

August 8, 2023



**CONFIDENTIAL & COMPETITIVE MATTER**

PCI Design Document for <project name> for <client>

v1.0

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Document History

|  |  |  |
| --- | --- | --- |
| Date | Version | Comments |
| 9/26/2018 | 1 | Initial Version |
| 8/27/2021 | 2 | Updated Task/code naming conventions from OneNote |
|  |  |  |
|  |  |  |
|  |  |  |

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[Executive Summary](#TOC)

*<Summarize the overall project scope or intent.>*

*Sample text:*

This document details how the PCI GSMS system will be implemented at <client> to support the XYZ market's front office, back office, deal management, and allocation functions. The document is divided into the following main sections:

*Day-ahead workflow*

* Bullet 1
* Bullet 2
* Bullet 3

*Real-time workflow*

1. Bullet 1
2. Bullet 2
3. Bullet 3

*Back office workflow*

*Settlement bridge workflow*

*ABC interface*

*XYZ Interface*

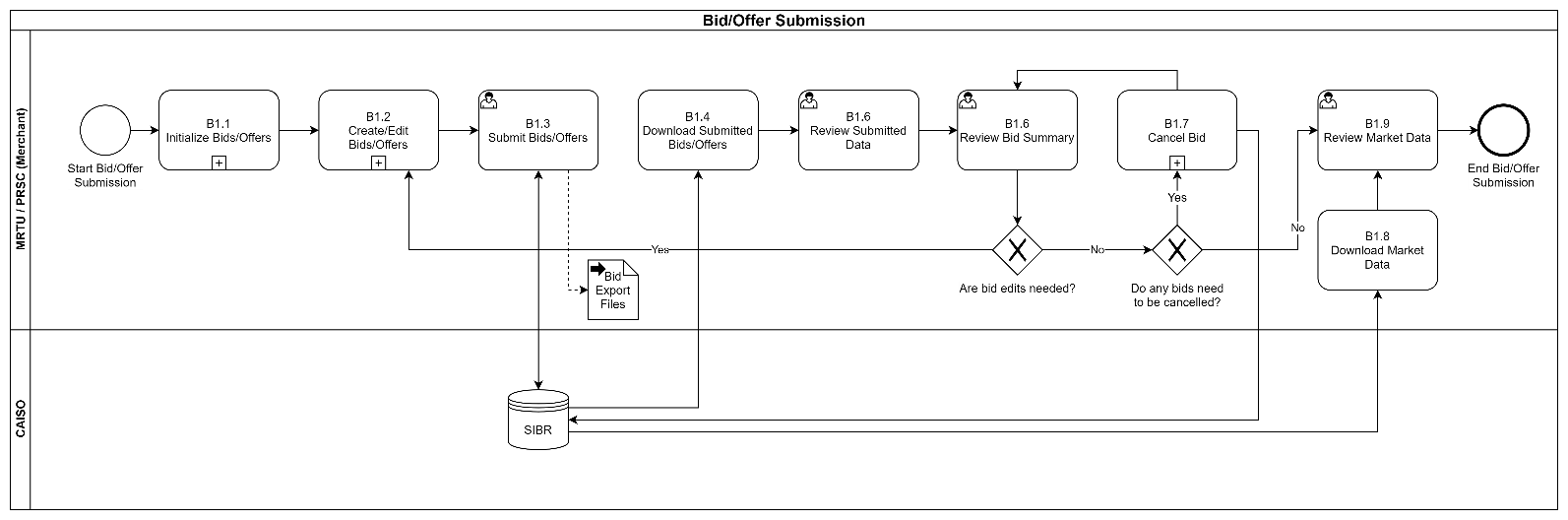
*Technical design detailing the technical implementation required to support the business workflows*

The primary purpose of this document is to be used as a blueprint for the configuration and setup of the PCI GSMS for XYZ at <client>.

# Supported Workflows

## High-Level Process Workflow (sample)

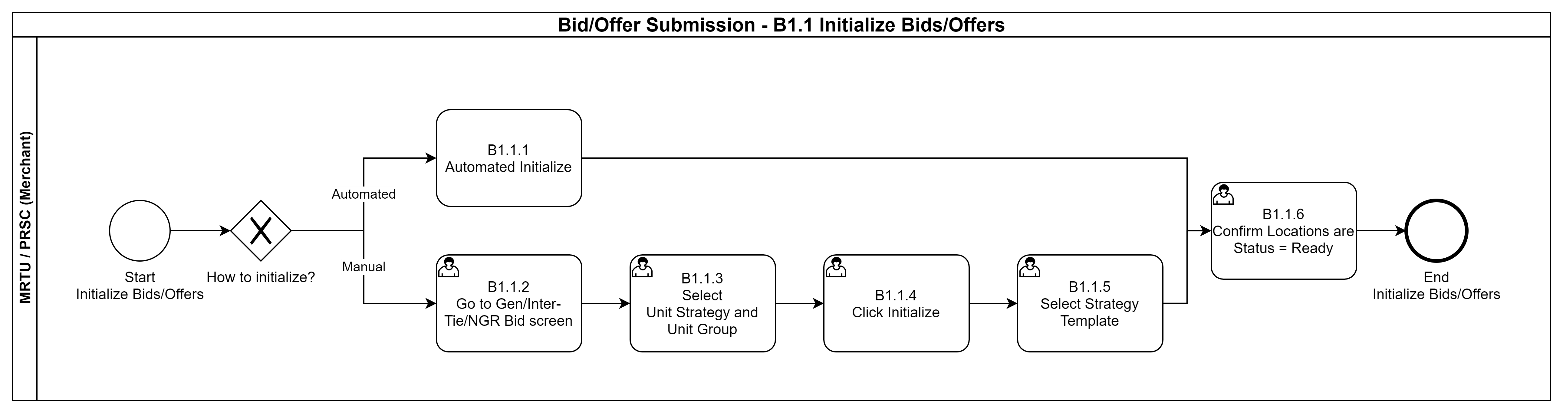
<Describe in detail the high-level workflow. Include workflow diagrams and screenshots when possible.>



*<Describe the High-Level Process Workflow>*

* *Presentation link:* [*​pptx icon Documentation and Process Diagrams Training.pptx*](https://mypci.sharepoint.com/:p:/g/pciteams/marketsys/caiso/EXlDgpp6uppLp7nJfke97NoBVrn3SUjVakdW3LqsGpP34g?e=JWV1X7)
* *Meeting Recording:* [*https://powercosts.zoom.us/rec/share/JWTieRkLeWc8KSA2zxfErl4XDOG2q5siO6KL\_NTyNnxqfAqPlGfkNZLwp1YQzgio.VF1vyOx1vqZU8wX8*](https://powercosts.zoom.us/rec/share/JWTieRkLeWc8KSA2zxfErl4XDOG2q5siO6KL_NTyNnxqfAqPlGfkNZLwp1YQzgio.VF1vyOx1vqZU8wX8)
  + *Access Passcode: Yw.Ue8zg*
* *Confluence Links*
  + [*How to Use Diagrams.net (formerly Draw.io)*](https://confluence.powercosts.com/pages/viewpage.action?pageId=42713718)
  + [*Business Process Diagram Standards*](https://confluence.powercosts.com/display/PCI/Business+Process+Diagram+Standards)
  + [*Sharepoint Sync to Computer*](https://confluence.powercosts.com/display/PCI/Sharepoint+Sync+to+Computer)
    1. Subprocess Flow <B1.1 Initialize Bids/Offers>

*<Include diagram of next level down in process diagram>*

**

*<Describe the subprocess workflow>*

#### Subprocess Flow <B1.1.1 Automated Initialize>

#### Description

*<Describe the subprocess workflow.>*

#### Timing

*<Describe the timing of the subprocess workflow>*

#### Supporting Information

*<List screens (including breadcrumb trails to get to the screen), Tasks, etc. used in this part of the workflow. Include screenshots as needed.>*

* + 1. Subprocess Flow <B1.1.2 Blah>

*<Repeat sections as needed until all subprocesses and processes have been documented>*

# Technical Design

## Release Plan

*<Mandatory for all projects to identify a release plan across all licensed products for the client, not just the products being deployed. See the release mgr. and all relevant product managers for an appropriate release. The project deployment must consider products already in production.>*

## Physical and Commercial Data

*Sample:*

PCI will work with <client> to enter the following data in PCI GenBase.

### Power Forwards

TBA

### Price Libraries

TBA

### Meters

TBA

### Etc.

TBA

## Parameters

*<Define parameters.>*

## Templates

*<Define all templates.>*

*Sample:*

*Table 1 - Energy Offer, Start-up, and No load Curve Templates*

| **Template Name** | **Description** | **Used to calculate (list offer attributes)** | **Applies to (list units)** |
| --- | --- | --- | --- |
| Cost-based | * Creates generation cost-based offer curves using the following inputs: fuel price, incremental heat rate curve, and variable O&M (**Price offer = Fuel price \* IHR + Var O&M)** * MW breakpoints match the breakpoints on the IHR curve. * Creates no-load price offer using the following inputs: fuel price, heat rate at the first breakpoint (MBTU/Hr), Fixed O&M, adder, and multiplier. **No load price = Fixed O&M + Fuel price \* heat input at zero load** * Creates startup price offers based on the following input data: startup fuel price, startup fuel requirements (MBTU), and startup fuel fixed O&M ($).   **Startup price ($) = Startup fuel price \* Startup fuel requirements + Startup O&M** | * MW - $/MWh Price offers for up to 10 breakpoints. * No-load offer ($/hr) * Startup offer (hot, intermediate, and cold) | All thermal units |
| Hydro Price | * Sets price for Hydro units based on the value stored in variable O&M. Only one breakpoint matches the unit's max limit. | * MW - $/MWh Price offers for 1 breakpoint * No-load = 0 $/hr * Startup = 0 $ | All hydro units |

## Data Interfaces

*<Define each import/export. Be sure to define the format, method, locations, and relevant parameters, and provide sample files where appropriate.>*

*<See these examples* [PCI PI Rest API Import](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Misc%20Training.one%7c1D212C2C-1D64-4460-A892-5BB5C8B9FDF9%2fPCI%20PI%20Rest%20API%20Import%7c7419CBDB-FC75-42B3-87B3-C231D7D6016E%2f%29), [PRT Load Forecast Import](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Common%20Tasks%20and%20Workflows.one%7c3A035DCB-4283-43E9-A269-4086D21E3C2B%2fPRT%20Load%20Forecast%20Import%7c2CE6D449-DDF7-4B6A-B8F8-A8DF26EA1858%2f%29), and [SFTP Mover](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Common%20Tasks%20and%20Workflows.one%7c3A035DCB-4283-43E9-A269-4086D21E3C2B%2fSFTP%20Mover%7c0061DC1A-5457-4CF9-A220-1E51B9B59E43%2f%29) .>

### PI Meter Data Extract

*<What does the task do? Describe in general terms*> This interface will populate the PI data into the PCI GSMS meter data.

*<What type of data does it consume and/or produce?>* During the AWS-hosted implementation, the interface will be temporarily configured to pull from PI to flat file and import to the hosted environment.

In production, data will be read from PI using the PI REST Services provided by <client>.

This data will be stored in the GSMS MeterData object in the "Actual" edition.

*<What business process(es) is this task related to?>* The data returning from the PI REST service call will be processed by the Import Meter API, which will digest the data, perform the required validations, and ultimately save the data into GSMS.

*<How often does it run and how (by schedule, by event, manually)?>* During the AWS-hosted implementation, data will be exported from the source PI system every 5 minutes and transferred to the AWS sftp location. The sftp directory will be configured in the \_SYSTEM\_/ParameterName GSMS parameter. In production, the task will poll the PI REST Services every 5 minutes.

*<How much data does this task deal with?>* This interface is expected to pull 3 hours of 5-minute data for approximately 1000 meters resulting in 12\*3\*1000 = 3600 records (every 5 minutes). Only changed meter data values will be saved as revision data in GSMS.

<*How does the task handle errors and/or failover?*> Data flow will be maintained by pulling overlapping periods. Failover is provided by the OSI PI Collective (replicated PI servers that collect data concurrently). On the GSMS side, the system will handle failover through its Watch Tasks functionality.

*<Sample files/API documentation?>*

*< Is any mapping configuration required between the source and PCI systems?>* A LOV named PI\_GSMS\_Meter\_Mapping will be configured to map PI Meter Names to GSMS Meter Names. If the PI Meter Name is not found in the LOV, the task will assume that the GSMS Name is the same as the PI Meter Name. If any of the GSMS Meter objects do not exist, the task will fail, and no data will be saved.

*<Any other assumptions we can think of?>*

## Task/Code Naming and Structure

The following sections describe best practices for naming and structuring GSMS objects that will be followed over this project. All GSMS description fields for these objects will be suitably populated where they are available.

### Folder Structure and Hierarchy Standard

A clean folder structure in GSMS is vital for easing the burden of support. This process maintains the separation between PCI supplied/supported objects and those which are customer specific. Role-based security is also easier to implement with this layout. Objects created by the GSMS installer should all reside under the PCI folder.

Customer-specific items shall be placed under the top-level folder named after the customer's abbreviation or short name. That folder should match the name of the customer's project in SVN. The Base Deployment package will create the basic structure. More detail on naming objects is under Task and Library Naming.

**Customer Folder Names**

Under the top-level folder, follow this structure:

* Please do not create new folders/packages in the CustomerName/com.customername locations.
  + Classes should be placed in the appropriate sub-folders, not piled into the parent folders.
  + If an additional category is needed or you have a question on where to situate an object, please ask for clarification.
  + Customer code should not be added to the Expresso com.pci package. This addition would interfere with the standardized global classes common to all customer projects.
* AutomatedProcess *(Expresso pkg: com.customername.process.automated)*
  + Processes that run on a set schedule and their related objects: 
    - *Most automated processes can still be manually executed if necessary.*
    - These can also include subfolders to break up processes across business groups to make applying for Security Roles easier.

Machine generated alternative text:
ô CustomerN ame
AutomatedProcess
ô FrontOffice
ô PrintPortfolio
O ET_PrintPortfolio
ar PrintPortfolioLibrary
b Pi PrintMeterData

* Dashboard *(Expresso pkg: com.customername.dashboard)*
  + Dashboards and their related objects. Group dashboards in subfolders.

Machine generated alternative text:
Dashboard
‘V  ExampleMain
ExampleMain
T ExampleMainDashboardLibrary

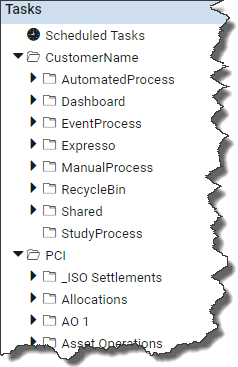
* EventProcess *(Expresso pkg: com.customername.process.event)*
  + These are event-driven processes and their related objects. It also includes special tasks like the Startup Task if a custom one is needed.

Machine generated alternative text:
‘V  MonitorAlarm
AT_MonitorAlarm
r Mon itorAlarm Library

* Expresso
  + Currently, all expresso libraries will show up in this folder. However, GSMS may eventually be able to display a hierarchical view.
* *ExternalProcess \*\* (Expresso pkg: com.customername.process.external)*
  + These are processes that are triggered only by external systems. This action is a specialized scenario usually involving EA systems where data is being passed into GSMS via WebServices calls to activate an execute task with a given payload.
* ManualProcess *(Expresso pkg: com.customername.process.manual)*
  + Processes that are only run manually and their related objects:
    - For example, tasks like importing new unit definitions or unit heat rates are infrequently run.
    - These will generally be Administrative tasks.
* RecycleBin
  + Temporary or testing code. This file should be purged when items are no longer needed.
  + ***Expresso: Do not leave temporary scripts in the system (or try to rename them out of the way), as this does not work and can cause compilation failures that impact ALL expresso libraries in the domain.***
* Shared *(Expresso pkg: com.customername.shared.{dataset, library, etc.})*
  + Shared system objects:
    - Subfolder by type, Dataset, Library, etc.
      * Library
        + Allocation Helpers (Shared\Library\Allocation\Data and \Rules)
    - Do NOT dump random script libraries in this folder. Find an appropriate home in the hierarchy for them!

Machine generated alternative text:
‘Shared
V Dataset
DS_User
‘V  Library
JJ System Library

* StudyProcess *(expresso pkg: com.customername.process.study)*
  + GT Study Processes and their related objects.
  + Machine generated alternative text:
    H  StudyTask
    —] Z7 BIoc&Pricinq
    ,, BlockPricingLibrary
    H  PEC_1
    ExecuteBlockPricing_PEC
    QueiyBlockPricingPEc
    RunBlockPricing_PEC
    UpdateOlockPricing_PEC
    PEF_1

CustomerName 
APIExample 
AutomatedProcess 
ExportFolderDetailFile 
Frontoffice 
PrintPortfoIio 
PrintMeterData 
Dashboard 
El ExampleMain 
EventProcess 
El MonitorAlarm 
Expresso 
com.customername.CustomerNameScript 
com.customername.shared_SystemHelper 
ManualProcess 
UpdatePowerFwdDetaiI 
Recycle8in 
Shared 
Dataset 
Library 
StudyProcess Machine generated alternative text:
4.,
> AutomatedIrocess i91
>  Dashboard 592 —_
>  Eclipselntegration 873
>  EventProcess 1730 •
>  ExternalProcess 867 •
>  ManualProcess 1703 •
>  RecycleBin 681
Shared 1733
>  Library 17331.—
L: package.html 597
>  StudyProcess 590
>  Test 16641 —
¡‘ overview.html 867
CustomerName_Market_Expresso 1892 [pcisvn-ProjectEngineering, Trunic StandardTools]
>  iRE System Library [JavaSE-1.8]
src 1892
4..r corn 189
customername 1779
>  dashboard 867
process 1779
>  automated 1779
>  event 867
)  external 867
manual 1717
_______________________  shared 1730
> ! CustomerNarne1skScript.java 1770
j package.html 867
>  pci.script.task 1892
overview.html 867
.,>  src_test 1730
>  launch 1872
4.’  CustomerName_Market 1891 [pcisvn-ProjectEngineering, Trunic StandardToolsj
>  iRE System Library [JavaSE-1.8]
src 181
CustomerName 1°Y1

**PCI Product Folders modified for a Customer**

This folder is for special cases where customer-specific changes are being made to the PCI base product. When necessary, duplicate as much of the PCI\{ProductName} tree structure as needed under the customer CustomerName\{ProductName} tree. Generally, the customer name will be suffixed on the modified objects. Either way, make sure there are GOTU objects in SVN (via GOTU\_Helper) for these customizations in case the GP Install/Update process overwrites them in the future.

### ISO Communication Configuration Standard

The standard structure is for custom ISO Communications Subsystems. *NOTE: Subsystem Name can only be ten characters. So, for example, we use Custom instead of CustomerName.*

**Defining Communication Tasks**

The Communication Task runs two IE tasks as an automated process in this example.

Machine generated alternative text:
Tasks
•Scheduled Tasks
CustomerN ame
‘V ‘ AutomatedProcess
‘V  ExDortFoderDetaiIFiIe
j DatasetFolderoetailLibrary
DS_FolderDetail
IE_ExportFolderDetailFile
E_ExportFoIderFiIe

The task Group should be part of the Package after CustomerName. In this case "AutomatedProcess.ExportFolderDetailFile". The task name is prefixed per the Task and Library Naming standard. This process provides consistency between the Main Tasks screen, Eclipse Project, and the ISO Communication Task screens.

Machine generated alternative text:
AuditLog Schedule Task Definition
[stem: EEstomer Time Zone: EDT 4* Refresh Generate a Register ] Copy Duplicate () Expressions Library: AcustomermsgJC_ExportFolderDetadFile.run
Add Delete (!) Expand All (t) Collapse All Add Delete Message Description:
Group al Task Naine AZ Method Argument Prompted Message Parameter Type Order Default ‘ilue
8 Automate IaskExportFolderûetailFile
AutomatedTas E’ portFolde.. IC_ExportFolderDetailFile No items to show.
Add Delete
Batch ID  Batc h Wait For Tasks ‘mit Time tsec) Check For Errors Clean Up Tasks
O Main
Task Type Parameters
Import/Export
Name \lue
Task IE_ExportFolderFile
lmportlEx port
Name \tlue
Task IE_ExportFolderDetadFile
Add Delete

### Task and Library Naming Convention

**Task Naming Convention**

* Prefix by type from this list with an underscore
  + AT - Action Task
  + ET - Execute Task
  + IE - Import/Export Task
  + DS - Dataset
  + QY - Query
  + IC - ISO Communication Task
* Use CamelCase and no additional spaces or punctuation
* The remainder should usually consist of a verb followed by a noun
  + Example: IE\_ExportFuelCostFile, AT\_MonitorAlarm
* Try to use a consistent set of verbs such as the following:
  + Export
  + Import
  + Update
  + Run
  + Build
  + Monitor
  + Verify/Validate

**Library Naming Convention**

* For BSH Only, end in Library for *AUTOMATIC* identification by the GenPortal Eclipse Plugin
* Match their equivalent Java class name and source code file name
* Use CamelCase and no spaces or other punctuation

### PCI Internal Documentation

During initial deployment, PCI developers should also follow these internally documented processes.

* [Base Deployment](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Task%20-%20Naming%20and%20Structure.one%7c2349E1D8-B39C-4CFB-921F-CCB83D96103C%2fBase%20Deployment%7c21299ACC-78D2-4B5B-A77E-ED0ED680232E%2f%29)
* [Customer Names and Abbreviations](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Task%20-%20Naming%20and%20Structure.one%7c2349E1D8-B39C-4CFB-921F-CCB83D96103C%2fCustomer%20Names%20and%20Abbreviations%7c85D50CAC-D1ED-4A70-BCFA-8F899C2FE498%2f%29)
* [Customer Domain Types](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Task%20-%20Naming%20and%20Structure.one%7c2349E1D8-B39C-4CFB-921F-CCB83D96103C%2fCustomer%20Domain%20Types%7c8ABB7B96-8CB6-4F8B-8CCF-E900ECEF8054%2f%29)
* [System Parameters](https://mypci.sharepoint.com/departments/projengineering/_layouts/OneNote.aspx?id=%2fdepartments%2fprojengineering%2fShared%20Documents%2fProject%20Engineering%20Knowledge%20Base&wd=target%28Task%20-%20Naming%20and%20Structure.one%7c2349E1D8-B39C-4CFB-921F-CCB83D96103C%2fSystem%20Parameters%7c0855B8F1-A60C-4FAE-9047-26CAB650A459%2f%29)

## User Security

### Authentication

*<TBD based on client needs and requirements>*

### User Groups

Permission will be implemented using role-based permissions:

* Users are assigned to a group
* Users inherit permissions from their group
* Role permissions are assigned to each group

The following groups will be set up in the system:

Table 2 - Permission groups

| **Group Name** | **Description** |
| --- | --- |
| Admin | Administrators of the system. Full permissions. |
| DA Analysts | Day-ahead analysts. Perform day-ahead operations |
| RT Dispatchers | Real-time desk. Perform real-time operations |
| Settlement Analysts | Settlement analysts. Perform back office processes. |

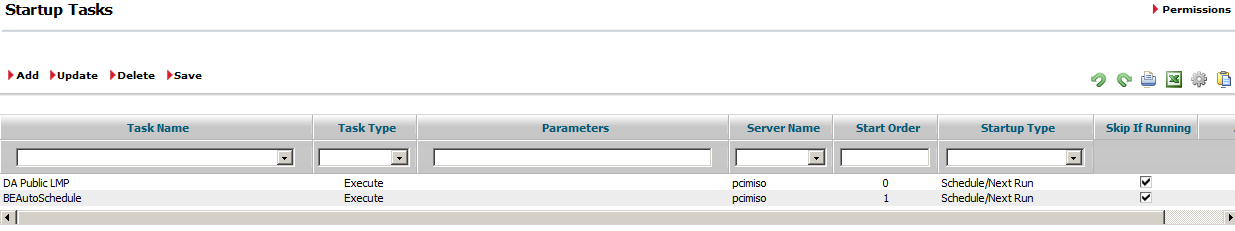
Permission roles assigned to each group will be documented in a separate spreadsheet

### Permissions

## Startup Task and Failover

The following table shows the tasks included in the Startup Task.

| **Task Name** | **Task Type** | **Description** |
| --- | --- | --- |
| AT Gas Price | Action |  |
| AT MISO Reports | Action |  |
| AT Weather Forecast | Action |  |
| DW Auto-Schedule | Execute |  |
| MISO Auto-Schedule | Execute | Schedules the background processes to run periodically |
| ImportLdapUsers | Execute | Import LDAP users from Active Directory using WebLogic LDAP configuration |
| GMA\_Initialize All Bid Pkgs | Action |  |
| AT\_DA\_OPT | Action | AT to run GenTrader DA Studies for both EAI and EES |
| AT\_Import\_NetTrades | Action |  |
| AT\_Import\_Load | Action | AT executes automatically on an event at .\PCI\Imports\Load |
| ET\_SwitchGasDayStartHour | Execute |  |
| AT\_BaseStudy | Action | AT to run Base GenTrader Studies for both EAI and EES |
| ET\_MonitorOMEvents | Execute |  |
| ET\_Macro\_Setup1Day | Execute | A task that will copy Bid Packages for each day |
| GADSConstraints Event Listener | Action |  |
| MISO ISOCacher Processor | Execute |  |
| AT Import Meter Data - XML | Action |  |
| ET\_MeterData\_Copy | Execute |  |
| ET\_RT5minLMP\_Yesterday | Execute |  |
| ET\_RTLMP\_6DaysAgo | Execute |  |
| ET\_Run\_Presettlements | Execute |  |
| MISO ISOCacher Processor | Execute |  |
| MISO ISOCacher Processor | Execute |  |
| ET\_DownloadSubmittedData\_Yesterday | Execute |  |
| ET\_LoadAllBilaterals | Execute |  |
| ET\_piDownload5minRegDeploy | Execute |  |
| ET\_piDownloadDispatchControl | Execute |  |
| ET\_piDownloadUnitHourly | Execute |  |
| ET\_piDownload5minTelemetry | Execute |  |
| ET\_RTLMP\_Yesterday | Execute |  |
| ET\_RTMarketResults\_Yesterday | Execute |  |
| AT Import Meter Data - Presett | Action | Task will kick off Import tasks to bring data into Meter and EA Editions |
| PlantMessages | Action | Responsible for routing broadcasts and instructions |
| ET\_ExportMarketDailyLog | Execute | \\\\wo2nf.tx.<Client>.com\\emoshare\\EMSDATA\\LOGS\\ |
| PLA MISO ISO Execute ETL S105 | Execute |  |
| PLA MISO ISO Execute ETL S14 | Execute |  |
| PLA MISO ISO Execute ETL S55 | Execute |  |
| PLA MISO ISO Execute ETL S7 | Execute |  |
| PLA MISO Presettlement Execute ETL 1 | Execute | PLA MISO Presettlement Execute ETL OD -1 |
| PLA MISO Presettlement Execute ETL 2 | Execute | OD-2 Execute PLA MISO Presettlement ETL Task |
| PLA MISO Presettlement Execute ETL 4 | Execute | PLA MISO Presettlement Execute ETL OD -4 |
| LoadForecast\_PCI | IETask |  |
| ET\_ExportUnitCommitment | Execute | \\\\lrl-fas3270-a1\\OIT-Apps-Test\\AFC\_RFCALC\\AFCOutageFile\\ |
| ET\_Download\_PSchedules | Execute |  |
| ET\_CopyMRToUnitScheduleToIC | Execute |  |
| ET\_Run\_PresettlementsOD-4 | Execute |  |
| ET\_CopyMRToUnitSchedule | Execute |  |
| PIInterface | Execute |  |
| ET\_Run\_PresettlementsOD-2 | Execute |  |
| PIInterface | Execute |  |
| PIInterface | Execute |  |



Startup task

## Data retention

### Partition

(not required for hosted)

PCI recommends using Oracle partitions. Please refer to the following:

* Section 6 of the *PCI Installer Guide* available at <https://support.powercosts.com/documents/genportal/releases/52/pci-gmgp-installerguide-52.pdf/?searchterm=None>
* Latest Oracle Installation reference guide: <https://support.powercosts.com/documents/genportal/guides/install/pci-oracle-installation-reference-guide.pdf/>

### Data Purging

The system will be set up to purge any redundant or unnecessary data after a specific time.

The table below lists the initial purge parameters for the PCI GSMS system. These values can be modified at any time by the system administrator.

Table 3 - Purge parameters

| **Name** | **Value** | **Description** |
| --- | --- | --- |
| PURGE\_ALARMS | 2 Days | Amount of time to keep acknowledged alarms |
| PURGE\_BLOCK\_PRICING | 7 Days | Amount of time to keep block prices |
| PURGE\_BLOCK\_PRICING\_PRICES | true | Flag to indicate if the prices for block pricing are purged. |
| PURGE\_CLEANUP | 2 Days | Amount of time to keep clean-up log |
| PURGE\_EVENT | 2 Days | Amount of time to keep an event log |
| PURGE\_POSITION\_REPORTS | 90 Days | Amount of time to keep position report data (approved study results) |
| PURGE\_RUNS\_ACTION | 7 Days | Amount of time to keep action task results logs |
| PURGE\_RUNS\_EXECUTE | 7 Days | Amount of time to keep the execute task results logs |
| PURGE\_RUNS\_IMPORT\_EXPORT | 7 Days | Amount of time to keep import/export task results logs |
| PURGE\_RUNS\_STUDY | 7 Days | Amount of time to keep study task results logs |
| PURGE\_RUNS\_WORKFLOW | 7 Days | Amount of time to keep workflow runs |
| PURGE\_RUNS\_WORKFLOW\_FLOWS | 7 Days | Amount of time to keep workflow flows |
| PURGE\_RUNS\_WORKITEMS | 7 Days | Amount of time to keep workflow work items |
| PURGE\_TASKS | 2 Days | Amount of time to keep finished, errored, and canceled tasks in the scheduled tasks screen |
| PURGE\_TASK\_LOG | 90 Days | Amount of time to task log entries (log messages from tasks) are kept |
| PURGE\_ISO\_TASKS | 200 Days | Amount of time to keep ISO transactions before purging them from the system |

Additionally, it is recommended to purge revision data for the following objects periodically:

| **Data** | **Purge parameters** |
| --- | --- |
| Power forwards | Delete revision data older than 30 days. |
| Unit offer strategy setup | Delete revision data older than 30 days. |
| Unit offer strategy details | Delete revision data older than 30 days. |
| Unit offer strategy hourly | Delete revision data older than 30 days. |
| Demand strategy details | Delete revision data older than 30 days. |
| Schedule profiles | Delete revision data older than 30 days. |