

NEM 12 & 13 FILE TEST PROCESS

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Version Control

VERSION	DATE	AUTHOR	COMMENTS
0.1	28/03/05	John Wiskin	Draft of base document.
1.0	04/04/05	John Wiskin	Final version for comment
2.0	06/04/05	John Wiskin	Final version for release. Includes updated comments from MDPs on version 1
3.0	18/04/05	John Wiskin	Section clauses 1.4 (d) updated for Meter Serial Number and Register ID test requirement.. UOM error corrected for scenario 7.
3.1	19/04/05	John Wiskin	Note added for scenario 7. NA added to scenario 9 (type 5 data) as only applicable to some MDPs.
3.2	22/04/05	John Wiskin	NMI error correction for scenario 4 in section 6.
4.0	Sep 2009		Updated to AEMO Format

Interpretation

For details of the interpretation of key words, such as addresses, dates, times and field types, refer to the Meter Data File Format Specification NEM12 & NEM13 and Technical Guidelines for B2B Procedures.

Documentation Conventions

Refer to the Meter Data File Format Specification NEM12 & NEM13 and Technical Guidelines for National B2B Procedures for the details of the documentation conventions.

Table of Contents

INTERPRETATION	2
DOCUMENTATION CONVENTIONS	2
1. INTRODUCTION	4
1.1 Background	4
1.2 Purpose	4
1.3 Scope	4
1.4 Process	4
2. NEM12 FILE TEST SCENARIOS	6
3. NEM13 FILE TEST SCENARIOS	7
4. SCENARIO FILE DATA DETAILS	8
5. EXAMPLE ERROR FILE DETAILS	9
6. MDP NEM12 NMI DATA DETAILS	10
7. MDP NEM13 NMI DATA DETAILS	11
8. TEST AND BUILD TIMELINE	12

1. INTRODUCTION

1.1 Background

- a. The national B2B / MDP working group have established through consultation a new Meter Data File Format (MDFF), NEM12 and NEM13 for the communication and delivery of metering data between service providers and Participants within the National Electricity Market (NEM).
- b. As part of the industry consultation phase undertaken on the revised MDFF. The national B2B / MDP working group requested that AEMO in conjunction with Meter data providers will monitor and assist with the implementation of the revised MDFF for 20th July 2005.

1.2 Purpose

- a. This document establishes the time frames and test scenarios required for test and implementation of the MDFF NEM12 and NEM13 Files. The resultant test files will be published on AEMOs web site to assist industry with construction and test of file loaders.

1.3 Scope

- a. This document details the various implementation test scenarios required for acceptance of the NEM12 and NEM13 file format specification by individual MDP's. The source documentation is:
 - Meter Data File Format Specification: NEM12 & NEM13 document ME_MA001v007
 - NEM12 & NEM13 File Format Clarification (latest version)

1.4 Process

- a. All MDPs are required to build the respective test files for the listed scenarios in the time frames as indicated in the attached project time lines.

MDP's listed in section 6 are requested to build NEM12 files for scenarios 1 to 10 inclusive using the NMI identifiers provided. Data details for scenarios 1 to 10 are provided in sections 2 and 4.

- MDP's listed in section 7 are requested to build NEM13 files for scenarios 11 to 18 inclusive using the NMI identifiers provided. Data details for scenarios 11 to 20 are provided in sections 3 and 4.
- b. All MDP's are required to test / load all other MDP files for the scenarios listed.
 - It is suggested that MDP's initially trial load their own file build scenarios in the Sage Tool.
 - All MDP's are required to provide the file build scenarios to AEMO by 10th May 2005. All NEM12 and NEM13 files to be collated and in a separate zip file. Zip file names to be <MDP Participant ID>_<NEM1#> where # is 2 Or 3 representative of NEM12 or NEM13 files.
 - AEMO will despatch and coordinate inter MDP testing.
 - c. Any issues related to the inter MDP file testing, file rejections or file format clarifications will be managed by the industry NEM12 & NEM13 File Clarification working group.
 - d. This document does not provide definitive detail as to file content date relationships. MDP's are requested to:

- All file data dates must be for any date time between than 01 January 2004 and 01 July 2005 unless specified within this procedure.
 - The last 5 digits of the NMI for each of the file test scenarios are to be used as the meter serial number entry within the NEM12 and NEM13 file *MeterSerialNumber* field.
 - The suffix (*NMISuffix*) as detailed in sections 4 and 5 for each test scenario is also to be utilised as the *RegisterId* entry within the NEM12 and NEM13 files.
 - Assign other necessary and suitable dates where required relating to the file fields for NSRD, RegisterRead date/times, Update and MSATS load date times.
 - Define all other necessary data descriptors where necessary and required unless specified within this procedure, (e.g. QualityMethod, ReasonCode, RetServiceOrder, Transcode etc).
- e. Ten data scenarios have been identified for the NEM12 and eight scenarios for the NEM13 format. In addition, files are to be constructed by CNRGYMDP which provide a number of example error files (refer section 5), that participant and service provider loaders should capture with appropriate error messages. Allowing for the combinations of variances in the file builds (as per 1.4.d), and the number of example error files, a total of 185 test files will be created. It is intended that all of these files will be made available for industry to test purposes.
- f. File header to utilise the MDP's participant id for the FROM detail, and use 'AEMO' as the TO participant id.

2. NEM12 FILE TEST SCENARIOS

SCENARIO NO.	TEST SCENARIO	DESCRIPTION DETAIL
1	Blocking Variance1	A data file which relates to a service order request for 4 consecutive days of historical type 5 MRIM data where all interval values have the same <i>QualityMethod</i> , <i>ReasonCode</i> and <i>ReasonDescription</i> . (i.e. the file to have no 400 record). Note: Energexm, Wbaym and Globalm to build this file as a Type 1-4.
<u>2</u>	Blocking Variance2	A data file which details 4 consecutive days of historical type 1-4 data where all interval values have the same <i>QualityMethod</i> , <i>ReasonCode</i> and <i>ReasonDescription</i> . (i.e. the file to have no 400 or 500 record).
3	Blocking Variance3	A data file which details 4 consecutive days of historical type 1-4 data for a given set of suffixes.
4	NEM13 to NEM12 Change over	A data file which has 3 consecutive days of Type 5 MRIM data. Day 1 data shows the part day of padded zeros with F Quality flag and part day forward estimate for the start day of the interval meter. This data day is followed by a further 2 consecutive days of forward estimated data. See Scenario 14 NEM13 file for the final reading of the basic meter for this site. (Refer also to section 2.3 of the draft Meter Churn Data Management Rules for the process detail).
5	Change of Interval time	A data file that has 2 consecutive days of 15 minute interval data followed by another 2 consecutive days of 30 minute interval data
<u>6</u>	NMI data for part suffix1	A data file that contains 4 consecutive days of interval data pertaining to only 2 suffixes of the <i>NMIConfiguration</i> .
<u>7</u>	NMI data for part suffix2	A data file that contains 4 consecutive days of interval data for the same date period as scenario 6 but having data pertaining to the remaining 2 suffixes of the <i>NMIConfiguration</i> of Scenario 6.
<u>8</u>	Quality Flag variance	A data file for 2 consecutive days that contains the various quality flags of A, S and F and a range of reason codes.
<u>9</u>	Forward estimate file	A file which contains 7 consecutive days of data. 3 days of 'A' data followed by 1 day part 'A', part 'E' and then 3 further days of 'E' data to emulate a forward estimation.
<u>10</u>	Configuration change	A data file of 3 consecutive days that emulates a meter installation and suffix change for the same NMI.

3. NEM13 FILE TEST SCENARIOS

SCENARIO NO.	TEST SCENARIO	DESCRIPTION DETAIL - OTHER
11	Blocking Variance	A data file where the <i>PreviousTransCode</i> and the <i>CurrentTransCode</i> are 'N' and no service orders pertain to this file.(i.e. the file to have no 550 record).
<u>12</u>	Solar Panel	A historical data file where the <i>PreviousRegisterRead</i> is smaller than the <i>CurrentRegisterRead</i> and the 250 record has direction indicator of 'I' and has a negative <i>Quantity</i> value. Note: It is understood that having a negative value for the <i>Quantity</i> field is valid but is highly unusual. Participants and service providers should accept this file but raise an 'exception'.
13	Index Read clock over	A historical data file where the <i>PreviousRegisterRead</i> is larger than the <i>CurrentRegisterRead</i> within the 250 record following a clock over of the meter.
14	NEM13 to NEM12 Change over	Type 6 to type 5 meter change. The respective data files to detail final type 6 read with the start of type 5 data forward estimates.
<u>15</u>	Normal Read event	Data file showing a Forward estimates following an 'Actual' normal meter read (<i>Transcode</i> of N).
<u>16</u>	Historical Data File	Historical data file for three consecutive read periods where all readings are Actuals, ('A') and has a 550 Transcode record of '0'.
<u>17</u>	Separate service orders	NEM13 data file for a single historical reading period which has a 550 record detailing the provision of separate service orders for current and previous reads.
<u>18</u>	Quality Flag variance	A data file that contains quality flags of S and E and a range of reason codes.

4. SCENARIO FILE DATA DETAILS

SCENARIO NO.	UOM	SUFFIXES	COMMENTS
1	kWh, kWh	E1,E2	
2	kWh, kvarh	E1,B1,Q1,K1	
3	kWh, kvarh	E1,Q1	
4	kWh	E1	Start interval data file relating to a basic to interval meter change. Data date relationships to match scenario 14 as required.
5	kWh	E1	Interval time changes from 15 mins to 30 mins
6	kWh	E1, B1	Part suffix file for NMI configuration E1B1Q1K1 Refer also to scenario 7
7	kvarh	Q1,K1	Part suffix file for NMI configuration E1B1Q1K1. Refer also to scenario 6.
8	kWh	E1	
9	kWh	E1	
10	kWh	E1, E2,B2	Meter installation change from suffix E1 to suffixes E2, B2 on day 2 of scenario data period.
11	kWh	11	
12	kWh	12	Historical data relating to emulated Solar panel. A single 3 month file. All Quality Flags are 'A' following a special read service order.
13	kWh	11	Historical data file for a single 3 month period where the <i>PreviousRegisterRead</i> is larger than the <i>CurrentRegisterRead</i> within the 250 record following a clock over of the meter. Quality Flag of 'A'.
14	kWh	11	Final reading for removed meter on change over to interval meter. Data date relationships to match scenario 4 as required.
15	kWh, kWh	11,41	Data file showing Actual 'A' values of reads for last 3 months following a read event with a forward estimate for the next 3 months.
16	kWh	11	
17	kWh	11	Historical data file for a single 3 month period where separate service orders have been raised for both <i>PreviousRegisterRead</i> and <i>CurrentRegisterRead</i> . Quality Flag of readings are both 'A' .
18	kWh	11, 41	A data file that emulates the conversion of a previous forward estimate to a substitution (quality flag of 'S') and followed by a new forward estimate.

5. EXAMPLE ERROR FILE DETAILS

These example 'error' files to be constructed by CNRGYMDP are to reflect the following file detail errors.

SCENARIO NO.	NMI	UOM	SUFFIX	COMMENTS
21	NEM1221001	kWh	E1	NEM12 - No 200 record
22	NEM1222002	kWh	E1	NEM12 - Data for a suffix that is not part of the NMIconfig.
23	NEM1223003	kWh	E1	NEM12 - Data file that has a 400 line with a 'V' quality flag.
24	NEM1224004	kWh	E1	NEM12 - Data file with an erroneous quality flag (i.e. 'T').
25	NEM1225005	kWh	E1	NEM12 - No 900 record
26	NEM1326007			(This suggested file deleted)
27	NEM1327008	kWh	11	NEM13 - Data for a suffix that is not part of the NMIconfig.
28	NEM1328009	kWh	11	NEM13 - Data having no Current Reason Description where Current ReasonCode is '0'
29	NEM1329010	kWh	11	NEM13 - Data where no direction indicator is provided.
30	NEM1330011	kWh	11	NEM13 - No 900 record
31	NEM1331011	kWh	11	NEM13 - Current read date is earlier than Previous.

6. MDP NEM12 NMI DATA Details

All NMIs for the various NEM12 file scenarios must begin with **NEM12** and end with the following characters for each respective scenario and MDP. (Note: The 6th and 7th characters reflect the test scenario number).

e.g: Scenario 1 file for TCAUSTM will be for NMI NEM1201008

SCENARIO NO.	ACTEWM	CNRGYMDP	ELECTDSM	ENERGEXM	GLOBALM	INTEGM	POWERMDP/CPNETMDP	TCAUSTM	UNITEDDP	WBAYM	ETSAMDP
1	01001	01002	01003	01004	01005	01006	01007	01008	01009	01010	01011
2	02021	02022	02023	02024	02025	02026	02027	02028	02029	02030	02031
3	03041	03042	03043	03044	03045	03046	03047	03048	03049	03050	03051
4 see Note2	(04061)	(04062)	na	na	na	(04066)	(04067)	(04068)	(04069)	na	(04071)
5	05081	05082	05083	05084	05085	05086	05087	05088	05089	05090	05091
6	06101	06102	06103	06104	06105	06106	06107	06108	06109	06110	06111
7 see Note1											
8	08141	08142	08143	08144	08145	08146	08147	08148	08149	08150	08151
9	09161	09162	na	na	09165	09166	09167	09168	09169	na	09171
10	10181	10182	10183	10184	10185	10186	10187	10188	10189	10190	10191

Note1: Scenario 7 NMIs and meter serial numbers are the same as for scenario 6.

Note2: Scenario 4 and 14 NMIs are the same. Use 5 char bracketed numbers for scenario 4 as new type 5 meter serial number)

7. MDP NEM13 NMI DATA Details

All NMIs for the various NEM13 file scenarios must begin with **NEM13** and end with the following characters for each respective scenario and MDP. (Note: The 6th and 7th characters reflect the test scenario number).

e.g. Scenario 15 file for CNRGYMDP will be for NMI NEM1315082

SCENARIO NO.	ACTEWM	CNRGYMDP	AGILITYM	INTEGM	POWERMDP/CPNETMDP	TCAUSTM	UNITEDDP	ETSAMDP
11	11001	11002	11003	11006	11007	11008	11009	11011
12	12021	12022	12023	12026	12027	12028	12029	12031
13	13041	13042	13043	13046	13047	13048	13049	13051
14	14061	14062	NA	14066	14067	14068	14069	14071
15	15081	15082	15083	15086	15087	15088	15089	15091
16	16101	16102	16103	16106	16107	16108	16109	16111
17	17121	17122	17123	17126	17127	17128	17129	17131
18	18141	18142	18143	18146	18147	18148	18149	18151

8. TEST AND BUILD TIMELINE



