Non Half Hourly Data Aggregation (NHHDA) Operations Guide

Version Number 18.~~0~~1

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Operations Guide

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1   Introduction

This document is the Operations Guide for the NHHDA application software developed for ELEXON.

Software Version

This version of the NHHDA Operations Guide documents functionality provided by release 11.0.0 of the NHHDA application software.

1.1   Purpose

The purpose of this Operations Guide is to provide information on the features of the NHHDA system that will support the day-to-day operational business of organisations responsible for handling Non Half Hourly Data Aggregation.

1.2   Scope

The scope of this document is the operational aspects of the NHHDA system. Detail pertaining to hardware and third party software is included only where necessary to support the description of the NHHDA application software. The sites running the NHHDA application software are expected to have expertise in the setting up and day to day management of the server system, and an Oracle Database Administrator to carry out the housekeeping tasks for a large relational database.

For system management aspects of the NHHDA application software, refer to the NHHDA System Management Guide.

For details of installation of the NHHDA application software, refer to the corresponding Installation Guide.

Comments on the completeness and accuracy of this guide are welcome. A Comment Form is contained at the back of this guide.

1.3   Structure of Document

The remainder of this document consists of the following sections:

- Section 2 gives a high-level overview of the NHHDA system and show its data interfaces, with a brief description of each;

- Section 3 gives an overview of an operational schedule;

- Section 4 provides an introduction to the facilities for logging on to the NHHDA system, and an overview of the user interface, including error messages and on-line help;

- Section 5 to section 12 contain information on the functions provided by the NHHDA system for maintaining market domain data and other static data via the user interface;

- Section 13 to section 20 provide information on the reports that can be generated from the user interface;

- Section 21 describes the form for managing Data Aggregation Runs and section 23 describes how to report on the Data Aggregation Run Schedule;

- Section 22 outlines the functionality for reporting on inconsistencies between PRS Agent and Data Collector data;

- Section 24 gives information on generating a Supplier Purchase Matrix;

- Section 25 to section 26 describe the functionality provided to browse the statuses of files that have been loaded by or generated by the NHHDA application software;

- Section 28 to section 33 describe the functionality provided for managing and reporting on instructions;

- Section 34 and section 35 describe the functionality provided for viewing the activities on the NHHDA system;

- Section 36 describes the forms used to implement user account maintenance for the application;

- Section 37 describes the form used to initiate the EAC Data For Distributors Report;

- Section 38 provides an overview of the reports that may be generated by the NHHDA system.

Appendices to this document are as follows:

- Appendix A lists the error messages that may be generated by the NHHDA application software;

- Appendix B shows examples of reports that may be generated by the NHHDA system and provides a brief description of the layout of each report.

- Appendix C lists the instruction processing error codes that may be generated by the NHHDA application software.

1.4   Amendment History

Issue	Details
0.901	First draft issue to Client
0.902	Addresses highest priority comments
0.903	Addresses severity 1 and 2 comments
0.990	Addresses outstanding and additional comments
1.000	Authorised version
1.100	Addresses severity 3 comments and OR 2248
1.200	Addresses help desk call 550, OR2300
	OR2322 (help desk call 615)
	Addresses help desk call 702
	OR2348 – additional detail in error code explanations
	OR2353 – LCR080/CR422 – Changed Settlement Code in domain SECO from 'D_' to 'DR' in database table cdb_ref_values.
	OR2351 – LCR075/CR455 – Refresh unit of work changed to Metering System
	OR2369 – LCR082/CR492 – Performance changes to instruction processing
	OR2380 –(help desk call 810/defect 1485) Additional validation checks
	OR2382 –(help desk call 724/defect 1472) Data collector Appointment validation

Issue	Details
	CLAR113 additional data separators
	OR2206 (pool defect 1359) Allow skip from next expected file
	Pool Defect 1404 – menus available to each user role
1.300	OR2448 (pool defect 1507) Sort order on manage refresh form
	OR2320 (pool defect 1411) Archived Instruction Files do not show breakdown statistics
	OR2444 (LCR092 CR487) Average EAC changed to Default EAC in documentation only
1.500	Changed to incorporate internal review comments. Draft issue for external review consistent with release R1.2 (build 1.1.35).
	Also includes changes as specified under
	OR2411- Close window looping fault.
	OR2398 (pool help desk call 3972) – Update documentation on changed functionality in Manage Instruction Form
2.000	Incorporate Pool review comments
	consistent with release 1.3
	Authorised Version
2.001	OR 2720 Browse File Loading Status section
	PMR0078 Auto-processing of files clarification
	OR 2754 Changes to error messages in Appendix A.2 for Load Data and Instruction Processing
	OR2790 Changes to error messages associated with NM* error codes.
	OR2782 Misleading headings in Check Data Collector and Aggregation Reports
	OR2795 Allow Released Runs to be modified even if date has past
2.002	Incorporating changes from TA2000 development
	The changes are detailed in the following SIRs:
	(Package 1) LCRs 21/3 (SIR R419), 106 (SIR R576) , 114 (SIR R654) and divergence document 001ldr30.doc.
	(Package 2/MDD) LCRs 94/2 (SIR R529), 103/2 (SIR R709), 105 (SIR R391), 107 (SIR R692), 109 (SIR R715), 110 (SIR R716), 112 (SIR R575), 116 (SIR R991), 124/2 (SIR R295), 127/2 (SIR 1528) and divergence document 002ldr50.doc.
2.990	Incorporating internal review comments.
2.991	Incorporating Pool comments and
	OR2825 Alteration System Parameter Validation.
3.000	Incorporating Pool review comments
	consistent with release 4.0.0/5.0.0
	Authorised Version
3.001	Incorporating the following Ors:
	OR2870 – Incorrect error messages for MDD/DAST file loading
	OR2884 – Instruction failure reason code NNA and associated message changed (NNA replaced with NIA).
	OR2890 – Adding a Browse File Loading Status search criteria and updating the version header.
	OR2901 – Added AFYC Effective To Date to the SSC and Associated Items report.
3.002	Incorporating the following Ors
	OR2902 – Information on first-time load of D0269
	OR2903 – Added Load MDD Exception Log and Load DAST Exception Log

Issue	Details
	OR2928 – It is not possible to generate A02 Aggregation Exceptions
	OR2953 – Addition of MDD Load Window
3.003	Incorporating changes made for LCR149.
3.004	Incorporating changes made for LCRs152/153.
3.005	Incorporating Pool review
3.006	Incorporating Pool review
3.007	LCR157 – Inclusion Of AFYCs in NHHDA Aggregation Robustness.
3.990	Issued to the Pool for review.
4.000	Authorised version
4.001	Incorporating OR2971 corrections to meanings
4.002	Incorporating OR3001 replacing exception values.
4.003	Incorporating OR3010 adding new exception values.
4.004	LCR167/2 (SIR R2657) – Reducing Superfluous CDCD Exception Reports
	Incorporating OR 3018 altering exception record sequence.
	Incorporating OR 3044 adding new exception code for invalid EAC/AA values in D0019s.
4.005	Incorporating changes for LCR143/2 (SIR R1713) – Check Data Collector Operability Improvements and LCR169 (SIR R2700) – Management of Failed Instructions
4.006	Update for Oracle 8.1.7 upgrade.
4.990	Issued to the Pool for review.
4.991	Incorporating Pool review comments,
	OR3118 - Updating the copyright notice
4.992	Change to Office 2000.
4.993	Changes relating to Elexon superseding The Electricity Pool
5.000	Made definitive
5.001	Changes for OR3149
5.002	Changes for OR3154
5.003	Changes for OR3159
5.004	Changes for CP769, OR3214, OR3166, OR3165, OR3153, OR2961
5.990	Version for ELEXON review
5.991	Incorporating ELEXON review comments
5.992	Incorporating ELEXON review comments
6.000	Authorised version
6.001	Update document template
6.002	Changes for LCR192
6.003	Changes for LCR207 and LCR207/2
6.004	Changes for LCR215/3
	Updated for OR3314
	Updated for OR3312
6.005	Updated for OR3225
	Updated for OR3311

Issue	Details
6.990	Version for ELEXON review
6.991	Updated for OR3225
6.992	Updated from ELEXON Review
7.000	Authorised version
7.001	Changes for LCR225 (Oracle 9i upgrade) Document Template Updated Updated for OR3380 and OR3394
7.990	Version for ELEXON review
7.991	Applied ELEXON review comments
8.000	Authorised version
8.001	Changes for LCRA218/4 NHHDA BETTA changes Updated for OR3395 and OR3411
8.002	Updated for OR3395 – 'Resend Failed Instructions' screen message clarification.
8.990	Version for ELEXON review
8.991	Applied ELEXON review comments
9.000	Authorised version
10.000	Updated document references
10.001	Updated to include LCR220.
10.002	Updated after internal review
10.003	Applied ELEXON review comments
10.004	Updated for Nov04 release (CP1001, CP1006, CP1016 & CP1052). Issued to ELEXON for review.
10.005	Updated following further feedback from ELEXON. Issued as an interim version.
10.006	Updated following additional feedback from ELEXON.
10.007	Further updates following feedback from ELEXON.
10.008	Additional updates. Issued to ELEXON for review.
10.009	Final updates added. Issued to ELEXON.
11.000	Authorised version.
11.001	Include changes from section 3.1.3 November 04 Release Errata7P9.0.doc
11.002	Updated for Feb06 release (CP933, CP965, CP1047 & CP1089).
11.990	Version for ELEXON review.
12.000	Authorised version.
12.001	Incorporating changes for Nov-06 release.
12.002	Incorporated Internal review comments and changes for HD061638.
12.990	Version for ELEXON review
12.991	Incorporated review comments
13.000	Authorised version.
13.900	Incorporating changes for Feb-08 release: OR3728 HD064249 ; OR3659 HD064195 ; OR3584 HD049810 ; OR3720 HD60105
13.990	Incorporating internal review comments ; version for ELEXON review.

Issue	Details
13.991	Incorporating ELEXON review comment received after PPT.
13.992	Incorporating further ELEXON review comments.
14.000	Authorised version.
14.900	Incorporating changes for Feb 09 release.
14.901	Incorporate ELEXON review comments and internal review comments.
15.000	Authorised version.
15.010	Updated document classification
15.990	Draft after incorporating the CP1295 changes
16.000	Definitive version
17.0	CP1383 - Updated for Tech Upgrade (Oracle DB upgrade from 10.2.0.3 to 11.2.0.3 and OAS upgrade from 10.1.2.2 to 11.1.1.6)
18.0	Updated for CP1408 implementation to include the boundary value validation for EAC and AA values
18.1	P305 – Updated for November 2015 Release

1.5 Summary of Changes

Changes as indicated in the amendment history.

1.6 Changes Forecast

Agreed Change Requests will be incorporated.

1.7 References

Mnemonic	Information	Details
[NSMGDE]	Title: Version No: Author: Date:	NHHDA System Management Guide. 19.0 Cognizant 6 November 2014
[NINGDE]	Title: Version No: Author: Date:	NHHDA Installation Guide. 17.0 Cognizant 27 June 2013
[NTSPEC]	Title: Version No: Author: Date:	NHHDA Physical Design Technical Specification. 21.0 Cognizant 6 November 2014

1.8 Abbreviations

AA	Annualised Advance
AFYC	Average Fraction of Yearly Consumption
BETTA	British Electricity Transmission and Trading Arrangements
DAA	Data Aggregator Appointment
DC	Data Collector
DCP	DC Performance (Report)
EAC	Estimation of Annual Consumption
ES	Energisation Status

GSP	Grid Supply Point
ISRA	Initial Settlement and Reconciliation Agency (now called SVAA)
LDSO	Licensed Distribution System Operator
LLFC	Line Loss Factor Class
MAP	Meter Advance Period
MC	Measurement Class
MDD	Market Domain Data
NHHDA	Non Half Hourly Data Aggregation
PC	Profile Class
PRS	PES Registration Service (now called SMRS)
SMRA	Supplier Meter Registration Agent
SPM	Supplier Purchase Matrix
SSC	Standard Settlement Configuration
SVAA	Supplier Volume Allocation Agent

1.9   Intellectual Property Rights and Copyright

2   System Overview

The Non Half Hourly Data Aggregation (NHHDA) system is responsible for carrying out aggregations of Annualised Advances (AAs) and Estimations of Annual Consumption (EACs). PRS Agents send Metering System data to the NHHDA system, in the form of Instructions. Data Collectors also send Metering System data, and Estimations of Annual Consumption (EACs) and Annualised Advances (AAs), as Instructions.

Using the Metering System data supplied by the PRS Agents, and the EACs and Aas supplied by the Data Collectors, the NHHDA system performs an aggregation for each Initial Settlement and Reconciliation, according to the Settlement Timetable received from the Pool Market Domain Data Agent. The aggregated results are sent to the ISR Agent, in the form of Supplier Purchase Matrices (SPMs).

The NHHDA system also supports the comparison of PRS Agent and Data Collector Metering System data. Exceptions are reported to the Suppliers so that any inconsistencies can be resolved.

The NHHDA system user interface enables users to manage Instruction Files which have been received by the system, maintain Market Domain Data which has been received from the Pool Market Domain Data Agent, perform aggregation of EACs and Aas, and generate reports on the data held by the system.

Figure 1 illustrates the external interfaces to the NHHDA system:
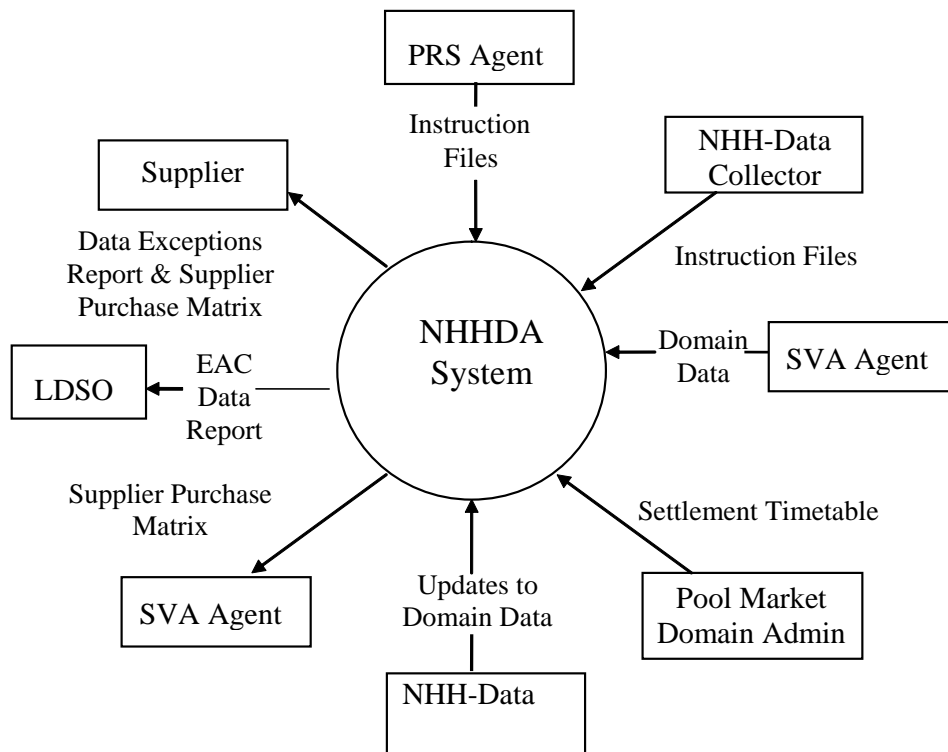
Figure 1:   NHHDA External Interfaces

Receipt of all files by the NHHDA application software is logged in the Operator Log. Refer to Section 4.5.2 for further details about Operator Logs. When files arrive at the NHHDA system, an initial validation process validates them, (the system waits for a user-configurable period for the footer of a file to arrive before recording it as invalid because no footer has been received – refer to section 11 for further information on configuring this period). When files have successfully completed this initial validation, files are subjected to more file-specific validation. File receipt and validation are described in more detail below.

In addition, the NHHDA system supports:

- auditing records for all updates to the system;

- advance scheduling of aggregation runs;

- online and off-line storage of system data, through archiving and restoration facilities. These are controlled by configurable parameters defined by the user.

The main components of the NHHDA system are described below. For further details of the NHHDA functions and data flows, refer to the NHHDA Technical Specification.

2.1   Instructions

Instruction Files are received from Data Collectors and PRS Agents and are validated on receipt by the NHHDA system.

Within each Instruction File, there may be numerous instructions. Valid instructions are applied to the NHHDA database.

Data Collector Instruction Files contain details of:

- Estimations of Annual Consumption;

- Annualised Advances;

- Registrations (DC);

- Profile Classes (DC) and Standard Settlement Configurations (DC);

- Measurement Classes (DC);

- GSP Groups (DC);

- Energisation Statuses (DC).

PRS Agent Instruction Files contain details of:

- Metering Systems;

- Registrations;

- Data Aggregator Appointments;

- Data Collector Appointments;

- Profile Classes and Standard Settlement Configurations;

- Measurement Classes;

- Energisation Statuses;

- Line Loss Factor Classes;

- GSP Groups.

2.1.1 Instruction Files

Each Instruction File has a sequence number. This sequence number is used in the validation of the Instruction File, to ensure that files from the same source are processed in the correct order. Exceptions are reported if the system detects any anomalies between file sequence numbers. In this document, this is referred to as "File Sequence".

In addition to Instruction File sequence numbers, each Instruction within a file also has a sequence number, again to ensure that Instructions are handled appropriately. In this document, this is referred to as "Instruction Sequence".

Each Instruction has a "Significant Date", which is the date on which the first of the changes made by the Instruction occurs.

2.1.2 Instruction File Lifecycle

The following diagram illustrates the lifecycle of an Instruction File once it has been received by the NHHDA system. An overview of this lifecycle is given after the diagram, where cross-references are given to the appropriate sections in this document that describe in more detail the underlying processing and the user interface that supports this processing.

The rectangles in the diagram show the possible statuses of the Instruction File during its lifecycle. Note that updates to the database are not shown on the diagram for clarity. The database is updated following any change to the status of an Instruction File.
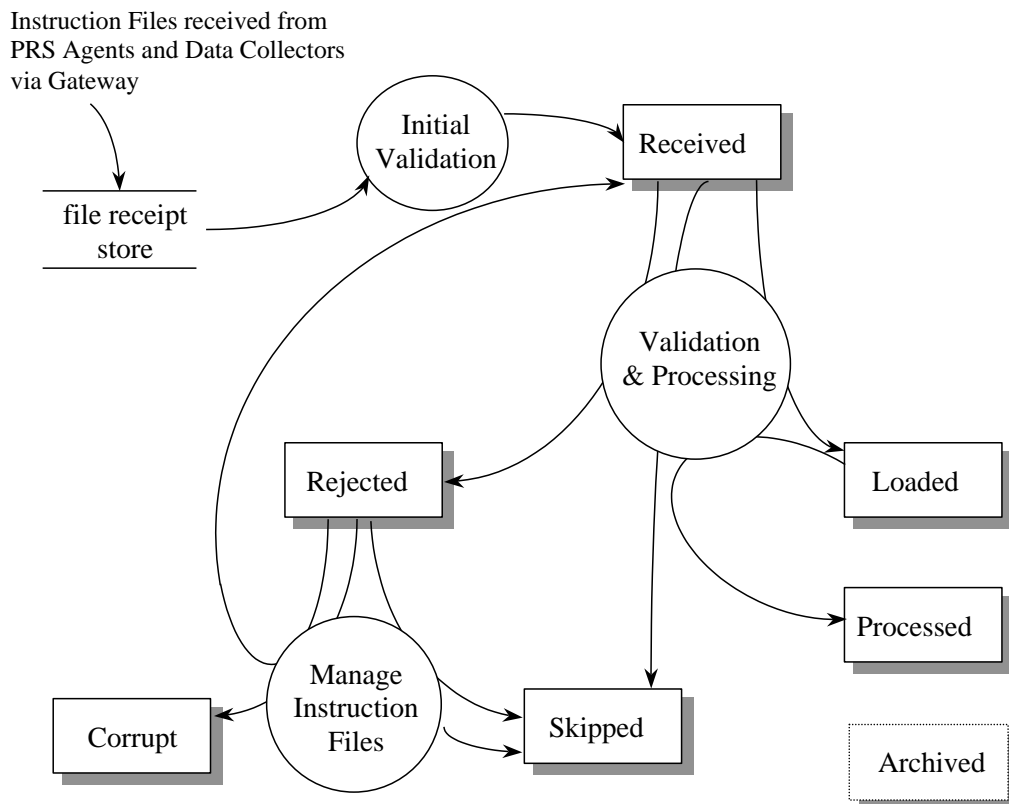
Figure 2:   Instruction File Lifecycle

2.1.2.1   Instruction File Receipt

Instruction Files are received by the NHHDA system via the Gateway and are placed in the File Receipt Store. Details about the file are stored in the NHHDA database with a status of "Received". Unrecognised Instruction Files are also given a file status of "Received", with a file type of 'L0000001' (error).

Each recognised Instruction File is validated by the File Receipt process, which checks that:

- the first record in the file is a header; this contains details of the file source, the file type and the creation date and time;

- the file type is a type expected by the NHHDA system;

- the file ends with a footer;

- the number of records in the file is the number in the footer and the checksum in the footer is correct;

- the Instruction Sequences are contiguous.

Information about Instruction Files that have either passed or failed the validation can be viewed using the Browse File Loading Statuses form. See Section 26 for a description of this form and further details of the file statuses.

2.1.2.2   Instruction File Loading

When an Instruction File passes its initial validation, details about the individual Instructions within the file are also stored in the database, with a status of "Unprocessed".

Further validation is performed on files for which initial validation was successful, during which the contents of files are validated against business rules which have been defined for the particular type of Instruction File. If the additional validation is unsuccessful, the file is "Rejected". Refer to section 2.1.2.4 for further details of managing rejected Instruction Files.

Upon successful completion of the validation, the Instruction File is marked as "Loaded". Note that at this stage, no processing of the individual Instructions within the file has been performed unless the automatic processing of this file type has been enabled (refer to section 6.4 of the System Management Guide for further details about this feature).

2.1.2.3   Instruction Validation and Application

The NHHDA system attempts to apply each Instruction in a non-Refresh Instruction File to the database, by validating each Instruction, (for information on Refresh Instruction processing, refer to section 2.1.2.6). Each Instruction that passes this validation is applied to the database, and the Instruction status is set to "Applied". When an Instruction fails this validation, for example due to inconsistencies between the data in the Instruction and existing data in the database, the Instruction status is set to "Failed" and the Instruction is not applied to the database.

The status of a failed Instruction is set to "Superseded" when the Instruction is superseded by a later Instruction.

Only when *all* Instructions in a file have either been applied or superseded, is the status of the file is set to "Processed". This may take several weeks if Instructions in a file fail validation.

The Statuses of Instruction Files can be viewed via the Browse File Loading Status form, described in Section 26.

2.1.2.4   Manage Instruction Files

Via the NHHDA user interface, you can manage non-Refresh Instruction Files that have passed the initial validation, that is they have been recognised by the NHHDA software.

For each Instruction File, you can perform one of the following tasks:

- attempt to re-validate the file (the file status is set back to "Received");

- mark the file as corrupt (the file status is set to "Corrupt");

- mark the file, and optionally subsequent files, to be skipped (the file status is set to "Skipped").

Instruction Files can only be re-validated ('Reprocessed') or 'Corrupt' if the status is 'Rejected'.

Instruction Files can only be 'Skipped' if the status is not 'Processed', 'Loaded' or 'Skipped'.

You can also choose to skip where the first file to be skipped is the next expected file from a given source.

For further details about managing failed Instruction Files, refer to section 31, which describes the Manage Instruction Files form, and gives more detail about the three processes listed above.

2.1.2.5   Manage Failed Instructions

Each non-Refresh Instruction File contains one or more Instructions. Each Instruction with a status of 'Failed' has one or more associated failure reasons. The user interface provides facilities to view the contents of non-Refresh Instruction Files or browse details of non-Refresh Instructions that the NHHDA system has unsuccessfully attempted to apply to the database. Failed non-Refresh Instructions can be flagged for reprocessing, flagged for resend or a file containing details of failed Instructions that the Data Aggregator is unable to resolve, with associated failure reasons, can be generated and sent to the originator of the Instructions.

See Section 28 for guidance on managing failed non-Refresh Instructions and returning details of failed Instructions to the originator.

2.1.2.6   Control the Application of Refresh Instructions

Instructions that are sent to the NHHDA system by a PRS Agent may be "Refresh" instructions. A PRS Agent sends Refresh instructions to the NHHDA system from time to time, to resolve inconsistencies between the PRS Agent and Data Aggregator databases.

The NHHDA user interface enables users to select and view details of unprocessed Refresh instructions. Each instruction can be applied to the NHHDA database, partially applied due to validation errors, or discarded.

Note that a Refresh Instruction is applied to the database almost immediately after the user selects the Apply option on the Manage Refresh Instructions form. Any inconsistencies between the Refresh instructions and the data in the database are reported on.

Before performing a refresh, a backup of the NHHDA database <u>must</u> be performed. You are reminded of this via the user interface when you initiate a refresh. If the refresh is unsuccessful for reasons other than only validation errors, the backed up data <u>must</u> be restored to revert to the state prior to the refresh.

The Refresh Instruction Failures will be viewable and maintainable through the client via the Manage/Report Refresh Instruction Failures and forms. These forms allow the individual validation errors for a given Refresh instruction to be maintained and sent back to the PRS Agent if necessary. Refer to sections 30 & 33 for details of their operation.

Refer to section 14 of the NHHDA System Management Guide for further information on managing a PRS Refresh.

2.1.2.7   Report on Instructions

Users can generate reports containing information on Data Collector and PRS Agent instructions that have been received by the NHHDA system.

Refer to section 32 for more information.

2.2   Market Domain Data

Market Domain Data is primarily used to validate data received from PRS Agents and Data Collectors.

Market Domain Data files may be received and validated automatically by the NHHDA system. Market Domain Data can also be entered manually via the user interface.

The following Market Domain Data Files are loaded and validated automatically by the NHHDA system:

- Market Domain Data Complete Set

- Data Aggregation and Settlement Timetable File (further information is given in section 2.3);

Market Domain Data File
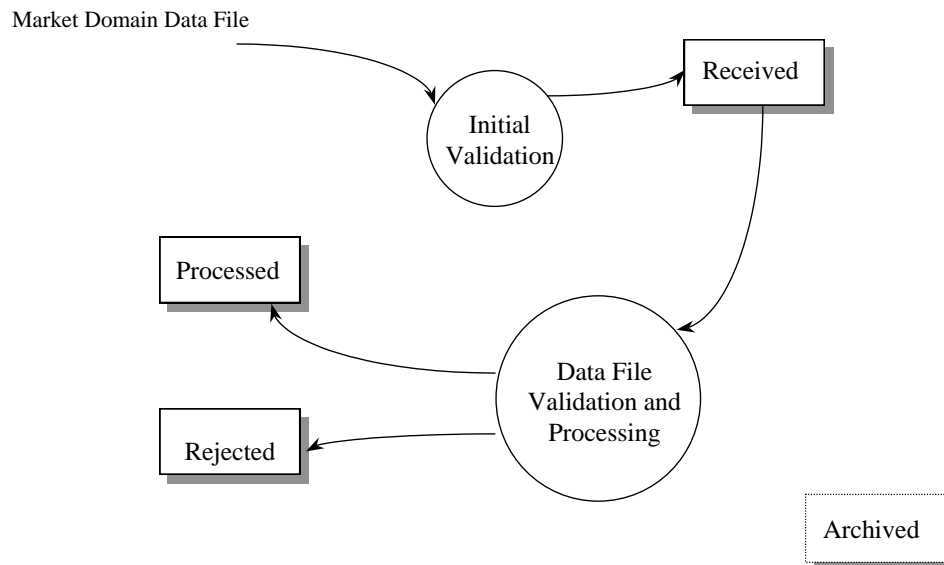
Figure 3:   Market Domain Data Processing

A data file containing the Market Domain Data is validated by the File Receipt process, which checks that:

- the first record in the file is a header; this contains details of the file source, the file type and the creation date and time;

- the file type is a type expected by the NHHDA system;

- the file ends with a footer;

- the number of records in the file is the number in the footer, and the checksum in the footer is correct.

Market Domain Data files are received by the NHHDA system via the Gateway and are placed in the File Receipt Store. Details about the file are stored in the NHHDA database with a status of "Received", and a file type as shown below for the different files:

- Market Domain Data Complete Set: 'D0269002'.

- Data Aggregation and Settlement Timetable: 'D0286001'.

Unrecognised files are also given a file status of "Received", with a file type of 'L0000001' (error).

Further validation is performed on files for which this validation was successful, during which the structure and content of the data in the files is validated against business rules which have been defined for the particular type of file. If the file cannot be processed further, eg. because the data in the file header is invalid, then the file status is set to "Rejected".

Information about Market Domain Data files that have either passed or failed the validation can be viewed using the Browse File Loading Status form. See Section 27 for a description of this form. Refer to section 38 for information on viewing and printing reports.

2.2.1   Market Domain Data Complete Set

A Market Domain Data Complete Set file can be processed in three different ways. Firstly, the file can be loaded with the 'Validate Only'

indicator set; this will create a file reporting any exceptions that have occurred during the load, but no database changes are made. Secondly, the file can be loaded with the 'Validate and Apply' indicator set; this will again create an exception report but if there are no Medium or High Level exceptions (see below) the changes will be applied to the databaseThirdly, a previously loaded file can be reprocessed. This option is used usually after an initial 'Validation Only' load has been completed and all outstanding exceptions resolved or ignored. The file can be reprocessed with the 'Validate and Apply' set and the changes applied to the database.Exceptions can be resolved by editing the Market Domain Data manually via the user interface as detailed in Sections 5 through 12 (except Section 11).

During validation of a Market Domain Data Complete Set file, various types of exception may be raised that have different meanings with regard to the data load. There are three levels of severity for exceptions:

- Low level exceptions are raised when there is an item of Market Domain Data on the database that does not appear in the file, when data is changed for a date before the latest Final Initial Settlement Date, or if information about a GSP Group is received when the GSP Group is not on the database. In this case data relating to this GSP Group is not loaded, and an exception written to the log. If this data is required, the GSP Group may be added manually via the user interface and then the file reprocessed.

- Medium level exceptions are raised when information relating to a parent entity is loaded but the parent entity does not exist. For instance, trying to load an LLF Class for a Distributor that does not exist will raise a Medium level exception.

- High level exceptions are raised when Market Domain Data is updated whilst it is in use by a Metering System.

In the event of one or more Medium / High Level Exceptions being raised, no changes will be made to the database and the status of the file will be set to "Processed". Under such circumstances, you must check for and inspect any Load MDD Exception Report generated by the load process to identify all Market Domain Data Exceptions. Once these have been resolved, the file may be reprocessed and if no Medium or High level exceptions still exist, the data will be applied to the database.

When the MDD file is read, all data that is date based will be checked to see if the data is relevant at the time of the load. The Start Date of the relevant date range will be based on the last archive date (i.e. the earliest date for which NHHDA holds full Settlement Date based data) and the End Date of the date range will be the current date (the date that the file is loaded) plus the number of days as specified by the system parameter 'MDD Load Advance Period'. The date range between the Start Date and End Date will be known as the 'MDD Load Window'. Any date based data with 'To Date' before the Start Date of the 'MDD Load Window' will be ignored. Any such data with 'From Date' after the End Date of the 'MDD Load Window' will also be ignored.

Data Items in the file which are not considered for loading are ignored by the MDD load process. This may cause exception messages to be generated when the appropriate data is in the file. These exception messages will be

displayed in the format of the exception number, the type of data missing, for example Threshold Parameter, and an explanation that the data is on the database but missing from the file. Examples of these data items are those outside the load window or Site Specific Line Loss Factor Classes.

Database changes invoked by the MDD load process are recorded in the MDD Load Audit table and in the Load MDD Exception Report.

NB: If the Market Domain Data Complete Set file is used to initially populate the NHHDA database (i.e. is loaded onto an empty database), the following actions must be performed:

1. Define the ISR Agent through the Edit Market Participants form.

2. Define the GSP Groups for which MDD is required through the Edit GSP Groups form.

3. Load the D0269.

4. Define the Default EACs through the Edit Profile Classes form.

2.2.2   Data Aggregation and Settlement Timetable File

The Data Aggregation and Settlement Timetable File covers a period of Payment Dates. The load process loads new runs and runs in the past that have not already been run. Each record in the Settlement Timetable file is uniquely identified by a combination of Settlement Code and Settlement Date. Each record also includes a Payment Date and ISR Notification Date, where Payment Date is the date on which funds must be transferred, and ISR Notification Date is the date by which the ISR Agent must receive the Supplier Purchase Matrix produced for this Settlement. The possible Settlement Codes are listed in section 21. When a Data Aggregation and Settlement Timetable File is loaded, the information written to the Operator log and the Data Aggregation and Settlement Timetable Exception log will include:

- the values for Use Run Date from File, Days before Notification and Valid Calendar Days for Run;

- a list of any working days derived from existing entries in the Settlements database table, if any;

- a list of GSP group Ids that were used;

- any errors that caused the Settlement Timetable file load to fail.

Data Aggregation Runs can be created, rescheduled and updated via the user interface. For further information, refer to section 21.

There is an option to use the Data Aggregation run date from the file when loading in the timetable file. If this is set then the DA Run date is taken from the file, otherwise it is calculated for each Settlement Date. Refer to Section 11 for details on how to set this option.

Note: Any Settlement Date already on the database which has no Data Aggregation runs scheduled for that date will be overwritten with the details

from the file when it is loaded in. Data Aggregation runs created via the User Interface will not be affected by the load.

2.2.3 Maintaining Market Domain Data

The following items of Market Domain Data can be maintained via the user / file interface:

- Market Participants;

- GSP Groups with associated Distributors;

- PRS Agent Appointments to Distributors;

- ISR Agent Appointments to GSP Groups;

- Line Loss Factor Class Details;

- Profile Classes;

- Time Pattern Regime Details;

- Standard Settlement Configurations, and relationships with:

  - Measurement Requirements;

  - Valid Settlement Configuration Profile Classes;

  - Average Fractions of Yearly Consumption;

- Threshold Parameters.

For further information about maintaining this data, refer to sections 5 through 12 (except Section 11). For information about reporting on this data, refer to sections 13 through 20.

Some of the above items of Market Domain Data are maintained via forms of the same name. For example, to maintain Average Fractions of Yearly Consumption, use the Average Fractions of Yearly Consumption form (see Section 5). Some items of Market Domain Data can be maintained via forms that do not include the data item as part of the form heading; these items are maintained via forms used to maintain related data. The following table will assist you in identifying the appropriate form for maintaining items of Market Domain Data.

Market Domain Data	Form in which Data is Maintained
Average Fractions of Yearly Consumption	Define Average Fraction of Yearly Consumption
Data Collector	Market Participants
Distributor	Market Participants
Distributor Appointments	GSP Groups
GSP Groups	GSP Groups
ISR Agent	Market Participants
ISR Agent Appointments	GSP Groups
Line Loss Factor Classes	Line Loss Factor Classes
Measurement Requirements	Define Standard Settlement Configurations
Pool Market Domain Data Agent	Market Participants
Profile Classes	Profile Classes
PRS Agent	Market Participants

Market Domain Data	Form in which Data is Maintained
PRS Agent Appointments	GSP Groups
Standard Settlement Configurations	Define Standard Settlement Configurations
Supplier	Market Participants
Threshold Parameters	Threshold Parameters
Time Pattern Regimes	Define Standard Settlement Configurations

Some items of Market Domain Data are related, such that if you add a particular item, eg. Market Participant or GSP Group, you need to add other related data via the NHHDA forms. The following table indicates which additional data needs to be added when you add a particular item of Market Domain Data. For example, if you add a new Distributor, using the Market Participants form, you will also need to: appoint the Distributor to GSP Groups (and the PRS Agent to the Distributor) using the GSP Groups form; assign Line Loss Factor Classes to the Distributor via the Line Loss Factor Classes form. The Additional Notes column provides further information on the data to be added in the corresponding form.

Note: When a Market Domain Data Complete Set file has been loaded containing information about a GSP Group that is not on the database, a low level exception will be raised but the data relating to this GSP Group not loaded. If it is required, the GSP Group must be created manually via the Maintain GSP Groups form (see Section 6) and the file reprocessed.

When Adding this item of Domain Data	You should also add	Using this form	Additional Notes
Distributor	PRS Agent(s) appointed	GSP Groups	This is done automatically when the distributor is added to the GSP group
Distributor	GSP-group distributors	GSP Groups	select each GSP group and add distributor
Distributor	Line Loss Factor Classes	Line Loss Factor Classes	
GSP Group	ISR Agent Appointment	GSP Groups	
GSP Group	GSP-group distributors	GSP Groups	
GSP Group	GSP group – Profile Class Researched Default EAC	Profile Classes	select each profile class and add Researched Default EAC for the GSP group
GSP Group	AFYC	Define Average Fraction of Yearly Consumption	select each valid SSC-PC and add AFYC for the GSP Group
ISR Agent	ISR Agent Appointment	GSP Groups	select each GSP group in turn and add ISR appointment
Profile Class	GSP group – Profile Class Researched	Profile Classes	add Researched Default EAC for each GSP group

When Adding this item of Domain Data	You should also add	Using this form	Additional Notes
	Default EAC		
Profile Class	Valid SSC-PC	Define Standard Settlement Configurations	select each SSC and add PC to valid list
Profile Class	AFYC	Define Average Fraction of Yearly Consumption	select PC, and for each valid SSC-PC and GSP Group add AFYC
SSC	Measurement requirements	Define Standard Settlement Configurations	add all Time Pattern Regimes
SSC	Valid SSC-PC	Define Standard Settlement Configurations	add all valid Profile Classes to list
SSC	AFYC	Define Average Fraction of Yearly Consumption	select SSC, and for each valid SSC-PC and GSP Group add AFYC
Threshold Parameter			no related data

2.3   Data Aggregation

Aggregation of EACs and AAs is the main function of the NHHDA system. It is performed using a subset of EAC and AA data contained in the system, for selected GSP groups and Settlement Dates. The aggregation output, in the form of a Supplier Purchase Matrix is sent to the appropriate ISR agent and the corresponding Supplier Purchase Matrix files are sent to the Suppliers, with only the relevant data for the Supplier appearing in the SPMs they receive.

Aggregation is performed in two stages.   The first stage calculates aggregation results, which are stored in the database, producing an audit and error log. The second stage collates this data, and generates the Supplier Purchase Matrix data file and DC Performance Report. The Supplier Purchase Matrix is automatically sent to the ISR Agent, (via the gateway). The corresponding SPMs are generated for the Suppliers. The Supplier Purchase Matrix can be re-sent on request via the user interface (see section 24). The regeneration of the SPMs for ISRA will also regenerate the SPMs for the Suppliers.

2.4   Reporting

The following NHHDA reports can be generated on request via the user interface:

- DC data exception;
- Failed instructions;
- Average Fraction of Yearly Consumption;

- Data Aggregation Run Schedule;

- GSP Groups;

- Line Loss Factor Class;

- Metering System and Associated Items;

- Metering System History, EACs and Aas;

- SSC and Associated Items;

- Distributors and Associated Items;

- Supplier Purchase Matrix Report;

- Aggregation Exception Log Report;

- Check Data Collector Data Exception Log;

- Market Domain Data Complete Set Exception Log;

- Data Aggregation and Settlement Timetable Exception Log;

- Profile Class and Associated Items;

- Operator Log

- Error Log .

- DC Performance Report.

- DC Exception Summary Report

- EAC Data for Distributor Report

Data Collector Exception reports are generated during overnight processing and sent to the relevant Suppliers. DC Performance Reports (machine readable) are created by the aggregation run, and the human readable version is requested via the user interface. All other reports are requested via the user interface.

All of these reports are produced in a machine-readable format. The reports can be displayed and printed using the Select Reports form on the user interface; for the EAC Data for Distributor Report only the exception log can be viewed. Refer to section 38.3 for further information about displaying and printing reports.

In addition to this user initiated reports, the NHHDA system also produces exception reports for batch processes and audit reports. Refer to section 38 for details of the exception reports and to section 9 of the NHHDA System Management Guide for details of audit reporting.

The DC Exception Summary report is an ad-hoc report and is initiated by the user on a monthly basis using the DC monthly report option.

2.5   Manual Report Distribution

The EAC Data for Distributor reports (P0222) are specifically requested by an LDSO, and the reports which are created need to be manually distributed to the Participant. The completed reports will be held under the ldso_out directory in sub-directories named to correspond to the short code of the Market Participant the report should be sent to; refer to the NHHDA System Management Guide for details of the directory structure.

When the EAC Data for Distributor reports are sent to the participant it is recommended that the files are removed from the the ldso_out sub-directories. By removing the report files it will be clear which files have been manually sent to participants, as the NHHDA application has no way to track manual actions. The removal of the reports will not cause the NHHDA application a problem as the reports will be given the status of archived by the NHHDA application once it has put the reports into the ldso_out sub-directories.

3   Operational Schedule

This section provides guidelines on the scheduling of tasks that need to be performed using functionality provided by the NHHDA application software.

The main daily activities on the system are:

- instruction management and standing data maintenance;

- batch processing;

- backup.

Note that it is the responsibility of organisations running the NHHDA system to devise their own schedule, taking into account their operational environment. Each user organisation should ensure that the schedule will enable the organisation to meet the Settlement Timetable, and is compliant with Agreed Procedures and Service Lines.

However, the recommended order of the end of day activities is given below. The main features of this schedule are as follows:

- Loading of Data Files and Instruction Files is the first task to be performed. This ensures that batch processes such as Data Aggregation use the most up to date data.

- Loading of Data Files is performed prior to Instruction Files, to ensure that Instructions that are applicable to the data can be applied successfully to the database.

- Check Data Collector Data is the last batch process to be performed, because it is not critical for the settlement timetable and may be omitted if there is insufficient time in the overnight schedule.

- Archiving must be performed *immediately* after backup. Backup stores database data and associated files on off-line media. Archiving removes flat files and data meeting particular criteria from the database, (refer to section 12 of the NHHDA System Management Guide for further information).

Daytime Activities

1. **Start up database**. Start up the NHHDA Oracle database.

2. **Start up NHHDA application processes**. Start up the NHHDA processes using the nhhda_start command from the server operating system command line. Refer to the NHHDA System Management Guide, section 10.1, for further information.

3. **Maintain Standing Data**. Standing Data, such as Standard Settlement Configurations, Average Fractions of Yearly Consumption and Profile Classes can be maintained via the user interface.

4. **Manage Instruction Files and Instructions**. A series of forms allows the Data Aggregator User to view instruction information, attempt reprocessing of failed instructions, return failed instructions to their Originator and to control the application of Refresh instructions from PRS Agents.

5. **Unload audit data**. Unload audit data from the audit database tables into flat files. This task is initiated using the nhh_submit.exe command. Refer to section 4.6 for details of this command, and the NHHDA System Management Guide for further information about auditing.

6. **Archive data**. Remove data that has been flagged for archive onto off-line media, using server operating system commands. Refer to the NHHDA System Management Guide for further information about archiving.

End of Day Activities

1. **Shut down database**. Interactive users are logged out, batch processes are halted.

2. **Start up database in restricted mode**. Access is only available to the Database Administrator and batch tasks.

3. **Market Domain Data Complete Set files are loaded**. Market Domain Data Complete Set files that have been received from the ISR Agent since the previous end of day processing are validated. If the files are valid, the data is loaded into the NHHDA database. Frequency: once per fortnight.

4. **Data Aggregation and Settlement Timetable File is loaded**. The Data Aggregation and Settlement Timetable File is validated, and if validation is successfully completed, the file details are loaded. Frequency: one per year.

5. **Instruction Files undergo initial validation**. The File Receipt Process validates any Instruction Files that have been received since the last end of day processing. Frequency: Instructions received from Data Collectors and PRS Agents every working day.

6. **Valid Instructions files are loaded**. Attempts to apply Unprocessed Instructions, and any Failed Instructions for which reprocessing has been requested, to the NHHDA database.

7. **Aggregation of EACs and AAs**. Calculations are performed according to the Aggregation Runs scheduled via the Data Aggregation and Settlement Timetable File and the Schedule Aggregation Runs form on the NHHDA user interface. Note that the database is locked at the beginning of the aggregation process to ensure that the backup performed after the aggregation reflects the state of the system immediately after the aggregation has completed. See point 14 for information on unlocking the database.

8. **Check data collector data**. Checks on the Metering System data stored in the database are performed in batch mode by the system. This involves checks for consistency between the data supplied by Data Collectors and PRS Agents, and checks on the EAC/AA data supplied by (potentially multiple) Data Collectors.

    These checks are scheduled to run every night, in order to update the stored exceptions table. It will additionally generate output files, when these have been requested, every two weeks on average, typically at weekends or when few Aggregation runs are scheduled and there is spare capacity on the system.

On a monthly basis, the DC exceptions summary report is generated for high-level monitoring and inclusion in PARMS.

The results of this processing are written to files. These files are automatically sent to the Supplier currently responsible for the meters which have inconsistent data.

9. **Shut down NHHDA application processes**. Shut down the NHHDA processes using the nhhda_stop command from the server operating system command line. Refer to the NHHDA System Management Guide, section 10.2, for further information.

10. **Shut down database**. The Oracle database is shut down so that an off-line backup can be performed.

11. **Perform backup**. This daily backup should enable the User organisation to recover the NHHDA system following failure; support the requirements of the NHHDA Auditor; support the needs of the User organisation to archive data from the database. Refer to the NHHDA System Management Guide for further information.

12. **Restart database**. The Oracle database is restarted so that the aggregation lock can be released.

13. **Start up NHHDA application processes**. Start up the NHHDA processes using the nhhda_start command from the server operating system command line. Refer to the NHHDA System Management Guide, section 10.1, for further information.

14. **Release the lock on the database**. Release the lock on the database that was set by the Data Aggregation process, using the nhh_unlock.exe command from the server operating system command line. (If you enter this command and the application processes have not been started, as in point 13, the following message is displayed: "FAILED TO SEND TO OPERATOR LOG DAEMON". If you then start the application processes, more than one message is recorded in the Operator Log that the nhh_unlock.exe command has been run, because the application has attempted to write to the log since the initial failure. This message duplication may also occur for batch processes such as Instruction processing if the application processes are not running, and are then started up.) Refer to the NHHDA System Management Guide, section 9.3, for further details.

15. **Archiving of data**. This task is not necessarily a daily activity, but is included here as the last task of overnight processing. This task should be performed according to details set out in the NHHDA System Management Guide.

    It is essential that archiving is performed <u>immediately</u> after the backup (step 10), as the archiving process deletes data from the database.

16. **Database modified to unrestricted mode**. Users can now log in to the application software.

The following tasks are scheduled using the nhh_submit.exe, which is described in section 4.6:

- Loading of Data Files;

- Loading and processing of Instruction Files;

- Aggregation of EACs and AAs;

- Check Data Collector Data;

- Archiving;

- Unloading audit data.

- Loading of Demand Control Event

3.1   Timestamps

The following timestamps are contained in NHHDA data files:

- creation time – the time at which the file was created by the NHHDA application software;
- received time – the time at which the file was received by the NHHDA application software;
- send time – the time at which the file was transmitted to the Gateway by the NHHDA application software.

Each of these timestamps is held as a GMT value, reflecting the time format in the headers of the corresponding files, thus ensuring consistency of file handling between different systems. All other timestamps used in the NHHDA application software are held in local time, reflecting the time used in the NHHDA application environment. This should be taken into account when managing data files in the NHHDA system, eg. when displaying file creation, receipt and transmission dates via the NHHDA user interface, care should be taken when interpreting dates around midnight.

4   Getting Started

This section provides an introduction to the facilities for logging onto the system; provides an overview of the user interface; outlines help, and error and status reporting functionality.

4.1   Logging On

Logging on to the NHHDA system is controlled by the standard Oracle User name and Password validation. This mechanism ensures that you are a valid NHHDA user. For further information about user names and passwords, consult your System Manager.

Access to NHHDA functions is controlled by the allocation of NHHDA user roles to users. You can only access a function if you have the appropriate authority. The table in Section 4.3 shows which menus and functions each NHHDA User Role has access to.

4.2   User Interface Overview

This section gives an overview of the menus and toolbars to which users of the NHHDA system have access.

The User Interface has been developed using Oracle Forms. A form is a window, and its behaviour is similar to that of other Windows applications. Some of the tasks that can be performed by the user within the forms is specific to Oracle Forms. The main features of the user interface are described in this document. For further information about using Oracle Forms, refer to the Oracle Forms Documentation Set.

When entering a date in any of the date input fields, the date should be in the DD/MM/RRRR format where '/' is the delimiter. The delimiter entered can be any character as long as it is not alphabetic. For example, the following formats are valid

    01-01-2004

    01*1 2004

    01-jan-2004

    01=jan/2004

4.2.1   Application Menu

On entry to the NHHDA system, an application menu is displayed. This menu provides access to the functionality of the NHHDA application software. The menu items to which you have access depend on the NHHDA user role to which you have been allocated by the System Manager and with which you are logged on. The menu structure is shown below:

Top Level Menu Option	Second Level Menu Option	Third Level Menu Option
File	Exit	
Edit Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	

Top Level Menu Option	Second Level Menu Option	Third Level Menu Option
	Standard Settlement Configuration	
	System Parameters	
	Threshold Parameter	
View Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	
	Standard Settlement Configuration	
	System Parameters	
	Threshold Parameter	
Reports	Request Standing Data	Average Fraction of Yearly Consumption
		Distributors and Associated Items
		GSP Groups
		Profile Class and Associated Items
		Standard Settlement Configuration and Associated Items
	Request Metering System	MS and Associated Items
		MS History, EACs and AAs
	Select Reports	
	Request Monthly D0095 Report	
	Report EAC Data to Distributors	
Aggregation	Schedule Aggregation Run	
	Check Data Collector Data	
	Browse Aggregation Run Schedule	
	Report Aggregation Run Schedule	
	Generate Supplier Purchase Matrix Data	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	
	Browse File Loading Status	
	Manage Failed Instructions	
	Manage Refresh Instructions	
	Manage Failed Refresh	

Top Level Menu Option	Second Level Menu Option	Third Level Menu Option
	Instructions	
	Manage Instruction Files	
	Report Instructions	
	Report Refresh Instruction Failures	
Activities	Browse Activity Queue Statuses	
	Browse Activity Statuses	
Account Management	User Management	
	Change Password	
Help	Contents	
	About	
Window	Cascade	
	Tile	
	Arrange Icons	

4.2.2 Forms Menu and Toolbar

When a form is invoked from one of the application menu items, a further menu (the Forms menu) and toolbar are displayed at the top of the form, as shown in Figure 4.

The Forms menu and toolbar provide access to commonly used functions for navigating within the forms, restricting data displayed on the forms (executing queries), editing data and accessing on-line help. Function keys that are defined with Oracle Forms can also be used to access the toolbar and menu functions. A list of function keys available for a particular form can be displayed using the toolbar "Show Keys" button.
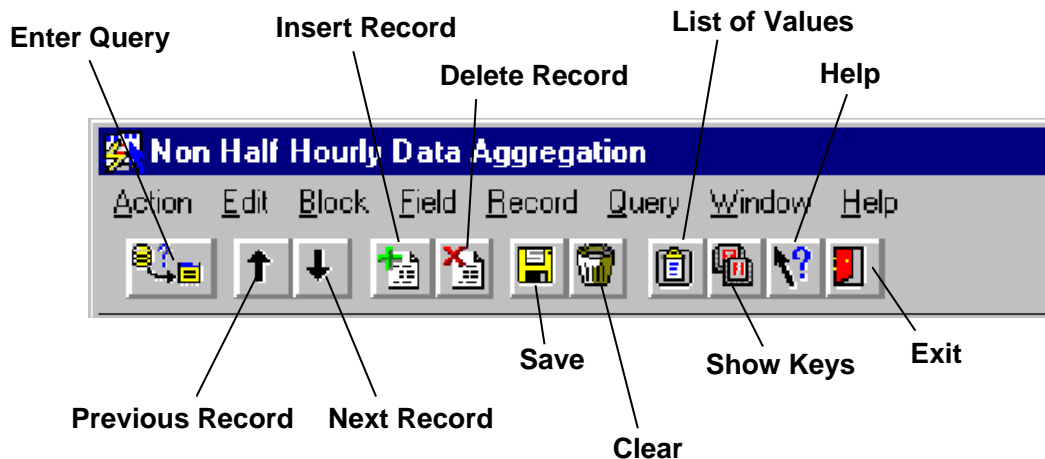
Figure 34:   NHHDA Toolbar

Some forms display a subset of the toolbar buttons. The following table gives a brief description of the buttons on the toolbar.

Enter Query	Enter query mode. When the form is in query mode, ENTER QUERY is displayed in the Status Line at the bottom of the form.
	When you click on this button, the Enter Query mode button disappears and two further buttons are displayed:

✓	Execute Query – initiates a query on the current area of the form
⬊	Cancel Query – cancels out of query mode
Previous Record	Navigate to the record above the one the cursor is currently on.
Next Record	Navigate to the record below the one the cursor is currently on.
Insert Record	Create a new record in the current block.
Delete Record	Delete the current record.
Save	Commit any outstanding changes to the database. A message indicating that changes have been saved is displayed in a message box or in the Status Line at the bottom of the form.
Clear Record	Clear the contents of the current record from the screen. This should not be confused with the *Delete Record* function which removes the record from the database.
List of Values	Pop up a list window showing the available values for the current field. If a List of Values is available for the current field, `<List>` is displayed in the Status Line at the bottom of the form.
Show Keys	Display the keys available in a pop up window.
Help	Displays the help available.
Exit	Return to the top level of the Application.

When not in query mode, if you enter an invalid value in a field for which a list of values is available, and attempt to exit the field, the list of values is displayed, allowing you to select a valid value. For example, the Profile Class Id fields in the Define Standard Settlement Configurations form, described in section 10.

Also, when not in query mode, any change to fields on a form are detected by the database as a change to the data, even when the field value remains the same. For example, in the Profile Classes form accessible from the Edit Standing Data menu, if you perform a query to display GSP Group Profile Class Researched Default EACs and change the value of a Settlement Date from 01/08/1998 to 01/08/1998, i.e. the value is unchanged, and attempt to exit from the field, an error message is displayed. To restore the original value of the field, clear the record using the Clear Record button, and requery.

The following behaviour of the 'X' in the top right corner of the NHHDA forms differs from the standard Windows application behaviour, (where 'X' exits the form):

- The 'X' in the top right of both the main form and the application window does not exit the application – it exits the current operation:

  - in query mode, 'X' is equivalent to cancel query, otherwise, 'X' closes the current option

  - if at the menu level, it closes forms.

4.2.3   Function Keys

Keyboard function keys can also be used to perform the tasks that can be executed using the menus and toolbar. A list of available function keys can be displayed by clicking on the Show Keys button on the toolbar.

4.3   User Access

Access to NHHDA functions is controlled by the allocation of NHHDA user roles to users. You can only access a function if you have the appropriate authority.

Menu options are greyed out and cannot be selected if the user does not have access to a form.

The following tables indicate the menus to which each NHHDA user role has access.

4.3.1   Data Aggregation Administrator

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
Reports	Request Metering System	MS History, EACs and AAs
	Select Reports	
	Report EAC Data to Distributors	
Aggregation	Schedule Aggregation Run	
	Report Aggregation Run Schedule	
	Generate Supplier Purchase Matrix Data	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	
Account Management	User Management	

4.3.2   Market Domain Data Administrator

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
Edit Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	
	Standard Settlement Configuration	
	Threshold Parameter	
Reports	Request Standing Data	Average Fraction of Yearly Consumption
		Distributors and Associated Items

Top-Level Menu	Second-Level Menu	Third-Level Menu
		GSP Groups
		Profile Class and Associated Items
		Standard Settlement Configuration and Associated Items
	Select Reports	
Aggregation	Browse Aggregation Run Schedule	
	Report Aggregation Run Schedule	
External Files	Browse File Loading Status	
Account Management	Change Password	

4.3.3   Superior Market Domain Data Administrator

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
Edit Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	
	Standard Settlement Configuration	
	Threshold Parameter	
Reports	Request Standing Data	Average Fraction of Yearly Consumption
		Distributors and Associated Items
		GSP Groups
		Profile Class and Associated Items
		Standard Settlement Configuration and Associated Items
	Select Reports	
Aggregation	Browse Aggregation Run Schedule	
	Report Aggregation Run Schedule	
External Files	Browse File Loading Status	
Account Management	Change Password	

The Superior Market Domain Data Administrator has access to the same functionality as the Market Domain Data Administrator. However, when certain time-based Market Domain Data has been used in an aggregation

run, only the Superior Market Domain Data Administrator has the authority to amend it:

- Average Fractions of Yearly Consumption;

- Researched Default Estimated Annual Consumption (EAC) for a GSP Group/Profile Class combination (via the Edit Standing Data|Profile Class menu items);

- Threshold Parameters.

Note: Market Domain Data loaded via the file interface will automatically overwrite data that has been used in an Aggregation Run, but will report this in the Operator Log and Load MDD Exception Log.

4.3.4   Exception Administrator

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
View Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	
	Standard Settlement Configuration	
	Threshold Parameter	
Reports	Request Standing Data	Average Fraction of Yearly Consumption
		Distributors and Associated Items
		GSP Groups
		Profile Class and Associated Items
		Standard Settlement Configuration and Associated Items
	Request Metering Systems	MS and Associated Items
		MS History, EACs and AAs
	Select Reports	
	Request Monthly D0095 Report	
	Report EAC Data to Distributors	
Aggregation	Check Data Collector Data	
	Browse Aggregation Run Schedule	
	Report Aggregation Run Schedule	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	

Top-Level Menu	Second-Level Menu	Third-Level Menu
	Browse File Loading Status	
	Manage Failed Instructions	
	Manage Refresh Instructions	
	Manage Failed Refresh Instructions	
	Manage Instruction Files	
	Report Instructions	
	Report Refresh Instruction Failures	
Account Management	Change Password	

4.3.5   Auditor

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
View Standing Data	Average Fraction of Yearly Consumption	
	GSP Groups	
	Line Loss Factor Classes	
	Market Participant	
	Profile Classes	
	Standard Settlement Configuration	
	System Parameters	
	Threshold Parameter	
Reports	Request Standing Data	Average Fraction of Yearly Consumption
		Distributors and Associated Items
		GSP Groups
		Profile Class and Associated Items
		Standard Settlement Configuration and Associated Items
	Request Metering Systems	MS and Associated Items
		MS History, EACs and AAs
	Select Reports	
	Request Monthly D0095 Report	
Aggregation	Check Data Collector Data	
	Browse Aggregation Run Schedule	
	Report Aggregation Run Schedule	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	

Top-Level Menu	Second-Level Menu	Third-Level Menu
	Browse File Loading Status	
	Report Instructions	
	Report Refresh Instruction Failures	
Account Management	Change Password	

4.3.6 System Operator

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
Edit Standing Data	System Parameters	
View Standing Data	System Parameters	
Reports	Select Reports	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	
	Browse File Loading Status	
Activities	Browse Activity Queue Statuses	
	Browse Activity Statuses	
Account Management	Change Password	

4.3.7 System Manager

Top-Level Menu	Second-Level Menu	Third-Level Menu
File	Exit	
Edit Standing Data	System Parameters	
Reports	Select Reports	
External Files	Browse File Extraction and Transmission Status	
	Browse Aggregation Files	
	Browse File Loading Status	
Account Management	User Management	
	Change Password	

4.4 On-line Help

On-line help is available by clicking on the Help button on the toolbar. Help is an on-line version of this document, converted into Windows help format.

4.5 Status and Error Reporting

Status and error messages that support the operation of the NHHDA application software are displayed via the user interface, and in Operator and Error logs. Each message can be categorised according to severity:

- Information;

- Warning;

- Error;

- Fatal.

Information, Warning and Error messages may be reported via the user interface, and are recorded in Operator Logs.

Fatal errors, such as file handling problems, are recorded in Error logs. For further information about Error logs, refer to the NHHDA System Management Guide.

High level Exceptions occurring during an MDD file load will appear in the Operator Log, while other warnings and errors will appear in the MDD Exception Log that is produced for that load.

4.5.1 Reporting via the User Interface

Error and status messages are displayed in the status line at the bottom of the form and in alert boxes. Depending on the level of the Error, the User will receive the appropriate type of Alert.

A list of error messages that may be generated by the application software in Operator Logs and exception reports is contained in Appendix A.

4.5.2 Reporting via Operator Logs

An Operator Log records operational events and data errors. For example:

- run-time information about batch processes such as file receipt, processing of Instruction Files, loading of data files, eg. Pool Market Domain Data;

- messages giving the high level progress of a process, eg. 'aggregation run started', 'out of order Instruction File received'.

The default location of Operator Logs in the local file store is defined in the database. This location can be configured during installation. If the Operator Logs are not held in the default directory, consult your System Manager.

A new Operator Log is created for each day by the system. The name of the Operator Log has the following format:

```
OPcurrent_date.LOG
```

where "current_date" is the current system date, in the format YYYYMMDD. For example, an Operator Log for 1st June 1997 would be named `OP19970601.LOG`.

Operator Logs can be examined using a server operating system editor or other tools as advised by your System Administrator.

The Operator Log is also viewable via the user interface Select Reports screen (see section 38.2), however if the Operator Log is large then it will take a long time to download to the client PC. The speed of download depends on the configuration of the network.

Entries in the Operator Log are preceded by the date and time at which they are logged, eg. 10-Dec-1997 10:03:34. When an Operator Log is created, it first logs the start up of various NHHDA processes, such as the File Receipt process and the Scheduler. It then logs some information relating to the File

Receipt, File Send and Scheduler processes, such as the interval at which the File Receipt process checks for incoming files.

Batch processing, such as Instruction processing and Data Aggregation, is performed by submitting activities to the Scheduler. Each activity has a numeric id, and the ids of entries in the Operator Log can be checked to identify related processing.

The following example shows several entries in an Operator Log, (which may be separated by messages from other activities), relating to the processing of an Instruction File:

```
15-Dec-1997 12:21:18 cfrd - File: /pcstore/Users/hicks/runtime/files/gatein/testfile

15-Dec-1997 12:21:18 cfrd - File (file id: 9612) received.

15-Dec-1997 12:21:18 cfrd - File: /pcstore/Users/hicks/runtime/files/gatein/testfile2

15-Dec-1997 12:21:18 cfrd - File (file id: 9613) received.

15-Dec-1997 12:21:33 cscd - csc_start_process:Activity 10032 started, process identifier is 10263.

15-Dec-1997 12:21:33 nmi 10032 - control process

15-Dec-1997 12:21:33 nmi 10032 - Activity 10033 submitted - Instruction file arrival: file 9612

15-Dec-1997 12:21:33 cscd - csc_start_process:Activity 10033 started, process identifier is 15455.

15-Dec-1997 12:21:34 nmi 10033 - Loading instruction file sequence 1; file: 9612 - testfile

15-Dec-1997 12:21:34 nmi 10033 - Loading instruction file sequence 2; file: 9613 - testfile2

15-Dec-1997 12:21:34 nmi 10033 - Missing Significant Date for instruction number 000000000013

15-Dec-1997 12:21:34 nmi 10033 - Unable to load File 9613

15-Dec-1997 12:21:34 nmi 10033 - Complete - Error status -1

15-Dec-1997 12:21:34 cscd - csc_handle_exits:Activity 10033 completed, status F, exit status 203.

15-Dec-1997 12:21:34 nmi 10032 - Activity 10034 submitted - Apply instructions (starting with file 1) from P 0062

15-Dec-1997 12:21:35 cscd - csc_start_process:Activity 10034 started, process identifier is 1862.

15-Dec-1997 12:21:35 nmi 10034 - apply instructions from 0062 P

15-Dec-1997 12:21:35 nmi 10034 - Attempting to process instructions from instruction file sequence 1 - file: 9612 testfile

15-Dec-1997 12:21:35 nmi 10034 - File 9612, Instruction 1          Failed

15-Dec-1997 12:21:35 nmi 10034 - File 9612, Instruction 2          Failed

15-Dec-1997 12:21:37 nmi 10034 - Complete - Successful

15-Dec-1997 12:21:37 cscd - csc_handle_exits:Activity 10034 completed, status S, exit status 0.

15-Dec-1997 12:21:38 nmi 10032 - Complete - Successful

15-Dec-1997 12:21:38 cscd - csc_handle_exits:Activity 10032 completed, status S, exit status 0.
```

The processing of the Instruction File '**testfile'** can be monitored as follows:

- first establish **testfile's** id which is allocated by the file receipt manager − cfrd − the detection of the file is recorded including the full path name of the file, and the assigned id is reported. − the id is **9612**

- look for all messages about **9612**. This gives the full processing history

    - The activity which performed the initial load of instruction headers from the file is activity 10033. Note that messages complaining about the file will follow within that activity output but without the file id being repeated. This is seen in the processing of testfile2 (9613) which fails to load with the error '`Missing Significant Date for instruction number 000000000013`'

- The activity which performed the initial attempt to process the loaded instructions from the file was 10034.

The progress of a single activity may be tracked as every message generated by an activity has the activity id. So activity 10033 may be tracked by searching for 'Activity 10033' or '10033', from its receipt at 12:21:33, to its completion at 12:21:34.

Thus, when examining the Operator Log to determine the outcome of a batch job, you should identify the activity id of the process, (in the above example, Activity 10033 is submitted to the Scheduler following receipt of Instruction File 9612), and then search the log for further entries with the same activity id, until you find an entry with "status F" indicating that the activity has failed or "status S" indicating that the activity has completed successfully. The activity statuses may be viewed via the user interface (see Section 35 for details).

Additionally, you can examine the Scheduler Log to determine the outcome of related activities. Refer to the NHHDA System Management Guide for further information about Scheduler Logs.

4.6   Scheduling Batch Jobs

A number of tasks performed by the NHHDA application software run in batch mode:

- Data Aggregation runs;

- Check Data Collector Data;

- Instruction loading and processing;

- Data loading;

- Archiving;

- Unload audit data.

For further information about submitting Data Aggregation Runs, refer to section 21. For more information on archiving, refer to the NHHDA System Management Guide.

To schedule a batch job via the Scheduler, use the following command from the Operating System command line:

```
nhh_submit.exe [-v|-s|-w] job-type [@when] [-flag [-flag] ...]
    [job-type [@when] [-flag]] ...
```

where:

[] indicates optional parameters

−v is "verbose" – the details of the submitted batch job are displayed to the user. For example:

```
Activity  (ID  9446)  Instruction  Loading/Processing
scheduled to start at 19-NOV-1997 09:41.
```

This information, in particular the activity id, may be useful when monitoring the progress of the batch job using the Operator Logs. Refer to section 4.5.2 for further information.

−s is "silent" (the default if neither –v nor –s is specified) – no details of the submitted job are displayed to the user.

−w is "wait" – the program waits for the activity to complete and exists with the activity exit status if this is non-zero.

job-type identifies the type of batch job to be submitted, and is one of :

- a for Data Aggregation Run;

- c for Check Data Collector Data;

- i for Instruction loading and processing;

- d for Data loading with parameters (flags):

  - -APPLY_MDD to apply the MDD updates if validation successful;

  - -REPROCESS_MDD to reprocess the latest successful MDD file that has been loaded (if it exists);

  - -REPROCESS_DAST to reprocess the latest successful Data Aggregation and Settlement Timetable File that has been loaded (if it exists);

- x for Archiving;

- u for Unload audit data.

- r for Demand Control Event Loading

All batch jobs will run with no further parameters specified. Data Aggregation Run batch jobs accept the run date and recovery mode parameters described below.

@when indicates the time at which the job is to be run. This is in 24-hour clock, hhmm format, eg. 2300, 0900. If this parameter is not entered in the correct format, an error message is displayed on the screen, and examples of appropriate values are shown. If no time is specified, the default is for the batch job to start immediately.

The flags are `run date` and `recovery mode`, which are described below, (these must be preceded by a '-').

`run date` indicates which runs should be processed by the batch job, with available values as follows:

- `NOW` : include runs scheduled to run today or earlier which have a status of 'Released', (this is the default if the run date parameter is not specified);

- `TONIGHT` : allows aggregation runs to be scheduled to run in the evening without having to consider whether the actual run time is before or after midnight, (the actual run time may depend on other operational activities, and other NHHDA batch processing such as Instruction processing).

  For example, assume that aggregation runs have been scheduled for today, 'Day 1' and tomorrow, 'Day 2'. If the TONIGHT option is used with the nhh_submit.exe command, aggregation runs with a Released status, that are scheduled for 'Day 2' or earlier, are submitted to the scheduler, whether the aggregation process runs before midnight, eg. 23:30 on 'Day 1', or after midnight, eg. 01:00 on 'Day 2'.

- `YYYYMMDD` : only runs scheduled on or before the date specified are included. This option may be used, for example, in exception conditions where only yesterday's runs are required.

Note that the run date parameter is only used if the `START` recovery mode parameter is used when scheduling Data Aggregation Runs; if another recovery mode parameter is used, the value specified for the run date parameter is ignored. If an invalid value is specified for this parameter, an error is given in the Scheduler Log (this is described in the NHHDA System Management Guide – refer to your System Administrator if further assistance is required).

`recovery mode` is used only in conjunction with the Data Aggregation Run batch job, and indicates how the batch job handles any previous Data Aggregation runs that have terminated abnormally. To determine how previous Aggregation Runs have terminated, use the Schedule Aggregation Run form (see section 21). This form indicates which runs have Failed, and which have a status of Running (a run that still has a status of Running some time after it is expected to have completed, may be an indication that the run has terminated abnormally). The available values for the recovery mode parameter are as follows:

- `START`, assumes that the last Data Aggregation Run was terminated normally, with all parts of the Run having either a success or failed status, and starts the new run according to the run date parameter;

- `RESTART`, restarts a previously failed Data Aggregation Run from the beginning of the run;

- CONTINUE, restarts a failed Data Aggregation Run from the beginning of the stage that failed;

- ABORT, sets the status of an abnormally terminated Data Aggregation Run to 'Failed'. Removes any incomplete data / files created by previous aggregation processing.

If the last aggregation job included multiple aggregation runs, only a subset of which completed with a status of Failed, then the failed runs can be rescheduled with the Start flag. The status of an Aggregation Run can be determined using the Schedule Aggregation Run form. If an invalid value is specified for this parameter, an error is given in the Scheduler Log (this is described in the NHHDA System Management Guide – refer to your System Administrator if further assistance is required).

A few examples of the use of the nhh_submit.exe command are given below:

- to submit a batch job to load and process Instructions at 10pm:

      nhh_submit.exe i @2200

- to submit a batch job to archive data from the NHHDA database immediately:

      nhh_submit.exe x

- to submit a batch job to reprocess a previously loaded MDD file and apply it to the database if validation successful:

      nhh_submit.exe d –REPROCESS_MDD –APPLY_MDD

- to submit a batch job to perform data aggregation at 11pm, for runs scheduled on or before 25th July 1998, assuming that the last Data Aggregation Run terminated normally:

      nhh_submit.exe a @2300 –19980725 –START

5   Maintain Average Fractions of Yearly Consumption

This form enables you to browse and define Average Fractions of Yearly Consumption assigned to each Measurement Requirement for a particular Standard Settlement Configuration Profile Class and GSP Group.

Screen layout

5.1   Define Average Fractions of Yearly Consumption

1. Select a GSP Group by executing a query on GSP Group Id or GSP Group Name, or by selecting from a list of values.

2. Select a Profile Class by executing a query or selecting from a list of values.

    The Description of the selected Profile Class is populated automatically. The Standard Settlement Configurations available are determined by the Profile Class selected.

3. Select a Standard Settlement Configuration by executing a query or selecting from a list of values.

    For the selected combination of GSP Group, Profile Class and Standard Settlement Configuration, Average Fractions of Yearly Consumption are displayed.

4. To define a new Average Fraction of Yearly Consumption for the GSP Group, Profile Class and Standard Settlement Configuration displayed, position the cursor on the Average Fractions of Yearly Consumption table and insert a row.

5. Enter a Settlement Date from which the Average Fraction of Yearly Consumption is effective.

6.   Enter an Effective Settlement To Date for which the Average Fraction of Yearly Consumption is effective. An Effective Settlement To Date must be on or after the Effective From Settlement Date. If the Effective To Date is left blank, the Effective To Date defaults to being open-ended, represented by a date of 31/12/4712.

7.   Specify the Time Pattern Regime for the Average Fraction of Yearly Consumption by executing a query or selecting from a list of values.

For each Settlement Date, the list of values available is dependent on the GSP Group, Profile Class and Standard Settlement Configuration displayed on the screen.

8.   Time Patterns must be unique for each Settlement Date, and all Time Pattern Regimes for the Standard Settlement Configuration must be entered for each Settlement Date.

9.   Enter the value of the Average Fraction of Yearly Consumption, between 0 and 1.

10. For multiple register configurations, the 'from-to date' pairs must be consistent, i.e. for a given Effective From Date, all the AFYCs for each TPR for that From Date must have the same To Date.

11. If a Metering System uses the current GSP Group, Profile Class, Standard Settlement Configuration combination and a new AFYC is to be entered for this combination, then if there are any gaps in the coverage for that Metering System's Data Aggregator Appointment an error is reported to the user and no changes made.

The sum of Average Fractions of Yearly Consumption for the same combination of GSP Group, Profile Class, Standard Settlement Configuration and Settlement Date must equal one. Therefore, all changes to Average Fractions of Yearly Consumption for a particular combination must be performed before attempting to save the changes to the database.

Note that you can re-select a GSP Group without having to re-enter the other selection criteria.

5.2   Amend Average Fractions of Yearly Consumption

1.   Select a GSP Group by executing a query on GSP Group Id or GSP Group Name, or by selecting from a list of values.

2.   Select a Profile Class by executing a query or selecting from a list of values.

The Description of the selected Profile Class is populated automatically. The Standard Settlement Configurations available are determined by the Profile Class selected.

3.   Select a Standard Settlement Configuration by executing a query or selecting from a list of values.

For the selected combination of GSP Group, Profile Class and Standard Settlement Configuration, Average Fractions of Yearly Consumption are displayed.

4.   Amend the required Effective To Settlement Date and/or Average Fractions of Yearly Consumption.

5.   For multiple register configurations, the 'from-to date' pairs must be consistent, i.e. for a given Effective From Date, all the AFYCs for each TPR for that From Date must have the same To Date.

6.   If a Metering System uses the current GSP Group, Profile Class, Standard Settlement Configuration combination and a new AFYC is to be amended for this combination, then if there are any gaps in the coverage for that Metering System's Data Aggregator Appointment an error is reported to the user and no changes made.

The sum of Average Fractions of Yearly Consumption for the same combination of GSP Group, Profile Class, Standard Settlement Configuration and Settlement Date must equal one. Therefore, all changes to Average Fractions of Yearly Consumption for a particular combination must be performed before attempting to save changes to the database.

5.3   Delete Average Fractions of Yearly Consumption

1.   Select a GSP Group by executing a query on GSP Group Id or GSP Group Name, or by selecting from a list of values.

2.   Select a Profile Class by executing a query or selecting from a list of values.

The Description of the selected Profile Class is populated automatically. The Standard Settlement Configurations available are determined by the Profile Class selected.

3.   Select a Standard Settlement Configuration by executing a query or selecting from a list of values.

For the selected combination of GSP Group, Profile Class and Standard Settlement Configuration, Average Fractions of Yearly Consumption are displayed.

4.   Delete the required Average Fractions of Yearly Consumption. Note when deleting an AFYC, if a Metering System is using this AFYC during the period it is effective for, then deletion will be prevented and a message displayed saying it is in use by a Metering System.

The sum of Average Fractions of Yearly Consumption for the same combination of GSP Group, Profile Class, Standard Settlement Configuration and Settlement Date must equal one. Therefore, all changes to Average Fractions of Yearly Consumption for a particular combination must be performed before attempting to save changes to the database.

Changes to data that has been used in an Initial Settlement can only be made by a user logged in as Superior Market Domain Data Administrator. If you have sufficient authority, and change the data under these circumstances, the changes are logged in the Operator Log.

5.4   Field Summary

Field	Details
GSP Group	The unique id of a GSP Group and its description
Profile Class	Id and description of the Profile Class
SSC	Id and description of the Standard Settlement Configuration
Settlement From Date	The Settlement Date from which the corresponding Average Fraction of Yearly Consumption is applicable
Settlement To Date	The Settlement To Date which the corresponding Average Fraction of Yearly Consumption is applicable (ie The Settlement To Date must be on or after the Effective From Settlement Date)
Time Pattern Regime	The Time Pattern Regime for the displayed GSP Group, Profile Class, Standard Settlement Configuration and Settlement Date Effective
Avg Fraction of Yearly Consumption	The Average Fraction of Yearly Consumption for the combination of GSP Group, Profile Class, Standard Settlement Configuration, Settlement Date and Time Pattern Regime

6   Maintain GSP Groups

This form allows details of GSP Groups and their associated Distributor and ISR Agent appointments to be browsed and maintained.

6.1   Create a GSP Group

1.   Enter a GSP Group Id and GSP Group description.

2.   Enter the details of Distributor and ISR Agent appointments.   The Distributor Id and ISR Agent Id can be selected from lists of values. You can add Distributor and ISR Agent details at a later time by amending the GSP Group, as described below.

Note that if you do not enter a To Calendar Date for the Distributor or ISR Agent appointment, when you save the details, this field is populated with the date '31/12/4712'.   This date is used as a default end date if no date is specified.

It should also be noted that appointing a Distributor to a GSP Group automatically appoints the PRS Agent to the Distributor for this GSP Group. This appointment is for all calendar dates and not just the settlement dates valid for the distributor appointment to the GSP Group. Once a distributor has been deappointed, it can not be reappointed for the same GSP group.

If MDD files containing information relating to a GSP Group that is not on the database are loaded, the GSP Group data is ignored. If the GSP Group data should be loaded, the GSP Group should be entered manually via the form as described above and the MDD file reloaded. Refer to section 4.6 for details of reloading MDD files.

6.2   Amend a GSP Group

1.   Display the required GSP Group by executing a query or selecting from a list of values. The Distributor and ISR Agent details for the selected GSP Group are displayed.

2.   The following details can be amended:

- GSP Group description.

- appointments can be created for Distributors and ISR Agents that already exist in the NHHDA system. An error message is displayed if a new or changed Distributor Id or ISR Agent Id is not already defined on the system.

- existing appointment details can be amended.

     When amending Distributor Appointments, an error message is displayed if any of the Metering Systems in the GSP Group have a Data Aggregator Appointment which is affected by this amendment.

- existing appointment details can be deleted.

Note that if you do not enter a To Calendar Date for the Distributor or ISR Agent appointment, when you save the details, this field is populated with the date '31/12/4712'. This date is used as a default end date if no date is specified.

6.3   Delete a GSP Group

You can delete a GSP Group if it has no associated occurrences of Metering System GSP Group, Metering System GSP Group (DC), or GSP Group in Aggregation runs (this check includes failed instructions).

1.   Display the required GSP Group by executing a query or selecting from a list of values. The Distributor and ISR Agent details for the selected GSP Group are displayed.

2.   Delete the row.

If there are any associated ISR Agent appointments, GSP Group Distributors, GSP Group Profile Class Researched Default EACs or Average Fractions of Yearly Consumption then these are also deleted. You will be prompted to confirm this action.

6.4   Field Summary

Field	Details
GSP Group	Id and description of a GSP Group
Distributor	Id and name of a Distributor (and PRS Agent)
Short Code	An alternative short code used to identify a Market Participant who has the Distributor role
From Settlement Date	The Settlement Date on which the Distributor appointment begins
To Settlement Date	The Settlement Date on which the Distributor appointment ends
ISR Agent	Id and name of an ISR Agent

Field	Details
From Calendar Date	The calendar date on which the ISR Agent appointment begins for the displayed GSP Group
To Calendar Date	The calendar date on which the ISR Agent appointment ends for the displayed GSP Group

7   Maintain Line Loss Factor Class

This form enables you to define Line Loss Factor Classes for a specified Distributor. You can create new Line Loss Factor Classes and delete existing ones.
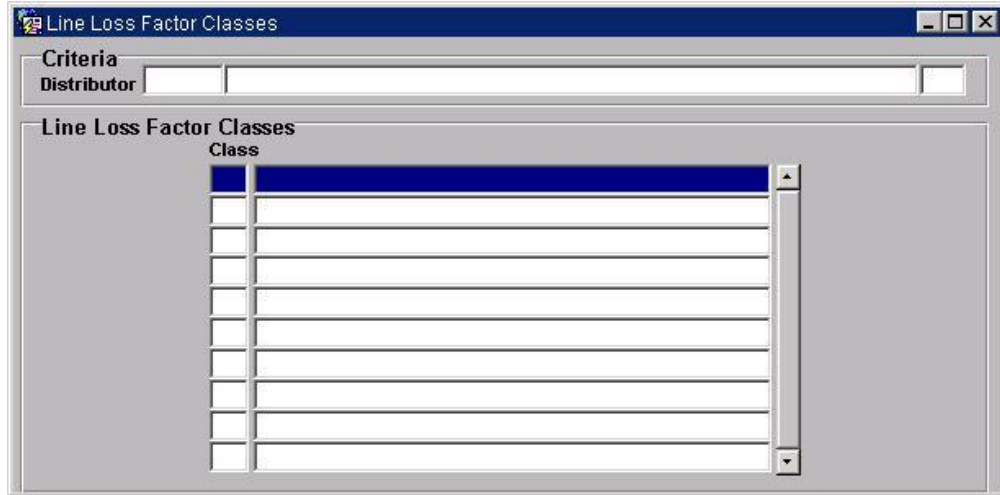
7.1   Create a New Line Loss Factor Class

1.   Select the required Distributor by executing a query or selecting from a list of values.

2.   Enter the Line Loss Factor Class Id and Description.

You can only create a new Line Loss Factor Class for an existing Distributor. New Line Loss Factor Classes must also be unique for the same Distributor.

7.2   Delete a Line Loss Factor Class

1.   Position the cursor on the required Line Loss Factor Class and delete the row.

You can only delete a Line Loss Factor Class if it has not been applied to a Metering System and not used in the calculation of any Supplier Purchase Matrix data.

7.3   Amend a Line Loss Factor Class

1.   Change the Line Loss Factor Class description as required.

7.4   Field Summary

Field	Details
Distributor	The Market Participant Id and name of the selected Distributor
Class	The id and description of a Line Loss Factor Class within a Distributor's system

8   Maintain Market Participant

Use this form to browse and maintain details of Market Participants.

You can check one or more check boxes at the top of the form to display details of the Market Participants with the selected types.

8.1   Create a Market Participant

1.   Enter a Market Participant Id and Name. The Market Participant Id must be unique.

2.   Check the Market Participant Types which apply to the new Market Participant.

3.   If the Market Participant is a Distributor, you must enter the Short Code, which must be unique.

4.   The creation of a Distributor automatically creates a PRS Agent with the same ID and vica versa.

8.2   Amend a Market Participant

1.   Display the required Market Participant by selecting from a list of values of Market Participant Ids, or by executing a query on Market Participant Type and/or Market Participant Id and/or Market Participant Name. All Market Participants matching any of the specified Market Participant Type(s), Market Participant Id and Market Participant Name are displayed. The appropriate Market Participant Types are checked. If the Market Participant is a Distributor, the Short Code is also displayed.

2.   You can amend the following details:

    • Market Participant Type.

- Market Participant Name.

- Distributor Short Code. The Distributor Short Code cannot be changed if there are any Metering Systems associated with the Distributor (including failed instructions). This is because when Metering Systems are set up, the Metering System uses the Distributor Short Code as part of its Id.

- Add Market Roles to an existing Market Participant.

8.3   Delete a Market Participant

1.   Display the required Market Participant.

2.   Position the cursor on the Market Participant and delete the row.

Market Participants cannot be deleted under the following circumstances (Market Participant Type shown in bold):

- **Supplier** – it has any associated registrations, registration (DC)s or Supplier Purchase Matrix.

- **Data Collector** – it has any associated Data Collector Appointments, Metering System Measurement Class (DC)s, Registration (DC)s, Metering System GSP group (DC)s, Metering System Energisation Status (DC)s, Metering System Profile Class (DC)s, Settlement Configuration (DC)s or Settlement Register (DC)s.

- **Distributor and PRS Agent** – it has any associated Line Loss Factor Classes, or GSP Group Distributors, PRS Agent Appointments or metering systems.

- **ISR Agent** – it has any associated ISR Agent Appointments.

Note that if you attempt to uncheck a Market Participant Type for a Market Participant, the above validation is also invoked.

8.4   Field Summary

Field	Details
Data Collector	check box to display Data Collectors or define selected Market Participant as a Data Collector
Distributor and PRS Agent	check box to display Distributors and PRS Agents or define selected Market Participant as a Distributor and PRS Agent
ISR Agent	check box to display ISR Agents or define selected Market Participant as an ISR Agent
Pool	check box to display Pool or define selected Market Participant as an Pool
Supplier	check box to display Suppliers or define selected Market Participant as a Supplier
Market Participant	Id and name of a Market Participant and Short Code if the Market Participant is a Distributor
Short Code	Short Code if Market Participant is a Distributor

9   Maintain Profile Classes

This form enables you to browse and maintain the set of valid Profile Classes and their associated GSP Group Profile Class Researched Default EACs (note that the form calls these "Average EACs"). The underlying table for the GSP Group Profile Class Average EACs screen is loaded from a script supplied by ELEXON

9.1   Create a Profile Class

1. Enter the Profile Class Id and Description.

2. For each GSP Group Profile Class Researched Default EAC required, enter:

   - Settlement Date from which the EAC is effective (this defaults to the current date).

   - GSP Group to which the EAC pertains (the GSP Group description is populated automatically).

   - Researched Default EAC.

If you do not know the Researched Default EAC information when you create a Profile Class, you can add it at a later date by amending the Profile Class (see below).

Profile Classes may be created by an MDD file load. If a new Profile Class has been created, then a Researched Default EACs for that Profile Class may be entered using the steps indicated in the next section.

9.2   Amend a Profile Class

1.   Select the required Profile Class by executing a query on Profile Class Id or selecting from a list of values.

2.   You can amend the following details:

     - change the Profile Class Description.

- add a Researched Default EAC.

- delete a Researched Default EAC (position the cursor on the Researched Default EAC and delete the row).

- for any Researched Default EAC, amend the Settlement Date and/or Researched Default EAC.

Changes to data that has been used in an Initial Settlement can only be made by a user logged in as Superior Market Domain Data Administrator. If you have sufficient authority, and change the data under these circumstances, the changes are logged in the Operator Log.

9.3   Delete a Profile Class

1. Select the required Profile Class by executing a query on Profile Class Id or selecting from a list of values.

2. Delete the Profile Class and all associated Researched Default EACs, by positioning the cursor on the Profile Class Id field and deleting the row.

   You are prompted for confirmation if you attempt to delete a Profile Class that has GSP Group Researched Default EACs defined.

   You cannot delete a Profile Class that:

   - has been linked to a Standard Settlement Configuration via the Standard Settlement Configuration form or through an MDD file load.

   - has associated Metering System Profile Classes or Metering System (DC) Profile Classes.

9.4   Field Summary

Field	Details
Profile Class	The unique id of a GSP Group and its description
Settlement Date	First Settlement Date for which the Researched Default EAC is effective
GSP Group	GSP Group Id and description
Researched Default EAC	The Researched Default Estimated Annual Consumption for the GSP Group / Profile Class combination

10   Maintain Standard Settlement Configurations

You can use this form to maintain Standard Settlement Configurations and relationships with the Time Pattern and Profile Classes.

10.1   Create a New Standard Settlement Configuration

1. Enter a Standard Settlement Configuration Id and description.

2. Enter a Profile Class by executing a query on the Profile Class Id field or by selection from a list of values. Only existing Profile Classes can be assigned to a Standard Settlement Configuration.

3. Enter a Time Pattern Regime Id, which can be selected from a list of values. If you enter a non-existent Time Pattern Regime Id, you are prompted to create a new Time Pattern Regime or cancel.

10.2   Amend a Standard Settlement Configuration

1.   Execute a query on the Standard Settlement Configuration Id field or select from a list of values.

     The associated Profile Classes and Time Pattern Regimes are displayed.

2.   The following modifications can be made:

     - change the Standard Settlement Configuration description;

     - add or remove existing Profile Classes. If you remove a Profile Class that is associated with Average Fractions of Yearly Consumption, you are prompted for confirmation. If you continue, the Average Fractions of Yearly Consumption are also deleted. Validation as described in section 5 will be carried out for AFYCs;

     - add or remove Time Pattern Regimes. Note that it is only possible to amend the Time Pattern Regime *for a particular* Standard Settlement Configuration if no Metering Systems or Supplier Purchase Matrix Data is associated with that Time Pattern

Regime.   If Average Fractions of Yearly Consumption are associated with the Time Pattern Regime, an error is displayed. You need to delete the Average Fraction of Yearly Consumption via the Maintain Average Fractions of Yearly Consumption form (see section 5) before deleting the Time Pattern Regime for the selected Standard Settlement Configuration.

If the data has been used in an Initial Settlement, it can only be amended by a user logged in as Superior Market Domain Data Administrator. If you have sufficient authority and amend the data under these circumstances, the changes are logged in the Operator Log.

10.3   Delete a Standard Settlement Configuration

1.   Execute a query on the Standard Settlement Configuration Id field or select from a list of values.

      The associated Profile Classes and Time Pattern Regimes are displayed.

2.   Position the cursor in the Standard Settlement Configuration Id field and delete the row.

      The Standard Settlement Configuration and its associated Profile Classes and Time Pattern Regimes are deleted from the database. If any Average Fractions of Yearly Consumption are associated with the Time Pattern Regimes related to the selected Standard Settlement Configuration, a warning is displayed; you can continue or cancel the action. If you continue, the Average Fractions of Yearly Consumption are also deleted. Validation as described in section 5 will be carried out for AFYCs.

      Deletion of Standard Settlement Configurations is not allowed if there are any associated Settlement Configurations or Settlement Configuration (DC)s.

10.4   Field Summary

Field	Details
SSC	Standard Settlement Configuration Id and description
Profile Class	Profile Classes associated with the displayed Standard Settlement Configuration
Time Pattern Regimes	Time Pattern Regimes associated with the displayed Standard Settlement Configuration

11   Maintain System Parameters

The NHHDA system uses a number of System Parameters, which are stored in the cdb_system_parameter table.

The System Parameters shown in the table below can be modified using the form following the table.

Any changes to System Parameters are recorded in the NHHDA Audit Log. Refer to the NHHDA System Management Guide for further information about the Audit Log. Note that additional System Parameters, which cannot be modified and are not shown below, are used by the NHHDA application software to store the dates on which archiving of different tables and Operating System files was last performed.

The default values for the maintainable parameters are also given. Further System Parameters which can only be defined during system installation are given in the NHHDA Installation Guide.

It is important that if any system parameters with a default numeric value are modified, the new value is numeric. Failure to do so may result in unexpected results:

- *If a default numeric value is modified such that the first character is non-numeric, eg. B3, the parameter will be interpreted as zero.*

- *If a default numeric value is modified such that part of the value is non-numeric, eg. 3W55, the parameter will be interpreted as only the digits preceding the non-numeric characters.*

The Parameter column below shows the values of param_type and param_type2 from the cdb_system_parameter table. The combination of these two values provides a unique parameter reference.

Parameter	Description	default value
ARP/DBA	Activity based DB data period The number of days between successive archiving of data stored in the cdb_activity and cdb_activity_parameter database tables. Refer to section 12 of the NHHDA System Management Guide for further details.	3
MDP/MDA	Advance Period for MDD Load The number of days in the future that MDD data will be considered valid. Any data with an Effective From Date > {Current System Date} + {MDD Advance Load Period} will be ignored and not be loaded.	90
NAR/AAV	Aggregate All Valid GSP Groups When set to TRUE, Aggregation will use all valid GSP Groups on the system and report Metering Systems totals to the Operator Log at the end of Aggregation. Also, the GSP Groups scheduled will be amended to reflect those actually used in the run and any changes to the schedules reported to the Operator Log.	TRUE

Parameter	Description	default value
ARP/FAU	Audit log retention period The number of days between successive archiving of audit logs. Refer to section 12 of the NHHDA System Management Guide for further details.	2
ARP/FCE	CDCD exception period The number of days between successive archiving of Check Data Collector Data exception logs. Refer to section 12 of the NHHDA System Management Guide for further details.	7
CSC/CLD	Closedown timeout (secs) The delay in seconds between requesting scheduler closedown and exit	20
ARP/DBF	DB File reference period The number of days between successive archiving of data held in the File Information tables (except cdb_file_processing) listed in section 5.1 of the NHHDA System Management Guide. Refer to section 12 of the NHHDA System Management Guide for further details.	1500
NDB/DBN	Days before Notification In a Data Aggregation Settlement Timetable, the number of working days for which a data aggregation run is scheduled prior to an ISR Notification deadline date.	2
ARP/FER	Error Log Period The number of days between successive archiving of Error Logs. Refer to section 12 of the NHHDA System Management Guide for further details.	7
ARP/FEX	Exception period The number of days between successive archiving of: Data Aggregation Run Exception log; Load SSC Exception Log; Load Data Aggregation Settlement Timetable Exception log. Refer to section 12 of the NHHDA System Management Guide for further details.	7
ARP/FFI	Failed Instructions period The number of days between successive archiving of failed Instructions. Refer to section 12 of the NHHDA System Management Guide for further details.	2
CFR/FRT	File Receipt Timeout (secs) Time after which an incoming file without a footer is deemed to be corrupt. If this parameter value is too low, a large file that takes some time to arrive may be marked as corrupt, even though it has a footer, because the footer arrives after the timeout period	3600
CFS/ALT	File Send Alert Timeout (seconds) Time after which the File Send daemon wakes up if no new file sends are requested, and hence rechecks for files needing resending	10
ARP/FID	Incoming Data File period The number of days between successive archiving of incoming data files. Refer to section 12 of the NHHDA System Management Guide for further details.	2

Parameter	Description	default value
ARP/FIN	Instruction File period The number of days between successive archiving of Instruction Files. Refer to section 12 of the NHHDA System Management Guide for further details.	28
CSC/LOG	Log Directory The directory in which the Scheduler logs are generated. This must be a valid directory and can be either an absolute path or in relation to the directory where the NHHDA executables are installed	../csc_log

NAR/AUD	NAR Audit Log Enabled
	Sets on and off generation of the Aggregation Run Log.
	Valid values for this parameter are:
	    enabled
	    disabled
	    ENABLED
	    DISABLED
		disabled

CFS/NFS	Number of retries Number of attempts by the File Send Process to send a file	3
ARP/FOP	Operator log period The number of days between successive archiving of Operator logs. Refer to section 12 of the NHHDA System Management Guide for further details.	7
CLG/PTM	Pipe timeout (seconds) Time after which if there is no response from the logger the application assumes that the logger daemon is dead	5
CFR/PFQ	Poll frequency (seconds) The number of seconds between polling of the incoming file directory by the File Receipt process	5
ARP/DAG	SPM DB table period Number of days between successive archiving of Supplier Purchase Matrix data in the database. Refer to section 12 of the NHHDA System Management Guide for further details.	900
ARP/FSP	SPM retention period The number of days between successive archiving of Supplier Purchase Matrices. Refer to section 12 of the NHHDA System Management Guide for further details.	5
CSC/LCK	Schedule Lock The name of the lock of the Scheduler. This would be used in the unlikely event of more than one instance of the Scheduler running on a particular server. For example, if the NHHDA and ISRA application software are both running on the same server.	<User Name>_CSC_LOCK
ARP/DBS	Schedule based DB data period The number of days between successive archiving of Settlement based db data. Refer to section 12 of the NHHDA System Management Guide for further details.	900
CSC/ALT	Scheduler Alert timeout (seconds) Time between successive polls for scheduled activities	10

Parameter	Description	default value
SYS/ORG	System Organisation Name Name of the organisation operating the NHHDA system	(defined at installation)
CFS/NRT	Time between retries (secs) Number of seconds between attempts by the File Send Process to send a file to the gateway	30
ARP/FUK	Unknown File Retention Period The number of days between successive archiving of files unrecognised by the NHHDA application software. Refer to section 12 of the NHHDA System Management Guide for further details.	7
NDB/URF	Use Run Date from File The Data Aggregation Run Date is calculated as "Days before Notification for Aggregation Run" working days before the corresponding ISR Notification Deadline Date. (If it is 'TRUE', the date held in the Planned Data Aggregate Run Date field of the Data Aggregation Settlement Timetable Details record is used as the Data Aggregation Run Date.	FALSE
ARP/FUR	User report period The number of days between successive archiving of machine- and human-readable reports. Refer to section 12 of the NHHDA System Management Guide for further details.	2
NDB/VCD	Valid Calendar Days for Run The maximum number of calendar days prior to an ISR Notification deadline date for which a Data Aggregation Run can be scheduled without returning a status of 'error' or Failed.	15
ARP/FDC	DCP retention period The number of days between successive archiving of DC Performance files. Refer to section 12 of the NHHDA System Management Guide for further details.	5
ARP/FIS	Instruction Data Archive period The number of days for which the Instruction Data are retained. Note that if parameter ARP/FIN is greater than ARP/FIS the FIN value will be used as instruction data cannot be archived before the corresponding instruction files have been archived. Refer to section 12 of the NHHDA System Management Guide for further details.	30
ARP/FCS	DC Exception Summary retention period	5
CRP/WFS	Warning File Size (bytes)	50
NMI/EUB	EAC Upper boundary value If the received EAC value is greater than the EAC upper boundary value, the respective instruction will be rejected with the failure reason code NIV	100,000,000.0
NMI/ELB	EAC Lower boundary value If the received EAC value is less than the EAC lower boundary value, the respective instruction will be rejected with the failure reason code NIV	-100,000,000.0

Parameter	Description	default value
NMI/AUB	AA Upper boundary value If the received AA value is greater than the AA upper boundary value, the respective instruction will be rejected with the failure reason code NIV	100,000,000.0
NMI/ALB	AA Lower boundary value If the received AA value is less than the AA lower boundary value, the respective instruction will be rejected with the failure reason code NIV	-100,000,000.0
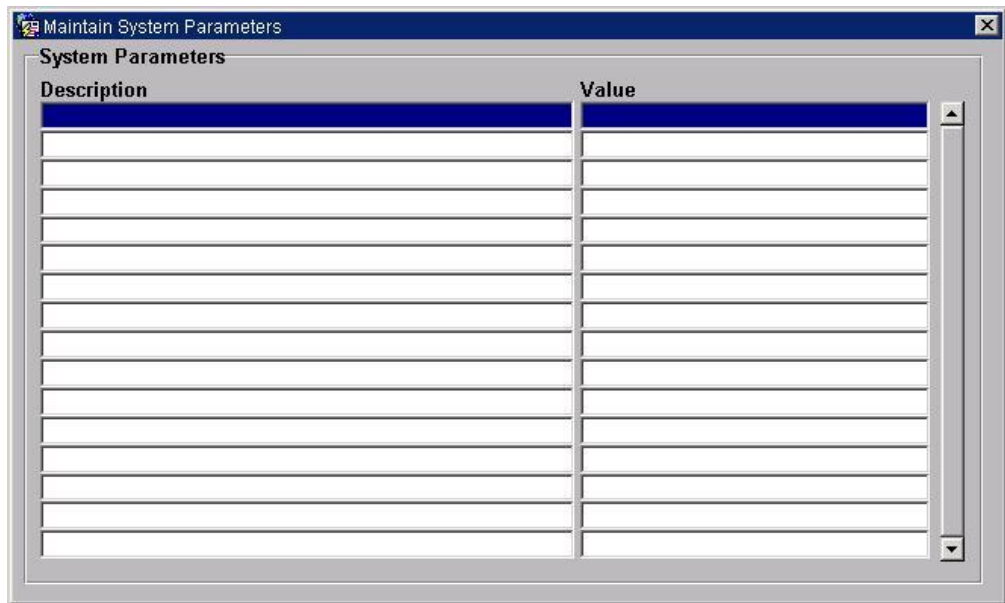
1. Select the required system parameter.

2. Amend the value.

11.1   Field Summary

Field	Details
Description	The description that uniquely identifies the System Parameter. This cannot be modified.
Value	The value of the System Parameter

12   Maintain Threshold Parameters

This form allows you to browse and maintain Threshold Parameters. A Threshold Parameter is the minimum number of EACs/AAs that must be provided for averaging to be used as the mechanism for determining an EAC substitute for missing or invalid EACs/AAs.

When you select this form from the menu, existing Threshold Parameters and the Settlement Dates from which each is effective are displayed.

Note that Threshold Parameters for dates which have already been used in an Initial Settlement may only be entered, deleted or updated by the Superior Market Domain Data Administrator. If you are logged on as Superior Market Domain Data Administrator and change Threshold Parameters under these circumstances, the changes are logged in the Operator Log.

12.1   Create Threshold Parameter

1.   Insert a row.

2.   Enter the Settlement Date from which the Threshold Parameter will be effective. The Settlement Date defaults to the current date. The Settlement Date must be unique.

3.   Enter the Threshold Parameter. This cannot be negative.

12.2   Amend Threshold Parameter

1.   Select the required Threshold Parameter.

2.   You can amend both the Settlement Date and the Threshold Parameter value.   The Settlement Date must be unique and the Threshold Parameter cannot be negative.

12.3   Delete Threshold Parameter

1.   Select the required Threshold Parameter.

2.   Delete the row.

12.4   Field Summary

Field	Details
Settlement Date	The Settlement Date from which the associated Threshold Parameter is effective
Threshold Parameter	Threshold Parameter value

13   Report Average Fractions of Yearly Consumption

This form allows you to specify the parameters for, and initiate a report on Average Fractions of Yearly Consumption.
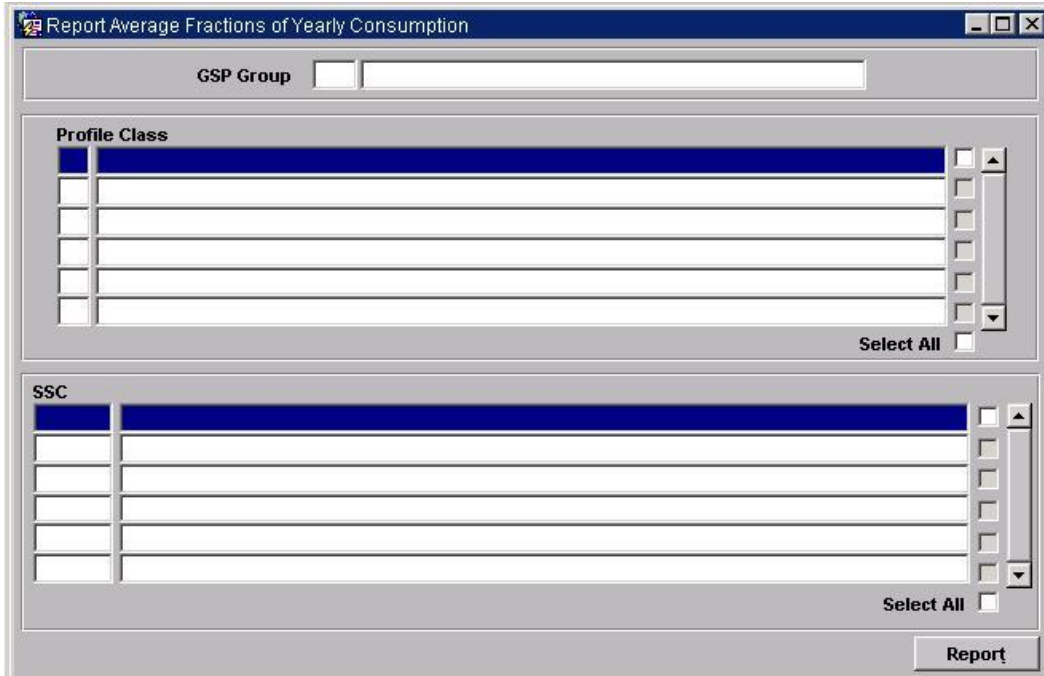
13.1   Specify Parameters and Submit Report

1.   Display the required GSP Group details by executing a query or selecting from a list of values.

2.   Select one or more of the Profile Classes to report on, using the check boxes. To select all Profile Classes, check the Select All check box below the Profile Classes table. Note that for any one report, only one Profile Class is reported on; this is the one that is highlighted by the cursor when the Report button is clicked.

3.   For each Profile Class checked for inclusion in the report, select one or more of the Standard Settlement Configurations, using the check boxes. To select all Standard Settlement Configurations for a particular Profile Class, check the Select All check box below the Standard Settlement Configuration rows.

4.   When you have specified all required parameters, click on the Report button to schedule the report.

An example and description of the Average Fractions of Yearly Consumption report is contained in Appendix B.

13.2   Field Summary

Field	Details
GSP Group	Unique id of a GSP Group and its description

Field	Details
Profile Class	Id and description of the Profile Class for the selected GSP Group
Profile Class check box	Check this to report on the corresponding Profile Class
Profile Class Select All	Check this to report on all Profile Classes for the current GSP Group
SSC	Standard Settlement Configuration Id and description corresponding to the currently selected Profile Class
SSC check box	Check this to report on the corresponding Standard Settlement Configuration
SSC Select All	Check this to report on all Standard Settlement Configurations for the current Profile Class

Please note that the Additional Information column in the Reports for Viewing screen will display GSP Groups and Profile Classes selected and may also include SSC if selected.

14   Report Distributors and Associated Items

This form enables you to generate a report detailing Distributors, their Line Loss Factor Classes and PRS Agent Appointments.

14.1   Specify Parameters and Submit Report

1.   Select one or more of the Distributors, using the check boxes. To select all Distributors, check the Select All check box. If a single Distributor is selected, you can restrict the Line Loss Factor Classes for the Distributor that are reported on.

2.   Click on the Report button to schedule the report.

14.2   Field Summary

Field	Details
Distributor	Name of a Distributor
Distributor Short Code	Short Code of a Distributor
Distributor check box	Check this to report on the corresponding Distributor
Distributor Select All	Check this to report on all Distributors
Line Loss Factor Class	Line Loss Factor Class Id and description
LLFC check box	Check this to report on the corresponding Line Loss Factor Class
LLFC Select All	Check this to report on all Line Loss Factor Classes for the selected Distributor

Please note that the Additional Information column in the Reports for Viewing screen will display Distributor IDs and/or LLFC selected.

15 Report GSP Groups

This form enables you to generate a report showing information on selected GSP Groups and their associated Distributor details and ISR Agent Appointments.
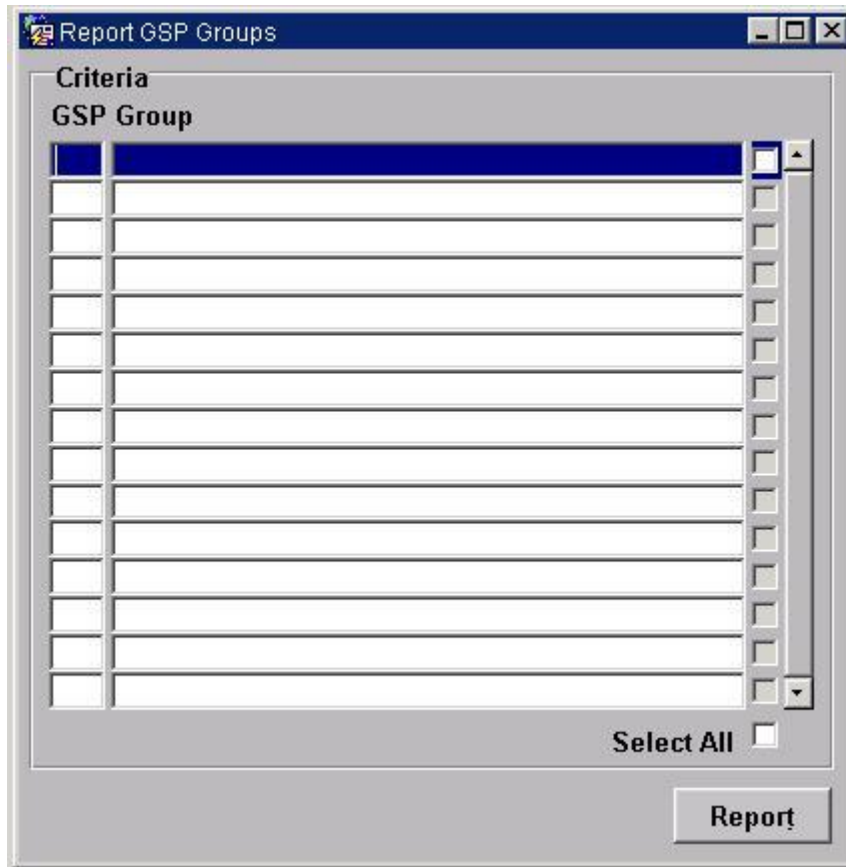
15.1 Specify parameters and submit report

1. Select one or more Ids of GSP Groups that you want to report on, by checking the check boxes corresponding to those GSP Groups. To report on all GSP Groups, check the Select All check box. Display a subset of all GSP Groups by executing a query on GSP Group Id or displaying a list of values.

2. Click on the Report button to initiate the report.

An example of the GSP Groups report is shown in Appendix B.

Refer to section 38 for information on viewing and printing the report.

15.2 Field Summary

Field	Details
GSP Group	The unique id and the description of a GSP Group
Check box	Select this to report on the corresponding GSP Group
Select All	Select this to report on all GSP Groups

Please note that the Additional Information column in the Reports for Viewing screen will display GSP Groups IDs selected.

16   Report Profile Classes and Associated Items

Use this form to generate a report containing details of selected Profile Classes and associated GSP Group Profile Class Researched Default EACs.
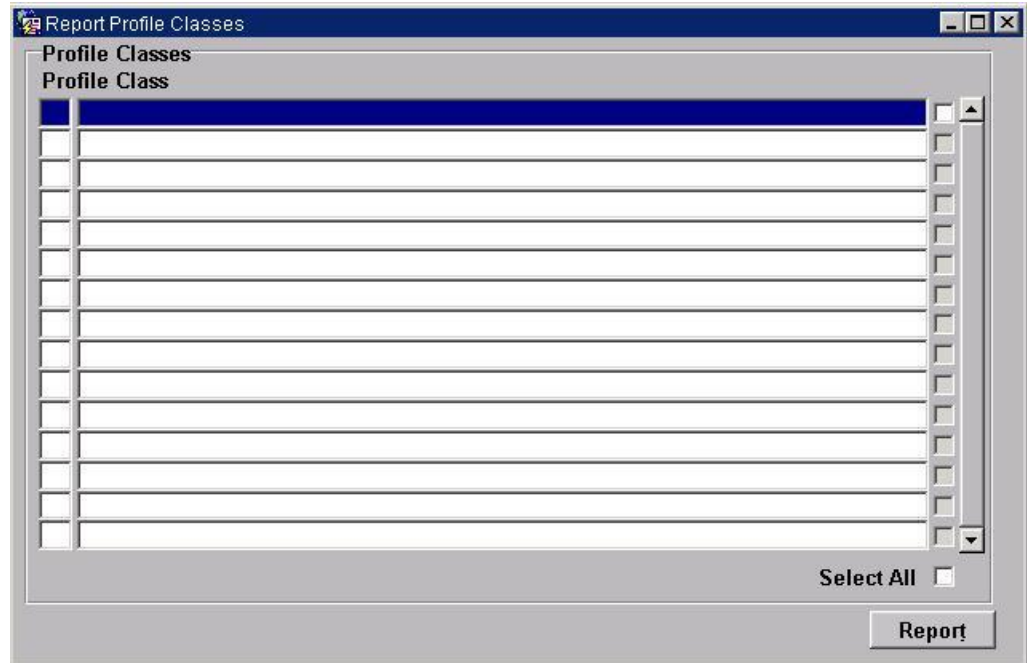
16.1   Specify Parameters and Submit the Report

1.   Report on one or more Profile Classes, by executing a query, selecting from a list of values, or using the check boxes or Select All check box.

2.   Click on the Report button.

An example of the report is given in Appendix B.

For further information about viewing and printing reports, refer to section 38.

16.2   Field Summary

Field	Details
Profile Class	Profile Class Id and description
Check box	Select the check boxes corresponding to the Profile Classes for which the report is required
Select All	Enables the selection of all Profile Classes for reporting

Please note that the Additional Information column in the Reports for Viewing screen will display Profile Class IDs selected.

17   Report Standard Settlement Configurations

You can use this form to report on Standard Settlement Configurations and associated Measurement Requirements, Valid Settlement Configuration Profile Classes and Average Fractions of Yearly Consumption.

On entry to the form, all Standard Settlement Configurations are displayed.
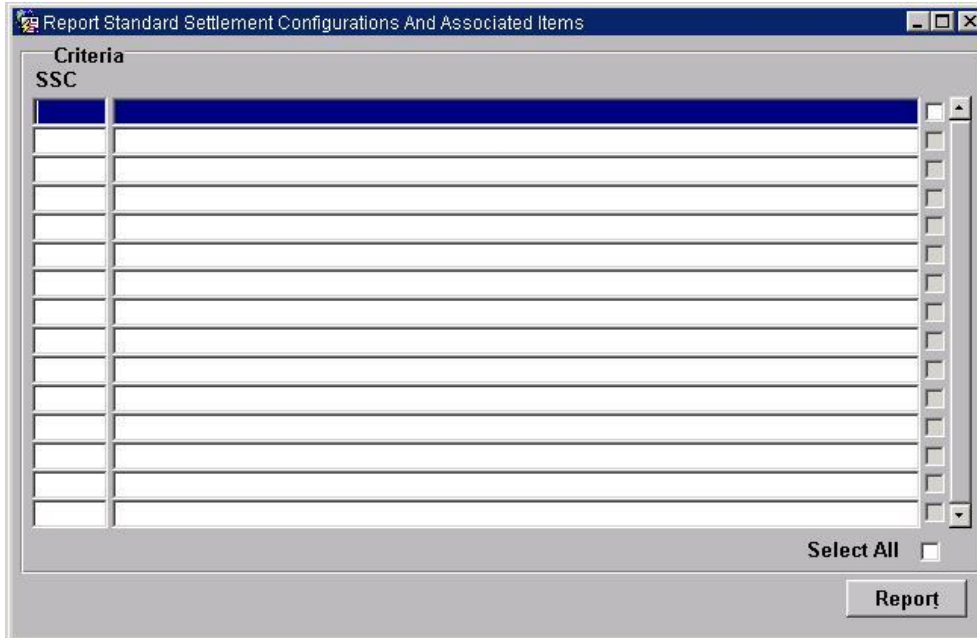
17.1   Specify Parameters and Submit Report

1.   Select one or more Standard Settlement Configurations by executing a query on Standard Settlement Configuration Id, selecting from a list of values, or using the individual or Select All check boxes.

2.   Click on the Report button to submit the report.

An example of the report produced is given in Appendix B.

For further information on displaying and printing the report, see section 38.

17.2   Field Summary

Field	Details
SSC	Standard Settlement Configuration Id and description
check box	Select the check boxes corresponding to the Standard Settlement Configurations for which the report is required
Select All	Enables the selection of all Standard Settlement Configurations for reporting

Please note that the Additional Information column in the Reports for Viewing screen will display SSC IDs selected.

18   Report Metering Systems and Associated Items

This form enables you to report on Metering Systems and associated items, such as GSP Group, Supplier, Profile Class and Standard Settlement Configuration, for a selected Settlement Date.

18.1   Specify Parameters and Submit Report

1.   Enter a Metering System Id and Settlement Date.

The Supplier Registration in effect for the Metering System on the entered date is determined and a list of all the Data Collectors appointed during the Registration is displayed.

2.   Select the required Data Collector, and click on the Report button.

Only one Data Collector can be reported on at a time.

The report includes items associated with the Metering System on the specified Settlement Date that have been received from the PRS Agent and the specified Data Collector in Instruction Files. The effective dates of these items are the latest ones prior or equal to the Settlement Date entered.

A description and an example of the Metering Systems Report are contained in Appendix B.

For further information on displaying and printing the report, see section 38.

18.2   Field Summary

Field	Details
Metering System	Metering system id
Settlement Date	Settlement Date
Data Collector	Data Collector Id and name
Calendar Date	The first date of the period for which the Data Collector Appointment to the Registration is effective.

Please note that the Additional Information column in the Reports for Viewing screen will display Metering System ID and Settlement Date selected.

19   Report Metering System History, EACs and AAs

Use this form to produce a report on Metering System History, Estimations of Annual Consumption (EACs) and Annualised Advances (AAs).

19.1   Specify Parameters and Submit Report

1.   Enter the Id of the Metering System and Settlement Dates that you want to report on.

2.   The report is in two parts:

   i)   Metering System History

   The History of the Metering System Id between the Dates entered is reported. Note that the Standard Settlement Configuration and Data Collector in the lower part of the screen is only used by the Estimated Annual Consumption and Annualised Advances part of the report and there may be a History for the Metering System where no Standard Settlement Configuration and Data Collector data is present.

   ii)   Estimated Annual Consumption and Annualised Advances

   Check the check box for the required Standard Settlement Configuration and Data Collector combination(s) to report EAC and AA data for. If no Standard Settlement Configuration and Data Collector combination is selected only the History is reported.

3.   Click on the Report button to schedule the report.

For an example of the report, refer to Appendix B.

For further information about viewing and printing the report, see section 38.

19.2   Field Summary

Field	Details
Metering System	Metering system id
SSC	Standard Settlement Configuration Id and description

Field	Details
Settlement Start Date	Settlement Date from which to begin reporting on the selected Metering System.
Settlement End Date	Settlement Date at which to end reporting on the selected Metering System.
Time Pattern Regime	Time Pattern Regime for the displayed Standard Settlement Configuration and Metering System
Data Collector	Data Collector Id and name

Please note that the Additional Information column in the Reports for Viewing screen will display Metering System ID, Settlement Date Start and End entered and Settlement Register/Data Collector Data if selected.

20   Report D0095 Exception Summary

Use this form to produce a summary of D0095 exceptions report.

20.1   Specify Parameters and Submit Report

1.   Enter the file creation date range.

2.   Click on the Report button.

For an example of the report, refer to Appendix B.

For further information about viewing and printing the report, see section 38.

20.2   Field Summary

Field	Details
From Date	File creation date from which to begin reporting on
To Date	File creation date at which to end reporting

21   Browse and Schedule Aggregation Run

The default schedule is prepared by the Data Aggregation and Settlement Timetable File, which is automatically loaded by the NHHDA system.

Note: Any Settlement Date already on the database which has no Data Aggregation runs scheduled for that date will be overwritten with the details from the file when it is loaded in.

This form enables you to:

- browse aggregation runs;

- re-schedule data aggregation runs;

- to schedule new runs;

- to change the status of a scheduled run;

- to delete data aggregation runs;

- to add or remove the GSP Groups to be included in a run;

- add, modify and delete settlements.

No run will actually start until the status of the run has been set to 'Released'. For data aggregation runs with a status of 'Released', the system will automatically trigger the data aggregation run at the time requested.

To enable Auditors to check the data that is used in a Data Aggregation Run, an audit log, (the Data Aggregation Log), can optionally be generated during a Data Aggregation Run. The mechanism to enable or disable the creation of the log is via the Maintain System Parameters form, described in section 11. It is recommended that this logging is only enabled in a non-live environment to support the requirements of the Auditor, as the log is likely to be large. Refer to the NHHDA System Management Guide, section 9.3, for further information about auditing.

Additionally, to enable Auditors to check the data used in a Data Aggregation Run, a backup of the database is performed at the end of the Aggregation Run process. To ensure that the data in this backup is consistent with the data held in the database when the aggregation was performed, the Data Aggregation Run process sets a lock to ensure that the database cannot be updated until after the backup has completed. This lock must be removed manually after the backup has finished. This is described in the NHHDA System Management Guide.

21.1 Enter Criteria for Displaying Settlement and Run Details

Enter any of the following:

1.   Settlement Date Range.

2.   Run Date Range.

3.   Settlement Code.

4.   Data Aggregation Run Status.

5.   Data Aggregation Run Number.

6.   Execute a query.

A list of settlements is then displayed based on the date information entered.

For each Settlement, the Settlement Code is populated with one of the following values:

- **SF** - Initial Settlement;
- **R1** - First Reconciliation;
- **R2** - Second Reconciliation;
- **R3** - Third Reconciliation;
- **RF** - Final Reconciliation;
- **DR** - Dispute;
- **DF** - Final Dispute.

The Number Of Runs shows the number of aggregation runs for which details have been set up and saved in the Runs part of the form.

As you navigate through each Settlement, Aggregation Runs that have been defined are displayed in the lower part of the form.

Status is populated with one of the following values:

- **P** - Provisional;
- **A** - Approved;
- **R** - Released;
- **U** - Running;
- **F** - Failed;
- **S** - Successful;
- **D** - Provisional Default.

The Status of Data Aggregation Runs loaded automatically from the Data Aggregation and Settlement Timetable File is usually 'Released'. When a Data Aggregation Run is loaded, if the value of "Use Run Date from File" is TRUE, the Data Aggregation Run Date for that Settlement Date is taken from the file, whereas if it is set to FALSE, then the run date is set to be a number of days before the ISR Notification Date. This number of days can be configured using the Maintain System Parameters form (see section 11).   If the run date determined by this Days before Notification value is not a working day, or is more than a user configurable number ("Max Days before Notification for Aggregation Run"), then the Data Aggregation Run is scheduled for the Planned Data Aggregation Run Date field, with a status of "Provisional Default".

The Operator and Error logs can be used to identify the cause of failure of an aggregation run.

Note that the Run Time is populated by the aggregation process, and shows the time at which the corresponding aggregation run was performed.

To view the GSP Groups relating to a run, click on the Select GSP Grps button. The following pop-up window is displayed:

This screen displays a list of GSP Groups. The check boxes of GSP Groups relating to the run are ticked. Individual GSP Groups can also be selected by ticking the checkbox. Selecting the All GSP Grps button displays a list of all GSP Groups with all the GSP Group ticked regardless of whether the GSP Group is assigned to the run or not. If the run status is not provisional or provisional default, selecting the 'All GSP Group' button will display a message stating that GSP Groups cannot be inserted, updated, or deleted unless run status is provisional or provinal default. In this circumstance, only the GSP Groups assigned to the run are ticked.

The bottom of the screen displays the value of Aggregate All Valid GSP Groups.

If the System Parameter "Aggregate All Valid GSP Groups" is set to TRUE, then during Aggregation, ALL GSP Groups will be considered. At the end of Aggregation, the GSP Groups that actually contained Metering Systems will be compared with those scheduled, and the list will be amended to those GSP Groups used in the run. Any additions/deletions will be notified in the Operator Log.

If the System Parameter "Aggregate All Valid GSP Groups" is set to FALSE, then during Aggregation, only the GSP Groups chosen on the screen are used in the run; if no GSP Groups are chosen, then a warning message is displayed to the user when the run is set to Released.

If the Settlement Code is "DR" or "DF" (i.e. the run is a dispute run) and no GSP Groups are chosen on the screen, then, regardless of the value of the System Parameter "Aggregate All Valid GSP Groups", a warning message is displayed to the user when the run is set to Released.

21.2   Add a Settlement

1.   Insert a row in the Settlement part of the form.

2.   Enter the Settlement Date, Settlement Code (as listed in section 21.1) and ISR Notification Date. The Settlement Date defaults to today's date, the Settlement Code defaults to SF (Initial Settlement).

The Number Of Runs will show the number of Data Aggregation Runs for the Settlement, once they have been set up, as described in section 21.5.

21.3   Amend a Settlement

1.   Display the required Settlement details as described in section 21.1.

2.   Amend the ISR Notification Date.

21.4   Delete a Settlement

1.   Display the required Settlement details as described in section 21.1.

2.   Select the required Settlement and delete the row.

Note that a Settlement cannot be deleted if Data Aggregation Runs have been scheduled for that Settlement.

21.5   Schedule a New Data Aggregation Run

1.   Position the cursor on the Settlement for which you want to schedule an Aggregation Run. Any existing runs for that Settlement are displayed in the Runs part of the form.

2.   Position the cursor on the Runs part of the form and insert a new row. The Run Date defaults to the current system date; if you amend this date, it must not be earlier than the current system date. The Status defaults to P (Provisional); see section 21.1 for information about this status. Refer to section 21.6 for information about changing the Status.

3.   Click on the Save button to create the new Aggregation Run, (a message is displayed in the Status Line prompting you to do so). A Run Number is generated, and cannot be modified.

4.   Specify GSP Groups to be added to the Data Aggregation Run. Click on the Select GSP Grps button. Add GSP Groups by selecting the check box next to the desired GSP Group. Save the changes before returning to the Schedule Aggregation Runs form. The number of GSP Groups for an Aggregation Run, displayed in the Number of GSP Groups field on the Schedule Aggregation Run form is updated.

21.6   Reschedule or Modify a Data Aggregation Run

1.   Display the required run, using standard query functionality.

The Status of a Data Aggregation Run can be updated to Approved once it has been checked by suitably authorised personnel. For Data Aggregation Runs *only* with the Released status, the system will automatically trigger the Data Aggregation Run at the time specified. To cancel the Run before it starts, the Status must be changed back to Provisional.

To reschedule or modify a Data Aggregation Run that has a Status of Approved or Released, other than to change the Status to Approved or Released, you must first change the Status to Provisional.

If the current date is after the run date (ie. the run was scheduled to have already occurred but it did not happen), then the run can be modified by setting the status to Provisional, then modifying the Run Date to today, or later and then saving the change. The Run Date or GSP Groups can then be modified.

If the current date is the same as or later than the run date, then the run can be modified by setting the status to Provisional and then saving the change. The Run Date or GSP Groups can then be modified.

Note that the system will not allow a Data Aggregation Run to be rescheduled or modified if it has already taken place, i.e. if the Status is Running, Failed or Successful.

2.   Reschedule the Data Aggregation Run, by changing the Aggregation Run Date.

3.   Update the Settlement Code and/or Status as required.

4.   Optionally, specify GSP Groups to be added to or removed from the Data Aggregation Run. Click on the Select GSP Groups button. Add or remove GSP Groups by selecting or de-selecting the check box. Save the changes before returning to the Schedule Aggregation Runs form. The number of GSP Groups for an Aggregation Run, displayed in the Number of GSP Groups field on the Schedule Aggregation Run form is updated.

5.   Set the Status to Approved or Released if required.

21.7   Submit Data Aggregation Runs to the Scheduler

To submit Data Aggregation Runs to the Scheduler, use the nhh_submit.exe command from the server Operating System command line. An overview of this command is given in section 4.6; characteristics of this command specific to submitting Data Aggregation Runs are described further here.

The basic command for submitting Data Aggregation Runs is as follows:

```
nhh_submit.exe a -Run Time Flag -Recovery Flag
```

The processing performed depends on the value specified for the Recovery Flag, (START, RESTART, CONTINUE, ABORT), as follows:

START

The START Recovery Flag should be used when the previous Data Aggregation Run has completed normally.

All temporary files and records of them in the database are deleted.

All *incomplete* Supplier Purchase Matrix files are deleted. Note that *completed* Supplier Purchase Matrix files which may have been sent to the ISR Agent or Suppliers are not deleted.

The status of any previous Data Aggregation Runs that terminated abnormally is set to Failed.

If the Run Time flag has been specified as -NOW, the status of Data Aggregation Runs with a status of Released and a Run Date equal to or before today, is set to Running.

If the Run Time flag has been specified as -TONIGHT, the status of Data Aggregation Runs that have a status of Released, and a Run Date equal to or earlier than the current date/time + 12 hours, the status is set to Running. Refer to section 4.6 for an example of this flag.

If the Run Time Flag has been specified as -YYYYMMDD, for Data Aggregation Runs with a status of Released, and a Run Date equal to or earlier than the date specified, the status is set to Running.

The aggregation calculations are performed, and the Supplier Purchase Matrix files are created for transmission to the ISR Agent, also corresponding Supplier Purchase Matrix files are generated for the Suppliers.

RESTART

The RESTART Recovery Flag should be used to re-run a Data Aggregation Run that has completed abnormally.

All temporary files and records of them in the database are deleted.

All *incomplete* Supplier Purchase Matrix files are deleted. Note that *completed* Supplier Purchase Matrix files which may have been sent to the ISR Agent are not deleted.

The aggregation calculations are performed, and the Supplier Purchase Matrix files are created for transmission to the ISR Agent, and also to the corresponding Suppliers.

CONTINUE

The CONTINUE Recovery Flag should be used to continue processing of a Data Aggregation Run that has terminated abnormally, from the beginning of the stage in the run that failed.

All *incomplete* temporary files and records of them in the database are deleted.

All *incomplete* Supplier Purchase Matrix files are deleted. Note that *completed* Supplier Purchase Matrix files which may have been sent to the ISR Agent are not deleted.

Aggregation processing is performed, starting from the beginning of the stage that terminated abnormally.

ABORT

The ABORT Recovery Flag should be used when the previous Data Aggregation Run has completed abnormally, and you do not want the system to attempt to recover it.

All temporary files and records of them in the database are deleted.

All *incomplete* Supplier Purchase Matrix files are deleted. Note that *completed* Supplier Purchase Matrix files which may have been sent to the ISR Agent are not deleted.

All records in the Supplier Purchase Matrix database table for the incomplete Supplier Purchase Matrix files are deleted.

The status of the Data Aggregation Run is set to Failed.

21.8 Field Summary

Field	Details
Settlement Date From	Settlement Date from which to begin searching for Aggregation Runs where the Settlement Date falls into the Settlement Date Range
Settlement Date To	Settlement Date at which to end searching for Aggregation Runs where the Settlement Date falls into the Settlement Date range
Run Date From	Aggregation Run Date from which to begin searching for Aggregation Runs
Run Date To	Aggregation Run Date at which to end searching for Aggregation Runs
Settlement Code	The code that identifies an Initial Settlement or Reconciliation (according to the Pool's settlement timetable) on which to search on.
Status	Status of Data Aggregation Run to search on
Data Aggregation Run No.	Settlement's Data Aggregation Run to search on.
Settlement Date	The Settlement Date associated with the Data Aggregation Run
Settlement Code	The code that identifies an Initial Settlement or Reconciliation according to the Pool's settlement timetable
ISR Notification Date	The date by which the ISR Agent must receive the Supplier Purchase Matrix produced for this Settlement
Number of Runs	The number of Data Aggregation Runs for that Settlement
Number	The unique number automatically allocated by the NHHDA system to a Data Aggregation Run
Date	The date of the Data Aggregation Run
Time	The time of the Data Aggregation Run if it has already taken place
Status	The current status of the run
Number of GSP Groups	The number of GSP Groups associated with the selected Data Aggregation Run
(GSP Group)	The unique id of a GSP Group
(Name)	The description of a GSP Group
(GSP Group Select)	Check box to add or remove the GSP Groups from the Data Aggregation Run
(Select All)	Check box to include all GSP Groups in the Data Aggregation Run

22   Check Data Collector Data

This form allows you to request a report that shows any discrepancies between data received from a Data Collector and Metering System data received from a PRS, or to amend or delete previously submitted report requests.

22.1   Specify Parameters and Request Report

1.   Optionally, select a Supplier, Data Collector and PRS Agent by selecting from lists of values.

2.   Enter a Settlement Date range for the report. The From Settlement Date and To Settlement Date default to the current date.

3.   Click on the Process button to request generation of the report.

It is possible to leave empty one or more of the Supplier, Data Collector or PRS Agent parameters. This will result in the following behaviour:

- If a specific Supplier/Data Collector combination is specified, a report will be requested for that combination.

  NB: An empty report will be generated if there are no exceptions for an active combination. An empty report will also be generated if the specified combination is inactive;

- If the Supplier/Data Collector combination is not specified, a report will be requested for each active Supplier/Data Collector combination. A report will not be requested for inactive combinations.

  NB: An empty report will be generated for each active combination if no exceptions are present for that combination;

- If the Data Collector is specified but the Supplier is not specified a report will be requested for each possible combination (both active and inactive) of Supplier with the specified Data Collector.

  NB: An empty report will be generated for each active combination if no exceptions are present for that combination. An empty report will also be generated for inactive combinations;

- If the Supplier is specified but the Data Collector is not specified a report will be requested for each active combination of Data Collector with the specified Supplier. A report will not be requested for inactive combinations;

  NB: An empty report will be generated for each active combination if no exceptions are present for that combination;

- If a PRS Agent is specified only Metering Systems for their Distribution Business will be included (subject to the specified Supplier and Data Collector parameters). If the PRS Agent is not specified all Metering Systems will be included (subject to the specified Supplier and Data Collector parameters).

An active Supplier/Data Collector combination is one where the Supplier has appointed the Data Collector according to PRS, or where the Data Collector has sent consumption data for the Supplier.

N.B : When pressing the Process button, a message "No changes to save" is displayed on the status bar. This indicates that no changes have been made to the 'Current CDC Job Specifications' block.

22.2   Specify Parameters and Modify or Delete Report Requests

1.   Optionally, select a Supplier, Data Collector and PRS Agent by selecting from lists of values.

2.   Enter a Settlement Date range for the report. The From Settlement Date and To Settlement Date default to the current date.

3.   Execute Query to display a list of the report requests currently awaiting processing that match the specified criteria.

The selected report requests are displayed in the Current CDC Job Specifications block. You can then modify the Supplier, Data Collector, PRS Agent, From Date or To Date of any report request, or delete any report request. Pressing the Process button will commit the changes you have made, provided no Check Data Collector Run is currently in progress.

22.3   Submit Check Data Collector Data Run to the Scheduler

To submit a Check Data Collector Data Run to the Scheduler, use the nhh_submit.exe command from the server Operating System command line. An overview of this command is given in section 4.6.

The basic command is as follows:

```
nhh_submit.exe c
```

The output of the Check Data Collector Data process is a Check Data Collector Log, which is automatically sent to the Supplier.

A report can be generated from the output of this process via the Browse File Extraction and Transmission Statuses form. Refer to section 25 for further information.

22.4   Field Summary

Field	Details
Supplier	Id and description of a Supplier
Data Collector	Id and description of a Data Collector
PRS Agent	Id and description of a PRS Agent
From Settlement Date	Settlement Date from which to begin the report
To Settlement Date	Settlement Date at which to end the report

23   Report Aggregation Run Schedule

Use this form to enter the criteria for, and submit a report on Aggregation Runs.

23.1   Specify Parameters and Submit Report

1.   Enter either a Settlement Date range or a Run Date range.

2.   Click on the Report button.

To view or print the report, use the Select Reports form, described in Section 38.3.

Refer to Appendix B for an example of this report.

23.2   Field Summary

Field	Details
Settlement Date From	Settlement Date from which to begin reporting on Aggregation Runs where the Settlement Date falls into the Settlement Date Range
Settlement Date To	Settlement Date at which to end reporting on Aggregation Runs where the Settlement Date falls into the Settlement Date range
Run Date From	Data Aggregation Run date from which to begin reporting
Run Date To	Data Aggregation Run date to which to end reporting

24   Generate Supplier Purchase Matrix

From this form, you can extract Supplier Purchase Matrix data from a previous Data Aggregation Run for resending to the ISR Agent.

24.1   Enter Criteria and Send SPM

1.   In query mode, enter the Settlement Date for the Data Aggregation Run. All Data Aggregation Runs for the entered Settlement are displayed.

2.   Select the Data Aggregation Run for which the Supplier Purchase Matrix is required.

3.   Click on the Process button to extract the data.

If the Data Aggregation Run is not the latest for the selected Settlement Date, a warning is displayed. You can acknowledge this warning and continue the extraction.

A set of Supplier Purchase Matrix files, (one for each GSP Group included in the selected run), is created and each is sent to the currently appointed ISR Agent for that GSP Group, via the gateway, also the corresponding Supplier Purchase Matrix files are sent to the Suppliers. Note that the appointed ISR Agent is determined by the BETTA Start Date for Scottish GSP Groups:

- For settlement dates before the BETTA Start Date the ISR Agent for Scottish GSP Groups will be that stored in the 'SPI' system parameter (i.e. IAR).

- For settlement dates on or after the BETTA Start Date for Scottish GSP Groups, the ISR Agent appointments will be set up via MDD file or the GSP groups Form in the same way that English and Welsh GSP Group ISR Agent appointments are set up.

24.2 Field Summary

Field	Details
Settlement Date Effective	The Settlement Date for which the Data Aggregation Run that produced the Supplier Purchase Matrix is applicable
Run Number	The run number of the Data Aggregation Run
Settlement Code	The code that identifies an Initial Settlement or Reconciliation according to the Pool's settlement timetable
Date	The date on which the Data Aggregation Run was performed
Time	The time at which the Data Aggregation Run was

25   Browse and Report File Extraction and Transmission Statuses

This set of forms enables you to display and report on files that have been extracted from the database and files, other than those associated with aggregation, that have been transmitted to other Market Participants. Such files include Check Data Collector Logs and Operator Log, and Failed Instructions File. Aggregation files, such as Supplier Purchase Matrices and Aggregation Exception Logs can be viewed / reported upon by using the Browse Aggregation Files. The files will be displayed in date extracted order (within the file ids) in descending order.

1.   Enter any of the selection criteria for the files to be displayed:

- one or a range of dates during which the file was extracted - these dates default to yesterdays date for the From Date and todays date for the To Date;

- the type of the file, which can be selected from a list of values;

- the Market Role of the recipient of the file, if the file has been transmitted or is to be transmitted to another Market Participant via the Gateway (this criteria field is not applicable for files that are not sent by the NHHDA application software);

- the Participant Id of the recipient of the file, if the file has been transmitted or is to be transmitted to another Market Participant via the Gateway (this criteria field is not applicable for files that are not sent by the NHHDA application software);

- the Status of the file. All possible file statuses are available from a list of values. You can select all files with a particular status from the Status list of values.

  A subset of these are applicable to extracted or transmitted files:

- **New** - a file that is being generated by the NHHDA application software but is not yet complete, for example reports.

- **Completed** - a file that has been created by the NHHDA application software, but has not been transmitted to the gateway.

- **Sent** - a file that has been created by the NHHDA application software and has been transmitted to the gateway.

- **Default** - this status is used to manage files where the combination of file type and file status is not defined in the database. (For example, if the combination of L0044001 and the status of 'Completed' is not held in the database, the directory identified by the combination of L0044001 and 'Default' is used to store the file.)

- **Deleted** - this status is for temporary files used by batch processes, eg. PRS Refresh.

The details of extracted and transmitted files that meet the criteria are displayed in the File Extraction and Transmission Statuses part of the form.

2. You can navigate through the file details. For the following file types, additional functionality is provided:

    -
    - Check Data Collector Data;
    - Failed Instructions File;

    See below.

    -

25.1   Failed Instructions Files

If you navigate to a Failed Instructions File the Resend button is enabled.

25.2   Check Data Collector Data Files

If you navigate to a Check Data Collector Data file the Resend and Report buttons are enabled. When the Report button is enabled additional report criteria may be entered as follows :

1. A Metering System Id

2. An Exception Type Id as report criteria.

To generate a report, click on the Report button.

The available Exception Types are as follows:

Check Data Collector Data Exception Log

Missing Consumption Data

For each Data Aggregator Appointment, (AAs and EACs refer to data from any Data Collector with an appointment to the Supplier to which the Data Aggregator is also appointed).

E01   E01s should be generated when the PRS appointed NHHDC is not sending AAs and EACs to the (PRS) appointed NHHDA. (ie. This exception is raised when there is no AA or EAC at all for this Metering System)

        The E01 is sent to the supplier according to PRS.

E02   E02s should be generated when the PRS appointed NHHDC is not sending AAs and EACs to the (PRS) appointed NHHDA. (ie. This exception is raised when there is an AA but where there is a period after the latest AA that does not have an AA or an EAC.)

        The E02 is sent to the supplier according to PRS.

Extraneous Consumption Data

Where there is a Registration to the specified Supplier according to either or both the PRS Agent and the specified Data Collector.

E03   E03s should be generated when AAs are being received from a DC that has not been appointed, or if AAs are being received when the DA has not been appointed. (ie. This exception is raised when there is an AA that does not overlap with a NHHDA appointment.)

        The E03 is sent to the supplier according to the DC.

E04   E04s should be generated when EACs are being received from a DC that has not been appointed, or if EACs are being received when the DA has not been appointed. (ie. This exception is raised when there is an AA that does not overlap with a NHHDA appointment.)

        The E04 is sent to the supplier according to the DC.

Consumption while de-energised

E05   E05s should be generated when a de-energised metering system has a non zero AA. (ie. This exception is raised when a metering system has a non zero AA whilst it is de-energised according to NHHDC).

        The E05 is sent to the supplier according to PRS.

Inconsistent Consumption

For each Data Aggregator Appointment.

E06   E06s should be generated when the PRS appointed DC has not sent an AA in the past. (ie. This exception is raised when there

is an AA but where there is a period before this AA that does not have an AA.)

The E06 is sent to the supplier according to PRS.

E07   E07s should be generated when overlapping AAs are received from two NHHDC's. (ie. This exception is raised when a change of DC has failed to work correctly, resulting in overlapping AA consumption data.)

The E07 is sent to the supplier according to PRS.

Inconsistent PRS and Data Collector Views

Differences between the PRS view and the Data Collector's views of the Metering System's relationship with any of the following during any Data Aggregator Appointment and the specified date range. These exceptions are only generated if consumption data (EACs or AAs) has been received from the DC in the period of the exception

E08   E08s should be generated when PRS or DC hold an incorrect record of the metering systems' Supplier during a period overlapping a DAA. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Supplier is for a particular date which falls within a DAA.)

The E08 is sent to the supplier according to PRS.

E09   E09s should be generated when PRS or DC hold an incorrect record of the metering systems' Measurement Class. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Measurement Class is for a particular date.)

The E09 is sent to the supplier according to PRS.

E10   E10s should be generated when PRS or DC hold an incorrect record of the metering systems' GSP Group. (ie. This exception should be raised when the DC and PRS agent have a different view of what the GSP Group is for a particular date.)

The E10 is sent to the supplier according to PRS.

E11   E11s should be generated when PRS or DC hold an incorrect record of the metering systems' Profile Class. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Profile Class is for a particular date.)

The E11 is sent to the supplier according to PRS.

E12   E12s should be generated when PRS or DC hold an incorrect record of the metering systems' Energisation Status. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Energisation Status is for a particular date.)

The E12 is sent to the supplier according to PRS.

E13   E13s should be generated when PRS or DC hold an incorrect

record of the metering systems' Standard Settlement Configuration. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Standard Settlement Configuration is for a particular date.)

The E13 is sent to the supplier according to PRS.

E14   E14s should be generated when PRS or DC hold an incorrect record of the metering systems' Supplier. (ie. This exception should be raised when the DC and PRS agent have a different view of what the Supplier is for a particular date.)

The E14 is sent to the supplier according to DC.

Note: The E14 exception is not simply the converse of E08.

- The E08 is sent to the Supplier according to PRS and requires the mismatch to be within a PRS registered NHHDA appointment

- The E14 is sent to the Supplier according to DC and does not require the mismatch to be within a NHHDA appointment

- This means that an E08 exception will always have a corresponding E14 exception but an E14 exception will not necessarily have a corresponding E08

For examples of the Data Collector Exception Log, and the meanings of the report components, refer to Appendix B. For information on displaying and printing the logs, refer to section 38.

Archiving

It should be noted that exceptions prior to the archive date are not reliable.

For example: if there exists in the database a DAA two EACs for the same appointed supplier, no E01 is raised. If archiving then occurs, with the archive date set after the effective from date of the second EAC, the earlier EAC is then removed from the database. When CDCD is next run this will result in an E01 being produced for the appointed period prior to the remaining EAC. If archiving occurs again, the E01 will be removed (as specified by the archiving rules).

Such exceptions will only be evident to the user if the reporting period selected is prior to the archive date.

Any selected exception types appear on the additional information column of the Reports for Viewing screen.

25.3   Field Summary

Field	Details
Criteria Block	
From Date	The start date in a date range during which files were extracted
To Date	The end date in a date range during which files were extracted
Type	The type of file to search for

Field	Details
Market Role	The Market Role of the Participant to whom files are to be sent or have been sent
Participant	The Id of the Participant to whom files are to be sent or have been sent
Status	The Status of the file
File Extraction and Transmission Statuses Block	
Participant	The Participant Id of the recipient of the file if the file is transmitted to the Gateway (blank otherwise) and the Market Role of the recipient of the file if the file is transmitted to the Gateway (blank otherwise)
Date Extracted	The date on which the file was extracted
Date Transmitted	The date on which the file was transmitted to the Gateway
File Type	The type of file
Status	File status
Additional File Details Block	
Filename	Name of the file selected
Report Criteria (Check Data Collector Data Log)	
Metering System	For a highlighted Check Data Collector file , the Metering System to report on
Exception Type	For a highlighted Check Data Collector Data file, the Exception Type to report on

26   Browse and Report Aggregation Files

This set of forms enables you to display and report on aggregation files that have been extracted from the database and files that have been transmitted to other Market Participants. Such files include Supplier Purchase Matrices, DC Performance Report and Aggregation Exception Logs . The files will be displayed in date extracted order (within the file ids) in descending order. The Report Criteria Block changes dependant on the type of file that has been chosen.

1. Enter any of the selection criteria for the files to be displayed:

   - one or a range of dates during which the file was extracted - these dates default to yesterdays date for the From Date and todays date for the To Date;

   - the type of the file, which can be selected from a list of values;

   - the Market Role of the recipient of the file, if the file has been transmitted or is to be transmitted to another Market Participant via the Gateway (this criteria field is not applicable for files that are not sent by the NHHDA application software);

   - the Participant Id of the recipient of the file, if the file has been transmitted or is to be transmitted to another Market Participant via the Gateway (this criteria field is not applicable for files that are not sent by the NHHDA application software);

   - the Status of the file. All possible file statuses are available from a list of values. You can select all files with a particular status from the Status list of values.

     A subset of these are applicable to extracted or transmitted files:

     - **New** - a file that is being generated by the NHHDA application software but is not yet complete, for example reports.

     - **Completed** - a file that has been created by the NHHDA application software, but has not been transmitted to the gateway.

     - **Sent** - a file that has been created by the NHHDA application software and has been transmitted to the gateway.

     - **Default** - this status is used to manage files where the combination of file type and file status is not defined in the database. (For example, if the combination of D0041001 and the status of 'Completed' is not held in the database, the directory identified by the combination of D0041001 and 'Default' is used to store the file.)

   - For Supplier Purchase Matrix files only, the following additional criteria can be entered:

     - the Settlement Date for which the file was generated;

     - the Settlement Code - this can be selected from a list of values;

     - the GSP Group – this can be selected from a list of values;

     - the Run Number of the Data Aggregation Run from which the file was produced - this can be selected from a list of values (Settlement Date and Settlement Code should be left blank if this is entered).

   The details of extracted and transmitted files that meet the criteria are displayed in the File Extraction and Transmission Statuses part of the form.

2. You can navigate through the file details. For the following file types, additional functionality is provided:

    - Supplier Purchase Matrices;

    - Aggregation Exception Logs.

26.1   Supplier Purchase Matrices

If you navigate to a Supplier Purchase Matrix file, the Resend button is enabled. The settlement Date, Settlement Code, Data Aggregation Run Number and AA percentage are displayed at the bottom of the form in the Additional Details block.

The Report button is enabled and you are able to enter further Supplier Purchase Matrix criteria:

1. Enter one or more of the criteria.

2. To generate a report that includes the displayed information, click on the Report button.

For an example of the Supplier Purchase Matrix report, see Appendix B. For details about viewing and printing this report, see section 38.

26.2   Aggregation Exception Logs

If you navigate to an Aggregation Exception Log, the Report button is enabled and you are able to enter additional report criteria:

You can enter a Metering System Id and a number of Exception Type Ids as report criteria.

To generate a report, click on the Report button.

The available Exception Types are as follows:

Aggregation Exception Log

A01   Missing EAC/AA for the Metering System resulting in a default EAC/AA being used.

A02   No PRS data provided (NB: This code will never be generated, instead an A12 will be seen).

A03   Non-zero AA used when Metering System is de-energised.

A04   AA from more than one Data Collector.

A05   Mismatch of the Metering System's Supplier Registration as advised by the PRS Agent and that advised by the Data Collector.

A06   Mismatch of the Metering System's Measurement Class as advised by the PRS Agent and that advised by the Data Collector.

A07   Mismatch of the Metering System's GSP Group as advised by the PRS Agent and that advised by the Data Collector.

A08   Mismatch of the Metering System's Profile Class as advised by the PRS Agent and that advised by the Data Collector.

A09   Mismatch of the Metering System's Energisation Status as advised by the PRS Agent and that advised by the Data Collector.

A10   Mismatch of the Metering System's Standard Settlement Configuration as advised by the PRS Agent and that advised by the Data Collector.

A11   Unmetered Metering Systems with an AA that is ignored, resulting in a default EAC being used.

A12   Metering System Excluded due to missing DC or PRS details

A13   Missing AFYC

A14   Missing Default EAC

Any selected exception types appear on the additional information column of the Reports for Viewing screen.

For examples of the Aggregation Exception Log and the meanings of the report components, refer to Appendix B. For information on displaying and printing the logs, refer to section 38.

26.3   Field Summary

Field	Details
Criteria Block	
From Date	The start date in a date range during which files were extracted
To Date	The end date in a date range during which files were extracted
Type	The type of file to search for
Market Role	The Market Role of the Participant to whom files are to be sent or have been sent
Participant	The Id of the Participant to whom files are to be sent or have been sent
Status	The Status of the file

Field	Details
Settlement Date	The Settlement Date to which the required file corresponds
Settlement Code	The Settlement Code to which the required file corresponds
GSP Group	The GSP Group to which the required file corresponds
Data Agregator Run Number	The Run Number of the Data Aggregation Run that produced the data held in the file
	File Extractionand Transmission Statuses
Participant	The Participant Id of the recipient of the file if the file is transmitted to the Gateway (blank otherwise) and the Market Role of the recipient of the file if the file is transmitted to the Gateway (blank otherwise)
Date Extracted	The date on which the file was extracted
Date Transmitted	The date on which the file was transmitted to the Gateway
File Type	The type of file
Status	File status
GSP Group	The GSP Group to which the required file corresponds
	Additional File Details Block
Filename	The name of the file meeting the criteria entered
Settlement Date	The Settlement Date relating to the currently highlighted file
Settlement Code	The Settlement Code to which the required file corresponds
Data Aggregator Run Number	The Run Number of the Data Aggregation Run that produced the data held in the file
AA Percentage	The percentage of Aggregated Actuals (Formula for calculating AA% is in Tech Spec Documentation section 9.6.2.)
Report Criteria Block (Supplier Purchase Matrix Data)	
Standard Settlement Configuration	For a highlighted Supplier Purchase Matrix file, the Standard Settlement Configuration to report on
Distributor	For a highlighted Supplier Purchase Matrix file, the Distributor to report on
Line Loss Factor Class	For a highlighted Supplier Purchase Matrix file, the Line Loss Factor Class to report on
Profile Class	For a highlighted Supplier Purchase Matrix file, the Profile Class to report on
Supplier	For a highlighted Supplier Purchase Matrix file, the Supplier to report on
Report Criteria Block (Aggregation Exception Log)	
Metering System	For a highlighted Aggregation Exception Log, the Metering System to report on
Exception Type	For a highlighted Aggregation Exception Log, the Exception Type(s) to report on

27   Browse File Loading Status

This form allows you to browse the status of files received and/or successfully loaded by the system. These files are:

- Data Aggregation and Settlement Timetable File;

- Market Domain Data Complete Set

- PRS Agent Instruction Data;

- Data Collector Instruction Data.

27.1   Specify the Search Criteria

Note that the Criteria block has been designed as a query block, so you do not need to enter query mode. The File Loading Statuses block is queryable, so having entered the criteria in the Criteria block, you can execute a query, which takes the cursor into the File Loading Statuses block. Cancel query returns the cursor to the Criteria block.

1.   Enter one or more of the following criteria, either by entering the required values or, where applicable, selecting from a list of values:

- Date From;

- Date To;

- File Type;

- Market Role of file source;

- Participant Id of file source;

- File Status;

The Date From default to yesterday and Date To default to the current date.

The File Type, Market Role and Participant Id information can be selected from lists of values.

2. Position the cursor in the File Statuses part of the form and execute a query.

   For each qualifying file, the source (Market Role, Participant Id and name), type, date received, file sequence number, first instruction sequence number, last instruction sequence number and file status are displayed. All possible file statuses are available from a list of values. You can select all files with a particular status from the Status list of values.

A subset of these are applicable to loaded files:

- **Received** - a file has been received by the NHHDA application software but not processed further. Note that a file with a Received status may be in error if the file is corrupt in such a way that the File Receipt process is unable to recognise the file. Such a file has a Type of 'L0000001'.

- **Running** - the file is currently being loaded (NB: This is only applicable when processing Data Aggregation and Settlement Timetable File or Standard Settlement Configuration files).

- **Rejected** - validation of a file against a set of business rules has been unsuccessful.

- **Archived** - the file has been moved to the archive directory or has been restored from off-line media (see the NHHDA System Management Guide for further information about archiving).

- **Loaded** - an Instruction File has passed initial validation, but not all Instructions within the file have a status of Applied or Superseded.

- **Processed** - a Data Aggregation and Settlement Timetable File or Standard Settlement Configuration file has been validated successfully; all instructions in an Instruction File have either been applied or superseded (the file status is Loaded up to this point). The status will only move from Loaded to Processed during standard instruction processing.

- **Corrupt** - the status of the file has been set to Corrupt via the Maintain Instruction Files form (see Section 31 for further information)

- **Skipped** - the status of the file has been set to Skipped via the Manage Instruction Files form (see Section 31 for further information)

The reason for a file having a particular status is recorded in the Operator Log. This may be as a result of a file being loaded (and instruction processing initiated) or through manual operations made by the user using the front end of the application. Refer to section 4.5.2 for further information about Operator Logs.

For each successfully loaded Instruction File (i.e. where the status is either Loaded or Processed), the total number of instructions in the file and the number and percentage of instructions of each possible instruction status are displayed. The instruction statuses are as follows:

- **Unprocessed** - the instruction has been received by the system, but it has not been applied;

- **Failed** - an attempt to apply the instruction has failed;

- **Superseded** - the Instruction was in a Failed state and has been superseded by a subsequent Instruction;

- **Applied** - the Instruction has been successfully applied;

- **Invalid** - the Instruction has been applied but some (or all) of the updates demanded by the Instruction were not applied due to contravention of validation rules (this is the logical state "Validation Errors");

- **Discarded** - the PRS Refresh Instruction has been discarded or has not been applied successfully.

At the bottom of the screen, additional file details are displayed as each file from the file loading statutes section is selected. The details include file id, file name, original file name and last processed date. The contents of the selected file can be viewed by selecting the view button.

27.2   Field Summary

Field	Details
Criteria Block	
Date From	The start date from which to begin searching for loaded files
Date To	The end date at which to end searching for loaded files
Type	The type of the file
Market Role	Market role of the organisation that sent the file
Participant	Market Participant Id of the organisation that sent the file
Status	The status of the file
File Loading Statuses Block	
Market Role	Market role of the organisation that sent the file
Participant	Market Participant Id of the organisation that sent the file
Date Received	The date on which the file was received by the NHHDA system
File Type	The file type
Status	The status of a file
File Sequence Number	The file sequence number for instruction files
First Instruction Seq Nos.	The first sequence numbers contained within the file for instruction files (ie. D0019001 or D0209001)
Last Instruction Seq Nos	The last instruction sequence numbers contained within the file for instruction files (ie. D0019001 or D0209001)
Additional File Details Block	

Field	Details
File Id	The NHHDA file id generated by the system.
File Name	The NHHDA filename generated by the system.
Original File Name	The file name (if applicable) prior to being loaded into system
Last Processed	Date which the file was last processed.
Instruction Status Block	
Number of Instructions Processed	The total number of instructions in a file according to ndb_instructions table.
Status	The status of an instruction
Number	The number of instructions in a file with the corresponding status
Percentage	The percentage of instructions in a file with the corresponding status

28   Manage Failed Instructions

This form enables you to identify failed Non-Refresh Instructions for reprocessing or returning to the originators. To manage entire Instruction Files, use the Manage Instruction Files, described in Section 31.

To identify failed Refresh Instructions for reprocessing or returning to the originators, refer to section 30, Manage Failed Refresh Instructions .

Screen layout

28.1   Display the Required Instructions

1.   Specify search criteria for the required Instruction. Enter any of the following (if any are left blank, selection of failed instructions is not made against those fields; for example, if the name of the source is left blank, failed instructions for all sources that meet all other criteria are displayed):

   - Role: Role (Type and Id) of the source of the file containing the required Instruction (this can be selected from a List of Values);

   - Participant: Name of the source of the Instruction File;

   - Resend: Select 'Resend' to retrieve failed Instructions that have been marked for resend, leave blank to retrieve failed Instructions whether or not they have been marked for resend;

   - Reprocess:. Select 'Reprocess' to retrieve failed Instructions that have been flagged for reprocessing, leave blank to retrieve failed Instructions whether or not they have been flagged for reprocessing;

   - Instr Type: Enter the Instruction Type to retrieve failed instructions with the instruction type;

- Instr Seq No: Enter the Instruction sequence number to retrieve failed instructions with the instruction sequence number entered;

- Processed Date From and To: Enter a date range to retrieve failed instructions processed within the date range.

- Metering System Id, to retrieve only those failed Instructions that are applicable to that Metering System;

- Distributor: Select distributor associated with the Instruction (this can be selected from a list of values).

All instructions satisfying the criteria are displayed, sorted by Instruction Sequence number within Metering System Id. The instructions can also be resorted by selecting the button above each column in the instruction section of the screen. This will resort the instructions by the column below the button selected. The contents of an instruction file can be viewed by selecting the desired instruction and clicking the view button.

A list of Instruction Status Reasons, their codes and meanings is given in section B. The Instructions with Status Reasons with a code beginning 'NI' can be resolved by amending data such as GSP Groups, Standard Settlement Configurations, using the appropriate NHHDA forms, and flagging the Instructions to be Reprocessed, (see section 28.3). Those Instructions with codes beginning with 'NM' may be resolved by the resolution of other Instructions with 'NI' codes. Information about most other failed Instructions should be returned to the originators, (see sections 28.2).

28.2   Marking and Resending of Instructions to the Originators

1. Check the check boxes for the Instructions for which details are to be sent to the originators or check the All check box to select all Instructions listed in the Instructions part of the form.

2. Click on the Mark for Resend button to mark the instruction for resend. This does not resend the instruction (i.e a D0023 file is not created).

3. Click on the Resend All button to resend all instructions that are already marked for resend or those instructions with check boxes currently checked. Both refresh and non-refresh instructions will be returned for the selected PRS Agents, and non-refresh instructions for the selected Data Collectors (i.e a D0023 file is generated for each participant). A final message will appear containing a count of the number of non refresh instructions and refresh instructions resent. If for any reason the count cannot be completed the message will indicate that the count has timed out.

4. Click on the Resend All not Sent button to resend all instructions which have not been resent in the past (i.e the resent date is null), those already marked for resend or those instructions with check boxes currently checked. Both refresh and non-refresh instructions will be returned for the selected PRS Agents, and non-refresh instructions for the selected Data Collectors (i.e a D0023 file is generated for each participant). If there are no records displayed or selected on the screen, all marked for

resend failed refresh instructions are returned for PRS Agent. A final message will appear containing a count of the number of non refresh instructions and refresh instructions resent. If for any reason the count cannot be completed the message will indicate that the count has timed out.

The database is updated with this information. Where a file is generated for each Market Participant selected, the files are sent to the Gateway for retrieval from the recipient systems. Each file contains the following information:

- header, identifying the report originator and market role;

- Metering System Id for an Instruction being returned, with the earliest Significant Date of the returned Instructions for that Metering System;

- for each Instruction:
  - Instruction Sequence Number;
  - zero, one or more Instruction Reasons for Failure;
  - for each Instruction Reason for Failure, additional data that will assist in identifying why the Instruction has failed;

- Footer.

Following a resend, the number of refresh and non-refresh instructions is displayed in the Operator Log.

28.3   Identify Instructions for Reprocessing

1.   Check the check boxes for the Instructions to be reprocessed or check the All check box to select all Instructions listed in the Instructions part of the form.

2.   Click on the Reprocess All button.

The database is updated with this information. During overnight processing, the NHHDA application software attempts to apply any instructions marked for reprocess (Refer section 4.6 for details of the nhh_submit.exe command).

28.4   Update the Aggregator Action State for the Instruction Status Reason

By default instruction failure reasons will be marked as 'Unresolvable' if the instruction status reasons are blank. These allow them to be returned to their originators.

1.   Check the check boxes for the Instruction Status Reasons for which you want to assign an Aggregator Action State, or check the All check box if you want to assign the same Aggregator Action Status to all Instruction Status Reasons for the current Instruction.

2.   Click on the Resolved, Resolvable or Not Resolvable button, as follows:

- Resolvable - when the cause of an Instruction Status Reason has been investigated, and can be resolved by the Data Aggregator. For example, if an Instruction has been received from a PRS Agent that is not in the NHHDA database, the PRS Agent can be

added before the Reprocess Flag is set to 'R' to reprocess the Instruction.

- Resolved - when the cause of an Instruction Status Reason has been investigated and resolved by the Data Aggregator.

- Unresolvable - when the cause of an Instruction Status Reason cannot be resolved by the Data Aggregator. Unresolvable instructions can be flagged with the Resend flag, so that during the next Instruction processing, information about these Instructions is sent to the Instruction originator.

28.5   Field Summary

Field	Details
Role	The Market Role and Market Participant Id of the source of the instruction
Participant	The name of the source of the instruction
Reprocess	Select 'Reprocess' to retrieve failed Instructions that have been flagged for reprocessing, or blank to retrieve failed Instructions whether or not they have been flagged for reprocessing
Resend	Select Resend to display only those Instructions which have been selected for resending to the originator or blank to display failed Instructions whether or not they have been flagged for resending.
Instr. Type	Enter Instruction type
Instr Seq No	Enter Instruction Sequence number
Processed Date From	Start of instruction processing date range
Processed Date To	End of instruction processing date range
Metering System	Select a Metering System Id to retrieve only those failed Instructions that are applicable to that Metering System
Distributor	Distributor for which the corresponding Instruction is applicable
Participant	Id and name of the source of the instruction
Instr Seq No	Instruction sequence number
Significant Date	The date on which the first of the changes made by this instruction occurs
Instr. Type	The type of Instruction
Metering System	Metering system for which the corresponding Instruction is applicable
Resend Date	Resend request date for the latest resend request.
Resend	'Y' indicates that the corresponding Instruction is marked for resending to the originator
Resend File Id	File id of the D0023 file that contains the failed instruction.
Reprocess	'R' indicates that the corresponding Instruction is marked for reprocessing. 'X' indicates that the Instruction cannot be reprocessed
check box	Check this prior to clicking on any of the Resend or Reprocess buttons
Select All	Check this to select all Instructions for resending or reprocessing

Field	Details
Filename	The NHHDA filename generated by the system.
File Received	File received date
File Created	File created date
Sequence Number	The sequence number of the Instruction Status Reason for the currently highlighted Instruction
Reason	The reason for the Instruction having the status it does
Aggregator Action State	Indicates whether the reason for the Instruction failure has been Resolved, is Resolvable, or is Not Resolvable
check box	Check this to select an Instruction Status Reason for identifying as Resolved, Resolvable or Not Resolvable
Select All	Check this to select all Instruction Status Reasons for the current Instruction for identifying as Resolved, Resolvable or Not Resolvable

29   Manage Refresh Instructions

Use this form to apply a "PRS Refresh" instruction to the NHHDA database.

All Refresh Instructions which have an Instruction Status of "Unprocessed" (These are the ones which have not been applied to the NHHDA database) are displayed; all Refresh Instructions with an Instruction Status of "Validation Errors" are displayed (these are the ones which have been attempted but for which there were validation errors preventing all Metering Systems from being updated) and those with a status of "Discard" which have not been flagged as "cannot reprocess", are displayed. The Instructions are displayed in descending Significant Date order.

A Refresh Instruction may update data for a large number of Metering Systems. Processing is performed for one Metering System at a time. In the event of a failure of the refresh due only to validation rules preventing some of the updates from being applied, the Refresh Instruction's status is set to "Validation Errors". The individual errors for the Refresh may be managed via the Manage Failed Refresh Instructions form. (see Section 30 for more details) If it is felt that the system is nevertheless in a better state than that before the attempt to apply the refresh, the instruction may be accepted and the status set to Applied - the user presses the Accept button. If the error is with the physical Instruction File, the refresh will only have been applied to a subset of the metering systems. If the refresh is re-attempted, the process re-checks the data in the Instruction against the data in the database for all metering systems, whether or not they have been successfully applied. If it is not possible to re-attempt the refresh immediately, eg. because of insufficient time, the database must be restored to its state prior to the failed refresh. To support this, a backup of the database must be taken before the refresh is requested, (a warning message is displayed when the refresh is requested).

During the processing of a refresh file, previous failed instructions may be superseded. As the PRS refresh processing does not update the status of non refresh instruction files, there may be a period of time between the accepting of a refresh file and the running of normal instruction processing where there are instruction files containing only applied and superseded instructions still at status 'Loaded'. This will be updated the next time normal instruction processing is run.

Note that after the restore, the database will indicate that the refresh has not been applied - in this case, the user needs to discard the refresh, to enable subsequent Instructions to be processed.

For further information about management of the Refresh process, refer to section 14 of the NHHDA System Management Guide.
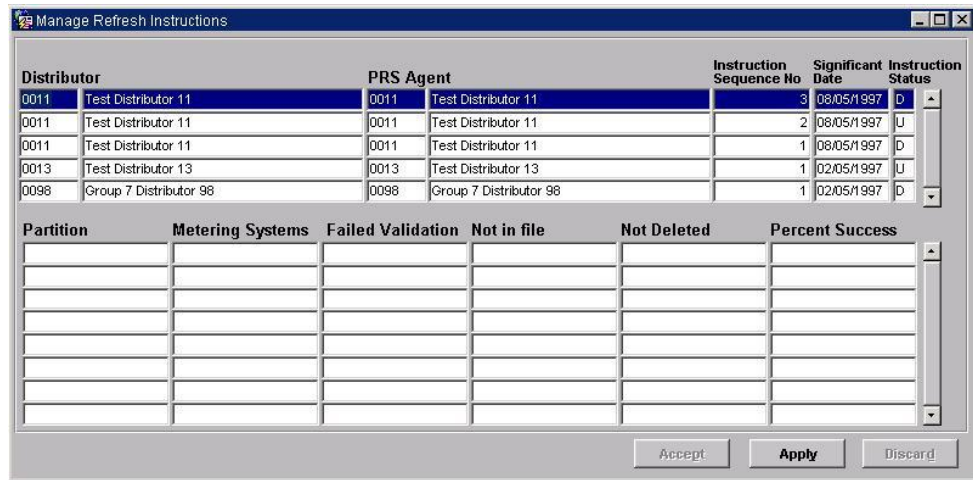
If more than one instruction is shown, instructions are listed in ascending Distributor order, and descending Instruction Sequence Number order within each Distributor.

29.1   Apply Refresh Instructions

1.   Select the instruction that you want to apply to the NHHDA database. It is recommended that you apply a Refresh Instruction with a Significant Date approximately 2 years earlier than the current date, or from the start of the market, if this is later. This minimises the likelihood of warnings being generated by the Refresh that data in the database is effective before the Significant Date of the Refresh Instruction.

2.   Click on the Apply button.

You are prompted to confirm that a backup of the database has been taken. If you confirm that a backup has been taken, the Refresh Instruction is applied *immediately*. If a backup has not been taken, or you decide not to proceed, you can cancel the request.

A message is displayed indicating that the job has been submitted and the form is closed.

For further confirmation that the job has been submitted, you can check the Operator Log.

A comparison of Metering System data before and after application of the Instruction is given in the Scheduler Log for the application process. Refer to the NHHDA System Management Guide, section 14, for more information.

29.2   Accept Refresh Instruction which has Validation Errors

If the attempt to apply the refresh encounters validation errors, those metering systems which failed are not updated. If the only errors encountered are of this type, the Refresh Instruction status is set to "Validation Errors". When viewed from the Manage Refresh form, summary information detailing the numbers of metering systems encountered from each partition, plus the overall total, are presented to aid the decision whether to accept the instruction as Applied.

1.   Select the instructions that you want to accept and set as Applied.

2.   Click on the Accept button.

29.3   Discard Refresh Instructions

1.   Select the instructions that you want to discard.

2.   Click on the Discard button.

29.4   Field Summary

Field	Details
PRS Agent	The PRS Agent Id and name
Instruction Sequence No	The sequence number of the Instruction
Distributor	The Distributor Id and name of the subject of the refresh
Significant Date	The Refresh will be applied to all Metering System data for which the Distributor is responsible from the Significant Date onwards
Instruction Status	The status of the Instruction: U (Unprocessed), V (Validation Errors) or D (Discarded)
Partition	The partition number to which this summary row applied, or 'total' for the overall totals
Metering Systems	The number of metering systems in the instruction for the partition/instruction
Failed Validation	The number of metering systems in the instruction for the partition/instruction which were *not* updated due to failing validation rules
Not in file	The number of metering systems present in the database for the partition/instruction before applying the instruction which were not also in the instruction
Not Deleted	The number of metering systems present in the database for the partition/instruction before applying the instruction which were not also in the instruction which could not have details deleted due to violation of validation rules
Percent Success	The number of metering systems updated as a percentage of the possible metering systems to update

30   Manage Failed Refresh Instructions

This form enables you to select failed Refresh Instructions and then mark them and their associated reasons for failure for return to Instruction's originator on a per Metering System basis.

Screen layout:

30.1   Display the Required Instructions

Specify the selection criteria for the required Instruction. Enter any of the following (if they are blank, selection of failed instruction is not made against those fields; for example, if the Metering System Id is left blank, failed instructions for all Metering Systems that meet all other criteria are displayed):

- Market Participant Id of the source of the file containing the required Instruction (this can be selected from a List of Values);

- Resend Flag. Select Yes to display only those Instructions which have been selected for resending to the originator, No to display only those Instructions that have not been selected for resending to the Originator, or leave blank to display both;

- Include or Exclude. Select Include to specify that only records with a Resend Request Date within the Specified Range (see below) are retrieved. Selecting Exclude will mean that all records with a Resend Request Date outside the Specified Range will be retrieved. Leaving this blank will mean that Instructions will be retrieved regardless of whether their Resend Request Date lies within the Specified Range or not;

- Resend Request Date Range, to retrieve Instructions for which a resend request has been issued during the date range;

- Metering System Id, to retrieve only those failed Instructions that are applicable to that Metering System.

All Refresh Instruction Failures satisfying the criteria are displayed, sorted by Instruction Sequence Number within subject (Metering System Id or Distributor).

30.2   Identify Instructions for Resending to the Originators

1. Check the check boxes for the Refresh Instructions for which details are to be sent to the originators or check the All check box to select all Refresh Instructions listed in the Instructions part of the form.

2. Click on the Resend check button.

3. Click on the individual Reason Codes to send only those selected back to the Originator. Use the Select All and Deselect All to flag or unflag all Reasons for a given Instruction.

The database is updated with this information. To create the files that are sent to the Instruction originators, use the Manage Failed Instructions form (see Section 28).

30.3   Field Summary

Field	Details
Market Participant	The Market Participant id and name of the source of the Instruction File
Resend	Select Yes to display only those Instructions which have been selected for resending to the originator. No to display only those Instructions that have not been selected for resending to the Originator, or blank to display both
Request From	The from date of the resend request
Request To	The to date of the resend request
Metering System	Metering system for which the corresponding Instruction Failure is applicable
Distributor	Distributor for which the corresponding Instruction Failure is applicable
Sequence Number	Instruction Failures Sequence Number
Significant Date	The date on which the first of the changes made by this instruction failure occurs
Resend Flag	'Y' indicates that the corresponding Instruction is marked for resending to the originator
Resend Request	Resend request date for the latest resend request.
Select All	Click this to select all Instruction Failures for resending
Deselect All	Click this to deselect all Instruction Failures
Sequence Number	The sequence number of the Instruction Failures Status Reason
Reason	The reason for the Instruction Failures having the status it does

Field	Details
Resend	Check this if the Instruction Failures are reported to the originator
Select All	Click this to select all Instruction Failure Reasons
Deselect All	Click this to deselect all Instruction Failure Reasons

31   Manage Instruction Files

This form can be used to display all Instruction Files that have failed validation. Note that this form enables you to manage entire Instruction Files; the form Manage Failed Instructions (described in Section 28) allows you to manage *individual* instructions contained within an Instruction File. For an overview of Instruction and Instruction File processing, refer to section 2.1.

Specify the selection criteria by entering a particular Market Participant (Data Collector or PRS Agent) or all Data Collector/PRS Agent and then execute a query. Participants relating to those specified in the criteria section are displayed. Selecting each participant displays Instruction file details relating to the selected participant. The instruction file type displayed can be restricted by selecting the 'Rejected', 'Received' or Processed checkbox. The following instruction file details are displayed:

- Rejected Files: Number of rejected Instruction files for the participant;

- Received Files: Number of received Instruction files for the participant;

- Last Loaded /Processed Insr Seq No: Last loaded or processed Instruction sequence number for the participant;

- Last Loaded /Processed File Seq No: Last loaded or processed Instruction file sequence number for the participant;

- File Name: The NHHDA file name of the Instruction file;

- Original Filename: The original name of the Instruction file;

- File Type: The instruction file type;

- Received: Date Instruction file was received;

- Seq No: Instruction file's sequence number;

- First Instr. Seq No: Sequence number of the first instruction within the Instruction file;

- Last Instr. Seq No: Sequence number of the last instruction within the Instruction file;

- File Status: Status of the Instruction file;

- Skip to file Sequence No: The Sequence Number of the next Instruction File that you want to process if you are skipping some files.

If the File Receipt process has recognised the file, but data within the file does not meet the requirements of business rules used by the NHHDA system, Instruction Files are given a status of "Rejected" (with a file type of D0019001 for Data Collector Instruction Files and D0209001 for PRS Instruction Files). Each failed Instruction File can be dealt with in one of three ways. You can:

- attempt to reprocess the file;

- mark the file as corrupt;

- instruct the system to skip the file.

If the File Receipt process has not accepted an Instruction File its file type is set to L0000001; it is not displayed on this form, but can be viewed via the Browse File Loading Status form. This file is not recognised as an Instruction File and so

- attempt to reprocess the file has no meaning as the reprocessing assumes the file has been recognised as an Instruction File;

- mark the file as corrupt is not needed as the file has not been recognised as an Instruction File so if a replacement file is received it will not conflict with the pervious one;

- instruct the system to skip the file - as the system has not recognised the file as an Instruction File, it cannot be selected as the first of a range of files to be skipped. Instead, the next expected Instruction File may be selected as the start of the range.

Each of these actions is described in further detail below. The action taken will depend on the circumstances under which processing of the Instruction File failed. You should be aware of the following rules for Instruction File and Instruction processing when managing failed Instructions; note that these rules are provided for information here - these rules are validated by the initial validation process, (outlined in section 2.1.2), and are also reported via the Browse File Loading Status form:

- Each Instruction File has a sequence number.

- The Instruction Files received from a particular source are processed by the NHHDA application software in contiguous file sequence order. Thus, an Instruction File from Data Collector DC05 with file sequence number 15 cannot be processed until an Instruction File with file sequence 14 has been processed in one of the following ways:

  - loaded, and if the file contains a Refresh instruction, that instruction must be applied or discarded.

  - skipped using the Manage Instruction Files form. Note that files with a status of 'Skipped' are treated as if they contain no Instructions. When an Instruction File is skipped, a new amended Instruction File with a file sequence number one greater than the last of the skipped files can be received and processed by the NHHDA application software.

- Each Instruction has a sequence number.

- Instructions within a file must have contiguous sequence numbers.

- The first Instruction in a file must have a sequence number one greater than the last Instruction loaded from a previous Instruction File. Note, if Instruction 123, the last Instruction in Instruction File 5, has been loaded, and Instruction File 6 has been skipped, (using the Manage Instruction Files form), then the first Instruction contained in Instruction File 7 must have a sequence of 124.

Note that in deciding what to do following a failure, you will have to talk to the organisation which sent the file and agree the action to be taken.

After a button is clicked, an activity is submitted to run on the server to perform the requested action. When that activity completes, the form re-executes the query and the form is updated to reflect the requested change.

31.1   Reprocess the Instruction File

If an Instruction File has failed to load because the data in the database necessary for loading of the file is not available, you can attempt to reprocess the file once the problem has been rectified.

1. Select the required Instruction File(s) or select all by clicking the 'Select All' button.

2. Click on the Reprocess button.

The statuses of the selected Instruction Files are set to "Received". During batch processing, the NHHDA application software attempts to reload the file as though it has just been received. If successful, the file Status is updated to "Loaded", and the system attempts to apply the Instructions contained in the file to the database. Otherwise, the file Status is set to "Rejected" again. Instruction Files can only be 'Reprocessed' if the status is 'Rejected'.

31.2   Mark the File as Corrupt

If you believe that the file is corrupt, eg. due to transmission problems between the file originator and the NHHDA system, then you can mark the file as Corrupt. Instruction Files can only be 'Corrupt' if the status is 'Rejected'. You can then request the file originator to resend the file.

1. Select the required Instruction File(s) or select all by clicking the 'Select All' button.

2.   Click on the Corrupt button.

The Status of the Instruction File is changed to "Corrupt".

Note that the originator resends the same file, hence the File Sequence is the same.

31.3   Skip Instruction File(s)

If the problem with a file is such that it fails the validation carried out by File Receipt, the file type will have been set to 'L0000001'. In this case, it is not possible to select the file from the Manage Instruction Files form as the file does not have an Instruction File type.

If there is a problem with the Instruction File it may not be possible simply to mark it as corrupt and for the originator to send a replacement. Subsequent files may already have been generated and sent, so these too need to be ignored.

In order to avoid duplication of file sequence numbers and the possibility that a file which should be ignored may actually be processed, the Instruction file along with one or more files is skipped. The originator will reset his system so that all database changes included in the skipped Instruction File(s) are resent. He will set his system so that the next file sequence number is the one agreed (i.e. one which has not yet been used). The set of files skipped will be regarded as if they contained no instructions and so the first instruction in the new file will have the same sequence number as was originally expected in the skipped Instruction file.

Instruction Files can only be 'Skipped' if the status is not 'Processed', 'Loaded' or 'Skipped'.

The 'Skip to file Seq No' button is enabled by selecting a participant from the list of participants. The user may enter a 'skip to' value in the box to the right of the 'Skip to file Seq No' button to specify the next File Sequence Number to expect. This implies that the sequence number entered is excluded from the skip. The user has the option to proceed with the skip or abort. If the user opts to proceed a message is displayed detailing the number of Instruction Files skipped.

31.4   Example of Skip usage

Instruction File with file sequence of 13 has arrived and been loaded. The last instruction in the file has an Instruction Sequence number or 1234.

Instruction File with file sequence of 14 arrives.

Assuming the File was rejected i.e. Instruction processing was unsuccessful subsequently setting the status of the file to "Rejected" (Any further Instruction Files received from the same Originator cannot be processed, as the File Sequences are higher).

Instruction File with file sequence of 15 arrives.

The Statuses of this Instruction File is set to "Received" by File Receipt processing (but ignored by Instruction Processing until the failure of file 14 is resolved.).

The User contacts the Originator and establishes that file 16 has also been sent (although it has not yet arrived).

In order to rectify the situation, the User agrees with the Originator to correct and resend the data contained in the original Instruction File, starting from file sequence 18.

To rectify the situation:

1.   Select the Originator from the list of participants. Enter the File Sequence of the next Instruction File (i.e. 18) that you want to process. The File Sequence you enter here is for the first of the files resent by the Originator containing the corrected data.

      When entering the File Sequence, you must make sure that you are entering the correct number. If you enter a number which is too big, ask the originator to amend the next sequence number to be sent to match.

2.   Click on the 'Skip to file Seq No' button.

The NHHDA system gets the last Loaded, Processed or Skipped Instruction File Sequence number and updates the Status of any subsequent files up to the file just before the number you entered to Skip to. If any files with a File Sequence between that of the last Loaded, Processed or Skipped file and the File Sequence you entered are missing, empty Instruction Files are created, for which the Status is "Skipped"; when/if the real file with that file sequence number arrives, it too is set to skipped.

So, file 14 is updated to "Skipped"; file 15 is updated from "Received" to "Skipped"; and dummy files are created with sequence numbers 16 and 17. When file 16 arrives, File Receipt will set its status to "Received", and then Instruction Processing will change the status to "Skipped". File 17 will never arrive.

When the new file 18 is received from the Originator, it will be validated to ensure it starts with Instruction Sequence 1235, and then processed by the system.

31.5   Field Summary

Field	Details
Market Participant	The Market Participant id and name of the source of the Instruction File
Role	The Market role of the source of the rejected Instruction File
Rejected	If selected, display Instruction file with status of 'Rejected'
Received	If selected, display Instruction file with status of 'Received'
Processed	If selected, display Instruction file with status of 'Processed'
Skip to file Seq No	The Sequence Number of the next Instruction File that you want to process if you are skipping some files
File Name	The NHHDA file name of the Instruction File
Original File name	The real name of the Instruction file.
File Type	Instruction's file type.
Received	Date Instruction file was received.
Sequence Number	Instruction file's sequence number.
First Instr Seq No	Sequence number of the first Instruction.
Last Instr Seq No	Sequence number of the Last Instruction.
File Status	Status of the Instruction file
Select	Click this to select individual Instruction File(s) to Corrupt or Reprocess.
Select All	Click this to select all Instruction Files in order to Corrupt or Reprocess.

32   Report Instructions

You can use this form to generate a report detailing Instructions received by the system.

32.1   Specify Parameters and Initiate Report

1.   Enter any of the following criteria, (if any of the criteria are not specified, the report is generated for Instructions that meet all other criteria; for example, if the Source Role is not specified, a report is generated for Instructions from all Market Participants, where the Instructions meet all other criteria specified):

   - Source Role. The Market Participant Id of the Source of the Instructions;

   - Market Participant. A list of valid Market Participants is available from a list of values. The name is populated automatically when a Market Participant Id is selected;

   - Date Received range, which must be equal to or earlier than today's date. Note that the Date Received To date must be equal to or later than the Date Received From date, (if the date range is to be changed such that the new Date Received From is later than the current Date Received To, the Date Received To must be changed first);

   - Instruction Type. A list of valid Instruction Types is available from a list of values;

   - Instruction Status. A list of valid Instruction Statuses is available from a list of values. These statuses are described in section 2.1.2;

   - Instruction Sequence Number range. The range of Instructions to be included in the report;

   - Metering System Id;

   - Distributor. A list of valid Distributors is available from a list of values. The Distributor Name is populated automatically when a Distributor Id is selected;

Note that Metering System Id and Distributor are mutually exclusive. If you attempt to enter both, a warning message is displayed. One of the values must be removed before the report can be generated. Note that PRS Refresh Instructions act on a Distribution Business.

2.   Click on the Report button to generate the report.

To view or print the report, use the Select Reports form, described in Section 38.

An example and a description of the Instructions Report is shown in Appendix B.

Note that the report does not include the values of the Resend or Reprocess flags for the Instructions. To obtain this information, use the Manage Failed Instructions form, described in section 28. The report on a Refresh Instruction does not include the values of the Resend or Reprocess flags. To obtain this information, use the Report Refresh Instruction Failure form. (see Section 33 for more details)

32.2   Field Summary

Field	Details
Source Role	The role of the file source
Market Participant	Id and name of the source of the Instructions
Date Received	The date range between which the Instruction Files were received by the NHHDA system
Instruction Type	The type of the Instruction
Instruction Status	Instruction Status (one of Unprocessed, Failed, Superseded, Applied, Discarded)
Instruction Sequence Number	The Sequence Numbers of the Instructions
Metering System	Id of a Metering System
Distributor	Id and name of a Distributor

33   Report Refresh Instruction Failure

This form allows reporting of Refresh Instruction validation failures.

Zero or more of the following selection criteria can be selected.

- Refresh Instruction source (a PRS Agent)

- a subject Metering System Id

- the status of the Resend Request Flag

- include or exclude Refresh Instruction Failures with a Resend Request Date between two given dates

After entering the required selection criteria, the user may press the 'Report' button to invoke the 'Refresh Instruction Failures' report. Refer to section 38 for details on how to view and print the report.

33.1   Field Summary

Field	Details
Market Participant	Id and name of the source of the Instructions
Resend	The status Yes / No of the Resend Request Flag
From Date	Include / Exclude Refresh Instruction Failures from this date
To Date	Include / Exclude Refresh Instruction Failures to this date
Metering System	Id of a Metering System
Report	Press this button to invoke the 'Refresh Instruction Failures' report

Please note that the Additional Information column in the Reports for Viewing screen will display Market Participant IDs selected.

34   Browse Activity Schedule

This form allows you to browse scheduled NHHDA activities. The user must specify a date range (default : ± 7 days from date) and whether or not sub-activities (activities scheduled by parent activities) are to be included in the list (default : include sub-activities).

The user may optionally restrict the list to a single queue, otherwise activities scheduled on all queues will be displayed.

Once the user has provided the selection criteria, a list is displayed, ordered by scheduled run date-time and then activity identifier, showing the following for each activity satisfying the criteria.

- scheduled run date-time

- activity identifier

- type

- host operating system process id.

- parent activity identifier

- update time

- username

- status

- exit code

The user may select an activity from the list and view or print the associated activity log.

34.1.1   Screen layout
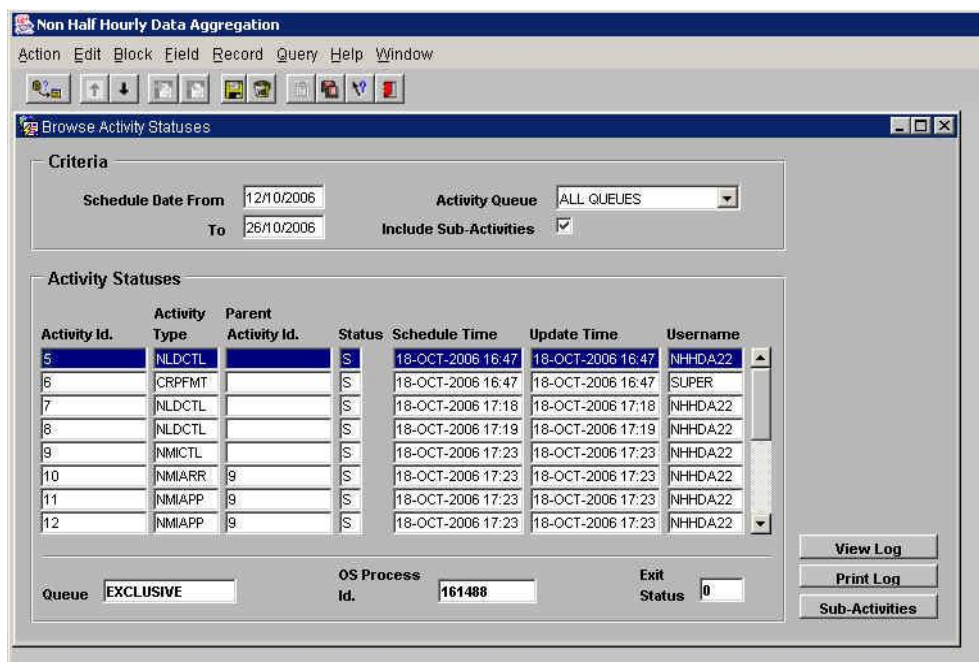
34.2   Field Summary

Field	Details
Activity Id	Identifier for the process allocated by the NHHDA system
Activity Type	Type code determining what the activity does
Parent Activity Id	Activity Id of the process that spawned this activity
Status	Current status of the activity
Schedule Time	The time the activity was scheduled for
Update Time	Latest time the activity was updated
Username	Name of the user scheduling the activity
Queue	Name of the activity queue on the server
OS Process Id	Process Id of the activity allocated by the operating system
Exit Status	Completion status of the activity

35   Browse Activity Queue Statuses

This form allows you to browse the NHHDA activity queue statuses. The form displays a list showing each queue's identifier, width (the maximum number of activities which may run concurrently on the queue), the number of running activities, the number of activities waiting to run with a start date-time that has passed and the number of activities waiting to run with a start date-time which has not yet passed.

The user may update the list by re-running the query.

35.1.1   Screen layout
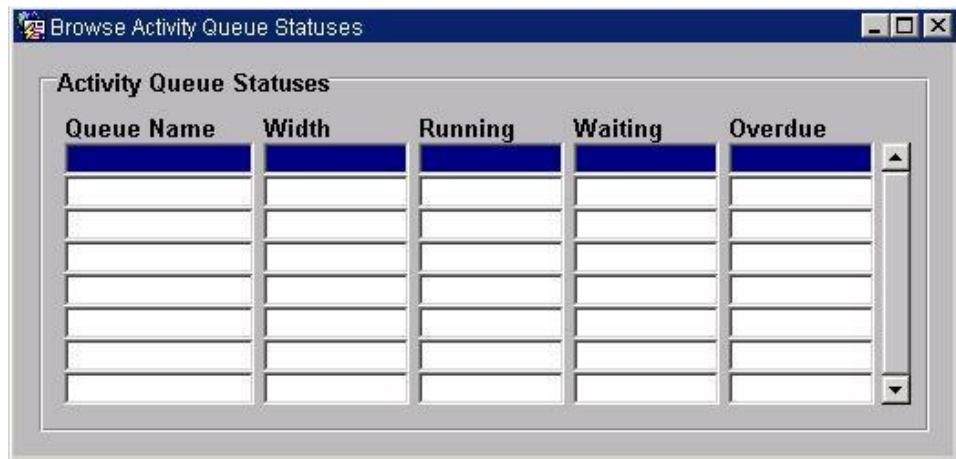
35.2   Field Summary

Field	Details
Queue name	Name of the activity queue on the server
Width	Maximum number of activities allowed to run concurrently on the queue
Running	Number of activities currently running on that queue
Waiting	Number of activities scheduled but schedule time not passed
Overdue	Number of activities scheduled and schedule time has passed

36   Maintain User

This section provides information on maintaining user accounts and password change for both the System Manager who has control over all accounts, and for the system user who may change only their own password.

36.1   Manage User Accounts

This form is available to users with the user role of system manager only. It allows the user to view user account details for a selected user and to make changes to the user's account where required. The form also allows the user to add users to the system, or to drop a selected user.
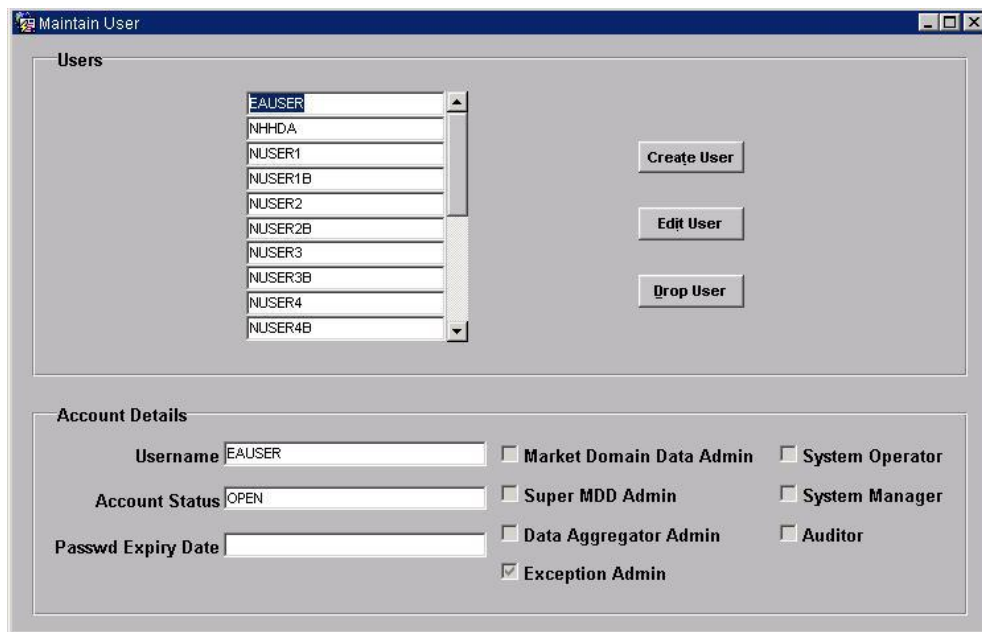
Figure 36-1 Maintain User - View User Details

Upon opening the Maintain User form, the System Manager is presented with a list of existing users as well as the details of the first user listed displayed in the Account Details section. To select a different user and display their details, move the cursor to any of the listed users.

Figure 36-2 Maintain User - Create/Edit User details

Create a new user.

Press the Create User button on the Maintain User - View User Details form. A blank Maintain User – Create/Edit User Details form is displayed. Enter your password to confirm your System Manager role, and then enter the user's details and initial password, together with the user roles required for that user. Press the Save button and the new user will be created.

Note:- You may wish to create new users with expired passwords, so that they are forced to change their passwords on first logon.

Edit an existing user.

Select the user to edit by placing the cursor in the user's username on the Maintain User - View User Details form and then press the Edit User button on that form. The Maintain User – Create/Edit User Details form is displayed, populated with the chosen user's details. Enter your password to confirm your System Manager role. After this, these details can then be edited. When the edit has been completed, press the Save button and the amended user details will be saved.

An account may be locked, either by the System Manager setting the Account Locked checkbox, or by a user exceeding the allowed number of failed login attempts. The System Manager may unlock the account by clearing the Account Locked checkbox.

Drop an existing user.

Select the user to be dropped in the Maintain User – View User Details form and press the Drop User button. After a confirmation, the user will be dropped. Note that a System Manager cannot drop his own user account. The Sys, System and other standard Oracle users cannot be dropped.

36.2   Change of Password

A user can change their password at any time by using the change password form. If a password has expired either by becoming stale dated or by being marked as expired by a System Manager, the user will be asked to change their password at login before being allowed to continue. At login the form used will be the standard Oracle Change User Password dialogue box, however if the user has an expired password, and presses the Cancel button, then the user will be logged out and the application closed. User initiated password changes use a password form modelled on the Oracle Change User Password dialogue box shown in Figure 36-3 Change User Password.
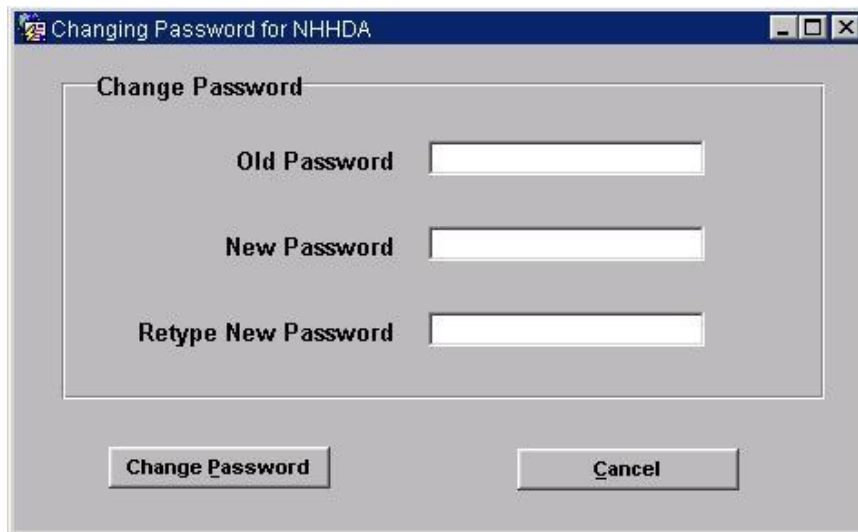
Figure 36-3 Change User Password

When this form is displayed the user is required to enter their old password to confirm their identity and then is required to type in a new password. This password must be six or more characters long. The user is then required to confirm the new password by entering it into the Retype New Password field. Pressing the Change Password button will then change the user's password. The user may abort the process at any time prior to its completion by pressing the cancel button.

36.3   Field Summary

Field	Details
Users	
User	Existing users set up on the system.
Account Details (View User Details)	
Username	Read only. The username for which Account Details are being displayed.

Field	Details
Account Status	Read only. The Account Status for the Username displayed.
Password Expiry Date	Read only. The Password Expiry Date for the Username displayed
Checkboxes	Read only. Ticked for the roles applied to the username displayed. See Roles section of this table.
System Manager	
Your Password	The password of the System Manager using the form. Concealed with asterisks, must be entered to be able to save any changed made on the form.
Account Details (Create/Edit User details)	
Username	The username for which Account Details are being changed. Note this field is blank and enterable only when a new user is being added.
New Password	Used to provide an existing or new user with a new password
Retype New Password	Required to check the password entry in the New Password field.
Account Status	
Account Locked	Ticked when an account is locked. Used to lock and unlock an account.
Password Expired	Checked for an expired password. Can be used to expire a password early and force a user to change their password.
Roles	
Market Domain Data Admin	Tick this checkbox to grant this role to the selected user.
Super MDD Admin	Tick this checkbox to grant this role to the selected user.
Data Aggregator Admin	Tick this checkbox to grant this role to the selected user.
Exception Admin	Tick this checkbox to grant this role to the selected user.
System Operator	Tick this checkbox to grant this role to the selected user.
System Manager	Tick this checkbox to grant this role to the selected user.
Auditor	Tick this checkbox to grant this role to the selected user.
Change Password	
Old Password	The user's current password
New Password	The user's new password to replace the current password
Retype New Password	Required to check the password entry in the New Password field.

37   EAC Data To Distributors Report P0222

This form submits EAC Data for Distributor reports runs.

37.1   Specify Parameters and Submit Report

When the form is opened the date will default to today and the list of Participants with the role of Distributor will be displayed. The details for the report run can then be specified:

1. Enter the date the report will use when selecting EAC data for Distributors. The date will be checked to ensure it is between the current date and a defined number of days in the past; the date range is controlled by a system parameter.

2. Select the Distributors that the report will be generated for using the checkboxes.

3. When a valid report date has been specified and one or more Distributors have been selected, then the report button will be enabled and can be pressed to initiate the report.

The report will generate two types of output file: the P0222 "EAC Data For Distributor" report and an Exception Log file. For an example of the "EAC Data For Distributor Exception Log" file, refer to Appendix B.

For further information about viewing and printing the report, see section 38.

37.2   Field Summary

Field	Details
Settlement Date	Date the report will use when reporting EAC data for Distributors
Distributors	The first field contains the short code used to identify a Market Participant who has the Distributor role.
	The second field contains the Market Participant name.
	The third field contains the Distributor short code
	The fourth field is a checkbox which when checked indicates that a report will be requested for the Distributor.

38   Reports

The reports that can be generated by the NHHDA system fall into two categories:

- User initiated;

- Automatically generated.

An example of each report is given in Appendix B.

38.1   User Initiated Reports

User initiated reports, listed below, can be generated on an ad-hoc basis by suitably authorised NHHDA users, for a set of parameters specified by the user:

- Data Aggregation Run Schedule;
- GSP Groups;
- SSC and Associated Items;
- Average Fractions of Yearly Consumption;
- Distributors and Associated Items;
- Metering Systems and Associated Items;
- Instructions;
- Metering System History;
- Metering System EACs and AAs;
- Profile Classes;
- Supplier Purchase Matrix.
- DC Exception Summary Report.
- EAC Data To Distributor Report

User initiated reports and the forms from which they can be generated, are described in Section 13 to Section 20, Section 23, Section 24, Section 32 and Section 37 above.

38.2   Automatically Generated Reports

Exception and log reports are automatically generated when batch processes complete.

The following reports are generated by the NHHDA system:

- Load Timetable Exceptions - this report is generated automatically if exceptions are found when a Data Aggregation Settlement Timetable is loaded into the NHHDA system regardless of whether exceptions occurred or not;

- Load MDD Exceptions - this report is generated automatically when a file containing Market Domain Data Complete Set and related data is loaded into the NHHDA system regardless of whether exceptions occurred or not;

- Data Aggregation Exceptions - this report is generated automatically if exceptions are found during a Data Aggregation Run;

- DC Performance Report − this report is generated automatically during a Data Aggregation Run;

- Operator and Error Logs - these reports are available for viewing from this screen all the time. Each report is for the current day and lists operational events and errors produced by the NHHDA system during that day. Note: Although the Error Log is available via these screens, it may not exist for the current day if no errors have been reported.

38.3   Viewing Reports

You can use the following form to select a report, which has been generated on the NHHDA server, for viewing at your PC or for printing to your default printer. This form is available from the Reports|Select Reports menu option. When you request to display or print a particular report for the first time, the report is generated on the application server; this may take a while if the report is large, or if other processing is occurring on the NHHDA server. Note that the first time you request to display or print a particular report, the NHHDA database server software must be running; for subsequent displaying or printing of the report, the NHHDA database server software does not need to be running, as the report exists on the application server.

A check is carried out to verify that the report size does not exceed the allowed size set in system parameters. If the size is exceeded, the user is given the option to proceed or cancel. It is also possible to view multiple reports at a time.

Note that you can only view and print reports to which your user role has been authorised.

Only reports that have a status of 'completed' are displayed.
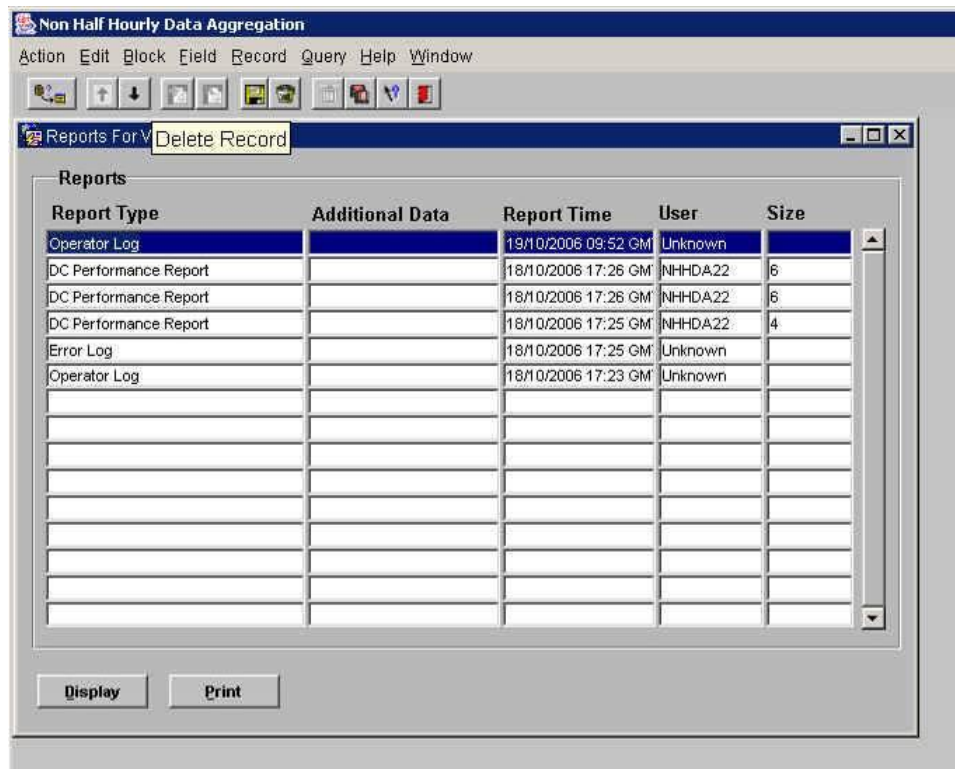
The following NHHDA reports can be viewed and printed from this form, with appropriate user authority:

- Load Timetable Exceptions;
- Load MDD Exceptions;
- Data Aggregation Run Schedule;
- GSP Groups;
- SSC and Associated Items;
- Average Fractions of Yearly Consumption;
- Distributors and Associated Items;
- Metering Systems and Associated Items;
- Instructions;
- MS History, EACs and AAs;
- Profile Classes;
- Supplier Purchase Matrix;
- DC Performance Report;
- Check Data Collector Data Exception;
- Aggregation Exception;
- Refresh Instruction Failures;
- Request Monthly D0095 Report;
- Operator Log;
- Error Log;
- EAC Data To Distributor Exception Log.

The additional information column displays the selection criteria entered when that report was created.

The Creation Time is the date and time, in GMT, at which the file was created on the server.

The User is the user who submitted the activity that generated the report on the server. For the Load Timetable Exceptions, Load MDD Exceptions and Data Aggregation Exceptions reports, the User is identified as 'batch'.

The Size is a relative indication of the size of the report, based on the number of records in the machine readable file.

During installation of the application software, the default viewer for reports is set to Wordpad. Within Wordpad, the No Wrap option (from the View|Options) menu should be set, to ensure that the report text does not wrap.

Note that if you attempt to print or display a report for the first time when the NHHDA software on the server is not running, the following message will be displayed, with <no> substituted with the id of the activity:

```
1006 Failed to wait for formatting activity <no>
NHHDA may not be running
```

Should you experience other unexpected error messages when attempting to print or display a report, you should ensure that you are using the correct printer driver for your printer.

Please note:- Should a report being viewed inadvertently have spurious characters saved to its content, there is a possibility that these changes could appear to persist. This is caused by the Internet Browser redisplaying a local copy of the displayed report. This can be rectified by adding sufficient additional change to the report to trigger the browser into refreshing the report file from the application server after which the report will appear in its correct state.

Appendix A   Error and Status Messages

This appendix gives a list of error and status messages that may be generated by the NHHDA application software. Note that error messages for underlying products, such as Oracle, are not shown; refer to the appropriate product documentation for this information.

Each error or warning message states why the operation or process has not proceeded normally. The cause of the exception and the remedial action required should be self-explanatory in the context of the operation or process that produces the exception.

In the message descriptions, the "%" symbol is used to indicate that the text at that point is inserted when the message is generated (to give more information about the cause of the condition being reported). "%d" indicates that an integer is inserted (eg Aggregation Run Number), while %s indicates that text will be inserted (eg a filename). (See a definition of the printf C function for a complete list on the meaning of the characters after the "%" symbol.).

Further help in diagnosing messages can be sought from the System Manager.

A.1   User Interface Messages

Information Messages

Criteria for Check DC Data saved.

File ALREADY queued

File will be resent

No Changes to Save

Number of instructions

Number of records resent =

Number of failed refresh records resent =

Number of failed refresh records resent has timed out, file processing is continuing

Password changed successfully

Superior privileges are needed by the user in order to perform this operation

> Data for dates for which there has already been an Initial Settlement aggregation run may not normally be amended - in order to insert/delete/modify this data the user must have the 'Superior Market Domain Data user role

The report has been submitted

This File has been archived

This Job has been queued up awaiting the end of Instruction processing

> The message is displayed when an attempt is made to corrupt or reprocess a file whist some activities such as instruction processing is underway. This job gets queued up and is carried out as soon as the activity is completed.

This job has been submitted

This record has been discarded

This Report has been printed

User Created Successfully

User Dropped Successfully

User Modified Successfully

Confirmation Messages

A later Aggregation Run Exists for this Settlement Date and Settlement Code - Are you sure you want to continue?

> You have selected a data aggregation run and requested that the SPM files for this run be extracted and sent to the appropriate ISR Agents and Suppliers. The run you have selected is not the most recent carried out for the settlement selected. You may be selecting and sending out of date data. This action is sensible if the later run was not for all GSP groups and the data you need is for one of the GSP groups not included in the later run. [NB this action will extract data for *all* GSP groups which were included in the selected run]

Any current selection will be deleted - Are you sure you want to continue?

Deleting this GSP Group will delete all its detail records. Do you wish to continue?

Deleting this profile class will delete all its detail records. Do you wish to continue?

Deleting this Profile Class will delete its associated Average Fraction of Yearly Consumption Records. Do you wish to continue?

> You are attempting to remove an association of a PC with the current SSC. Any AFYC for this combination will be deleted by this operation. Are you really sure you want to proceed?

Deleting this Standard Settlement Configuration will delete all its detail records. Do you wish to continue?

No GSP Groups Have Been Specified For The Aggregation Run:

No GSP Groups Have Been Specified For The Dispute Aggregation Run:

Please Ensure a backup exists before this refresh is invoked - Are you sure you want to continue?

> You must take a database backup IMMEDIATELY before applying a refresh (if the refresh fails you will have to restore from this backup). Additionally, you need to ensure that the file receipt (cfrd) and file sender (cfsd) daemon processes are *not* running. Consult your System Administrator for assistance if

required.

This query might return many rows, do you wish to continue?

> On the Resend Failed Instructions form you have entered selection criteria that include a date range of more than two weeks. This may result in many rows being retrieved, which could take a long time.

This Standard Settlement Configuration has associated Average Fractions Of yearly Consumption which will be deleted if you proceed - Are you sure you want to continue?

This will also save changes to other runs, do you wish to continue?

> On the Check Data Collector Data form you have modified or deleted some existing report requests, and entered details for a new report request. If you continue, all these changes will be saved.

This will create a new Time Pattern Regime. Do you wish to continue?

> You have specified a Time Pattern Regime Id which is not currently known to the system. Answer 'OK' if you are sure you have the right Id and you wish it to be added to the database; if not answer 'Cancel'.

The file size exceeds value set for the maximum file size. Do you wish to continue?

> You are attempting to view a file which has a file size greater than the maximum file size defined in the system parameter. Answer 'Ok' to display the file or 'Cancel' not to display the file.

Selected Failed Instructions will be returned for all PRS Agents as well, not just those selected. Are you sure you want to continue?

> If there are any failed refresh instructions waiting to be resent, by pressing 'Ok' there is the possibility that these will also be resent depending on the failed instructions that are about to be resent.

Error Messages

A Data Aggregation Run must be selected before generating a Supplier Purchase Matrix

A file has to be selected before it can be viewed.

> This message is displayed if a user has not selected a file to view, but presses the View button.

A From and To date must be entered when entering a Run Date range

A From and To date must be entered when entering a Settlement Date range

A From and To date must be specified when entering a date range

A From Settlement Date and a To Settlement Date must be entered

A GSP Group and valid Measurement Requirement must be specified before entry to this block

> You have attempted to position the cursor within the AFYC block without having selected a GSP group and a PC/SSC pair.

A GSP Group must be selected before a Report can be submitted

A Line Loss Factor Class may only be deleted if it has no associated Metering System Line Loss Factor Classes

A Line Loss Factor Class may only be deleted if it has no associated Supplier Purchase Matrix Data

A Line Loss Factor Class must be positive

A Line Loss Factor Class must be unique for the same distributor

A Line Loss Factor Class must be of type integer

A Market Participant Id must be unique

> Note that the Id you have entered may not already exist as a participant of the type you are trying to add, but it does already exist on the database. You can add a role to an existing record by executing a query specifying the Id only and then add the new role to the existing record.

A Market Participant Type must be entered for a Market Participant

> When entering a new participant, you must first select at least one role before you are allowed to type in an Id

A Metering System and a date range has to be specified to report on

A Metering System and a Settlement Date must be entered

A Metering System EAC/AA must be selected before a Report can be submitted

A Metering System, a Settlement Date and a Data Collector must be specified to report on

A Participant Id has to have been selected before the Report is submitted

A profile class can not be deleted if it has any associated valid settlement configuration profile classes

A Settlement Date Effective must be unique

A Settlement Date must be entered before a Time Pattern Regime can be input

A Settlement Date must be entered before performing a query

A Settlement record must be selected before access is allowed to the Aggregation Runs block

A Standard Settlement Configuration record must be selected before Profile Class or Time Pattern Regime Records can be viewed

A Threshold Parameter can not be a decimal

A Threshold Parameter can not be negative

A valid Distributor must be entered before submitting a report

A valid Line Loss Factor Class must be entered before submitting a report

A valid Market Participant must be entered once a Source Role has been entered before submitting a report

A valid Metering System must be entered

A valid or no Metering System at all must be entered before submitting a report

A valid Profile Class must be entered before submitting a report

A valid record must be selected

A valid Standard Settlement Configuration must be entered before submitting a report

A valid Supplier must be entered before submitting a report

AFYC effective period overlaps previous period %s.

Aggregation Run Date can only be changed if the Run Status is Provisional or Provisional Default

Aggregation Run Date must be greater or equal to todays date

Aggregation Run may not be deleted as GSP Groups exist for it

An incorrect data type has been entered in one of the criteria items

An Instruction record must be selected

An Instruction Sequence Number must be entered when Skipping

> Agree with the data originator the next file sequence number to be used, and enter this in the 'Skip to' field. All files skipped are treated as if they contained no instructions.

At least one user role must be selected per user

Average Fractions Of Yearly Consumption must add to 1 for the Settlement Date -

Average Fractions Of Yearly Consumption must be between the values of 0 and 1

Calendar Date To must be greater or equal to Calendar Date From

Cannot clear add ppt_code record

Cannot clear new ppt_code_record

Cannot make new ppt_code_record

Cannot un-tick the Password Expired without entering the New Password

Criteria for Check DC Data cannot be modified when jobs are running.

Data Aggregation Run can not be modified as it has already taken place

Data Aggregation Run From Date must be less than Data Aggregation Run To Date

Data Aggregator Appointments exist for Metering Systems with an Effective Date range outside of the Effective Date range specified for this GSP Group and Distributor

Data Collector cannot be deleted as associated Metering System Details exist for it

Data Collector cannot be deleted as Data Collector Appointments exist for it

Data Collector cannot be deleted as Meter Readings exist for it

Date Received To Date must be greater than Date Received From Date

Date To must be later than Date From

Dates must not overlap

Dates Received must be equal or earlier to todays date

Default Oracle user accounts cannot be dropped

Detail records must have corresponding master GSP Group records

Detail records must have corresponding master Profile Class records

Distributor cannot be deleted as a GSP Group Distributor Appointment exists for it

Distributor cannot be deleted as a Line Loss Factor Class exists for it

Distributor cannot be deleted as a Metering System contains the Distributors Short Code

Distributor Short Code can not be updated as it has associated Metering Systems

Distributor Short Code is required for a Distributor

Distributor Short Code must be a valid two digit number

Distributor Short Codes are only allowed for Distributors

Distributor Short Codes must be unique

Distributors must have a different Settlement Date Effective

Either a range of settlement dates or a range of Data Aggregation Run dates must be entered to report on

Error occurred while executing DDL statement. Details are:

Failed to synchronize GSP Groups Runs table:

File(s) will not be updated, the current status is not Rejected.

Format Failed

GSP Groups cannot be inserted, updated or deleted unless Data Aggregation Run Status is Provisional or Provisional Default

GSP Groups In Aggregation Run can only be displayed if the cursor is

on an Aggregation Run record

GSP Groups must be unique

Incorrect current Password entered

Instruction Sequence numbers must be positive

Instruction sequence To Value must be greater than From value

ISR Agent Calendar To Date must be greater than Calendar Date Effective

ISR Agent cannot be deleted as it has associated ISR Agent Appointments

Minimum length of Password should be 6

Minimum length of Username should be 4

New Password must be entered

No data has been selected for this report

No Del Command

No Distributors are available for selection

No Filename

No Line Loss Factor Classes are available for selection for this Distributor

No Placeholder

No Print Command

No Profile Classes are available for selection

No records to resend

No Report

No Temporary Directory

No valid SSC Profile Classes are available for selection for this Profile Class

No View Command

Only 1 Appointment per Distributor is allowed within each GSP Group

Open Failed

Operation denied due to insufficient access rights.

> This message is displayed if a user tries to view a report for which he has no permission to view

Problem occurred while appending changes to audit log file

Profile Classes must be unique

Profile Classes must be unique for a Standard Settlement Configuration

Repeat Password is only allowed when New Password is entered

Repeat Password should be same as New Password

Report Metering System criteria has changed. Re-query the data

Request From Date must be before Request To Date

Researched Average EACs must be equal to or greater than zero

Run Statuses of Provisional, Provisional Default, Approved and Released may only be changed to Approved, Released or Provisional

Settlement Date and Settlement Code must be unique for a Settlement

> Although possibly not currently displayed, a record already exists for the settlement date-code combination you have entered. Use query on settlement date to find the existing entry and add runs to that if required.

Settlement Date and Time Pattern Regime must be unique for an Average Fraction Of Yearly Consumption

Settlement Date cannot be less than previous days request limit or greater than the current System Date

Settlement may not be deleted as Aggregation Runs exist for it

Settlement Date must be populated before report request can be initiated

Settlement To Date must be later than Settlement From Date

Skipped Instruction Sequence value must be greater than Sequence Number of file currently selected

Standard Settlement Configurations must be unique

Superior privileges are needed by the user in order to perform this operation

> Data for dates for which there has already been an Initial Settlement aggregation run may not normally be amended - in order to insert/delete/modify this data the user must have the 'Superior Market Domain Data user role

Supplier cannot be deleted as a Registration exists for it

Supplier cannot be deleted as a Supplier Purchase Matrix exists for it

Supplier cannot be deleted as Data Collector Metering System Details exists for it

The Distributor Short Code is not numeric. Please correct this value in the Market Participant screen before proceeding.

The File Sequence Number entered for Skip is not allowed as it is either Processed, Loaded, or Skipped

The number of Average Fractions of Yearly Consumption required for each Settlement Date is -

The report runs on the exclusive queue and must complete before an Aggregation Run would be able to start. Do you wish to continue?

The settlement date effective must be unique for valid GSP Group

The specified To Date must be greater or equal to the From Date

There would be settlement days in existing DAA without AFYCs to %s.

This Data Collector is not valid

This GSP Group can not be deleted as it has associated GSP Groups in Aggregation Run Records

This GSP Group can not be deleted as it has associated Metering System Data Collector Detail Records

This GSP Group can not be deleted as it has associated Metering System PRS Detail Records

This job has not been submitted

This Profile Class has Metering System records associated with it and can not be deleted

This Profile Class has Supplier Purchase Data records associated with it and can not be deleted

This PRS Agent is not valid

This Standard Settlement Configuration has associated Metering System details and cannot be deleted

This supplier is not valid

This Time Pattern Regime has a Measurement Requirement which has a Metering System associated with it and can not be changed

This Time Pattern Regime has a Measurement Requirement which has Supplier Purchase Matrix data associated with it and cannot be changed

This Time Pattern Regime has a Measurement Requirement which has a Metering System associated with it and can not be inserted

This Time Pattern Regime has a Measurement Requirement which has Supplier Purchase Matrix data associated with it and can not be inserted

This Time Pattern Regime has associated Average Fraction of Yearly Consumption Records and can not be deleted

This Time Pattern Regime has associated Average Fraction of Yearly Consumption Records and can not be changed

Time Pattern Regimes must be unique

Time Pattern Regimes must be unique for a Standard Settlement Configuration

User details have been changed by another user. Cancel and refresh the details before re-applying the changes

Username cannot have space(s)

Username must be entered

Wait Failed

> An activity has been submitted onto the batch queue and the attempt to wait for that activity has failed. The NHHDA Server

processes may not be running. Contact your System Administrator for further assistance.

You cannot Drop the currently logged-in user

Your Password must be entered

A.2   Operator Log Messages

Messages displayed in the operator logs are preceded by a timestamp in the following format:

```
DD-Mon-YYYY HH:MM:SS
```

The messages listed below are grouped under the process in which they could occur.

For Instruction Processing, additional information giving the reasons for failure of Instructions is contained in the Instructions Report. This is described in more detail in section B.9.

A.2.1   Data Aggregation

Aggregation completed

Aggregation started

An error occured in opening DC PERF file (L0043001) for run %d

An error occured in writing header details in DC PERF file (L0043001) for run %d

An error occured writing DC PERF file (L0043001) for run %d

An error occurred writing SPM file for run %d, GSPG %s

Audit file %.0f created for Run %d Defaults

Audit file %.0f created for Run %d Partition %d

Could not update status

Couldn't find value of Aggregate All Valid GSP Groups system parameter, setting to FALSE

Dispute run %d will Aggregate All Valid GSP Groups

Error occurred closing SPM file: %.0f

Error occurred opening SPM file

Error occurred writing SPM data section for file :%.0f:

Error occurred writing SPM file footer for file :%.0f:

Error occurred writing SPM file header for file :%.0f:

Exception file %.0f created for Run %d Partition %d

Invalid Use Run Date parameter. False has been substituted.

NAR Audit enabled value is neither 'ENABLED' nor 'DISABLED' - audit not enabled

> The value of this system parameter is case sensitive - enter in upper case.

Not all SPM files were successfully generated for Aggregation Run %d

Run number %d, Sett. code %s, Sett. Date %s, GSP Group %s contains %ld valid Metering Systems

Run number %d, Sett. code %s, Sett. Date %s, GSP Group %s contains %ld valid Metering Systems; not scheduled so added to run

Run number %d, Sett. code %s, Sett. Date %s, GSP Group %s scheduled in run but has no Metering Systems, removed from run

SPM file %.0f created for Run %d GSP Group %s

Value of Aggregate All Valid GSP Groups system parameter not recognised, setting to FALSE

Warning: Empty SPM file for run %d, GSP Group %s, file not created

Warning: Failed to get Default EAC for %d MSIDs, Run %d, Sett Date %s, GSP Group %s, PC %d

Warning: Failed to get AFYC for %d MSIDs, Run %d, Sett Date %s, GSP Group %s, PC %d, SSC %s

A.2.2   Check Data Collector Data

Activity %.0f submitted for calculate exceptions for partition %d

Activity %.0f submitted for exception report from %s to %s

Supplier: %s Data Collector %s: PRS Agent: %s

Array size for CDC runs exceeded - skip remaining runs

Check Data Collector complete. Status %d

Check Data Collector complete. Successful

Check DC Data Start

No exception reports requested

No exceptions retrieved for specified parameters

Number of DCs (%d) exceeds Maximum (%d)

Warning - no Data Collectors

Will only process first %d DCs

A.2.3   Instruction Processing

Error : Originator not correct type

Error File (File Id = %.0Lf) is not Instruction File

Error on instruction type : %s

Error on instruction type : PRS Refresh

Error: Too many detail changes on database

Error: Too many distributors on database

File %.0Lf error : Instruction sequence number error

File %.0Lf error : later files in sequence already loaded

File %.0Lf error : More than one instruction in PRS Refresh file

> A file containing a PRS refresh instruction may only contain a single instruction

File %.0Lf error : Originator (%s) not a known PRS Agent/Data Collector

> The PRS Agent or Data Collector specified in the file header is not known as such to the system. Either enter a new participant with the new id and role and reprocess or mark as corrupt.

File %.0Lf error : Originator Role and File Type not consistent

> The originator is known, but not in the role this file claims to come from.

File %.0Lf error : Unrecognised Instruction Type %s

File %.0Lf rejected : duplicates file already loaded

File %.0Lf rejected : Source Unknown

File %.0Lf skipped

> A file has been marked to be skipped (using the Manage Instruction Files form) and has now arrived.

File %.0Lf suspended : Earlier file missing

> The file which has arrived is not the next one expected - it will not be processed until the missing file(s) have been received and loaded

File %.0Lf suspended : Outstanding PRS Refresh

> There is a refresh from this PRS agent which has not been applied or discarded. No subsequent files from this PRS agent will be processed

Instruction %s in file %.0f cannot be applied because current status is APPLIED

Instruction %s in file %.0f cannot be applied because current status is DISCARDED and it is marked as CANNOT REPROCESS

Instruction %s in file %.0f cannot be applied because current status is SUPERSEDED by another instruction

Metering system %s is not in Distribution Business %s

> The Metering System's first 2 digits do not match the short code for the distribution business which this refresh is supposed to relate to. The PRS Agent has sent illegal data.

NMI %.0Lf : apply instructions from %s %s

NMI %.0Lf : apply PRS Refresh in file %.0Lf

NMI %.0Lf : apply PRS Refresh thread %d from file %.0Lf in file

%.0Lf

NMI %.0Lf : control process

NMI %.0Lf : done

NMI %.0Lf : File %.0Lf, Instruction %s Failed

NMI %.0Lf : loading file %.0Lf

NMI %.0Lf : Returned Instruction File %.0Lf generated

NMI %.0Lf : returning all failed instructions

NMI %.0Lf : returning failed instructions from %s %s

NMI %.0Lf : skip instruction files (file %.0Lf, skip to %d)

NMI %.0Lf : Unable to load File %.0Lf

NMI %.0Lf Processing stopped : PRS Refresh Outstanding

Refresh Failed on Metering System %s

A.2.4   Load Data

%s %d : file id %.0f line %d%s%s

%s %d Error encountered while opening Market Domain Data Complete Set data file (id %.0f).

%s %d Processing file %.0f - exception file is %.0f

AFYC inserted which has date earlier than latest final initial settlement

Applying changes to database

Changes applied

Days before Notification is %d,

Max Days before Notification is %d,

> These are the values of the appropriate system parameters when the data loading was performed

Error applying changes - Changes NOT applied

Error creating nld exception report

Error opening nld data file

Exception File %s generated (File Id %.0Lf)

File %.0Lf processed successfully

File %.0Lf processing failed

File id %.0f failed validation - a file with the same or later timestamp has already been processed

File id %.0f failed validation - the source participant (%s) does not match role code

File id %.0f failed validation - the source role (%s) is not correct for file type

File id %.0Lf failed validation - another file is running.

GSP Group IDs : %s

> The following GSP groups were present on the system when the timetable was loaded - each run scheduled will be for these GSP groups.

Load starting

Load failed

Load had fatal exceptions - database changes not attempted

No rows in gsp_group_id table

Parameter NDB/DBN not found, using default (%d)

> System parameter Days before notification has illegal value

Parameter NDB/DBN out of range (%d) using max (%d)

Parameter NDB/DBN out of range (%d) using min (%d)

Parameter NDB/VCD not found, using default (%d)

> System parameter Max (calendar) Days before Notification has illegal value

Parameter NDB/VCD out of range (%d) using max (%d)

Parameter NDB/VCD out of range (%d) using min (%d)

Processing Data Aggregation and Settlement Timetable File

Processing Market Domain Data Complete Set file

status %d not known.

Too many rows in gsp_group_id table

> The number of GSP groups on the system exceeds the design maximum

Use Run Date From File is %s

Verify only (Load had no fatal exceptions) - database changes not attempted

Working days from existing settlements: %s

> A working day is defined as a day on which there is an ISR notification date either in the file being processed, or already on the database. This message is recording dates obtained from the database.

A.3   Exception Report Messages

A.3.1   Load Market Domain Data Complete Set

Load starting

Load failed

Load had fatal exceptions - database changes not attempted

Verify only (Load had no fatal exceptions) - database changes not attempted

Applying changes to database

Changes applied

Error applying changes - Changes NOT applied

Mkt Part. and Role on DB is missing from File. MP ID

> Market Participant Role Code

> Distributor Short Code

Failed to Update Dist Short Code From File. MP ID

> Market Participant Role Code

> Distributor Short Code

Modified TP. has been used in a Final Init Settlement. TP

> Eff From Sett. Date

Threshold Parameter on DB is missing from File. TP

> Eff From Sett. Date

GSP Grp in File is missing from DB. GSP Grp ID

> GSP Grp Name

GSP Grp on DB is missing from File. GSP Grp ID

GSP Grp/Dist appt. on DB is missing from File. GSP Grp ID

> Distributor Part. ID

> Eff From Sett. Date

Invalid Dist for GSP Grp/Dist Relationship. GSP Grp ID

> Distributor Participant ID

> Market Part. Role Code

> Eff From Sett. Date

Unable to update Dist appt. (MSID has open DAA). GSP Grp ID

> Distributor Participant ID

> Eff From Sett. Date

Dist appt. ETSD is less than EFSD. GSP Grp ID

> Distributor Participant ID

Eff From Sett. Date

Eff To Sett. Date

Invalid PRS Agent for appt. to Distributor. GSP Grp ID

PRS Agent ID

Mkt Part. Role Code

No Dist Appt. for GSP Grp corresponding to PAA GSP Grp ID

GSP Group ID

PRS Agent ID

ISR Agent appt. on DB is missing from File. GSP Grp ID

ISR Agent ID

Eff From Date

Eff To Date

Invalid ISR Agent for ISR Agent appt. GSP Grp ID

ISR Agent ID

Mkt Part. Role Code

Eff From Date

ISR Agent appt. ETD is less than EFD. GSP Grp ID

ISR Agent ID

Eff From Date

Eff To Date

ISR Agent appointments in the File overlap. GSP Grp ID

ISR Agent ID

Eff From Date of First appt.

Eff To Date of First appt.

ISR Agent ID

Eff From Date of Second appt.

Eff To Date of Second appt.

ISR Agent appt. on DB overlaps appt in the File. GSP Grp ID

ISR Agent ID

Eff From Date of DB appt.

Eff To Date of DB appt.

ISR Agent ID

Eff From Date of appt in file.

Eff To Date of appt in file.

Profile Class on DB is missing from File. PC ID

Time Pattern Regime on DB is missing from File. TPR ID

LLF Class/Dist on DB is missing from File. LLFC ID

> Distributor Part. ID

Invalid LLFC Dist. Distributor Part. ID

> Mkt Part. Role Code
>
> LLFC ID
>
> Eff From Sett. Date

SSC on DB is missing from File. SSC ID

Measurement Req. TPR on DB is missing from File. SSC ID

> TPR ID

Invalid Measurement Req. TPR Value. SSC ID

> Eff From Sett. Date
>
> TPR ID

Invalid update of Measurement Req. used by MSID. SSC ID

> Eff From Sett. Date
>
> TPR ID

VSCPC on DB is missing from File. SSC ID

> PC ID

Invalid VSCPC Profile Class value. SSC ID

> SSC Eff From Sett. Date
>
> PC ID
>
> PC Eff From Sett. Date

Update/Insert AFYCS before latest used in Final Ini.Sett.SSC

> SSC Eff From Sett. Date
>
> PC ID
>
> VSCPC Eff From Sett. Date
>
> GSP Grp ID
>
> AFOYCS Eff From Sett. Date
>
> AFOYCS Eff To Sett. Date
>
> TPR ID
>
> Average Fraction of Yearly Consumption

AFYCS for GSP Grp on DB but missing from File. SSCID

> PC ID
>
> GSP Grp ID
>
> Eff From Sett. Date

Eff To Sett. Date

MDD Load will cause missing AFYC data during DAA SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

AFOYCS Eff To Sett. Date

Date Range Start

Date Range End

AFYC Set ETSD is less than EFSD. SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

AFOYCS Eff To Sett. Date

AFYCS for the same GSP Grp overlap. SSC ID

First SSC record Eff From Sett. Date

PC ID

First VSCPC record Eff From Sett. Date

GSP Grp ID

First AFOYCS Eff From Sett. Date

First AFOYCS Eff To Sett. Date

Second SSC record Eff From Sett. Date

Second VSCPC record Eff From Sett. Date

Second AFOYCS Eff From Sett. Date

Second AFOYCS Eff To Sett. Date

AFYCS in the File overlaps an AFYCS on the DB. SSC ID

PC ID

GSP Grp ID

Eff From Sett. Date on DB

Eff To Sett. Date on DB

SSC record Eff From Sett. Date from File

VSCPC record Eff From Sett. Date from File

AFOYCS Eff From Sett. Date from File

AFOYCS Eff To Sett. Date from File

AFYC Set does not sum to 1.0000. SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

AFOYCS Eff To Sett. Date

Sum of all AFYCS in set

Incorrect additonal Measurement Req. for SSC. SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

TPR ID

Incorrect duplicate Meas. Req. for SSC in AFD record.SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

TPR ID

Incorrect missing Measurement Req. for SSC. SSC ID

SSC Eff From Sett. Date

PC ID

VSCPC Eff From Sett. Date

GSP Grp ID

AFOYCS Eff From Sett. Date

TPR ID

Invalid update of Meas. Req. for which AFYCS exist. SSC ID

Eff From Sett. Date of First SCI record

TPR ID

SSC has Meas. Req. not in another SCI rec for same SSC. SSC

Eff From Sett. Date of first SCI record

TPR ID

Eff From Sett. Date of second SCI record

Illegal Duplicate Meas. Req. for SSC in TPR record. SSC ID

Eff From Sett. Date

TPR ID

No corresponding Distributor to PRS Agent

PRS Agent ID

PRS Agent Role Code

No corresponding PRS Agent to Distributor

Distributor Participant ID

Distributor Role Code

Distributor Short Code

Missing PRS Agent Appointment for Distributor appointment to GSP Group

GSP Group ID

Distributor Participant ID

Effective From Settlement Date

Effective To Settlement Date

Distributor Appointment on database overlaps Appointment in the file

GSP Group ID

Distributor Participant ID

Effective From Settlement Date (DB)

Effective To Settlement Date (DB)

Effective From Settlement Date (file)

Effective To Settlement Date (file)

Reappointment of the same Distributor in the same GSP Group

GSP Group ID

Distributor Participant ID

Effective From Settlement Date

Effective To Settlement Date

Reappointment of the same PRS Agent in the same GSP Group

GSP Group ID

PRS Agent ID

A.3.2   Load Data Aggregation and Settlement Timetable File

Error reading settlement code (line %d)

First settlement date %s defined after last settlement date %s in TTH record

Invalid date field in file (line %d)

Invalid date format in file (line %d)

Invalid Detail Record in file (line %d)

Invalid header - first date (%s) less than last date (%s)

Invalid Field in file (line %d)

Invalid record at line %d

-ISR Deadline Date %s (line %d) is not before the Payment Date %s

ISR Notification Deadline Date %s (line %d) is not before the Payment Date %s

Payment Date %s (line %d) is not within the range defined in the header (%s-%s)Payment Date %s (line %d) is not within the range defined in the header

Planned Data Aggregation Run Date %s (line %d) is not before the ISR Notification Deadline Date %s

Settlement Code %s is not known to the system (line %d)

Settlement Date %s (line %d) is not before the Planned Data Aggregation Run Date %s

Too many ISR deadline dates

When reading ISR notification dates from the database to determine working days, the system has exceeded storage. This should never happen. Contact your System Administrator.

Unable to locate TTH record

Appendix B   Report Directory

This appendix gives an example of each report that can be generated from the NHHDA system.   User initiated and automatically generated reports are shown. All reports are printed landscape, apart from the D0095 Exception Summary Report, which is printed portrait. (The Operator Log and Error Log, which are unformatted text files, are also printed portrait.)

B.1   GSP Groups Report

The GSP Group Id and Name are reported along with all associated Distributor Details, ISR Agent Appointment Details and PRS Agent Appointment Details.

The report will be ordered on GSP Group Id for GSP Groups, Effective From Settlement Date (descending) for Distributors, Effective From Date (descending), Effective To Date (descending) for ISR Agent Appointments and Effective From Date (descending), Effective To Date (descending) for PRS Agent Appointments.

```
GSP Groups and Ass Items        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX

GSP Group
== =============================
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


Distributor Details
Distributor                              From Settlement Date To Settlement Date
==== ================================== ==================== ================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY           DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY           DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY           DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY           DD/MM/YYYY


ISR Agent Appointments
ISR Agent                                From Calendar Date To Calendar Date
==== ================================== ================== ================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
```

B.2 Distributor Report

```
Distributors                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT
User
XXXXXXXX
Distributor
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Line Loss Factor Class
XXXX

Distributor                                  Short Code
==== ======================================= ==========
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX

Line Loss Factor Classes
=== =============================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

PRS Agent Appointment Details
PRS Agent
==== ========================================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

GSP Group Details
GSP Group Name                      From Calendar Date To Calendar Date
==== =================================== ================== ================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY         DD/MM/YYYY
```

B.3   Average Fractions of Yearly Consumption Report

A list of existing Standard Settlement Configuration Ids and descriptions is displayed for the selected Profile Class (as recorded in Valid Settlement Configuration Profile Class). The user selects one, a range, or all of them to report.

A list of all the Time Pattern Regime Ids is Reported for the selected Profile Class and Standard Settlement Configurations (as recorded in Valid Settlement Requirement Profile Class) together with their Average Fraction of Yearly Consumption and Effective From Settlement Date {AFYC}s for the selected GSP Group, if any (from entity Average Fraction of Yearly Consumption).

The report will be ordered by GSP Group Id for GSP Groups, Profile Class Id, SSC Id and Effective From Date (descending) for the main body of the report.

```
Ave Fract Yearly Consumption              XXXXXXXXXXXXXXXXXXXXXXXXXXXXX          DD/MM/YYYY HH:MM GMT

User
XXXXXXXX
GSP Group
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Profile Class
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                          From            Time            Average Fraction of
Standard Settlement Configuration         Settlement Date Pattern Regime  Yearly Consumption
==== =================================================== =============== =============== ====================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXXX                    0.999999
                                                                          XXXXX                    0.999999
                                          DD/MM/YYYY       XXXXX                    0.999999
                                                                          XXXXX                    0.999999
                                          DD/MM/YYYY       XXXXX                    0.999999
                                                                          XXXXX                    0.999999
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXXX                    0.999999
                                                                          XXXXX                    0.999999
                                          DD/MM/YYYY       XXXXX                    0.999999
                                                                          XXXXX                    0.999999
```

B.4   Metering Systems and Associated Items Report

The report is ordered by Data Collector for the selected Metering System and Settlement Date. For each Data Collector included in the report, the Metering System's associated items are shown.

Ordering is in alphabetical order for each item, Data Aggregator Appointments and Data Collector Appointments will be in descending Date Effective From order.

```
MS and Associated Items          XXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX
Metering System
XXXXXXXXXXXXX
Settlement Date
DD/MM/YYYY
Data Collector (DC)
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                        Source Item
Item                    Role   Id   Description
======================= ====== ==== ========================================
GSP Group               PRS    XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Supplier                PRS    XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Profile Class           PRS    XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
SSC                     PRS    XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Measurement Class       PRS    X    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     X    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Energisation Status     PRS    X    XXXXXXXXXXXXXXXXXXXXXXXXXXX
                        DC     X    XXXXXXXXXXXXXXXXXXXXXXXXXXX
Line Loss Factor Class  PRS    XXX  XXXXXXXXXXXXXXXXXXXXXXXXXX
Distributor                    XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

B.5 Metering System History, EACs and AAs

```
MS History, EACs and AAs                  XXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX
Metering System
XXXXXXXXXXXXXX
Settlement Date From
DD/MM/YYYY
Settlement Date To
DD/MM/YYYY

                                                   Time
Standard Settlement Configuration                  Pattern Data Collector
==== ============================================= ======= ==== ==========================================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   XXXXX   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Settlement Date To              Annualised  Estimated Annual
Effective       Settlement Date Advance (Kwh) Consumption (KWh)
=============== =============== ============== ================
DD/MM/YYYY      DD/MM/YYYY      99999999999.9    99999999999.9
DD/MM/YYYY      DD/MM/YYYY      99999999999.9    99999999999.9
DD/MM/YYYY      DD/MM/YYYY      99999999999.9    99999999999.9
DD/MM/YYYY      DD/MM/YYYY      99999999999.9    99999999999.9

Source                          From
Role Id   Name                  Settlement Date GSP Group
==== ==== ===================================== =============== == =================================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX   XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Source                          From
Role Id   Name                  Settlement Date  Supplier
==== ==== ===================================== =============== ==== ==========================================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY       XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Appointments for Registration starting DD/MM/YYYY

Data Aggregator Appointments
From            To
Settlement Date Settlement Date
=============== ===============
DD/MM/YYYY       DD/MM/YYYY
DD/MM/YYYY       DD/MM/YYYY
DD/MM/YYYY       DD/MM/YYYY
DD/MM/YYYY       DD/MM/YYYY

Data Collector Appointments
Data Collector                  From Calendar Date
==== =============================== ==================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY

Source                          From
Role Id   Name                  Settlement Date Profile Class
==== ==== =========================== =============== == =================================================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Source                          From
Role Id   Name                  Settlement Date Standard Settlement Configuration
==== ==== =========================== =============== ==== =============================================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Source                          From
Role Id   Name                  Settlement Date Measurement Class
==== ==== =========================== =============== = ===============================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Source                          From
Role Id   Name                  Settlement Date Energisation Status
==== ==== =========================== =============== = ===============================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
DC   XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY      X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Source
Role Id   Name
==== ==== ===============================
PRS  XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Effective
From Date  LL Description               Distributor
========== ==== =========================== ==== ===============================
DD/MM/YYYY XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

B.6   Profile Class and Associated Items Report

The report is ordered by Profile Class and within each Profile Class, by GSP Group.

```
Profile Class                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX

Profile Class
== ===================================================
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

                                 From         Reasearched Average Estimated
GSP Group                        Settlement Date   Annual Consumption (KWh)
== ============================= =============== =============================
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
                                 DD/MM/YYYY              99999999999.9
                                 DD/MM/YYYY              99999999999.9
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
                                 DD/MM/YYYY              99999999999.9
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY              99999999999.9
```

B.7   Standard Settlement Configuration and Associated Items Report

For each selected Standard Settlement Configuration, the Id and Description are output. For each Valid Settlement Configuration Profile Class the Profile Class Id and Description are output. For each Measurement Requirement the Time Pattern Regime Id is output.   All Average Fractions of Yearly Consumption are output, ordered by Profile Class, GSP Group, Time Pattern Regime and Effective From Settlement Date.

The report will be ordered by SSC Id, Profile Class Id for Valid Profile Classes, Time Pattern Regime for Valid Measurement Requirements and Profile Class Id, GSP Group id, and Effective From Date (descending) for the associated SSC items.

This report is ordered as follows:

1. Standard Settlement Configuration Id

2. Profile Class Id (Profile Class within SSC)

3. Time Pattern Regime Id (Measurement Requirements within SSC)

4. Profile Class Id

5. GSP Group Id

6. Effective From Settlement Date (descending)

7. Time Pattern Regime Id

```
Standard Settlement Config  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX

Standard Settlement Configuration
==== =================================================
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Profile Class
== =================================================
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Measurement Requirements
(Time Pattern Regimes)
=======================
XXXXX
XXXXX
XXXXX

Profile                          Time     From            To
Class   GSP Group                Pattern  Settlement Date Settlement Date AFYC
======= == ============================ ======== =============== =============== ========
    XX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXX    DD/MM/YYYY      DD/MM/YYYY       0.999999
                                         XXXXX    DD/MM/YYYY      DD/MM/YYYY       0.999999
    XX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXX    DD/MM/YYYY      DD/MM/YYYY       0.999999
                                         XXXXX    DD/MM/YYYY      DD/MM/YYYY       0.999999
```

B.8   Instructions Report

The report is ordered by descending Date Received.

```
Instructions                                              Cognizant
03/10/1997 09:54 GMT


User
NUSER3
Instruction Source
DC 0039 Test Collector 10
Date Received From
Not entered
Date Received To
Not entered
Instruction Type
Not entered
Instruction Status
Not entered
Instruction Sequence From
1
Instruction Sequence To
10
Metering System
Not entered
Distributor
Not entered


Date       Source                             Sequence Type     Status     Significant Date Subject
========== ================================== ============ ========== ========== ================ ===========
03/10/1997 DC  0039 Test Collector 10                1 NH09      A          01/01/1997       200170896000
03/10/1997 DC  0039 Test Collector 10                2 NH09      F          02/01/1997       200170896000
Status Reason AA before Sig Date not on dB           01/01/1997                              Action State
XXXXXXXXXXXXXXXX
Status Reason MAP on dB missing from instruction     01/01/1997                              Action State
XXXXXXXXXXXXXXXX
```

Details of each Instruction that meets the criteria entered via the Report Instructions form (see section 32) is included in the report.

Each failed Instruction has one or more Instruction Status Reasons. For each Instruction Status Reason, there is additional data, which supplements the Reason and may assist in identifying the problem.

For example, in the above report, the Instruction with sequence number 2 has a status of Failed, for which there are two Instruction Status Failure Reasons, one of which is as follows:

```
AA before Sig Date not on dB
```

The Annualised Advance (AA) in the Instruction is not the most recent occurrence in the database before the Significant Date. The Effective from Settlement Date of the AA is given after the Reason, i.e.. 01/01/97.

For an explanation of Instruction Error codes, see Appendix C, page 191198. This shows Instruction Status Failure Reasons, Additional Data and also provides a description of the Reasons, (these descriptions are not shown in the report).

B.9   Refresh Instruction Failures Report

```
Refresh Instruction Failures            XXXXXXXXXXXXXXXXXXXXXXXXXX          DD/MM/YYYY HH:MM GMT
User
XXXXXXX
Instruction Source
XXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Metering System
XXXXXXXXXXXXX
Resend Request Flag
X
Resend Request Date
XXXXXXX From DD/MM/YYYY To DD/MM/YYYY


Source                                           Sequence     Significant Date Subject        Resend Request Date
================================================ ============ ================ ============== ====================
XXX XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX DD/MM/YYYY       XXXXXXXXXXXXX DD/MM/YYYY
Failure Reason XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Include X
Failure Reason XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Include X
Failure Reason XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Include X
Failure Reason XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX Include X
```

B.10 Data Aggregation Run Schedule Report

```
Data Aggregation Run                      XXXXXXXXXXXXXXXXXXXXXXXXXXX          DD/MM/YYYY HH:MM GMT
User
XXXXXXXX
Settlement Date From
DD/MM/YYYY
Settlement Date To
DD/MM/YYYY

Settlement
Date
==========
DD/MM/YYYY

                        ISR Notification Data Aggregation Data Aggregation                        Number of
Settlement Code         Date             Run Number       Run Date Time     Status                GSP Groups
== ============================ ================ ================ ======== ======== = ============================== =========
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX DD/MM/YYYY                9999999 DD/MM/YY HH:MM:SS X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX       99

GSP Group
== ==============================
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

B.11 Supplier Purchase Matrix Log Report

```
SPM (Report)                                       XXXXXXXXXXXXXXXXXXXXXXXXXXXX            DD/MM/YYYY HH:MM GMT
User
XXXXXXXX
Standard Settlement Configuration
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Distributor
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Line Loss Factor Class
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Profile Class
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Supplier
XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Settlement Settlement Run       Run GSP
Date       Code       Code     Number Group
========== ========== ======= ======= =====
DD/MM/YYYY XX         D        9999999 XX

Supplier
========
XXXX

Profile          Line Loss          Time P Default  Default   AA       AA              EAC             EAC      EAC             EAC
  Class Distr     Class SSC Regime  Metered Unmetered Metered  Metered (Mwh)   Metered (Mwh)   Metered  Unmetered (Mwh) Unmetered
======= ===== ========= ==== ====== ======== ========= ======== =============== =============== ======== =============== =========
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
     XX XXXX        XXX XXXX XXXXX  99999999 99999999 99999999 9999999999.9999 9999999999.9999 99999999 9999999999.9999  99999999
```

B.12 Check Data Collector Data Exception Log

```
Data Collector Exception Log      XXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXXX
Metering System
9999999999999
Exception Type
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX


         Data      From            To
Supplier Collector Settlement Date Settlement Date
======== ========= =============== ===============
XXXX     XXXX      DD/MM/YYYY      DD/MM/YYYY

Count of Metering Systems with E01 (no EAC or AA for appointed DC)    999999
Count of Metering Systems with E02 (missing subsequent consumption data) 999999
Count of Metering Systems with E03 (AA with no DAA Appointment)       999999
Count of Metering Systems with E04 (EAC with no DAA Appointment)      999999
Count of Metering Systems with E05 (non-zero AA while de-energised)   999999
Count of Metering Systems with E06 (missing preceding consumption data) 999999
Count of Metering Systems with E07 (Overlapping Meter Advance Periods) 999999
Count of Metering Systems with E08 (Supplier mismatch)               999999
Count of Metering Systems with E09 (Measurement Class mismatch)      999999
Count of Metering Systems with E10 (GSP Group mismatch)              999999
Count of Metering Systems with E11 (Profile Class mismatch)          999999
Count of Metering Systems with E12 (Energisation Status mismatch)    999999
Count of Metering Systems with E13 (SSC mismatch)                    999999
Count of Metering Systems with E14 (no PRS registration)             999999
Count of Metering Systems with any exceptions                        999999


PRS Agent
=========
XXXX

Metering System
===============
9999999999999

E01 Registration From Settlement Date                                DD/MM/YYYY
    Data Aggregator Appointment From Settlement Date                 DD/MM/YYYY
E02 Registration From Settlement Date                                DD/MM/YYYY
    Data Aggregator Appointment From Settlement Date                 DD/MM/YYYY
    First date with no data                                          DD/MM/YYYY
E03 Meter Advance Period From Settlement Date                        DD/MM/YYYY
E04 EAC From Settlement Date                                         DD/MM/YYYY
E05 Meter Advance Period From Settlement Date                        DD/MM/YYYY
E06 First date with no data                                          DD/MM/YYYY
E07 Meter Advance Period From Settlement Date                        DD/MM/YYYY
    Other Data Collector                                             XXXX
    Other Data Collector's Meter Advance Period From Settlement Date DD/MM/YYYY
E08 Supplier according to Data Collector                             XXXX
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E09 Measurement Class according to PRS                               X
    Measurement Class according to Data Collector                   X
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E10 GSP Group according to PRS                                       XX
    GSP Group according to Data Collector                           XX
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E11 Profile Class according to PRS                                   XX
    Profile Class according to Data Collector                       XX
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E12 Energisation Status according to PRS                             X
    Energisation Status according to Data Collector                 X
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E13 SSC according to PRS                                             XXXX
    SSC according to Data Collector                                 XXXX
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
E14 Supplier according to PRS Agent                                  XXXX
    PRS Data From Settlement Date                                    DD/MM/YYYY
    Data Collector From Settlement Date                              DD/MM/YYYY
```

The status code meanings are as follows:

E01   No EAC or AA for appointed DC

E02   Missing subsequent consumption data

E03   AA with no DAA appointment

E04   EAC with no DAA appointment

E05   Non-zero AA when de-energised

E06   Missing preceding consumption data

E07   Overlapping MAPs

E08	Supplier incorrect
E09	Measurement Class incorrect
E10	GSP Group incorrect
E11	Profile Class incorrect
E12	Energisation Status incorrect
E13	Standard Settlement Configuration incorrect
E14	No Registration

Further information about these status codes is provided in section 25.2.

B.13 Aggregation Exception Log

```
Aggregation Exception Log          XXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

User
XXXXXXX
Metering System
XXXXXXXXXXXXX
Exception Type
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Settlement Settlement Run        Run
Date       Code       Code      Number
========== ========== ======= =======
DD/MM/YYYY XX              D 9999999

Metering System
===============
XXXXXXXXXXXXX

A01 Appointed Data Collector                              XXXX
    Registration From Settlement Date                     DD/MM/YYYY
    Data Collector Appointment From Calendar Date         DD/MM/YYYY
A02 Data Collector                                        XXXX
    Data Collector Data From Settlement Date              DD/MM/YYYY
A03 Data Collector                                        XXXX
    Meter Advance Period From Settlement Date             DD/MM/YYYY
A04 Meter Advance Period From Settlement Date             DD/MM/YYYY
    Data Collector                                        XXXX
A05 Data Collector                                        XXXX
    Supplier according to PRS                             XXXX
    Supplier according to Data Collector                  XXXX
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC registration details   DD/MM/YYYY
A06 Data Collector                                        XXXX
    Measurement Class according to PRS                    X
    Measurement Class according to Data Collector         X
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A07 Data Collector                                        XXXX
    GSP Group according to PRS                            XX
    GSP Group according to Data Collector                XX
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A08 Data Collector                                        XXXX
    Profile Class according to PRS                       XX
    Profile Class according to Data Collector            XX
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A09 Data Collector                                        XXXX
    Energisation Status according to PRS                 X
    Energisation Status according to Data Collector      X
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A10 Data Collector                                        XXXX
    SSC according to PRS                                  XXXX
    SSC according to Data Collector                      XXXX
    Settlement date of last change to any PRS registration details  DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A11 Data Collector                                        XXXX
    Meter Advance Period From Settlement Date             DD/MM/YYYY
A12 Metering System Excluded                              XXXXXXXXXXXXX
A13 GSP Group ID                                                    XX
    Profile Class ID                                                XX
    SSC ID                                                        XXXX
    Time Pattern Regime Id                                        XXXXX
    Metering System Default Count                              XXXXXXX
A14 GSP Group ID                                                    XX
    Profile Class ID                                                XX
    Metering System Default Count                              XXXXXXX
```

The status code meanings are as follows:

A01   No EAC or AA for Metering System

A02   No PRS Data Provided

A03   Non-zero AA when de-energised

A04   Multiple Meter Advance Periods

A05   Supplier incorrect

A06   Measurement Class incorrect

A07   GSP Group incorrect

A08   Profile Class incorrect

A09   Energisation Status incorrect

A10   Standard Settlement Configuration incorrect

A11   AA for Unmetered Metering System

A12   Metering System Excluded due to missing
            DC or PRS details

A13   Missing AFYC

A14   Missing Default EAC

Further information about these status codes is provided in section 25.2.

B.14 Load MDD Exception Log

```
Load  MDD  Exceptions                                                                        Cognizant
07/03/2005 16:58 GMT

MDD File Name: 1_7_mdd_1i      File Id: 632

MDD Version Number : 1        MDD Load Date: 02/06/1999
Information : Load starting

THPL1 - Warning :- Modified TP. has been used in a Final Init Settlement. TP  :        2000
                   Eff From Sett. Date                                         :        01/02/1997

THPL2 - Warning :- Threshold Parameter on DB is missing from File. TP         :        4
                   Eff From Sett. Date                                        :        01/01/1996

MPRL1 - Warning :- Mkt Part. and Role on DB is missing from File. MP ID       :        0068
                   Market Participant Role Code                               :        P
                   Distributor Short Code                                     :

GSGL1 - Warning :- GSP Grp in File is missing from DB. GSP Grp ID             :        22
                   GSP Grp Name                                               :        GSP Group 22

IAAL1 - Warning :- ISR Agent appt. on DB is missing from File. GSP Grp ID     :        11
                   ISR Agent ID                                               :        0055
                   Eff From Date                                              :        01/01/1993
                   Eff To Date                                                :        31/12/1993

PFCL1 - Warning :- Profile Class on DB is missing from File. PC ID            :        1

TPDL1 - Warning :- Time Pattern Regime on DB is missing from File. TPR ID     :        2

Table                        Operator Data
============================ ======== ========================================
ndb_av_frac_y_cons           INSERT   4,5,9,5,01-JAN-95,31-DEC-98,0
ndb_av_frac_y_cons           UPDATE   4,2,6,3,01-JAN-95,31-DEC-12,.25

                                              -- End of Report --


                                              Page 1
```

The Human Readable Report shows the format but does not show all record types or reflect the data below.

ZHD|L0040001|B|LO|||Time Stamp

FNI|mdd1|312

MDD|1|19990602|Load starting

M03|3|19970301

M03|3|19970101

M04|2|19930301

M04|1|19930101

M01|EELC|X|

M01|EELC|R|16

M01|0090|P|

M01|0075|U|

M01|0034|D|

M01|0038|D|

M05|21|GSP Group 21

M05|22|GSP Group 22

MGD|1|LO|19940101|19971231|19961231

M07|1|LO|19970101

MGD|10|0010|19930101||19941231

M07|10|0010|19950101

M07|11|0011|19930101

M19|11|0055|19930101|19931231

MGD|13|0013|19930101||19941231

M07|13|0013|19950101

```
MGD|15|0009|19840101||19941231

M07|15|0009|19950101

MGD|19|0002|19940101||19941231

M07|19|0002|19950101

MGD|2|LO|19940101|19961231|19941231

M07|2|LO|19950101

MGD|3|0003|19940101|19961231|19941231

M07|3|0003|19950101

MGD|9|0015|19840101||19941231

M07|9|0015|19950101

M13|0003|19950101|20001231|0061

M13|0011|19931231|19991231|0091

M13|0013|19930101|19931231|0067

M13|0175|19960101|19980201|0069

M26|8|0009

M35|1|1|11|19930101|19931231

M34|2|19970101|3|19950101|4|19950101||6|0.250000

M34|2|19970101|3|19950101|4|19950101||7|0.750000

M34|2|19970101|4|19950101|5|19950101||6|0.750000

M34|2|19970101|4|19950101|5|19950101||7|0.250000

M34|2|19970101|5|19950101|2|19950101||6|0.500000

M34|2|19970101|5|19950101|2|19950101||7|0.500000

M35|3|2|11|19930101|19931231

M32|3|1

M32|3|3

M32|3|4

M32|3|5

MDD|1|19990602|Applying changes to database

MDD|1|19990602|Changes applied

M56|ndb_av_frac_y_cons|INSERT|4,5,10,5,01-JAN-95,31-DEC-98,0

M56|ndb_av_frac_y_cons|UPDATE|4,2,6,3,01-JAN-95,31-DEC-12,.25ZPT|53|Checksum
```

The status code meanings are as follows:

M01	Market Participant and Role On Database Is Missing From File
M02	Failed to Update Distributor Short Code From File
M03	Modified Threshold Parameter has been used in a Final Initial Settlement
M04	Threshold Parameter On Database Is Missing From File
M05	GSP Group In File is Missing From Database
M06	GSP Group On Database Is Missing From File
M07	GSP Group/Distributor Relationship On Database Is Missing From File
M08	Invalid Distributor for GSP Group/Distributor Relationship
M09	Unable to Update Distributor Appointment (MSID has open DAA)
M10	Distributor Appointment Effective To Settlement Date is less then Effective From Settlement Date
M14	Invalid PRS Agent for PRS Agent Appointment to Distributor
M15	No Distributor Appointment for GSP Group corresponding to PRS Agent Appointment
M19	ISR Agent Appointment on Database Is Missing From File
M20	Invalid ISR Agent for ISR Agent Appointment
M21	ISR Agent Appointment Effective To Settlement Date is less than Effective From Settlement Date.
M22	Date overlap exists between two or more ISR Agent Appointments in the file
M23	ISR Agent Appointment on database overlaps Appointment in the file.
M24	Profile Class on Database is Missing From File
M25	Time Pattern Regime on Database is Missing From File
M26	LLF Class/Distributor Relationship on Database is Missing From File
M27	Invalid LLFC Distributor ID
M28	SSC on Database is Missing From File
M29	Measurement Requirement TPR on Database is Missing From File
M30	Invalid Measurement Requirement TPR Value
M31	Invalid Update of Measurement Requirement Used by Metering System
M32	VSCPC On Database Is Missing From File
M33	Invalid VSCPC Profile Class Value

M34	Update/insert of AFYC set before latest date which has been used in Final Initial Settlement
M35	AFYC set for GSP Group Exists On Database Is Missing From File
M36	MDD Load Would Cause Missing AFYC Data During DAA Appointment
M37	AFYC Set Effective To Settlement Date is less than Effective From Settlement Date
M38	Date overlaps exist between two or more sets of AFYCS for the same GSP Group
M39	AFYCS in file overlaps an AFYCS on the database
M40	AFYC Set Does Not Sum to 1.0000
M41	Incorrect Additional Measurement Requirement for SSC
M42	Incorrect Duplicate Measurement Requirement in AFD record for SSC
M43	Incorrect Missing Measurement Requirement for SSC
M44	Invalid Update of Measurement Requirement for Which There is Already One or More Sets of AFYCs
M45	Measurement Requirement specified which is not specified for another SCI for the same Standard Settlement Configuration
M46	Illegal Duplicate Measurement Requirement in TPR record for SSC
M48	No corresponding Distributor to PRS Agent
M49	No corresponding PRS Agent to Distributor
M50	Missing PRS Agent Appointment for Distributor appointment to GSP Group
M51	Distributor Appointment on database overlaps Appointment in the file
M52	Reappointment of the same Distributor in the same GSP Group
M54	Reappointment of the same PRS Agent in the same GSP Group
M55	Failed to Insert due to dup. Dist Short Code From File
M56	Record of Database Changes

B.15 Load DAST Exception Log

```
ZHD|L0009001|B|LO|||19991102171451
FNI|1_1_pst_6|285
SYS|NDB|URF|FALSE
GSP|1|GSP Group 1
GSP|2|GSP Group 2
GSP|3|GSP Group 3
GSP|4|GSP Group 4
GSP|5|GSP Group 5
GSP|6|GSP Group 6
GSP|7|GSP Group 7
GSP|8|GSP Group 8
GSP|9|GSP Group 9
GSP|10|GSP Group 10
GSP|11|GSP Group 11
GSP|12|GSP Group 12
GSP|13|GSP Group 13
GSP|14|GSP Group 14
GSP|15|GSP Group 15
GSP|16|GSP Group 16
GSP|17|GSP Group 17
GSP|18|GSP Group 18
GSP|19|GSP Group 19
GSP|20|GSP Group 20
GSP|60|GSP Group 60
GSP|99|GSP Group 99
AAP|19970521|19970502|SF
NIA|19970101|SF|19970129|19970120
DPD|19970129|19970102|SF
DPD|19970129|19970103|SF
DPD|19970129|19970104|SF
DPD|19970129|19970105|SF
DPD|19970129|19970106|SF
DPD|19970129|19970107|SF
DPD|19970129|19970108|SF
DPD|19970129|19970109|SF
DPD|19970129|19970110|SF
DPD|19970129|19970111|SF
DPD|19970129|19970112|SF
DPD|19970129|19970113|SF
DPD|19970129|19970114|SF
DPD|19970129|19970115|SF
DPD|19970129|19970116|SF
DPD|19970129|19970117|SF
DPD|19970129|19970118|SF
DPD|19970129|19970119|SF
```

```
DPD|19970129|19970120|SF
DPD|19970129|19970121|SF
DPD|19970129|19970122|SF
DPD|19970129|19970123|SF
DPD|19970129|19970124|SF
DPD|19970129|19970125|SF
DPD|19970129|19970126|SF
DPD|19970129|19970127|SF
DPD|19970129|19970128|SF
DPD|19970225|19970130|SF
NIA|19970501|SF|19970529|19970520
NIA|19970502|SF|19970529|19970521
DPD|19970129|19970101|RF
DPD|19970129|19970102|RF
DPD|19970129|19970103|RF
ZPT|61|309732461
```

The status code meanings are as follows:

DND	Dispute Run Not Deleted
AAP	Aggregation Already Performed
NIA	Run Not Inserted (Duplicate run already performed)
NID	Run Not Inserted (Duplicate run already on database)
NIP	Run Not Inserted (no Payment Date)
DPD	Defaulted to Provisional Default
SYS	System Parameter Value
GSP	GSP Group In Run

B.17 DC Performance Report

```
DC Performance Report                    Cognizant              05/05/2004 14:05 GMT

Settlement Settlement Run        Run
Date       Code       Code       Number
========== ========== ======= =======
01/08/2000 SF         D          1004

Data Collector
===============================
SWEB

Supplier   Def EAC Def Unmetered  Total AA   Total EAC Total Unmetered
           Count   Count          Count      Count     Count
========   ======= ============== ========== ========= ===============
AQES            6              0          4         0               0
BGAS            6              0          2         2               0
FORT            4              0          6         0               0
MANP            4              0          4         2               0
Total          20              0         16         4               0

Data Collector
===============================
YELG

Supplier   Def EAC Def Unmetered  Total AA   Total EAC Total Unmetered
           Count   Count          Count      Count     Count
========   ======= ============== ========== ========= ===============
AQES            2              0          4         2               0
BGAS            2              0          6         2               0
ECON            2              0          2         4               0
Total           6              0         12         8               0


                          -- End of Report --


                              Page 1
```

B.18 D0095 Exception Summary Report

Note: this report is printed in portrait format.

```
D0095 Summary Report              Cognizant              18/10/2004 16:17
GMT


Supplier Data Collector From Settlement  To Settlement
Id       Id             Date             Date
======== ============== ================ =================
0020     0041           29/06/2000       29/06/2004
Summary of Metering System Ids with D0095 Exceptions
====================================================

Type Description                            MSID Count
==== ===========                            ==========
E01  No EAC or AA for Appointed DC                   0
E02  Missing subsequent consumption data             0
E03  AA with no DA appointment                       0
E04  EAC with no DA appointment                      0
E05  Non-zero AA when de-energised                   0
E06  Missing preceding consumption data              0
E07  Overlapping MAPs                                0
E08  Supplier incorrect                              0
E09  Measurement class incorrect                     0
E10  GSP Group incorrect                             0
E11  Profile Class incorrect                         0
E12  Energisation Status incorrect                   1
E13  Standard Settlement Configuration incorrect     0
E14  No registration                                 0

     Total Metering System ID Exceptions            1




Supplier Data Collector From Settlement  To Settlement
Id       Id             Date             Date
======== ============== ================ =================
0020     0044           29/06/2000       29/06/2004
```

B.19 EAC Data To Distributors Exception Log

```
Distributor EAC Exception Log       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  DD/MM/YYYY HH:MM GMT

Activity          XXXXXXXX
Settlement Date DD/MM/YYYY
Run Number        XXXXX

Distributor   MSID    Filename
Id            Count
============ ========= ================
XXXX         XXXXXXXX XXXXXXXXXXXX
XXXX         XXXXXXXX XXXXXXXXXXXX

Metering System
===============
XXXXXXXXXXXXX

A01 Appointed Data Collector                              XXXX
    Registration From Settlement Date                     DD/MM/YYYY
    Data Collector Appointment From Calendar Date         DD/MM/YYYY
A05 Data Collector                                        XXXX
    Supplier according to PRS                             XXXX
    Supplier according to Data Collector                  XXXX
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC registration details    DD/MM/YYYY
A06 Data Collector                                        XXXX
    Measurement Class according to PRS                    X
    Measurement Class according to Data Collector         X
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A07 Data Collector                                        XXXX
    GSP Group according to PRS                            XX
    GSP Group according to Data Collector                 XX
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A08 Data Collector                                        XXXX
    Profile Class according to PRS                        XX
    Profile Class according to Data Collector             XX
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A09 Data Collector                                        XXXX
    Energisation Status according to PRS                  X
    Energisation Status according to Data Collector       X
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A10 Data Collector                                        XXXX
    SSC according to PRS                                  XXXX
    SSC according to Data Collector                       XXXX
    Settlement date of last change to any PRS registration details   DD/MM/YYYY
    Settlement date of last change to any DC details    DD/MM/YYYY
A12 Metering System Excluded                              XXXXXXXXXXXXX
    Supplier                                              XXXX
    Supplier effective from settlement date               DD/MM/YYYY
    Data Aggregator Appointment effective from settlement date       DD/MM/YYYY

Metering System
===============

A13 GSP Group ID                                               XX
    Profile Class ID                                           XX
    SSC ID                                                     XXXX
    Time Pattern Regime Id                                     XXXXX
    Metering System Default Count                              XXXXXXX
A14 GSP Group ID                                               XX
    Profile Class ID                                           XX
    Metering System Default Count                              XXXXXXX
```

The status code meanings are as follows:

A01	No EAC or AA for Metering System
A05	Supplier incorrect
A06	Measurement Class incorrect
A07	GSP Group incorrect
A08	Profile Class incorrect
A09	Energisation Status incorrect
A10	Standard Settlement Configuration incorrect
A12	Metering System Excluded due to missing DC or PRS details
A13	Missing AFYC
A14	Missing Default EAC

Appendix C   Instruction Processing Error Codes

Error codes have the form NPQ where P indicates the category of error and appears in the following list underlined and Q discriminates between errors of the same category. Additional Data is held in a single column in the database table ndb_instruction_status_reason. Where more than one item is listed, items are separated by semicolons. Additional Data also appears alongside the Description text on the Manage Failed Instructions form, in the Instructions Report and in the Failed Instruction data file generated from Return Failed Instructions.

C.1   Miscellaneous (0 and 9)

Code	Description	Meaning	Additional Data
N0A	Refresh accepted with validation errors	User has manually set the instruction to Applied When a refresh instruction is set to Applied using the 'Accept' button on the manage refresh instructions form, this reason is logged. No action is required	username
N0B	Instruction type is not valid for source	PRS instructions may only be sent by a PRS Agent; EAC/AA instructions may only be sent by Data Collectors. This will never happen as instruction types are validated as part of file loading - an error causes the file to be rejected.	
N0D	Manual discard	User has manually set the instruction to Discard. When a refresh instruction is set to Discard using the manage refresh instructions form, this reason is logged. No action is required	username
N0F	Automatic discard due to failure	When a refresh fails, it is set to Discard. This reason indicates that the discard was automatic - a restore is required from the backup taken immediately before the apply refresh was attempted.	
N0I	Invalid Instruction	Instruction contents are invalid. Additional data identifies where the problem is e.g. DAA 2 2 means there is a problem with the second field in the second DAA record in the instruction The PRS/DC software is at fault, or the file has been corrupted. A new valid DAA instruction is needed from PRS or EAC/AA instruction from DC with Significant Date the same or earlier than the failed instruction	record type; record count of record type; field number
N0S	Instruction has been superseded	Following an instruction failure, a successful subsequent instruction which overlaps all data which should have been included in the failed instruction will supersede the failed instruction. This reason indicates which instruction caused the status of Superseded. No action is required for this instruction.	Participant Id from superseding instruction; Instruction Seq No of superseding instruction

Code	Description	Meaning	Additional Data
N0T	Refresh Totals	A Refresh has been applied. This record contains information about the numbers of metering systems processed. • If the current Instruction Status is 'V' (Validation Errors) use the Manage Refresh form to Accept the changes (set Instruction Status to 'Applied'), or restore from database backup taken before apply attempted. • If Instruction Status is 'A' (Applied), no action is required. There is an entry for each partition plus a total for the whole refresh	partition_id ('Total' for total); number Metering Systems for partition in refresh; number of Metering Systems for partition not updated due to validation errors; number of Metering Systems in partition on database but not in instruction ; number of Metering Systems in partition on database but not in instruction which are not updated due to validation rules
N0W	Wrong distributor	All metering systems must be for the distribution business based on the PRS Agent ID specified in the file header. This error indicates a metering system which belongs to a different distribution business. The Distributor in the LLF record must also match the Distributor according to the short code (the first 2 digits of the Metering System ID). Ensure PRS software correctly selects only metering systems for the one distribution business when creating a refresh instruction.	Distributor short code – for metering systems not owned by specified distributor Distributor id – for metering systems where the distributor in the LLF record is incorrect
N99	99 or more failure reasons	99 or more failure reasons encountered - not all reasons recorded (this is logged in place of the 99th reason, no further reasons are logged) Fix the first 98 errors and see what is left!	

C.2 2 or more before Significant Date

Instructions contain the picture of the metering system on the Significant Date plus changes thereafter; there can only be one value of an attribute for a metering system starting on or before the Significant Date.

Correct the PRS/DC software to ensure that instructions contain only data current on the Significant Date and changes after the Significant Date.

Code	Description	Meaning	Additional Data
N2C	>1 DC Appt on or before Sig Date	More than one Data Collector Appointment on a per registration basis in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2E	>1 ES on or before Sig Date	More than one Energisation Status in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)

Code	Description	Meaning	Additional Data
N2G	>1 GSP Group on or before Sig Date	More than one GSP Group in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2L	>1 LLFC on or before Sig Date	More than one Line Loss Factor Class in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2M	>1 MC on or before Sig Date	More than one Measurement Class in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2P	>1 PC/SSC on or before Sig Date	More than one Profile Class/Standard Settlement Configuration set in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2R	>1 Registration on or before Sig Date	More than one Registration in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)
N2Y	>1 EAC on or before Sig Date	More than one Estimated Annual Consumption in the instruction has a Start Date on or before the Significant Date	Start Date (first item before Significant Date); Start Date (second item before Significant Date)

C.3 Attribute value is <u>A</u>fter Registration end

In the Industry data model, some data about a metering system is held per registration. This data, when passed to NHHDA, is validated to ensure that it starts within the dates the registration is valid - i.e. on or after the registration start and before any subsequent registration starts.

Data from PRS Agent is associated with a specific registration. A value for an attribute must not start after a subsequent registration has started. PRS data is invalid.

Code	Description	Meaning	Additional Data
NAA	DA Appt end after Registration end	Data Aggregator Appointment End Date is after Registration End Date (i.e. after the next Registration starts)	Regn Start Date; DAA Start Date
NAE	ES Start after Registration End	Energisation Status clause Start Date is after Registration End Date (i.e. after the next Registration starts)	Regn Start Date; ES Start Date
NAM	MC Start after Registration End	Measurement Class clause Start Date is after Registration End Date (i.e. after the next Registration starts)	Regn Start Date; MC Start Date
NAP	PC/SSC Start after Registration End	Profile Class/Standard Settlement Configuration clause Start Date is after Registration End Date (i.e. after the next Registration starts)	Regn Start Date; PC/SSC Start Date

C.4   Change Illegal

A Data aggregator appointment end date can only be changed if both the old and new end date are on or before the Significant Date. If the Data aggregator appointment on the database ends before the Significant Date, then it should not appear in the instruction.

The instruction to extend the original DAA beyond the current Significant Date may have failed or may not have been issued. A new DAA instruction is required with a Significant Date on or before the database DAA end date.

Code	Description	Meaning	Additional Data
NCA	DA Appt already ends before Sig Date	Data Aggregator Appointment with Effective From Settlement Date before Significant Date is on the database but database has Effective To Settlement Date before Significant Date	DAA Start Date; DAA End Date (database)

When any of Energisation Status, Measurement Class, Supplier registration and Standard Settlement Configuration change, there MUST be a meter reading - hence DC data may not indicate a change in any of these attributes during a Meter Advance Consumption.

Correct the DC data to either include the missing meter reading (resulting from change of one of the attributes), or remove the illegal change in attribute.

Code	Description	Meaning	Additional Data
NCE	ES change during MAP	Instruction contains a change to Energisation Status within a Meter Advance period	ES Start Date; MAP Start Date
NCM	MC change during MAP	Instruction contains a change to Measurement Class within a Meter Advance period	MC Start Date; MAP Start Date
NCR	Registration change during MAP	Instruction contains a change to Registration detected within a Meter Advance period	Regn Start Date; MAP Start Date
NCS	SSC change during MAP	Instruction contains a change to Standard Settlement Configuration detected within a Meter Advance period	SSC Start Date; MAP Start Date

C.5   Duplicate Start Date

Instructions indicate the value of each attribute from a stated date - it is illegal for there to be two values of an attribute on the same date.

Correct the PRS/DC database so that duplicates are not held and ensure that data is not duplicated when instructions are generated.

Code	Description	Meaning	Additional Data
NDC	Duplicate DC Appt Start	Duplicate Data Collector Appointment Start Date in instruction	Start Date
NDE	Duplicate ES Start	Duplicate Energisation Status Start Date in instruction	Start Date
NDG	Duplicate GSP Group Start	Duplicate GSP Group Start Date in instruction	Start Date
NDL	Duplicate Line Loss Factor Start	Duplicate Line Loss Factor Start Date in instruction	Start Date

Code	Description	Meaning	Additional Data
NDM	Duplicate MC Start	Duplicate Measurement Class Start Date in instruction	Start Date
NDP	Duplicate PC/SSC Start	Duplicate Profile Class/Standard Settlement Configuration Start Date in instruction	Start Date
NDR	Duplicate Registration Start	Duplicate Registration Start Date in instruction	Start Date
NDY	Duplicate EAC Start	Duplicate Estimated Annual Consumption Start Date in instruction	Start Date

C.6 Early start/end date

In the Industry data model, some data about a metering system is held per registration. This data, when passed to NHHDA, is validated to ensure that it starts within the dates the registration is valid - i.e. on or after the registration start and before any subsequent registration starts.

Data is illegal if it starts before the registration with which it is associated.

Where end dates are specified (DAA and AA), the end date must not be before the Significant Date (instructions contain data current on Significant Date and changes thereafter; if the date range ends before the Significant Date then the date shouldn't be in the instruction).

The PRS data must be corrected so that no attributes which are details of a registration start before that registration; additionally the PRS/DC software must ensure that a DAA/AA is not included in an instruction if it has an end date earlier than the Significant Date.

Code	Description	Meaning	Additional Data
NEA	DA Appt End before Sig Date	Data Aggregator Appointment End Date in the instruction is before significant date	Start Date
NEB	DA Appt Start before Registration Start	Data Aggregator Appointment Start Date is before Registration Start Date	Regn Start Date; DAA Start Date
NEC	DC Appt Start before Registration Start	Data Collector Appointment Start Date is before Registration Start Date	Regn Start Date; DCA Start Date
NEE	ES Start before Registration Start	Energisation Status Start Date is before Registration Start Date	Regn Start Date; ES Start Date
NEM	MC Start before Registration Start	Measurement Class Start Date is before Registration Start Date	Regn Start Date; MC Start Date
NEP	PC/SSC Start before Registration Start	Profile Class/Standard Settlement Configuration Start Date is before Registration Start Date	Regn Start Date; PC/SSC Start Date
NEX	AA End before Sig Date	Annual Advance End Date in the instruction is before significant date	Start Date

C.7   <u>First Consumption does not have attribute set</u>

There must be a value for each attribute which is current at the start of the first consumption data held for the metering system.

Ensure there is a value for the attribute on the DC database with Effective From Settlement Date on or before the Effective From Settlement Date of the first consumption. Ensure all relevant data is include when creating EAC/AA instructions.

Code	Description	Meaning	Additional Data
NFE	No ES for 1st consumption	This instruction will leave no Energisation Status effective at the start of the earliest consumption	Earliest MAP/EAC Start Date
NFG	No GSP Group for 1st consumption	This instruction will leave no GSP Group ID effective at the start of the earliest consumption	Earliest MAP/EAC Start Date
NFM	No MC for 1st consumption	This instruction will leave no Measurement Class effective at the start of the earliest consumption	Earliest MAP/EAC Start Date
NFP	No PC/SSC for 1st consumption	This instruction will leave no Profile/SSC effective at the start of the earliest consumption	Earliest MAP/EAC Start Date
NFR	No Registration for 1st consumption	This instruction will leave no Registration effective at the start of the earliest consumption	Earliest MAP/EAC Start Date

C.8   <u>ID Illegal</u>

The errors may be due to incomplete or incorrect standing data on the NHHDA system, or the data may be wrong.

Energisation Status and Measurement Class have fixed legal values, the others are held on the database.

For database held values, CHECK whether the identifier indicated as illegal should be present on the NHHDA database. If it should, amend standing data to make it correct.

Where the illegal identifier is not valid, correct the data held on the PRS/DC.

Code	Description	Meaning	Additional Data
NIA	Invalid PC, SSC & GSP Group for AFYC	Values of the GSP, PC and SSC in the instruction will not have corresponding AFYC values for all of the settlement days possible within the DAA.	GSP Group; Profile Class Id; SSC; Start Date of period not covered; End Date of period not covered.
NIC	DC ID not found on dB	Data Collector ID in the instruction does not exist on database	DC ID; Start Date

Code	Description	Meaning	Additional Data
NIE	Invalid ES	Invalid Energisation Status in instruction	ES ID; Start Date
NIG	GSP Group ID not found on dB	GSP Group ID in the instruction does not exist on database	GSP Group ID; Start Date
NIL	Distributor/LLFC not found on dB	Distributor ID/Line Loss Class ID in the instruction does not exist on database	Distributor Id; LLF Class ID; Start Date
NIM	Invalid MC	Invalid Measurement Class in the instruction	MC ID; Start Date
NIP	PC ID not found on dB	Profile Class ID in the instruction does not exist on database	Profile Class ID; Start Date
NIR	Supplier ID not found on dB	Supplier ID in the instruction does not exist on database	Supplier ID; Start Date
NIS	SSC ID not found on dB	Standard Settlement Configuration ID in the instruction does not exist on database	SSC ID; Start Date
NIV	EAC/AA value outside permitted range	The EAC value in the file is outside the EAC boundary values defined in the system parameter table or the AA value in the file is outside the AA boundary values defined in the system parameter table.	TPR ID; EAC/AA value; EAC/AA Start Date; AA End Date (if available)

C.9 <u>Missing from database</u>

The definition of Significant Date means that changes to data earlier than the Significant Date is not always legal. This set of errors is for the cases where such a change is not allowed.

The error is usually a result of an earlier failure and may be resolved by generating a new DAA instruction from PRS or EAC/AA instruction from DC with a Significant Date on or before the start date of the item which is reported as not being present.

Code	Description	Meaning	Additional Data
NMA	DAA before Sig Date not latest on dB	Data Aggregation Appointment with Effective From Settlement Date before Significant Date is not already in the database	Regn Start Date; DAA Start Date
NMC	DC Appt before Sig Date not latest on dB	Data Collector Appointment with Effective From Settlement Date before Significant Date is not on the database and the Registration has a Data Aggregator Appointment before the significant date	DC ID; Start Date
NME	ES before Sig Date not latest on dB	Energisation Status with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) or AA/EAC (DC instruction) which is before the significant date and is not on the database	ES ID; Start Date
NMG	GSP Gp before Sig Date not latest on dB	GSP Group with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) or AA/EAC (DC instruction) which is before the significant date and is not on the database	GSP Group ID; Start Date
NML	LLFC before Sig Date not latest on dB	Line Loss Factor Class with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) which is before the significant date and is not on the database	Distributor Id; LLF Class ID; Start Date

Code	Description	Meaning	Additional Data
NMM	MC before Sig Date not latest on dB	Measurement Class with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) or AA/EAC (DC instruction) which is before the significant date and is not on the database	MC ID; Start Date
NMP	PC/SSC before Sig Date not latest on dB	Profile Class/Standard Settlement Configuration with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) or AA/EAC (DC instruction) which is before the significant date and is not on the database	PC Id; SSC Id; Start Date
NMR	Regn before Sig Date not latest on dB	Registration with Effective From Settlement Date before Significant Date affects a DAA (PRS instruction) or AA/EAC (DC instruction) which is before the significant date and is not on the database	Start Date
NMX	AA before Sig Date not latest on dB	Annualised Advance in instruction has Effective From Settlement Date before Significant Date but there is no corresponding (identical) set of records on the database	Start Date
NMY	EAC before Sig Date not latest on dB	Estimated Annualised Consumption in instruction has Effective From Settlement Date before Significant Date but there is no corresponding (identical) set of records on the database	Start Date

C.10 No overlap of Data aggregator appointment

Instructions may only contain data which is needed by the aggregator; if an attribute change does not affect the metering system during a Data aggregator appointment, the data is not needed.

There must be at least one Data aggregator appointment for each registration.

Either the Data aggregator appointment which data should overlap is missing from the NHHDA database due to an earlier failure of because it was never sent - in which case a new DAA instruction is needed which includes that appointment - or the data is not needed by the aggregator in which case the PRS software must be corrected to ensure only relevant changes are sent to NHHDA.

Code	Description	Meaning	Additional Data
NNE	ES not overlapping DA Appt	Energisation Status change is not required as it does not overlap any Data Aggregation Appointments	Start Date
NNG	GSP Group not overlapping a DA Appt	GSP Group change is not required as it does not overlap any Data Aggregation Appointments	Start Date
NNL	Line Loss Factor not overlapping DA Appt	Line Loss Factor change is not required as it does not overlap any Data Aggregation Appointments	Start Date
NNM	MC not overlapping a DA Appt	Measurement Class change is not required as it does not overlap any Data Aggregation Appointments	Start Date

Code	Description	Meaning	Additional Data
NNP	PC/SSC not overlapping DA Appt	Profile Class/Standard Settlement Configuration change is not required as it does not overlap any Data Aggregation Appointments	Start Date
NNR	No DAA for Registration in instruction	Registration does not have an associated Data Aggregator Appointment in the present instruction	Start Date

C.11 Overlap

Data aggregator appointments and Meter Advance Periods must not overlap

Correct the data held on the PRS/DC database and/or ensure that dates are correct when generating instructions.

Code	Description	Meaning	Additional Data
NOA	Overlapping DA Appts	The instruction contains overlapping Data Aggregator Appointments	Start Date (first item); Start Date (second item)
NOX	Overlapping MAPs	The instruction contains overlapping Meter Advance Periods	Start Date (first item); Start Date (second item)

C.12 Attribute value for a Registration which does not exist

In the Industry data model, some data about a metering system is held per registration. This data, when passed to NHHDA, is validated to ensure that it is associated with a Registration which actually exists.

Data is illegal if the registration to which it is assigned does not exist on the database (or will not exist as a result of applying the current instruction). Either an earlier instruction which should have created the registration has failed or the registration was never included in any instruction. A new DAA instruction is needed which includes all Data aggregator appointments for the missing registration.

Code	Description	Meaning	Additional Data
NRA	DA Appt references unknown Registration	Registration referenced by Data Aggregator Appointment in the instruction does not exist on the database and is not created by this instruction	Regn Start Date; DAA Start Date
NRC	DC Appt references unknown Registration	Registration referenced by Data Collector Appointment in the instruction does not exist on the database and is not created by this instruction	Regn Start Date; DCA Start Date
NRE	ES references unknown Registration	Registration referenced by Energisation Status in the instruction does not exist on the database and is not created by this instruction	Regn Start Date; ES Start Date
NRM	MC references unknown Registration	Registration referenced by Measurement Class in the instruction does not exist on the database and is not created by this instruction	Regn Start Date; MC Start Date
NRP	PC/SSC references unknown Registration	Registration referenced by Profile Class/Standard Settlement Configuration in the instruction does not exist on the database and is not created by this instruction	Regn Start Date; PC/SSC Start Date

C.13 Start of Registration/DAA has no value for attribute

In the Industry data model, some data about a metering system is held per registration. This data, when passed to NHHDA, is validated to ensure that within each Registration there is data specified for every attribute on or before the first Settlement Date within that Registration for which there is a Data Aggregator Appointment. For the data which is not held per registration, the check is for a value starting on or before the first Settlement Date for which there is a Data Aggregator Appointment.

There must be a value of GSP and LLF which starts on or before the first Data aggregator appointment

For each registration, there must be a value specified starting sometime from the Registration start date to the Data aggregator appointment start date for the attributes Energisation Status, Measurement Class, Profile Class/SSC and Data Collector Appointment.

A new DAA instruction is needed which includes all relevant data for the registration or Data aggregator appointment which is indicated.

Code	Description	Meaning	Additional Data
NSC	No DC Appt for 1st DAA in Registration	This instruction will leave no Data Collector Appointment for this Registration effective at the start of the first Data Aggregator Appointment for the Registration	Regn Start Date
NSE	No ES for 1st DA Appt in Registration	This instruction will leave no Energisation Status effective at the start of the Data Aggregator Appointment	Regn Start Date; DAA Start
NSG	No GSP Group before 1st DA Appt	This instruction will leave no GSP Group effective at the start of the Data Aggregator Appointment	DAA Start Date
NSL	No LLFC before 1st DA Appt	This instruction will leave no Line Loss Factor effective at the start of the Data Aggregator Appointment	DAA Start Date
NSM	No MC for 1st DA Appt in Registration	This instruction will leave no Measurement Class effective at the start of the Data Aggregator Appointment	Regn Start Date; DAA Start
NSP	No PC/SSC for 1st DAA in Registration	This instruction will leave no Profile Class/Standard Settlement Configuration effective at the start of the Data Aggregator Appointment	Regn Start Date; DAA Start

C.14 Time Pattern Regime duplicated in set or missing from set;

A set of consumption data should contain exactly one figure for each measurement requirement (settlement register) of the metering system:

Duplicate: two values are in the file for the same register

Correct the Data Collector database to remove the duplication and/or ensure figures are not duplicated in the Instruction File

Missing: data is not included for all registers

Correct the Data Collector database to add the missing register(s) and/or to hold the correct SSC for the metering system and/or to ensure all consumption figures are included in an instruction.

Code	Description	Meaning	Additional Data
NTV	AA with duplicate Time Pattern Regime	This instruction contains an Annualised Advance set which has more than one consumption figure for the same Time Pattern Regime Id	MAP Start Date; Duplicated TPR
NTW	EAC with duplicate Time Pattern Regime	This instruction contains an Estimated Annualised Consumption set which has more than one consumption figure for the same Time Pattern Regime Id	EAC Start Date; Duplicated TPR
NTX	AA missing for Measurement Req(s)	This instruction contains an Annualised Advance set where data is missing for one or more Measurement Requirements of the Standard Settlement Configuration	MAP Start Date
NTY	EAC missing for Measurement Req(s)	This instruction contains an Estimated Annualised Consumption set where data is missing for one or more Measurement Requirements of the Standard Settlement Configuration	EAC Start Date

C.15 Unnecessary TPR included in set

A set of consumption data should contain exactly one figure for each measurement requirement (settlement register) of the metering system:

Unnecessary: data is included for a register which does not belong with the SSC for this metering system

Correct the Data Collector database to remove surplus register(s) and/or to hold the correct SSC for the metering system and/or to ensure the correct consumption figures are included in an instruction

Code	Description	Meaning	Additional Data
NUX	AA where Time Pattern Regime not in SSC	This instruction contains an Annualised Advance set which contains consumption for a Time Pattern Regime Id which is not a Measurement Requirement for the Standard Settlement Configuration	MAP Start Date; Illegal TPR
NUY	EAC where Time Pattern Regime not in SSC	This instruction contains an Estimated Annual Consumption set which contains consumption for a Time Pattern Regime Id which is not a Measurement Requirement for the Standard Settlement Configuration	EAC Start Date; Illegal TPR

C.16 Standing data not Valid in this context

The errors may be due to incomplete or incorrect standing data on the NHHDA system, or the data may be wrong.

CHECK whether the appointment/combination indicated as illegal should be present on the NHHDA database. If it should, amend standing data to make it correct.

Where the illegal identifier is not valid, correct the data held on the PRS/DC.

Note that 'PRS Agent not appointed to distribution business within this GSP Group' can only be resolved on receipt of a valid instruction about the metering system from the PRS agent which is appointed to that metering system's distribution business within the specified GSP Group.

Code	Description	Meaning	Additional Data

Code	Description	Meaning	Additional Data
NVG	GSP not appointed to Dist Business	GSP group does not have an appointment to the Distribution Business for Metering System on the Effective From Settlement Date. NOTE: An NVZ will also be produced if it is a PRS instruction.	GSP Group ID; Start Date
NVP	PC/SSC combination not on dB	Profile Class/Standard Settlement Configuration combination does not exist on the database	Profile Class ID; SSC Id
NVZ	PRS Agent not appointed in this GSP Group	Instruction source (PRS Agent) not appointed to Distribution Business as determined from the first two digits of the Metering System Id within the specified GSP Group.	Dist ID

C.17 End < Start (Dates crossed over X)

End dates cannot be earlier than start dates

Correct the data held on the PRS/DC database and/or ensure that dates are not reversed when generating instructions

Code	Description	Meaning	Additional Data
NXA	DA Appt Start after End	The instruction contains a Data Aggregator Appointment which has a Start Date later than the End Date	Start Date
NXX	AA Start after End	The instruction contains an Annual Advance set which has a Start Date later than the End Date	Start Date

C.18 Instruction does not contain data already on the database (Z)

If the database contains a Data aggregator appointment or Meter Advance which starts before the Significant Date and ends on or after the Significant Date, then this should be included in the 'current' view of the metering system on the Significant Date. If it does not appear then there is a mismatch between the NHHDA database and the PRS/DC database.

Instructions are required to contain the data current on the Significant Date, if appropriate. If there is a Data Aggregator Appointment or Meter Advance which spans the Significant Date there must be a value for every attribute to go with that. If the data is missing then a deletion may not have been performed.

The error is usually a result of an earlier failure and may be resolved by generating a new DAA instruction from PRS or EAC/AA instruction from DC with a Significant Date on or before the start date reported.

Code	Description	Meaning	Additional Data
NZA	DAA on dB missing from instruction	A Data Aggregation Appointment exists in the database which is active on the Significant date but is not in the instruction (for Refresh, this is informational message)	Start Date
NZC	DC Appt missing from instruction	There is no Data Collector Appointment in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment	Date Appointment is required; Regn Start Date

Code	Description	Meaning	Additional Data
NZE	ES missing from instruction	There is no Energisation Status in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment/Consumption	Date value is required
NZG	GSP Group missing from instruction	There is no GSP Group in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment/Consumption	Date value is required
NZL	LLFC missing from instruction	There is no Line Loss Factor Class in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment	Date value is required
NZM	MC missing from instruction	There is no Measurement Class in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment/Consumption	Date value is required
NZP	PC/SSC missing from instruction	There is no Profile Class/SSC in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment/Consumption	Date value is required
NZR	Registration missing from instruction	There is no Registration in the instruction which will be effective on or before the earliest Date on or after the Significant Date for which there is a Data Aggregator Appointment/Consumption	Date value is required
NZX	MAP on dB missing from instruction	A Meter Advance Period exists on the database which is active on the Significant Date but is not in the instruction	Start Date

Comment Form

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If you have any comments on the accuracy and completeness of this document, please write them on a copy of this form and forward by email to the ELEXON Helpdesk at helpdesk@elexon.co.uk or contact the Helpdesk on telephone number 020 7380 4222.

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