Draft Change Proposal – BSCP40/01	DCP No: 0016 Version 1.0

Title Effective Date Validation in the D0052

Description of Problem/Issue

The D0052 data flow is used to establish settlement details and provide an initial Estimated Annual Consumption (EAC) for a specified Metering System or Unmetered Supply. It is necessary for new Metering Systems, following a change of Standard Settlement Configuration, Profile Class or Measurement Class, and for notifying a change of EAC for Unmetered Supplies and long term vacant sites. The flow is sent from Supplier to Non Half Hourly Data Collector (NHHDC) and from Unmetered Supply Operator (UMSO) to NHHDC and Supplier.

The D0310 data flow is an error report for the D0052. It is generated when a D0052 either fails to load or is missing. The D0310 is sent from the NHHDC to the D0052 source and includes a Failure Reason Code for the Supplier/UMSO to act upon.

The industry is currently experiencing large volumes of D0052 failures. A large proportion of these failures are the result of inconsistent Effective From Settlement Dates (EFSD), where in most cases the Settlement data values are consistent.

BSCP504 Section 4.12 defines the usage and validation of the D0052. It sets some rules surrounding EFSDs but does not specify exactly how EFSD fields should be populated or validated. In the event of inconsistencies BSCP504 gives guidance, but does not specify a standard process. As a result parties have each implemented a different system for populating and validating the D0052. This has lead to the large numbers of inconsistent EFSDs in the market. Supplier, UMSO and NHHDC systems are not generally compatible and the inconsistent EFSDs often result in D0052 failures.

Two common phenomena that can lead to inconsistent EFSDs in Supplier NHHDC and UMSO systems are as follows.

Change of Supplier

The Supplier Meter Registration System (SMRS) defines Profile Class (PC), Standard Settlement Configuration (SSC), Measurement Class (MC) and all Supplier sourced settlement items as being recorded against a Supplier Registration. With this system EFSDs are updated when there is a Change of Supplier (CoS), irrespective of whether there has been a change to the data item. This convention is adopted by NHHDA, SMRS and some NHHDC systems. Suppliers and UMSOs obtain settlement details from SMRS and so some also adhere to the same convention regarding EFSDs. However Meter Operator Agent (MOA), NHHDC and some Supplier and UMSO systems update EFSDs only when there is a change to the associated item. The result is large numbers of inconsistent EFSDs across the market.

It is understood that usually the D0052 is populated with data from Supplier and UMSO systems with EFSDs inline with the convention they have implemented. The data items themselves are often identical to those in the recipient NHHDC or Supplier system but because of the different storage conventions used the associated EFSDs are different. The result depends on the validation applied by the recipient system, but is often a D0052 load failure.

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It is often the case that different EFSD conventions are used for different Metering Systems within one NHHDC system, for example when historical data is transferred from a previous NHHDC on Change of Agent (CoA). This makes it particularly difficult for Suppliers and UMSOs to align EFSDs in D0052s to NHHDCs, where some may be held against a Supplier registration and others against the Metering System.

Unmetered Supplies EAC

Different views about whether the EFSD for the EAC of an Unmetered Supply should be aligned with the certificate on other Settlement data (e.g. Supplier, SSC). This is causing D0052s from UMSOs to be rejected by NHHDCs (depending on the validation checks implemented by NHHDCs).

Market Start Up

Default EFSDs used to populate systems at market start up can differ between different Suppliers, UMSOs, MOAs, NHHDCs within each GSP Group. Whilst most data items are updated on a regular basis, others (for example, Grid Supply Point Group) have not changed since market start up. The EFSD for these fields has therefore never been changed. Inconsistent EFSDs still exist in the system due to differing default market start up dates. As with the change of Supplier scenario described above the inconsistencies can result in a D0052 failure.

In the scenarios described above, the Settlement data held by either market participant is not necessarily wrong. The inconsistency in each case is confined to the EFSD. If the associated Settlement data item was identical in each case, then both EFSDs would have the same result for Settlement. However the problem exists because the inconsistent dates can result in a D0052 load failure. This prevents the otherwise accurate data from entering Settlement and results in the use of either Default EAC values, or continued use of old consumption data. This may constitute a material impact.

Justification for Change

The 'Data Consistency Check - Final Report' (February 2007) reported that out of a sample of 291,581 metering Systems, 54% had inconsistent Effective from Settlement Dates. A further 0.4% had Effective to Settlement Date mismatches. In most cases the inconsistency is confined to the Effective Date field, the corresponding data item is identical. However, depending on the validation processes of the recipient, inconsistent Effective Dates can have an impact on industry flows causing them to fail. With such high levels of mismatches it is important that industry systems are robust.

In paper SVG76/08 ELEXON investigated the Settlement Impact of the inconsistent Effective Date Issue. The volume of D0052 failures was high across the industry. The worst effect was in the Unmetered Market where failure rates in the sample averaged at 31%. Supplier Failure and NHHDC rates were are also high at 21% and 10% respectively. Inconsistent Effective Dates accounted for a high proportion of these failures, 67% for Unmetered Supplies, 26% for Suppliers and 15% for NHHDCs.

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Whilst Default EACs are not always caused by a failure to process a D0052 flow, such failures are likely to be a significant contributing factor. 1.15% of NHH Metering Systems were settled on Default EACs at the SF Run for 26 April 2007 against a performance level (BSC Section S1 2.1.1) of 0.5%. 0.34% of NHH Metering Systems were settled on a Default EAC at the RF Run for 28 March against a performance level of 0%.

The 2007 Auditors report stated that erroneous values of Unmetered Supplies in the Non Half Hourly Market contribute the largest material error in Settlement, reported at 287,000MWh. 1983 Un-metered Supplies were reported to have a non-trivial mismatch in EAC. The D0052 is used to send the Unmetered EAC to the NHHDC. D0052 failures prevent the EAC from getting to Settlement and result in the UMS settling on an incorrect value. This issue has been further identified by the Unmetered Supply Expert Group (UMSEG) as a direct result of D0052 processing problems. The UMSEG is investigating the Non Half Hourly Unmetered Supply market issues that arose from the 2006 Audit. Improving the D0052 process is essential to reduce the Settlement error in the Unmetered market.

The Supplier Volume Group (SVG) agreed the recommendation in paper SVG76/08 that ELEXON raise a Draft Change Proposal to progress the solutions identified above.

Proposed Solutions

The proposed solution consists of two parts; firstly to decide upon a standard Effective Date convention; secondly to decide how the convention will be implemented.

Convention

There are three possible conventions that can be applied to EFSDs:

1) Relate Settlement data to Metering Systems - EFSDs will be updated only when there is a change to the data item.
2) Relate Settlement data to Supplier Registrations - EFSDs will be updated following a CoS and when there is a change to the related data item.
3) Flexible - No standard convention will be implemented. This will allow companies to use their established EFSD conventions.

For solutions 1 and 2 a set of defined Market Start up dates will be required to address the inconsistent default EFSDs.

Implementation

There are 4 ways in which the convention can be implemented:

a) Big Bang – an EFSD storage convention is implemented with a mass data refresh, “Big Bang” of all system data across the market.

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b) Incremental – rules are set to establish an EFSD storage convention moving forward. Data is amended as and when changes happen.

c) D0052 Population – Data can be stored according to local conventions but must conform to an agreed convention when transferred to a D0052.

d) D0052 Validation – Data can be stored and transferred in any convention, but must be validated by NHHDCs according to defined rules.

Preferred Solution

Implementing conventions 1 and 2 would require significant industry system change, impacting NHHDC, Supplier, SMRS and MOA systems. Once the convention was implemented systems would need to be aligned either through a "Big Bang" approach or incrementally. Any market wide data refresh would rely on the data flows already in place and be subject to the problems that currently exist. It would likely result in further load failures and a surge of D0310s. The incremental approach would align systems gradually upon sending/receipt of a D0052, therefore resolving the issue.

If a convention were defined for populating the D0052, no change to NHHDA or SMRS would be needed. The responsibility would be on Suppliers and UMSOs to apply the convention to the D0052. Supplier and UMSO systems would need to be changed accordingly. This solution would address the D0052 Effective Date issue. It has the additional benefit that NHHDC systems will eventually become consistent in the EFSD convention they hold.

The flexible solution involves the minimum change to Industry systems. It puts the responsibility on NHHDCs to develop more robust validation rules that account for inconsistent EFSD. It will however allow Suppliers, NHHDCs, SMRS and MOAs to use their established processes for holding data. The flexible approach would overcome both the Market Start Up and CoS issues enabling the D0052 to function effectively. Any EFSD inconsistencies between NHHDC and Supplier and UMSO systems will then become immaterial.

Version History

N/A

Has this DCP been raised for discussion by a Working Group: No

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Originator's Details:

BCA Name…….Jack Barber

Organisation…….ELEXON

Email Address……jack.barber@elexon.co.uk

Telephone Number……..020 7380 4143

Date…….05 October 2007

Attachments: No