|  |  |  |  |
| --- | --- | --- | --- |
| LPGRR Number | DRAFT | LPGRR Title | Add BUSLRG and BUSLRGDG Profile Types |
| Date Posted | | December TBD, 2020 | |
|  | |  | |
| Requested Resolution | | Normal | |
| Load Profiling Guide Sections Requiring Revision | | Appendix D, Profile Decision Tree – Definitions  Appendix D, Profile Decision Tree – Segment Assignment  Appendix D, Profile Decision Tree – Valid Profile IDs | |
| Related Documents Requiring Revision/Related Revision Requests | | Nodal Protocol Revision Request (NPRR) XXX, Modify IDR Meter Requirement and Eliminate IDR Meter Requirement Report | |
| Revision Description | | This Load Profiling Guide Revision Request (LPGRR) adds two new PROFILETYPECODEs to be used for Premises billed on a 4-Coincident Peak (4-CP) tariff where the Transmission and/or Distribution Service Provider (TDSP) can support a 4-CP billing rate with an Advanced Metering System (AMS) profile. BUSLRG will be created for Premises that do not have Distributed Generation (DG) and BUSLRGDG will be created for those Premises that do have DG. Existing BUSIDRRQ will remain an option for Premises billed on a 4-CP tariff. | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/wcm/lists/144926/ERCOT_Strategic_Plan_2019-2023.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain)  *(please select all that apply)* | |
| Business Case | | The requirement for Interval Data Recorder (IDR) Meters at Premises connected at transmission voltage and/or having a peak Demand greater than 700kW/700kVA is no longer necessary due to the advent of Advanced Meters and efforts of competitive TDSPs to modify their systems to support 4-CP billing for Premises with Advanced Meters. Competitive TDSPs are bound by their tariffs and all of the tariffs require 4-CP billing for Premises having a peak Demand greater than 700kW/700kVA. Interval Load data for the ERCOT System’s largest customers will be available for Initial Settlement. | |

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| --- | --- |
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| Market Segment | Not Applicable |

|  |  |
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| Proposed Guide Language Revision |

**Appendix D, Profile Decision Tree - “Definitions” worksheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **IDRRQ** | Denotes Premises billed on a 4-CP tariff where the TDSP cannot support a 4-CP billing rate with an AMS profile (aka IDR Metered Premise). |  | Segment Assignment tab |
|  | **LRG** | Denotes Premises billed on a 4-CP tariff where the TDSP can support a 4-CP billing rate with an AMS profile and does not have Distributed Generation. |  | Segment Assignment tab |
|  | **LRGDG** | Denotes Premises billed on a 4-CP tariff where the TDSP can support a 4-CP billing rate with an AMS profile and has Distributed Generation. |  | Segment Assignment tab |

**Appendix D, Profile Decision Tree - “Segment Assignment” worksheet**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **III. Business (BUS)** | | | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **Assignment Year for Average Load Factor calculations: The previous calendar year (January through December) will be used to calculate the Average Load Factor.** | | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | For each ESI ID, assign the applicable Profile Segment based on the steps below. Because the steps below are not mutually exclusive, it is necessary to step through each of the following in the order listed, for each ESI ID, until an applicable case is found. Once an applicable case has been found follow the instructions in 'E' below for ESI IDs that have Distributed Generation (per the DG tab). | | | | | | | | | | | | | |  |
|  |  | | | | | | | | | | | | | | |  |
|  |  | **A.** Assign LRG, LRGDG or IDRRQ Profile Segment to all BUS ESI IDs billed on a 4-CP tariff.  NOTE: Do not use LRGDG for Settlement Only Generator (SOG) Premises. SOG Premises are assigned a Resource ID (RID) to be used for submission of generation data. | | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **B.** Assign the OGFLT (Oil & Gas Flat) Profile Segment to: | | | | | | | | | | | | | |  |
|  |  |  |  |  | ESI IDs for which ERCOT has informed the TDSP that OGFLT should be assigned per the Oil & Gas tab. | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **C.** Assign the NODEM Profile Segment for non-residential ESI IDs which are not billed demand. | | | | | | | | | | | | | |  |
|  |  |  |  |  |  | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **D.** Determine the Average Load Factor (AvgLF) for ESI IDs that were not assigned a Profile Segment in Steps 1, 2, or 3 above. | | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **1**. Determine Usage Month values (ActiveDaysm, kWDaysm, kWhm, MaxkWm, and ADUsem) for each ESI ID for the 12 months of the Assignment Year, which is listed near the beginning of Section III. | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **2**. Compute the Average Hourly Usage (AHUsem) for the Usage Months of the Assignment Year. | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  | | | | |  |  |  |  |  |
|  |  |  |  | where | kWhm = consumption in kilowatt hours in Usage Month m, and | | | | | | | | | | |  |
|  |  |  |  |  | ActiveDaysm = Number of Active Days in Usage Month m. | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | \* Round to two decimal places, per the Rounding instructions on the Definitions tab. | | | | | | | | |  |  |  |  |
|  |  |  |  | | | | | | | | | | | | |  |
|  |  |  | **3.** Compute the Average Load Factor (AvgLF) as shown below for the Usage Months of the current Assignment Year. TDSPs that measure kVA at the ESI ID level should reference the 'kVA to kW' tab before proceeding. The Average Load Factor is a weighted average of the individual monthly load factors, where demand levels are used to define the weights (presented in a mathematically equivalent calculation below). AHUsem and MaxkWm values are required for each of the 12 months of the current Assignment Year in order to calculate AvgLF. | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | | | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | where | AHUsem = Average Hourly Use in Usage Month m as previously defined, and | | | | | | | | | | |  |
|  |  |  |  |  | MaxkWm = Maximum metered kW Demand in Usage Month m, as defined on the Usage Month methodology tab. | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | \* Round to two decimal places, per the Rounding instructions on the Definitions tab. | | | | | | | | |  |  |  |  |
|  |  |  |  | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **4**. For each ESI ID, assign the appropriate Profile Segment based on A thru G below. Because A thru G below are not mutually exclusive, it is necessary to step through each of the following in the order listed, for each ESI ID, until an applicable case is found. (Please note that the breakpoint values below are subject to change periodically.) | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | a. | If there is no existing assignment then | | | | | |  |  |  |  |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if data were available (e.g., for Opt-in entities) to calculate the AvgLF then | | | | | | | | | |  |
|  |  |  |  |  |  |  | if the AvgLF < 0.40 then | | | | | | | | |  |
|  |  |  |  |  |  |  |  | assign LOLF; | | | | | | | |  |
|  |  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | |  |
|  |  |  |  |  |  |  |  | assign MEDLF; | | | | | | | |  |
|  |  |  |  |  |  |  | else assign HILF. | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | b. | If the existing assignment is LOLF (or a DG variation, such as LOWD) then | | | | | | | | | |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | do not change assignment from LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | do not change assignment from LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else assign HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | c. | If the existing assignment is MEDLF (or a DG variation) then | | | | | | | |  |  |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | do not change assignment from MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | do not change assignment from MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else assign HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | d. | If the existing assignment is HILF (or a DG variation) then | | | | | | | |  |  |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | do not change assignment from HILF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else do not change assignment from HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | e. | If the existing assignment is IDRRQ then | | | | | |  |  |  |  |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else assign HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | f. | If the existing assignment is NODEM (or a DG variation) then | | | | | | | | |  |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else assign HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | g. | If the existing assignment is neither LOLF, MEDLF, HILF, IDRRQ, nor NODEM then | | | | | | | | | |  |  |
|  |  |  |  |  |  | if the required data were not available to calculate the AvgLF\*\* then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if the AvgLF < 0.40 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign LOLF; | | | | | | | | |  |
|  |  |  |  |  |  | else if 0.40 ≤ AvgLF ≤ 0.60 then | | | | | | | | | |  |
|  |  |  |  |  |  |  | assign MEDLF; | | | | | | | | |  |
|  |  |  |  |  |  | else assign HILF. | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | \*\* or if the mathematical calculation of the AvgLF is undefined due to a zero (0) in the denominator | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **E.** | Assign a DG Profile Segment per the DG tab and report the assignment to ERCOT.  NOTE: Do not assign a DG Profile Segment for Settlement Only Generator (SOG) Premises. SOG Premises are assigned a Resource ID (RID) to be used for submission of generation data. | | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **1.** | If the ESI ID would otherwise be assigned IDRRQ then | | | | | | |  |  |  |  |  |  |
|  |  |  |  |  | assign IDRRQ; | | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **2.** | Else if the ESI ID has any PV generation then | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  | if segment is determined to be HILF then assign HIPV; | | | | | | |  |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be MEDLF then assign MEDPV; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be LOLF then assign LOPV; | | | | | | | |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be NODEM then assign NODPV; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be OGFLT then assign OGFPV; | | | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **3.** | Else if the ESI ID has wind generation then | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  | if segment is determined to be HILF then assign HIWD; | | | | | | |  |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be MEDLF then assign MEDWD; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be LOLF then assign LOWD; | | | | | | | |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be NODEM then assign NODWD; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be OGFLT then assign OGFWD~~.~~; | | | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | **4.** | Else if the ESI ID has other DG then | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  | if segment is determined to be HILF then assign HIDG; | | | | | | |  |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be MEDLF then assign MEDDG; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be LOLF then assign LODG; | | | | | | | |  |  |  |  |
|  |  |  |  |  | else if segment is determined to be NODEM then assign NODDG; | | | | | | | | |  |  |  |
|  |  |  |  |  | else if segment is determined to be OGFLT then assign OGFDG. | | | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Appendix D, Profile Decision Tree - “Valid Profile IDs” worksheet**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **BUS** | **LRG** | **COAST** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_COAST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **EAST** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_EAST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **FWEST** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_FWEST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **NCENT** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_NCENT\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **NORTH** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_NORTH\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **SCENT** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_SCENT\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **SOUTH** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_SOUTH\_IDR\_WS\_NOTOU** |
| **BUS** | **LRG** | **WEST** | **IDR** | **WS** | **NOTOU** | **BUSLRG\_WEST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **COAST** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_COAST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **EAST** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_EAST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **FWEST** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_FWEST\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **NCENT** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_NCENT\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **NORTH** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_NORTH\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **SCENT** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_SCENT\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **SOUTH** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_SOUTH\_IDR\_WS\_NOTOU** |
| **BUS** | **LRGDG** | **WEST** | **IDR** | **WS** | **NOTOU** | **BUSLRGDG\_WEST\_IDR\_WS\_NOTOU** |