

Load Managed Areas – Guidance Document

Introduction

Distributors may, from time to time, designate part of their network as a Load Managed Area (LMA). An LMA is where the distributor has identified a need to reinforce or extend the capacity of such area and that need is driven primarily by the occurrence of pre-programmed switched load. In these areas the distributor is able to avoid or defer the need for such reinforcement or extension through limiting the coincidence of switched load by adopting to control the Load Switching Regimes. This action will save consumers the cost of reinforcement without detriment to their overall energy use.

To enable identification of such an area on their network distribution companies have implemented a process using the Line Loss Factor Class (LLFC).

Detailed below is a guidance note on how the process is to be managed.

Scope

The scope of this document is to provide guidance to Distributors on how to replicate existing Market Domain Data (MDD) combinations and how to create new static/semi static combinations to meet their network requirements as per the obligations resulting from DCP 326 'Introduction of Load Diversification Identifiers for Load Managed Areas' which seeks to introduce a simplified process for retaining the diversification of demand in LMAs during the replacement of Radio Teleswitch controlled metering equipment by suppliers or post the decommissioning of the Radio Teleswitch System.

This Guidance note is based on the premise that only customers who have the capability to switch load will be identified within a LMA.

Distributors should follow the following steps in order to use an LLFC to identify customers within an LMA.

Replication of existing Market Domain Data (MDD) combinations

The existing MDD combinations can be identified by utilising the information contained within the Valid Meter Timeswitch Code (MTC), Line Loss Factor Class (LLFC), Standard Settlement Class (SSC), Profile Class (PC) table (MTC/LLFC/SSC/PC), which can be found on the Elexon Portal within the MDD section. Please note to view the information you must have a registered login to the site.

Step 1 – Identify Load Managed Area

Distributor identifies the extent of the LMA, it is expected that an LMA will be covered by the relevant LMA Post Codes. The peak load in an LMA area should be analysed to ensure that its duration and when it occurs is at a time that can be managed through the timing of switched load.

Step 2 – Identify customers whose load can be switched within the LMA

Distributor identifies customer MPANs whose load can be switched within the LMA. It should be noted that some customers may have two 'related' MPANs and as such will have two LLFCs that require to be managed.

Step 3 – Identify existing MDD combinations (including LLFC(s)) for customers who have a switched load capability

This can be done using the Valid MTC LLFC SSC PC table on the Elexon Portal (login required).

Step 4 – Create relevant new LLFC and associated combinations in MDD

Prior to submitting the appropriate MDD forms, Distributors should ensure that the new LLFC to be used has not previously been created/ used in order to avoid using one that does not relate to an LMA.

Step 5 – MDD process

- Create new LLFC (Entity 17 form). The LLFC description must include LMA in the text as this will allow all parties to identify that the customer resides in an LMA.

E.G. Existing LLFC Description – Economy 7

New LLFC Description – LMA Economy 7

- Create new Valid MTC LLFC SSC combination (Entity 56 form)
- Create new Valid MTC LLFC SSC PC combination (Entity 63 form)

Please note the new combinations cannot be used until they are valid within MDD and this process can take up to two months to complete from start to finish.

Step 6 – Send all relevant documentation to Elexon, along with revised D0265 data flow.

Distributors are required to submit the D0265 data file in accordance with BSCP 128 Appendix 7 – SVA Format Data File'.

Step 7 – Elexon review all documentation and send to Industry for comment. Final approval is given by Supplier Volume Allocation Group (SVG).

On receipt of all relevant information, Elexon will follow the existing Market Domain Data rules, in that they will review the submission and issue for peer review prior to submitting a final view to SVG, who are ultimately responsible for providing final approval. Following approval from SVG the approved information will be published in an Elexon MDD Circular which will indicate the effective go-live date for the approved information.

Step 8 – Once the new valid combinations are live in MDD the impacted customer MPANs require to be transferred to the new LMA LLFC

Distributors need to update their systems for the new LLFC associated with each MPAN and then notify their MPAS Provider of the change. Dependent upon the processes adopted by each distributor this may need an IT change to their system/s.

Please note that MDD does not permit any retrospective back dating, the combinations will only be live from the effective date which is usually the MDD publication date.

Step 9 – Distribution MPAS providers must also advise Suppliers of the changes to the customer details via the D0171 data flow.

This is undertaken electronically by the MPRS system as a result of the receipt of a valid LLFC which differs from the one held on the MPRS.

Step 10 – Distributors should ensure that the new LMA LLFC(s) are mapped to the appropriate DUoS tariffs.

Distributors need to update their systems for the new LLFC associated with each MPAN in order that the correct tariff can be used for billing since this LLFC will be contained in the relevant industry data flows. Dependent upon the processes adopted by each distributor this may need an IT change to their system/s

Smart Meter impact on creation of new LLFC(s) to identify Customers in a Load Managed Area

All Distribution companies will need to be aware that the Smart Meter roll-out will have an impact on all of their switched loads, with the biggest impact being on those loads that are currently dynamically switched, by Radio Teleswitch System (RTS).

Types of Switched Load

Static – Smart Meters will be able to replicate existing switching times, therefore any new LMA should follow process as outlined above and utilise existing combinations.

Semi-Static – Smart Meters will be able to replicate existing switching times, therefore any new LMA should follow process as outlined above and utilise existing combinations.

Dynamically Switched Load – Smart Meters are not be capable of dynamically switching load and as such a new process will have to be implemented.

Smart Meters and Dynamically Switched Load

It is not possible for a Smart Meter to dynamically switch load therefore a Distributor has to determine the most appropriate method to introduce relevant switching times that meet their network requirements.

The Distributor has effectively three choices

- 1) Distributor moves Customer on to existing static switching times, with the danger they may create new LMAs

If this route is chosen, the process as outlined above in steps 1 to 10 should be followed

- 2) Distributor moves Customer on to existing semi-static switching times, again with the danger they may create new LMAs

If this route is chosen, the process as outlined above in steps 1 to 10 should be followed

- 3) Distributor creates new static/semi static combinations to meet their network requirements

If a Distributor chooses to follow Option 3 then in order to input the correct combinations in MDD they will have to follow the following process.

Step 1 – Identify Load Managed Area

Distributor identifies the extent of the LMA, it is expected that an LMA will be covered by the relevant LMA Post Codes.

Step 2 – Identify customers whose load can be switched within the LMA

Distributor identifies customer MPANs whose load can be switched within the LMA. It should be noted that some customers may have two 'related' MPANs and as such will have two LLFCs that require to be managed.

Step 3 – Impact Assessment and Analysis

The Distributor uses the customer information from Step 2, maps the customer's MPAN to the network and the constraints that concern the Distributor. The customers who have a static or semi static schedule should have load profiles associated with them to represent their switching schedule. Dynamic tariffs should be given complimentary switching schedules, and therefore load profile, associated with them. Once these parameters configured, the impact on the network and constraints can be checked using load flow software, and the proposed switching schedules optimised.

Step 4 – Create/Identify relevant new LLFC and associated for MDD in compliance with BSCP509 and BSCP128

Prior to submitting the appropriate MDD forms, Distributors should ensure that the new LLFC to be used has not previously been created/used in order to avoid using one that does not relate to an LMA.

Step 5 – Identify and create new Standard Settlement Classes (SSC) and associated Time Pattern Regimes (TPR)

Please note that when creating a new SSC/TPR combination the SSC has to be linked to a Profile Class and the Average Fraction of Yearly Consumption for each SSC must be provided.

Step 6 – MDD process

- Create new LLFC (Entity 17 form). The LLFC description must include LMA in the text as this will allow all parties to identify that the customer resides in an LMA.

E.G. Existing LLFC Description – Economy 7

New LLFC Description – LMA Economy 7

A Distributor who would like to introduce a new LLFC has the opportunity to engage with the relevant Supplier DCUSA Contract Manager prior to completing the process.

- Create new SSC (Entity 32 form)
- Link new SSC to Profile Class (Entity 40 form – Valid Settlement Configuration Profile Class)
- Create new TPR(s) (Entity 38 form)
- Create TPR Clock Interval (Entity 27 Form)
- Link SSC/TPR (Entity 29 Form – Measurement Requirement)
- Link SSC/TPR to Profile Class (Entity 39 form – Valid Measurement Requirement Profile Class)
- Create Average Fraction of Yearly Consumption Set (Entity 11 Form)
- Create Average Fraction of Yearly Consumption (Entity 12 Form)
- Create new Valid MTC LLFC SSC combination (Entity 56 form)
- Create new Valid MTC LLFC SSC PC combination (Entity 63 form)

Please note the above includes the assumption that an existing Meter Timeswitch Code (MTC) will be used, however if Distributors wish to create a new MTC then the following forms also need to be completed along with the above.

- Meter Timeswitch Class – Entity 52 Form
- Meter Timeswitch Class for Distributor – Entity 53 Form
- Valid MTC/SSC Combination – Entity 54 Form

Please note the new combinations cannot be used until they are valid within MDD and this process can take up to two months to complete from start to finish.

Step 7– Send all relevant document to Elexon, along with revised D0265 data flow.

Distributors are required to submit the D0265 data file in accordance with BSCP 128 Appendix 7 – SVA Format Data File.

Step 8 – Elexon review all documentation and send to Industry for comment. Final approval is given by Supplier Volume Allocation Group (SVG).

On receipt of all relevant information, Elexon will follow the existing Market Domain Data rules, in that they will review the submission and issue for peer review prior to submitting a final view to SVG, who are ultimately responsible for providing final approval. Following approval from SVG the approved information will be published in an Elexon MDD Circular which will indicate the effective go-live date for the approved information.

Step 9 – Once the new valid combinations are live in MDD the impacted customer MPANs require to be transferred to the new LMA LLFC

Distributors need to update their systems for the new LLFC associated with each MPAN and then notify their MPAS Provider of the change. Dependent upon the processes adopted by each distributor this may need an IT change to their system/s.

Please note that MDD does not permit any retrospective back dating, the combinations will only be live from the effective from date which is usually the MDD publication date.

Step 10 – Distribution MPAS providers must also advise Suppliers of the changes to the customer details via the D0171 data flow.

Distributors need to update their systems for the new LLFC associated with each MPAN in order that the correct tariff can be used for billing since this LLFC will be contained in the relevant industry data flows. Dependent upon the processes adopted by each distributor this may need an IT change to their system/s.

Step 11 – Distributors should ensure that the new LMA LLFC(s) are mapped to the appropriate DUoS tariffs.

Distributors need to update their systems for the new LLFC associated with each MPAN in order that the correct tariff can be used for billing since this LLFC will be contained in the relevant industry data flows. Dependent upon the processes adopted by each distributor this may need an IT change to their system/s.

Step 12 – The Supplier should ensure that they programme the metering system according to the parameters listed in the MDD, as per the obligation within Schedule 8 of DCUSA.

The Supplier uses the information received and programmes the switching times for the valid combination onto the meter.