

| Marke | t Change Reques | t 1167   |                  | energy efficion | encies in Local<br>Lighting |
|-------|-----------------|----------|------------------|-----------------|-----------------------------|
| High  | Approved        | Priority | High Status Date |                 | 06/03/2019                  |

| Date       | Version | Reason for Change   | Version Status |
|------------|---------|---|----------------|
| 01/09/2015 | 1.0     | Issued to Market  | Final          |
| 16/09/2015 | 1.1     | Confirmation that CCMA and TII are in agreement with the proposals in this Discussion Request has been added.   |                |
|            |         | 'NRA' text has been replaced with TII - the NRA has recently merged with the Railway Procurement Agency to become "TII" Transport Infrastructure Ireland. |                |
| 06/01/2016 | 2.0     | Converted to MCR  | Final          |
| 27/09/2016 | 3.0     | Seven Additional Draft Profiles added   | Final          |
| 06/03/2018 | 4.0     | New burn hour calendars   | Final          |
| 26/10/2018 | 5.0     | Updates to Market Message Implementation Guides and Downloadable Meter Point Files Guide added to ROI Briefing Documents.                                 | Final          |
| 19/02/2019 | 6.0     | Cosmetic changes made to reference information in Table 2 on page 11 (i.e. text of the 'Burn Hour Calendar Description')                                  | Final          |

| Part 1 DETAIL OF DISCUSSION REQUEST / MARKET CHANGE REQUEST          |                 |  |  |  |  |
|--|-----------------|--|--|--|--|
| Requesting Organisation(s) ESB Networks Originating Jurisdiction Rol |                 |  |  |  |  |
| Request Originator Name  | Thereaa O'Neill |  |  |  |  |
| Date Raised  | 01/09/2015      |  |  |  |  |

| Classification of Request  |     |                                      |              |  |  |  |  |
|--|-----|--------------------------------------|--------------|--|--|--|--|
| Jurisdictional Applicability   | Rol | Jurisdictional<br>Implementation     | Both         |  |  |  |  |
| If jurisdictional implementation is<br>for one jurisdiction only – is the<br>other jurisdiction required to<br>effect any changes? | Yes | Co-Ordinated Baseline<br>Version No. | TBC          |  |  |  |  |
| Change Type  |     | Schem                                | na Impacting |  |  |  |  |

| Detail of Demost   |  |
|--------------------|--|
| Detail of Request  |  |
| 20000 0.7104000    |  |
| Reason for Request |  |
| Neason for Nequest |  |

The CCMA and TII have requested changes in the Unmetered Public Lighting sector in the Electricity Retail Market in Rol to facilitate energy efficiencies in Local Authority Public Lighting.

This request has been submitted to ESB Networks from the Local Government Sector under the auspices of the CCMA/TII. ESB Networks has received confirmation from the CCMA/TII that they are in agreement with the proposals that have been documented in this Discussion Request.

New lamp types are proposed to be installed which will have the ability to be pre-programmed to allow for Dimming at specific proportions and at specific times.

| 06/03/2019 | Page 1 of 15 | Market Change Request1167 |
|------------|--------------|---------------------------|



The Dusk to Dawn Burn Hour Calendar (D2D) that is currently in use is set at 4,150 hours in a year. 'Trimming' is currently included in this on the basis that lights have a warming up and down time i.e. they don't just turn on and off. As a result 10 minutes 21 secs has been taken off of the dusk and dawn timings since at least 2005 i.e. over 20 minutes a day is being 'Trimmed'.

The Local Authorities are looking for a new 'Dusk to Dawn Burn Hour Calendar with Extra Trimming' to be introduced and to be set at 4,095 hours in a year.

Similar to the current D2D Calendar, Daylight Saving Times will be incorporated into the new 'Dusk to Dawn Burn Hour Calendar with Extra Trimming'.

The CCMA/TII have confirmed that the new 'Dusk to Dawn Burn Hour Calendar with Extra Trimming' will be the basis of the energy efficiencies that the CCMA/TII are looking to implement when they introduce Dimming.

The CCMA/TII has noted that the consultation process undertaken by them across the local government sector indicated that eleven burn profiles for new Trimming / Dimming regimes are a minimum requirement for the public lighting providers over the coming years. This Change Request documents the CCMA's and TII's top four essential priorities and also the seven additional profiles which have been added in Version 3 of this document.

## **Proposed Solution**

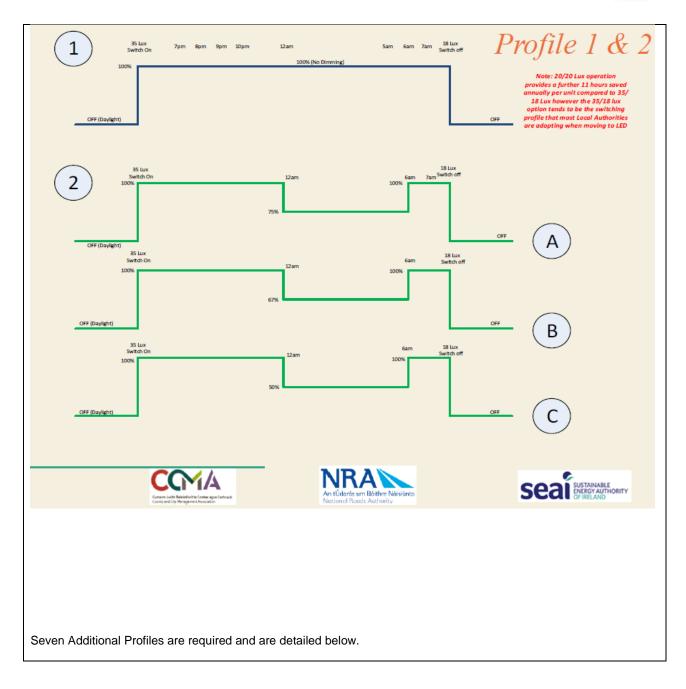
Additional Burn Hour Calendars for DUoS billing and additional Load Profiles for Data Aggregation are proposed to be introduced in RoI in the Electricity Retail Market.

These consist of the introduction of 1 step dimming into the new 'Dusk to Dawn Burn Hour Calendar with Extra Trimming' and its corresponding new Standard Profile and where the dimming is any of 75%, 67% or 50% between the hours of midnight and 6am.

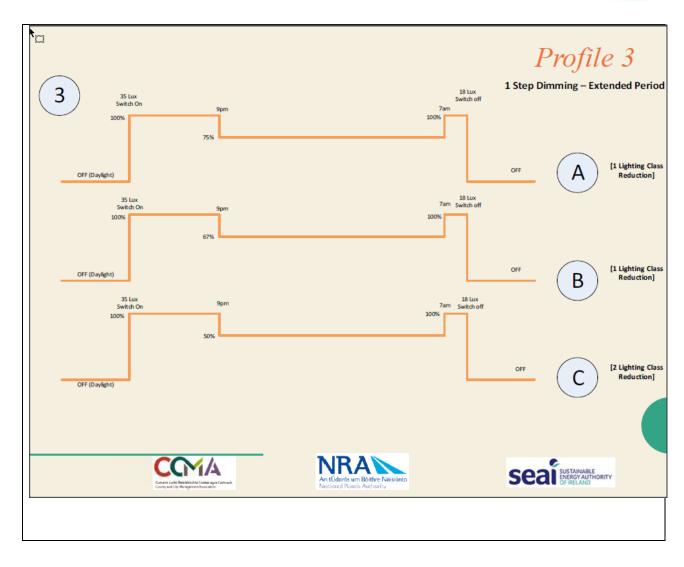
The dimming proportions are lighting output percentages. They represent 75%, 67% or 50% of 100%.

The new 'Dusk to Dawn Burn Hour Calendar with Extra Trimming' profile is pictorially represented as Profile 1 and new Dimming regimes are represented as 2A, 2B and 2C in this submission from CCMA/TII/SEAI viz:

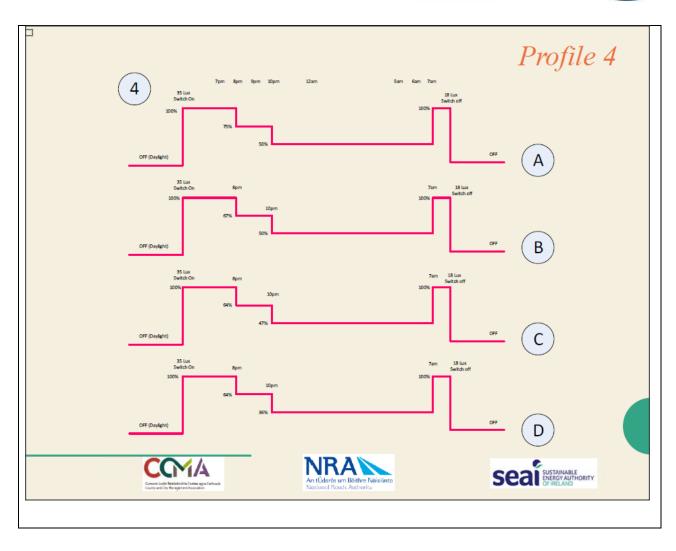




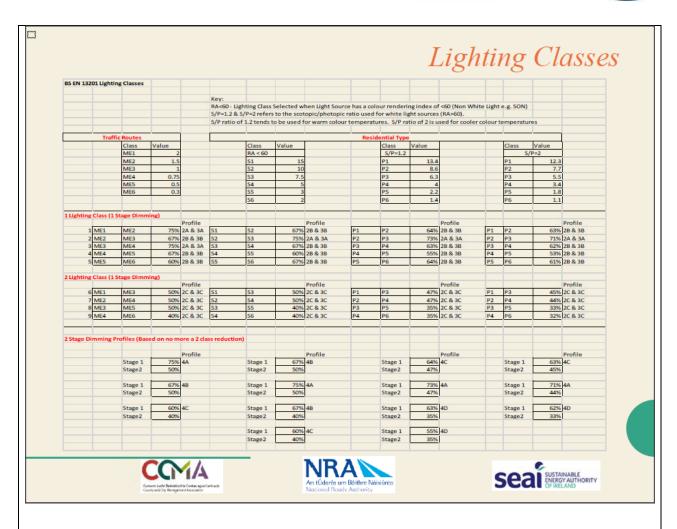












The lamp type in use will accurately reflect the actual wattage at a TMPRN. The Local Authorities will, as normal, advise the Unmetered Registrar (UMR) of all TMPRNs where changes in actual wattages are being made.

A separate Code Change Request will be raised as normal where needed to accommodate lamp types for Dimming.

ESB Networks will calculate the effective wattage for every lamp type that will be valid for dimming as part of the work for this Change Request. The output from this will be published.

The effective wattage will be billed in DUoS based on the dimming proportion (in conjunction with the power factor correction, as normal). Where there is dimming , the 'effective' wattage that will be billed will reflect the dimming regime in place at that lamp.

The Local Authorities will advise the UMR of the specific change that is needed for every TMPRN so that the Trimming/ Dimming regime can be reflected in the Burn Hours and Standard Load Profile in the inventory of that TMPRN.

NB: The status quo is that there is no mix of profiles at a single TMPRN, and this is not changing.



## Scope of Change

| Jurisdiction | Design<br>Documentation | Business<br>Process | DSO Backend<br>System<br>Change | MP Backend<br>System<br>Change | Tibco       | Supplier<br>EMMA | Schema      | Webforms | Extranet/NI<br>Market<br>Website |
|--------------|-------------------------|---------------------|---------------------------------|--------------------------------|-------------|------------------|-------------|----------|----------------------------------|
| ROI          | $\boxtimes$             | $\boxtimes$         | $\boxtimes$                     | $\boxtimes$                    | $\boxtimes$ |                  | $\boxtimes$ |          |                                  |
| NI           |                         |                     |                                 |                                |             |                  |             |          |                                  |

# Co-Ordinated Baseline Market Design Documents Impacted by Request

| Market Messages |                                      |           |           |    |  |  |  |  |  |  |
|-----------------|--------------------------------------|-----------|-----------|----|--|--|--|--|--|--|
| Message No.     | Message Name                         | CoBL      | ROI       | NI |  |  |  |  |  |  |
| 591             | Non Interval Aggregation             | see below | see below |    |  |  |  |  |  |  |
| 700             | Unmetered Characteristics            | see below | see below |    |  |  |  |  |  |  |
| 700W            | Unmetered Characteristics Withdrawal | see below | see below |    |  |  |  |  |  |  |
| 701             | Unmetered Consumption                | see below | see below |    |  |  |  |  |  |  |
| 701W            | Unmetered Consumption Withdrawal     | see below | see below |    |  |  |  |  |  |  |

## **Market Messages**

There is no change to the structure of any Market Message.

Five Market Messages currently contain, as a required item, the field LoadProfileCode viz **591**, **700**, **700W**, **701**, **701W**. In addition to any of the current LoadProfileCode values that are valid for Rol , this Change Request will allow for the population of any of the **eleven new LoadProfileCode values**, **viz 13 to 23 incl** in theses specific Market Messages.

Note that there are 20 further Market Messages that are outbound from ESB Networks and which currently allow for the population of a LoadProfileCode field viz. 101, 101P, 102, 102P, 114, 300, 300S, 300W, 301, 301N, 306, 306W, 307, 307W, 310, 310W, 320, 320W, 332, 332W . As none of these 20 messages are used for the population of LoadProfileCode values for Unmetered Public Lighting sites, none of the eleven new LoadProfileCode values will be populated on them.

Four Market Messages currently contain, as a required item, the field ConsecutiveNumber viz **700, 700W, 701, 701W**.. To identify the various un-metered type/billing value combinations on site the same ConsecutiveNumber may repeat in line with the Burn hour calendar (See Page 9 New Burn Hour Calendars for DUoS Billing)

## Data Definitions

No Impact



## **Data Codes**

## Eleven new Code Value and Code Value Descriptions for the data item Load Profile

The existing Data Item called Load Profile has the schema name LoadProfileCode. The list of Load Profile code values that are valid in Rol will be changed in the schema so that eleven new codes viz 13 to 23 incl will be added for LoadProfileCode.

The COBL will be changed so that the eleven new code values and their corresponding Code Value Description will be added to it.

These eleven new Data Code values will be valid for use only in Rol.

**Table 1** displays the list of current existing Load Profile codes that are valid in Rol as well as the eleven new code values and their corresponding code value descriptions.

| Note     | Data<br>Item    | Code<br>Value | Code Value Description   |     | Valid<br>in<br>NI? |
|----------|-----------------|---------------|--|-----|--------------------|
| Existing | Load<br>Profile | 01            | Urban Domestic Unrestricted  | Yes | No                 |
| Existing | Load<br>Profile | 02            | Urban Domestic Day/Night   | Yes | No                 |
| Existing | Load<br>Profile | 03            | Rural Domestic Unrestricted  | Yes | No                 |
| Existing | Load<br>Profile | 04            | Rural Domestic Day/Night   | Yes | No                 |
| Existing | Load<br>Profile | 05            | Non Domestic Unrestricted  | Yes | No                 |
| Existing | Load<br>Profile | 06            | Non Domestic Day/Night   | Yes | No                 |
| Existing | Load<br>Profile | 07            | MD with LF up to (but not including) 30%   | Yes | No                 |
| Existing | Load<br>Profile | 08            | MD with LF greater than or equal to 30% but less than 50%  | Yes | No                 |
| Existing | Load<br>Profile | 09            | MD with LF greater than or equal to 50%  | Yes | No                 |
| Existing | Load<br>Profile | 10            | Unmetered - Flat   | Yes | No                 |
| Existing | Load<br>Profile | 11            | Public Lighting - Dusk/Dawn  | Yes | No                 |
| Existing | Load<br>Profile | 12            | Public Lighting - Dusk/Midnight  | Yes | No                 |
| New      | Load<br>Profile | 13            | Public Lighting - Dusk/Dawn with Extra Trimming  | Yes | No                 |
| New      | Load<br>Profile | 14            | Public Lighting - Dusk/Dawn with Extra Trimming and 75% dimming between midnight and 06.00 hrs         | Yes | No                 |
| New      | Load<br>Profile | 15            | Public Lighting - Dusk/Dawn with Extra Trimming and 67% dimming between midnight and 06.00 hrs         | Yes | No                 |
| New      | Load<br>Profile | 16            | Public Lighting - Dusk/Dawn with Extra Trimming and 50% dimming between midnight and 06.00 hrs         | Yes | No                 |
| New      | Load<br>Profile | 17            | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to 75% from 21:00 through to 07:00 next day | Yes | No                 |
| New      | Load<br>Profile | 18            | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to 67% from 21:00 through to 07:00 next day | Yes | No                 |
| New      | Load<br>Profile | 19            | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to 50% from 21:00 through to 07:00 next day | Yes | No                 |



| New | Load    | 20 | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to | Yes | No |
|-----|---------|----|---|-----|----|
|     | Profile |    | 75% from 20:00 to 22:00 then to 50% until 07:00 next day      |     |    |
| New | Load    | 21 | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to | Yes | No |
|     | Profile |    | 67% from 20:00 to 22:00 then to 50% until 07:00 next day      |     |    |
| New | Load    | 22 | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to | Yes | No |
|     | Profile |    | 64% from 20:00 to 22:00 then to 47% until 07:00 next day      |     |    |
| New | Load    | 23 | Public Lighting - Dusk to Dawn with Extra Trimming, dimmed to | Yes | No |
|     | Profile |    | 64% from 20:00 to 22:00 then to 36% until 07:00 next day      |     |    |

Table 1

| ROI  |                    | Yes/No | NI | Yes/No |
|--|--------------------|--------|----|--------|
| Rol Co-Ordinated Retail Market Message Guide | – Data Aggregation | Yes    |    |        |
| Rol Co-Ordinated Retail Market Message Guide | – Unmetered        | Yes    |    |        |

### A. Rol Co-Ordinated Retail Market Message Guide – Data Aggregation

#### MM 591 - current text:

the count of MPRNs, Load profile and DLF will always be included for each of the Load Profiles in the segment Additional Aggregation Information

#### will be replaced with

the count of MPRNs, Load Profile and DLF will always be included for each of the Load Profiles 01-23 in the segments Additional Aggregation Information, Additional Aggregation Data and Additional Aggregation Consumption.

## B. Rol Co-Ordinated Retail Market Message Guide – Unmetered

### MM700, MM700W, MM701, MM701W - current text:

Profile is a code that determines, when coupled with Timeslot, the standard profile to be applied to the consumption for settlement. The following are valid values for load profile on this message:

- 10 Un-Metered Flat
- 11 Public Lighting Dusk/Dawn 12 Public Lighting Dusk/Midnight

### Each of these eleven Rol Retail Market Message guide entries will have the following text added

- 13 Public Lighting Dusk/Dawn with Extra Trimming
- 14 Public Lighting Dusk/Dawn with Extra Trimming and 75% dimming between midnight and 06.00 hrs
- 15 Public Lighting Dusk/Dawn with Extra Trimming and 67% dimming between midnight and 06.00 hrs
- 16 Public Lighting Dusk/Dawn with Extra Trimming and 50% dimming between midnight and 06.00 hrs
- 17 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 75% from 21:00 through to 07:00 next day
- 18 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 67% from 21:00 through to 07:00 next day
- 19 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 50% from 21:00 through to 07:00 next day
- 20 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 75% from 20:00 to 22:00 then to 50% until 07:00 next day
- 21 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 67% from 20:00 to 22:00 then to 50% until 07:00
- 22 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 64% from 20:00 to 22:00 then to 47% until 07:00
- 23 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 64% from 20:00 to 22:00 then to 36% until 07:00 next day

| 06/03/2019 | Page 9 of 15 | Market Change Request1167 |
|------------|--------------|---------------------------|



### Comments

### Only one profile on any given TMPRN

Under no circumstances will there be mixed profiles on a single TMPRN.

This is the status-quo and for the avoidance of doubt there is no change to this requirement.

#### Burn Hours for the New Burn Hour Calendars for DUoS Billing

Twenty five Eleven new Burn Hour Calendars will be introduced as part of this Change Request

Refer to table 2 on the following page which shows that multiple Burn Hour Calendars( for determination of Unmetered Consumption for DUoS Billing) may be aligned with each of the new Standard Profile ( for Data Aggregation).

For Example the following two Burning Hour Calendars will align with Standard Profile 14 (Public Lighting - Dusk/Dawn with Extra Trimming and 75% dimming between midnight and 06.00 hrs)

U14A
 Public Lighting Profile 14 – Hours not dimmed
 U14B
 Public Lighting Profile 14 – Hours dimmed to 75%

The daily coefficients of the Burning Hour Calendar U14A will specify the number of hours of **undimmed** consumption per day (i.e. Billable Wattage = 100% of Actual Wattage)

9.7531 hours for 01/01/2018 9.7364 hours for 02/01/2018

Etc.

While the daily coefficients of the Burning Hour Calendar U14B will specify the number of hours of **dimmed** consumption per day (i.e. Billable Wattage = 75% of Actual Wattage)

6.0000 hours for 01/01/2018

6.0000 hours for 02/01/2018

Etc.

For a new Standard Profile, the daily coefficients (totalised for a year) of all the aligned Burning Hour Calendars will sum exactly to 4,095 hours.

e.g. (Sum of the daily coefficients for Burning Hour Calendar U14A) plus (Sum of the daily coefficients for Burning Hour Calendar U14B) = 4,095 hours

The unmetered consumption of an individual lamp in a period may be calculated as follows:

While the Burning Hours Dimmed are determined by summing the daily coefficients of Burning Hour Calendar U14B for the period.

The daily coefficients will be determined as part of the work to introduce this change request

viz U13 to U23 incl. This is to keep the one-to-one alignment of the DUoS Billing Burn Hour Calendar and its corresponding Standard Profile for Data Aggregation. The daily coefficients will be determined as part of the work to introduce this change request. The daily coefficients will be the same across all of the new Burn Hour Calendars.

Burn Hour Calendars do not appear on any Market Messages and this will not be changing. One of the five Downloadable Meter Points Details contain the Burn Hour Calendars viz UNMT\_CUST file, and the impact on this file is considered further on under the heading **Downloadable Meter Point Details Files.** The twenty five eleven new Burn Hour Calendars will be revised and published annually.

## Profile Coefficients for eleven new Standard Load Profiles for Data Aggregation

Eleven new Standard Load Profiles for Data Aggregation will be introduced as part of this Change Request viz 13 to 23 incl. The profile coefficients for the eleven new Standard Load Profiles will be calculated as part of the work to introduce this Change Request. The eleven new Standard Load Profiles for Data Aggregation will be revised and published annually.

| 06/03/2019 | Page 10 of 15 | Market Change Request1167 |
|------------|---------------|---------------------------|



### **DUoS Group**

The DG4 Use of System tariff will continue to apply to all unmetered public lighting and other unmetered load types where the registered customer is a local authority. This means that no new DUoS Group is being introduced in this Change Request.

#### **New Connections**

There will be a change for Unmetered Public Lighting New Connections so that the 700MM will issue with DUoS\_Group of DG4 when the MeterPointStatusCode is 'A' Assigned, instead of currently where the 700MM issues with DUoS\_Group of DG3 when the MeterPointStatusCode is 'A' Assigned.

### **Retail Market Participant Extranet**

There is no change to the Retail Market Participant Extranet; this will display the new Load Profile Code values viz 13 to 23 incl.in the Standard Profile Code field on the MPRN Enquiry Tab and the New Connections tab.

#### **Downloadable Meter Point Details Files**

There is no change to the structure of any of the five Rol Downloadable Meter Point Details Files.

The structure of the **UNMT\_CUST** file will be extended to cater for the assignment of up to three different Burning Hour Calendar codes per TMPRN (together with the Actual Wattage and Billable Wattage values associated with each of the three different Burning Hour Calendars that could be assigned per TMPRN)

The UNMT\_CUST file currently displays existing Burn Hour Calendar values in the existing Burn Hour Calendar column as described in Table 2. In addition to any of the three Burn Hour Calendar values that are currently valid for Rol, this Change Request will allow for the population of the eleven new Burn Hour Calendar values, viz U13 to U23 incl in the Burn Hour Calendar field in the UNMT\_CUST file.

**Table 2** displays the list of the three existing Burn Hour Calendar field values that are currently valid in Rol as well as the twenty five eleven additional field values that will become valid in the UNMT CUST file.

Table 3 displays the changes to the UNMT\_CUST file.

For the avoidance of doubt, two columns are shown in Table 2 for information purposes only; they are not currently displayed in the UNMT\_CUST file, and will not be added to it by this change request, viz Burn Hour Calendar Description and the Corresponding Load Profile Code Value.

| Note     | Burn Hour<br>Calendar<br>column | Burn Hour Calendar Description   | Corresponding<br>Load Profile Code<br>Value  |
|----------|---------------------------------|--|--|
|          | UNMT_CUST file  Field Value     | NB this column is for reference only : these values will <u>not</u> appear in the UNMT_CUST file | NB this column is for reference only: these values will not appear in the UNMT_CUST file |
| Existing | 24H                             | Unmetered - Flat   | 10   |
| Existing | D2D                             | Public Lighting - Dusk/Dawn  | 11   |
| Existing | D2M                             | Public Lighting - Dusk/Midnight  | 12   |
| New      | U13                             | Public Lighting Load Profile 13 Dusk/Dawn with Extra Trimming                                    | 13   |
| New      | U14A                            | Public Lighting – Load Profile 14-Hours not dimmed   | 14   |
| New      | U14B                            | Public Lighting Load Profile 14 – Hours dimmed to 75% between midnight and 06.00                 | 14   |

| 06/03/2019 | Page 11 of 15 | Market Change Request1167 |
|------------|---------------|---------------------------|



| New | U15A | Public Lighting Load Profile 15 - Hours not dimmed  | 15 |
|-----|------|---|----|
| New | U15B | Public Lighting Load Profile 15 – Hours dimmed to 67% between midnight and 06.00            | 15 |
| New | U16A | Public Lighting Load Profile 16 - Hours not dimmed  | 16 |
| New | U16B | Public Lighting Load Profile 16 – Hours dimmed to 50% between midnight and 06.00            | 16 |
| New | U17A | Public Lighting –Load Profile 17 -Hours not dimmed  | 17 |
| New | U17B | Public Lighting Load Profile 17 – Hours dimmed to 75% from 21:00 through to 07:00 next day  | 17 |
| New | U18A | Public Lighting – Load Profile 18 - Hours not dimmed  | 18 |
| New | U18B | Public Lighting Load Profile 18 – Hours dimmed to 67% from 21:00 through to 07:00 next day  | 18 |
| New | U19A | Public Lighting – Load Profile 19 Dusk to Dawn with Extra Trimming, Hours not dimmed        | 19 |
| New | U19B | Public Lighting Load Profile 19 dimmed to 50% from 21:00 through to 07:00 next day          | 19 |
| New | U20A | Public Lighting – Load Profile 20- Hours not dimmed   | 20 |
| New | U20B | Public Lighting Load Profile 20 – Hours dimmed to 75% 20 from 20:00 to 22:00                |    |
| New | U20C | Public Lighting LoadProfile 20 – Hours dimmed to 50% from 22:00 to 50% until 07:00 next day | 20 |
| New | U21A | Public Lighting – Load Profile 21 -Hours not dimmed   | 21 |
| New | U21B | Public Lighting Load Profile 21 – Hours dimmed to 67% from 20:00 to 22:00                   | 21 |
| New | U21C | Public Lighting Load Profile 21 – Hours dimmed to 50%<br>from 22:00 until 07:00 next day    | 21 |
| New | U22A | Public Lighting – Load Profile 22 - Hours not dimmed  | 22 |
| New | U22B | Public Lighting Load Profile 22 – Hours dimmed to 64% from 20:00 to 22:00                   | 22 |
| New | U22C | Public Lighting Load Profile 22 – Hours dimmed to 47%<br>from 22:00 until 07:00 next day    | 22 |
| New | U23A | Public Lighting Load Profile 23 Hours not dimmed  | 23 |
| New | U23B | Public Lighting – Load Profile 23 Hours dimmed to 64% from 20:00 to 22:00                   | 23 |
| New | U23C | Public Lighting – Load Profile 23 -Hours dimmed to 36% from 22:00 until 07:00 next day      | 23 |

Table 2

| Current column headings in file UNMT_CUST | Revised column headings in file UNMT_CUST |  |
|---|---|--|
| MPRN                                      | MPRN                                      |  |
| Meter Point Status                        | Meter Point Status                        |  |
| House No                                  | House No                                  |  |
| street2                                   | street2                                   |  |
| street                                    | street                                    |  |
| street3                                   | street3                                   |  |
| street4                                   | street4                                   |  |
| street5                                   | street5                                   |  |



| City                 | City                          |  |
|----------------------|-------------------------------|--|
| Region               | Region                        |  |
| Country              | Country                       |  |
| De-Energised Flag    | De-Energised Flag             |  |
| Registration Status  | Registration Status           |  |
| Connection Agreement | Connection Agreement          |  |
| Class                | Class                         |  |
| MIC                  | MIC                           |  |
| Essential Plant      | Essential Plant               |  |
| Voltage              | Voltage                       |  |
| мсс                  | MCC                           |  |
| Metering Class       | Metering Class                |  |
| Reference No         | Reference No                  |  |
| Repitition Factor    | Repitition Factor             |  |
| Unmeter Type         | Unmeter Type                  |  |
| Burn Hour Calender   | Burn Hour Calender            |  |
| Actual Wattage       | Actual Wattage                |  |
| Billable Wattage     | Billable Wattage              |  |
| Power Factor         | Burn Hour Calender_2 ( Added) |  |
| GMPRN                | Actual Wattage_2 (Added)      |  |
| GMPRN House No       | Billable Wattage_2 (Added)    |  |
| GMPRN street2        | Burn Hour Calender_3 (Added)  |  |
| GMPRN street         | Actual Wattage_3 (Added)      |  |
| GMPRN street3        | Billable Wattage_3 (Added)    |  |
| GMPRN street4        | Power Factor                  |  |
| GMPRN street5        | GMPRN                         |  |
| GMPRN City           | GMPRN House No                |  |
| GMPRN Region         | GMPRN street2                 |  |
| GMPRN Country        | GMPRN street                  |  |
|                      | GMPRN street3                 |  |
|                      | GMPRN street4                 |  |
|                      | GMPRN street5                 |  |
|                      | GMPRN City                    |  |
|                      | GMPRN Region                  |  |
|                      | GMPRN Country                 |  |
| Table 3              |                               |  |

| ROI - Market Process Diagrams – MPDs |                  |           |  |
|--------------------------------------|------------------|-----------|--|
| No Impact                            | No Impact        | No Impact |  |
|                                      |                  |           |  |
|                                      |                  |           |  |
| NI - Market Procedures               |                  |           |  |
| Market Process Number                | Market Procedure | Affected  |  |
| No Impact                            | No Impact        | No Impact |  |
|                                      |                  | ·         |  |

| 06/03/2019 | Page 13 of 15 | Market Change Request1167 |
|------------|---------------|---------------------------|



## **ROI Guidance Documentation**

| ROI Briefing Documents                                |     |     |  |
|---|-----|-----|--|
| Document/Paper Version Affected                       |     |     |  |
| Aggregation Briefing Document                         | tbc | Yes |  |
| Oownloadable Meter Point Files Guide (UNMT_CUST)  Yes |     |     |  |

#### Current text will be removed:

#### 10.2 Use of Load Profiles

Unmetered Load Profiles are explicitly driven by the predefined duty cycle for the site and as a result are standardised into three Load Profiles:

- 1. Unmetered Dusk to Dawn
- 2. Unmetered Dusk to Midnight
- 3. Unmetered 24 Hours

#### And will be replaced by

10.2 Use of Load Profiles

Unmetered Load Profiles are explicitly driven by the predefined duty cycle for the site and as a result are standardised into seven-fourteen Load Profiles which are listed here with their corresponding Load Profile Code values:

- 10.Unmetered Flat
- 11.Public lighting Dusk/Dawn
- 12 Public Lighting Dusk/Midnight

### And the following text will be added:

- 13 Public Lighting Dusk/Dawn with Extra Trimming
- 14 Public Lighting Dusk/Dawn with Extra Trimming and 75% dimming between midnight and 06.00 hrs
- 15 Public Lighting Dusk/Dawn with Extra Trimming and 67% dimming between midnight and 06.00 hrs
- 16 Public Lighting Dusk/Dawn with Extra Trimming and 50% dimming between midnight and 06.00 hrs
- 17 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 75% from 21:00 through to 07:00 next day
- 18 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 67% from 21:00 through to 07:00 next day
- 19 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 50% from 21:00 through to 07:00 next day
- 20 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 75% from 20:00 to 22:00 then to 50% until 07:00 next day
- 21 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 67% from 20:00 to 22:00 then to 50% until 07:00 next day
- 22 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 64% from 20:00 to 22:00 then to 47% until 07:00 next day)
- 23 Public Lighting Dusk to Dawn with Extra Trimming, dimmed to 64% from 20:00 to 22:00 then to 36%47% until 07:00 next day.

### The following text will be removed in section 10.3

Both Burn Hour Calendars and Load Profiles are driven explicitly by the defined duty cycles and hence there is a one-to-one relationship between a Burn Hour Calendar and its respective Load Profile.

| User and Technical Documents    |  |  |  |
|---------------------------------|--|--|--|
| Reference Name Version Affected |  |  |  |
| No impact No Impact             |  |  |  |
|                                 |  |  |  |

| Part 2 - Performance and Data Changes   |  |  |
|---|--|--|
| Market Messages volume, processing etc. |  |  |
| Data                                    |  |  |

| 06/03/2019 | Page 14 of 15 | Market Change Request1167 |
|------------|---------------|---------------------------|



| Details of Data changes e.g. cleansing |  |
|--|--|

| Part 3 - ReMCoSG / CRU Approval |         |     |  |  |
|---------------------------------|---------|-----|--|--|
| Approved by                     | ReMCoSG | CRU |  |  |
|                                 |         |     |  |  |
| Comments                        |         |     |  |  |
|                                 |         |     |  |  |
|                                 |         |     |  |  |
|                                 |         |     |  |  |