identifier. In the deregulated energy billing market, the most commonly used transaction types are as follows: 814, 867, 810, 820, 824, 650, 568, 248, 997. See Transactions on page 18.

Term	Description
Marketer	Another term for Retailer or Supplier.
Master Customer Account	A Master Customer Account is a "place holder" that allows creating an organizational Customer Hierarchy. The Master Customer itself has no physical meaning. Master Customers have no Meters, Consumption, or service addresses. Master Customers are only a way to group multiple Customers.
	There is potentially no limitation to the number of levels that can be created within the hierarchical structure. Master Customers can be assigned to other Master Customers. The only requirement is that the lowest level of any branch needs to end with a "Customer Account" so that a physical location with actual consumption (metered, un-metered, "services," or "products") can be invoiced. The Master Customer, however, would be able to track at an aggregate level the sum of any of these items for the "Customers" under that master.
MCPE	Market Clearing Price for Energy.
	According to the ERCOT website, MCPE is defined as the highest price associated with a Congestion Zone for a Settlement Interval for Balancing Energy deployed during the Settlement Interval. The MCPE price for energy is a variable rate that changes every 15 minutes and is available from the ERCOT website.
MDMA	Meter Data Management Agent.
Meter	Device for recording billable items.
Meter Data Management Agent (MDMA)	A Meter Data Management Agent is an entity that has qualified to read meters, validate meter data, and estimate missing data to make available to others for use in various applications as defined by the PUC.
MSG	Multifamily Solutions Group. A former division of CIS that was sold out to another company in 2012.
MSP	Meter Service Provider
MU	Monthly Usage.

N

Term	Description
NAESP	North American Energy Standards Board (NAESB).
NERC	The North American Electric Reliability Corporation (NERC) is a nonprofit corporation based in Atlanta, Georgia. NERC oversees eight regional reliability entities and encompasses all of the interconnected power systems of the contiguous United States, Canada and a portion of Baja California in Mexico. (See http://en.wikipedia.org/wiki/North_American_Electric_Reliability_Corporation.)
New Account Set Up Fee	Fee for establishing new service (opening a new Account.) Same as Activation Fee and Establishment Fee.
Non-Metered Load	Load that is not required to be metered by applicable Distribution or Transmission tariff.
Non-POR	Term used for a billing program supported by a Utility that is not the PurchaseofReceivables program.
Non-sufficient Funds (NSF)	When an individual wrote a check that was not honored by the bank, i.e. funds were not available in the account to cover the check.
North American Energy Standards Board (NAESB)	The North American Energy Standards Board (NAESB) serves as an industry forum for the development and promotion of standards for wholesale and retail natural gas and electricity.
NSF	Non-sufficient Funds.

P

Term	Description
PAID	Collection Release transaction. This transaction removes a Customer from collection and automatically reconnect them. If the Customer has been shut off (see SONP transaction) and makes a payment within 10 days of being shut off, the Suppliercan send a PAID transaction to the Utility (for example, AGLC) and the utility removes this Customer from the SONP collections status and auto-reconnect the Customer.
Parent Account	Another term for a Master Customer Account in a Customer Hierarchy.
Partial Allocation	The total $ amount of the utility bill (the total $ amount includes all fees legally allowed to pass through to residents) is divided by the total Utility metered Usage amount. This results in a rate that is then multiplied by the individual resident's Meter usage for the total bill amount. This method may include common area water (irrigation & miscellaneous metered Consumption).
Pay Amount	The total amount due on the bill.
Pay As You Get Paid	Billing program in a Utility Consolidated market that does *not* support Purchase-ofReceivables. Also called "Non-POR."
PAYGP	Abbreviation for the "Pay As You Get Paid" (i.e."Non-POR") billing program.
Payment Posting Transaction	Another term for an 820 EDI transaction.
Payment Processing	Executing a transaction to verify the funds are available, e.g., charge credit card, and execute ACH transaction.
Payment Provider	The entity that processes payment requests from CIS to the Customer's financial institution.
Payments	Funds received for billed services.

Term	Description
PCI	The Payment Card Industry (PCI) denotes the debit, credit, prepaid, e-purse, ATM, and POS cards and associated businesses. The term is sometimes more specifically used to refer to the Payment Card Industry Security Standards Council, a council originally formed with the goal of managing the ongoing evolution of the Payment Card Industry Data Security Standard. The council itself claims to be independent of the various card vendors that make up the council. The PCI Council formed a body of security standards known as the PCI Data Security Standards, (PCI DSS), and these standards consist of 12 significant requirements including multiple sub-requirements which contain numerous directives against which businesses may measure their own payment card security policies, procedures and guidelines. By complying with qualified assessments of these standards, businesses can become accepted by the PCI Standards Council as compliant with the 12 requirements, and thus receive a compliance certification and a listing on the PCI Standards Council website.
PJM	PJM Interconnection LLC (PJM) is an RTO which is part of the Eastern Interconnection grid operating an electric transmission system. See also http://en.wikipedia.org/wiki/PJM_Interconnection.
PMVI	Priority Move In (PMVI) is a term used in Texas to indicate that a Customer wants to move in earlier than the normal schedule allows. A fee is assessed with a priority move-in.
POD	Another term for CIS's Client Services group.

Term	Description
Pre-Invoice Validations	Pre-invoice validations are used to do the sanity check of the Meter data and TDSP Charges and to make sure all data is valid and available for the Customer's invoice creation. CIS supports over 40 different types of pre-validations. Validations are performed once an invoice batch is created.
PremId	CIS's internal Client Database ID field for the Premise Number, which is stored in the PremNo field.
Premise	Point of Delivery of Service. A Premise can be a single home, an apartment complex, a stadium, business office, high-rise building, etc. This is the LDC service location for a period of time.
Premise Number	Unique identifier of the Premise. Also called ESIID in Texas or LDC Account Number in other states.
PremNo	CIS's Client Database field for the Premise Number, also called ESIID in Texas or LDC Account Number in other states.
Previous Balance	This is an unpaid balance.
Primary Meter	The ERCOT approved, revenue-quality Meter connected at an ERCOT approved interconnection point.
PRISM	CIS format of EDI transactions; stored in the Market Databases.
Products	Individual service and Commodity offered by the ESP. Each Product also includes prices, terms and/or conditions such as: Customer Type and Rate Class, Length of Contract, Cancellation Fees, Type of Distribution Charges, Rollover Product, Special Discounts, Adders.
Product Package	Individual Product grouped together and given set of terms available for a given type of Customers. It has a distinct Commodity available and is period confined.
Product Term	Number of months that a specific Product and Rate Package is invoiced to a Customer.

Term	Description
Prorated Rates	Ability in CIS to have multiple rates active for a given Usage Service Period. If the Rate Details record is not active for the entire service period, the usage is prorated for the number of days in which the rate detail is active. (e.g. Service period is 30 days, Rate A is applied for 13 days of usage, Rate B is applied for 17 days of usage.)
Protocol	A set of conventions between communication devices that validates the format and content of messages to be exchanged, and controls the communication session.
POLR	Provider of Last Resort - a Retail Energy Provider offering a standard retail service package for each class of Customer at a fixed, non-discountable rate. In the event that a REP fails to serve any or all of its Customers, the provider of last resort offers that Customer the standard retail service package for that Customer class with no interruption of service.
PUCT	Public Utility Commission of Texas - the state agency that regulates electric and telecommunications service. Under Electric Choice, the PUCT regulates the delivery of electricity and enforce Customer protections. Website: www.puc.texas.gov

Term	Description
PUC	Public Utility Commission. See also Public Utility Commission of Texas and California Public Utilities Commission.
POR	Purchase of Receivables - under the Utility Consolidated Billing Model, the Utility issues a single bill to the end user that contains the utility's delivery charges and the Suppliers' charges. When the Customer pays the utility for the bill, the utility then pays the Supplier. This is known as "Pay as you go" or "Pay as you get paid."
	When a Customer fails to pay, the Supplier cannot disconnect the Customer's service. Eventually the Supplier returns the Customer to the distribution utility, the Customer continues to receive service, and the Supplier may have to initiate costly litigation to recover its uncollected receivables (i.e. invoices).
	A Purchase of Receivables ("POR") program involves the utility purchasing the receivables of a Supplier at a discount rate equal to the utility's actual uncollectible rate. This discount rate is then offset from the monthly payments the utility makes to the Supplier and is subject to a periodic reconciliation process. In this model, the Supplier receives payment regardless if the Customer pays their bill. If a Customer does not pay their bills and continues to not pay their bill, the utility may change the billing type to Dual model in order to share the costs/risks with the Supplier. Other utilities may simply send a Drop Transaction to the Supplier for the Customer and the Customer goes back to the utility.

Q

Term	Description
QA	Quality Assurance.
QSE	Qualified Scheduling Entity - a Market Participant that is qualified by ERCOT in accordance with Section 16, Registration and Qualification of Market Participants, for communication with ERCOT for Resource Entities and LSEs and for settling payments and charges with ERCOT.

R

Term	Description
Rate Class	Rate Class and Load Profile are two values provided by the LDC on a given Meter. These values provide information about the meter status to the Client, such as meter is on peak, off peak, interval, summary, etc. They also provide data such as the anticipated throughput on the meter, for instance is this a small commercial, large commercial, industrial, residential, etc meter. Location information can also be provided in the values assigned to a given meter.
Rate Details	The rate structure assigned to a Customer (or Product) that specifies Energy Charge calculations, Customer Charge Calculations, etc. Commonly referred to as the Customer's Rate. Also defined as price of the products. These represent the individual charges billed.
Rate Package	Consists of a group of Rate Details that are routinely billed to a Customer.
Rate Ready	One of the energy Billing Models supported byCIS. When we talk about "Rate Ready" at CIS we always mean the Utility Consolidated Rate Ready model. In this model, the Distribution utility calculates charges on behalf of an energy Retailer/Supplier at a rate the Supplier previously communicates to the utility. The utility then sends an invoice to the Customer for all charges.

Term	Description
Rate Transition	Automatic or manual process that switches Customers from one Product's Rate Package to a new Product Rate Package.
Rate Type	CIS supports various Rate Types, such as Fixed Price Rate, Index Price Rate, percent of contract price, percent of energy price, and tiered Rates.
Real-Time Pricing	Refers to the pricing of a commodity that depends on the *time* the service is provided or delivered. Real-time pricing includes fixed time-of-use rates for electricity and public transport(supply chagres) with dynamic pricing (variable) reflecting the current supply-demand situation.
Recurring	An event (such as receiving a bill) which occurs more than once and is typically on a particular frequency of occurring again.
Regional Transmission Operator	A Regional Transmission Operator (RTO) is similar to an Independent System Operator. The primary difference is that generally an RTO coordinates, controls and monitors the operation of the electric power transmission system over a wider area that crosses state borders.
Residential Account	An apartment in which a family lives.
Residential Customer	One of three commonly used terms to differentiate Customer classes. The other two are Commercial Customers and industrial Customers. Residential Customers include private households that utilize energy for such needs as heating, cooling, cooking, lighting and small appliances.
Restructuring	The reorganization of traditional monopoly electric service to allow operations and charges to be separated or "unbundled" into generation, transmission, distribution and retail services. This allows Customers to buy retail electric service from competing providers.
REP	Retail Energy Provider - a person or company that sells electricity to Customers.
Retailer	Supplier or Marketer of energy; these are CIS's Clients.

Term	Description
ROI	Return on Investment - the amount of profit, before tax and after depreciation, from an investment made, usually expressed as a percentage of the original total cost invested.
Reverse Payment	Payment returned to original sender.
RPRS	ERCOT's Replacement Reserve System. A service that is procured from Generation Resource units planned to be off-line and Load acting as a Resource that are available for interruption during the period of requirement.
RSA	Residential Sales Agreement.
RTO	Regional Transmission Operator.

S

Term	Description
Sales Commission	Compensation to Aggregator/Sales Agent.
SBO	An abbreviation for the Supplier Consolidated Bill Ready model.
SDLC	Software Development Life Cycle.
Seemless Transfer	Process which allows an existing Customer to keep their service account when moving to a new location.
Service Address	The street address associated with an ESIID as recorded in the Registration Database. This address shall conform to United States Postal Service Publication 28.
Service Period	The start and end date for each Commodity that appears on a resident bill.
Service Provider	LDC or TDSP.
Settlement Interval	The time period for which Markets are settled.
Shadow Billing	Shadow billing is the CIS process in the Rate Ready Billing Model to verify for the Client what is being billed by the Utility. The utility is responsible for calculating and distributing the physical invoice to the Customer, the utility sends CIS an 867 (consumption) and 810 transaction but CIS still generates an invoice for tracking and viewing within CSR UI.

Term	Description
Shadow Price	A price for a Commodity that measures the marginal value of this commodity; that is, the rate at which system costs could be decreased or increased by slightly increasing or decreasing, respectively, the amount of the commodity being made available.
SLA	Service Level Agreement
Slamming	Switching electric or gas service providers without a Customer's approval.
SONP	Shut Off for Non-Payment transaction. When a Customer fails to meet their payment obligations with a Supplier they can be disconnected for non-payment. In this case the Supplier sends an SONP transaction to the Utility (for example, AGLC). The utility then disconnects the service. PAID (i.e. Collection Release) transaction.
Special Charges	Can be used to create various line items on a Customer's bill (e.g. Contract Cancel Fee, Misc. Charge). When a Special Charge is created, it is held in an CIS tableInvoiceSpecialCharges(InvoiceSpecialCharges.InvoiceID) until the next bill is created. Used for existing Customers who are still receiving invoices.
Statement Date	This is the date in which the Utility printed the bill or read the Meter.
Submeter Consumption	Entire submetered Consumption for timing devices at the community.
Sub-metered unit	A unit that has a Meter installed to measure the Usage of that unit.
Summary Bill	A bill that has multiple Accounts associated with it. For example, a Customer that has multiple Premises receives a single bill for all premises.
Supplier	An energy reseller that sells a utility Commodity to actual consumers. Also called Retailer or Marketer.

Term	Description
Supplier Consolidated	One of the energy Billing Models supported by CIS. See Supplier Consolidated Model on page 134.
Switch Hold	Customers who are set on "Switch Hold" are not allowed to switch to a new retail electric provider until they have a zero balance on their account. Switch Holds are reported to the market via a 650 transaction.

T

Term	Description
TBS	Transitional Bundled Service
TDSP	Transmission and Distribution Service Provider. The company that delivers electricity to a Customer's home or business along the poles and wires. TDSP is a Texas-only term. In other states, it is called an LDC.
TDSP Charges	Fees charged by the TDSP to a Customers, and imported via the 810 transaction to CIS. Also called Base Charges, 810 Charges or Ancillary Charges.
TDSP Template	The TDSP Template is a template with mapped 810/ancillary/TDSP Charges assigned to it. The ancillary charges are mapped by either passing through to the end client or they are not charged to the end client. When the charge codes are not passed through, the typical practice is to roll the 810 charges into the client Rate $/Units.
TDU	Transmission and Distribution Utility. The TDU owns the poles, wires, and meters and delivers electricity to homes. Commonly called TDSP.
Template	TDSP Template.
Term	Contract Term and Product Term.
Texas Electric Choice	The Customer education program conducted by the PUCT.

Term	Description
Therm	100,000 BTU's.
Time of Use Metering	A programmable electronic device capable of measuring and recording electric energy in pre-specified time periods. For Load Profiling purposes Time of Use Metering does not include IDRs.
Time of Use Schedule	A schedule identifying the Time of Use period associated with each Settlement Interval. These schedules may include on-peak, off-peak, and shoulder periods.
TLF	Transmission Loss Factor.
Trading Partner	A Customer, Supplier or other partner with whom business is conducted using EDI.
Transaction	Structured Transmission of pre-defined formatted data.
Transaction Set	The EDI equivalent of a complete business documents such as an invoice, a purchase order, or a remittance advice.
Transmission	In the energy business, the term refers to High Voltage lines.
Transmission and Distribution Losses	Resistive losses during Transmission and Distribution of electricity. This information is provided by ERCOT for calculating the MCPE rate.
TDSP	Transmission and Distribution Service Provider
Transmission Loss Factor (TLF)	The fraction of ERCOT Load (forecast or actual) that is considered to constitute the ERCOT Transmission Grid losses in a Settlement Interval, based on a linear interpolation (or extrapolation) of the calculated losses in the off-peak and on-peak seasonal ERCOT base cases.
True-Up	For a Customer who is on the Budget Billing plan, this is the automatic "settling up" of a Customer account on the True Up Date. Depending upon whether the Customer has a positive or negative account balance, this could be a credit or a debit to/from the Customer so that the Customer's Accounts Receivable is reset to a zero balance and the new budget billing period begins.

U

Term	Description
UAT	User Acceptance Testing
UC	An abbreviation for the Utility Consolidated Billing Model.
UCB	An abbreviation for the Utility Consolidated Billing Model.
UFE	Unaccounted For Energy
UI	User Interface
UOM	Unit of Measure - water: Gallons, CCF (hundreds of cubic feet), CF (cubic feet). Electricity: kWh (Kilowatt Hour). Gas: Therms, CF (cubic feet).
USF	Universal Service Fund - the Universal Service Fund assists low income families with utility bills.
UOM	Unit of Measure.
Usage	This is the amount of electricity used during the billing period measured in KWh. This is listed on the electric bill as kWh used.
USG	Utility Solutions Group. A former name for an CIS division.
Utility	Another name for a TDSP/LDC.
Utility Consolidated	See Supported Billing Models on page 131.

V

Term	Description
VAN	Value-added Network (VAN) is a hosted service offering that acts as an intermediary between business partners sharing standards based or proprietary data via shared Business Processes. The offered service is referred to as "Value-added Network Service". (See http://en.wikipedia.org/wiki/Value-added_network.)
Variable Rate	The rate charged for energy changes over time. It can be seasonally, monthly, or more often. Variable rates can be tied to an index rate that fluctuates each month.

W

Term	Description
Watt	An electrical unit of power or rate of do-ing work. It is analogous to horsepower or foot-pounds per minute of mechanical power. One horsepower equals 746 watts.
Weather Zone	Weather Zone within Texas used to lookup the Load Profile for an Account.
Workspace Alert	A workspace alert is a notification that something has happened in the CIS sys-tem and needs the attention of an opera-tions analyst, or needs manual interaction (e.g. calling a Customer because an En-rollment was rejected). Workspace alerts are assigned a particular Alert and as-signed to an Alert Group. In the Workspace UI feature, users can view and manage workspace alerts in groups to which they have access.

X

Term	Description
X12 Standard	A public EDI implementation widely used in North America.

Y

Term	Description
YRAC	Your Rights as a Customer.