## PROGRAM DEFINITION

|  |
| --- |
|  |
|  |

## RELATED TABLES

|  |  |
| --- | --- |
|  | **Access** |
|  | RW |

## RELATED PROGRAMS

|  |  |
| --- | --- |
|  | **Access** |
|  |  |

## ROLES

|  |  |
| --- | --- |
|  | **Test** |
|  |  |

## INITIAL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Get Property List [PROPERTY\_LIST]:   EXEC RSP\_GS\_GET\_PROPERTY\_LIST 'Login Company Id', 'Login User Id'  Set Value : CPROPERTY\_NAME  As Parameter: CPROPERTY\_ID |  |
| * Jalankan RSP\_GS\_GET\_TRANS\_CODE\_INFO dengan parameter, simpan hasil ke VAR\_GSM\_TRANSACTION\_CODE   + VAR\_COMPANY\_ID   + VAR\_TRANS\_CODE |  |

## TAB – UNIT

### TAB – UTILITY USAGE

#### TAB – GENERAL INFO

##### USER INTERFACE

**Electricity and Chiller**



**Water and Gas**



##### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * "Download" * "Upload" * "Photo"   Untuk upload photo Meter No   * "Undo" |  |

##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Building List   EXEC RSP\_GS\_GET\_BUILDING\_LIST 'Login Company Id', 'Selected Property Id', 'Login User Id'   * + "Building"     - Textbox     - Field = CBUILDING\_NAME |  |
| * Filter Header Utility List:   + "Utility Type\*"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', ',01,02,03,04', 'Login Language Id')   * + "Floor"     - Combobox     - Field = CFLOOR\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_FLOOR\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Login User Id'   * + Flag "All Floor"     - Checkbox     - Field = LALL\_FLOOR     - Value = [0] Unchecked / [1] Checked     - IF [1] Checked Then Disabled field "Floor" Else Enabled   + "Invoice Period\*"     - Combobox     - Field = CINV\_PERIOD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + Flag "Invoiced"     - Checkbox     - Field = LINV\_FLAG     - Value = [0] Unchecked / [1] Checked   + "Utility Period\*"     - Combobox     - Field = CUTILITY\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Utility Period Date\*" From     - Datetime Picker     - Field = CSTART\_DATE     - Default Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_INFO 'Login Company Id', ’Selected Year’, ’Selected Period No’   * + "Utility Period Date" To     - Datetime Picker     - Field = CEND\_DATE     - Default Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_INFO 'Login Company Id', ’Selected Year’, ’Selected Period No’   * + - Validation: "Utility Period Date" To cannot be earlier than "Utility Period Date\*" From |  |
| * On Click button "Refresh" and Utility Type IN (01,02), Load Utility List (Electricity and Chiller):   EXEC RSP\_PM\_GET\_UTILITY\_USAGE\_LIST\_EC 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  , Flag "All Floor"  , Selected "Invoice Period\*"  , Flag "Invoiced"  , Selected "Utility Period\*"  , Selected "Utility Period Date\*" From  , Selected "Utility Period Date" To  , 'Login User Id'   * + "**🗸**" *Checked*     - Checkbox     - Field = LSELECTED     - Value = [0] Unchecked / [1] Checked   + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START     - Disabled   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START     - Disabled   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   + "Beban Bersama"     - Textbox     - Field = IBEBAN\_BERSAMA   + "Block I Usage"     - Textbox     - Field = IBLOCK1\_USAGE     - Disabled   + "Block II Usage"     - Textbox     - Field = IBLOCK2\_USAGE     - Disabled   + "Avg Block I Usage"     - Textbox     - Field = IAVG\_BLOCK1\_USAGE     - Disabled   + "Avg Block II Usage"     - Textbox     - Field = IAVG\_BLOCK2\_USAGE     - Disabled   **[CR01]**   * + "Unit Description\*"     - Textbox     - Field = CUNIT\_DESCRIPTION     - Disabled   **[/CR01]**   * + "Status"     - Textbox     - Field = CSTATUS     - Disabled   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * On Click button "Refresh" and Utility Type IN (03,04), Load Utility List (Water and Gas):   EXEC RSP\_PM\_GET\_UTILITY\_USAGE\_LIST\_WG 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  , Flag "All Floor"  , Selected "Invoice Period\*"  , Flag "Invoiced"  , Selected "Utility Period\*"  , Selected "Utility Period Date\*" From  , Selected "Utility Period Date" To  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START     - Disabled   + "Meter End"     - Textbox     - Field = IMETER\_END   + "Meter Usage"     - Textbox     - Field = IMETER\_USAGE     - Disabled   + "Avg Meter Usage"     - Textbox     - Field = IAVG\_METER\_USAGE     - Disabled   + "Total Amount"     - Textbox     - Field = ITOTAL\_AMOUNT     - Disabled   **[CR01]**   * + "Unit Description\*"     - Textbox     - Field = CUNIT\_DESCRIPTION     - Disabled   **[/CR01]**   * + "Status"     - Textbox     - Field = CSTATUS     - Disabled   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |

##### PHOTO BUTTON

###### USER INTERFACE



###### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Utility Info   EXEC RSP\_PM\_GET\_UTILITY\_INFO 'Login Company Id', 'Selected Property Id', 'Selected Ref No', 'Login User Id'   * + "Property"     - Textbox     - Field = CPROPERTY\_NAME   + "Building"     - Textbox     - Field = CBUILDING\_NAME   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit"     - Textbox     - Field = CUNIT\_NAME   + "Unit Type"     - Textbox     - Field = CUNIT\_TYPE\_NAME   + "Meter No"     - Textbox     - Field = CMETER\_NO   + "Capacity"     - Textbox     - Field = ICAPACITY   + "CF"     - Textbox     - Field = ICF   + "Invoice Period"     - Textbox     - Field = CINV\_PERIOD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block I Usage"     - Textbox     - Field = IBLOCK1\_USAGE   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   + "Block II Usage"     - Textbox     - Field = IBLOCK2\_USAGE |  |

##### TEMPLATE PROCESS

**OUTPUT FILE:**

|  |  |
| --- | --- |
|  | **Test** |
| * Download Utility Usage File from Server * Tampilkan file directory untuk user melakukan save as |  |

##### UPLOAD PROCESS

###### USER INTERFACE



###### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * “Open File Explorer” – Untuk membuka File Explorer yang digunakan untuk mencari source file MS-Excel yang akan di-import ke dalam table Database. * “**L**oad” – untuk menampilkan file MS-Excel yang dipilih ke dalam List Load Utility Usage. * “**P**rocess” – Untuk melakukan proses import data – data yang ada di List Load Utility Usage. * “**C**ancel” – Untuk keluar dari program Load Department dan kembali ke program Utility Usage. |  |

###### OUTPUT

|  |  |
| --- | --- |
|  | **Test** |
| * Data pada table Utility Usage. |  |

###### ROLES

|  |  |
| --- | --- |
|  | **Test** |
| * Program ini dijalankan oleh operator yang mempunyai hak kewenangan menjalankan Utility Usage. |  |

###### INITIAL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Form:   + Kosongkan “Source File (Excel)” Textbox.   + Kosongkan List Load Utility Usage (Read Only).   + Disabled semua button.   + Enabled button Open File Explorer.   + Enabled button Process & Cancel.   + Set Focus pada Textbox “Source File (Excel)”. |  |

###### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tampilkan data List of Load Utility Usage EC   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   “Valid”   * + - Textbox (Y/N)   + “Notes“     - Textbox |  |
| * Tampilkan data List of Load Utility Usage WG   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START   + "Meter End"     - Textbox     - Field = IMETER\_END   + “Valid”     - Textbox (Y/N)   + “Notes“     - Textbox |  |

###### PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  , NBEBAN\_BERSAMA numeric(16,2)  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG(CCOMPANY\_ID VARCHAR(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Jumlah Progress Bar: 20 Step   * IF VAR\_RESULT.IERROR\_COUNT=0   + Display message ‘Utility uploaded successfully!’, OK   + ELSE     - Display error message where NO < 0 * ELSE   + Set Button Process / Save to Excel Label=Save to Excel   + Update DTO WHERE NO EXISTS IN Error Message NO     - set VALID=N     - Set NOTES=Error messages di resource berdasarkan kode resource di error messages (**CEK DENGAN RnD untuk utility buat convert multiple error messages ke dalam 1 baris**)   + Refresh Utility Usage GRID dengan DTO   + Set Valid=Number of DTO where VALID=Y   + Set Invalid= Number of DTO where VALID=N   + Display error message where NO < 0 |  |
| * Setelah Process selesai, Jalankan “**DISPLAY PROCESS**” |  |

###### CANCEL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tutup program dan kembali ke General Info List |  |

##### SAVE AND VALIDATION PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Save and Validation Process   If Utility Type IN (‘01’,’02’) Then  “List of DTO” selected di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC (NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  , NBEBAN\_BERSAMA numeric(16,2)  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| If Utility Type IN (‘03’,’04’) Then  “List of DTO” selected di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG (NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| * Back To Display Process |  |

#### TAB – DETAIL INFO

##### USER INTERFACE

**Electricity and Chiller**



**Water and Gas**



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Utility Info   EXEC RSP\_PM\_GET\_UTILITY\_INFO 'Login Company Id', 'Selected Property Id', 'Selected Ref No', 'Login User Id'   * + "Building"     - Textbox     - Field = CBUILDING\_NAME   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Tenant"     - Textbox     - Field = CTENANT\_NAME   + "Charge"     - Textbox     - Field = CCHARGE\_NAME   + "Invoice Period"     - Textbox     - Field = CINV\_PERIOD   + "Utility Period"     - Textbox     - Field = CUTILITY\_PERIOD |  |
| * Load Electricity and Chiller info |  |
| * Load Water and Gas Info |  |

### TAB – CUT OFF

#### USER INTERFACE

**Electricity and Chiller**



**Water and Gas**



#### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Building List   EXEC RSP\_GS\_GET\_BUILDING\_LIST 'Login Company Id', 'Selected Property Id', 'Login User Id'   * + "Building"     - Textbox     - Field = CBUILDING\_NAME |  |
| * Filter Header Cut Off List:   + "Utility Type\*"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', '', 'Login Language Id')   * + "Floor"     - Combobox     - Field = CFLOOR\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_FLOOR\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Login User Id'   * + Flag "All Floor"     - Checkbox     - Field = LALL\_FLOOR     - Value = [0] Unchecked / [1] Checked     - IF [1] Checked Then Disabled field "Floor" Else Enabled   + "Utility Period\*"     - Combobox     - Field = CUTILITY\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year] |  |
| * On Click button "Refresh", Load Utility List (Electricity and Chiller):   EXEC RSP\_PM\_GET\_UTILITY\_CUTOFF\_LIST\_EC 'Login Company Id'  , 'Selected Property Id'  , Selected "Utility Type\*"  , Selected "Floor"  , Flag "All Floor"  , Selected "Utility Period\*"  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "Utility Period"     - Textbox     - Field = CUTILITY\_PERIOD   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * On Click button "Refresh", Load Utility List (Water and Gas):   EXEC RSP\_PM\_GET\_UTILITY\_CUTOFF\_LIST\_WG 'Login Company Id'  , 'Selected Property Id'  , Selected "Utility Type\*"  , Selected "Floor"  , Flag "All Floor"  , Selected "Utility Period\*"  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Meter Start"     - Textbox     - Field = IMETER\_START   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |

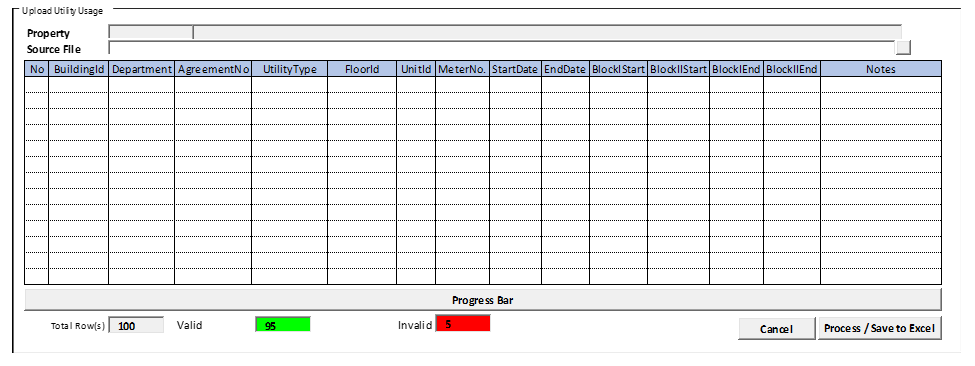
#### TEMPLATE PROCESS

**OUTPUT FILE:**

|  |  |
| --- | --- |
|  | **Test** |
| * Download Tenant File from Server * Tampilkan file directory untuk user melakukan save as |  |

#### UPLOAD PROCESS

##### USER INTERFACE



##### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * “Open File Explorer” – Untuk membuka File Explorer yang digunakan untuk mencari source file MS-Excel yang akan di-import ke dalam table Database. * “**L**oad” – untuk menampilkan file MS-Excel yang dipilih ke dalam List Load Utility Cut Off Usage. * “**P**rocess” – Untuk melakukan proses import data – data yang ada di List Load Utility Cut Off Usage. * “**C**ancel” – Untuk keluar dari program Load Department dan kembali ke program Utility Cut Off Usage. |  |

##### OUTPUT

|  |  |
| --- | --- |
|  | **Test** |
| * Data pada table Utility Cut Off Usage. |  |

##### ROLES

|  |  |
| --- | --- |
|  | **Test** |
| * Program ini dijalankan oleh operator yang mempunyai hak kewenangan menjalankan Lease Management. |  |

##### INITIAL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Form:   + Kosongkan “Source File (Excel)” Textbox.   + Kosongkan List Load Utility Usage (Read Only).   + Disabled semua button.   + Enabled button Open File Explorer.   + Enabled button Process & Cancel.   + Set Focus pada Textbox “Source File (Excel)”. |  |

##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tampilkan data List of Load Utility Usage EC   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   “Valid”   * + - Textbox (Y/N)   + “Notes“     - Textbox |  |
| * Tampilkan data List of Load Utility Usage WG   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START   + “Valid”     - Textbox (Y/N)   + “Notes“     - Textbox |  |

##### PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG(CCOMPANY\_ID VARCHAR(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Jumlah Progress Bar: 20 Step   * IF VAR\_RESULT.IERROR\_COUNT=0   + Display message ‘Utility uploaded successfully!’, OK   + ELSE     - Display error message where NO < 0 * ELSE   + Set Button Process / Save to Excel Label=Save to Excel   + Update DTO WHERE NO EXISTS IN Error Message NO     - set VALID=N     - Set NOTES=Error messages di resource berdasarkan kode resource di error messages (**CEK DENGAN RnD untuk utility buat convert multiple error messages ke dalam 1 baris**)   + Refresh Utility Usage GRID dengan DTO   + Set Valid=Number of DTO where VALID=Y   + Set Invalid= Number of DTO where VALID=N   + Display error message where NO < 0 |  |
| * Setelah Process selesai, Jalankan “**DISPLAY PROCESS**” |  |

##### CANCEL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tutup program dan kembali ke Cut Off List |  |

#### SAVE AND VALIDATION PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Save and Validation Process   If Utility Type IN (‘01’,’02’) Then  “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| If Utility Type IN (‘03’,’04’) Then  “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_WG(NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| * Back To Display Process |  |

### TAB – UPDATE METER NO

#### USER INTERFACE



#### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * "Add Meter No"   Run Form GSM02500 - Property Profile, Tab Unit - Utility   * "Update Meter No"   For Update Meter No.   * "Change Meter No"   For Change Meter No. |  |

#### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Header Info   + "Building"     - Lookup     - Field = CBUILDING\_ID, CBUILDING\_NAME     - Value = Lookup GS - **GSL02200 – BUILDING LOOKUP**   With Parameter:   * + - * Login Company Id       * Selected Property Id       * Login User Id      * + "Unit"     - Lookup     - Field = CUNIT\_ID, CUNIT\_NAME     - Value = Lookup GS - **GSL02300 – UNIT LOOKUP**   With Parameter:   * + - * Login Company Id       * Selected Property Id       * Login User Id   + "Agreement No"     - Textbox     - Field = CREF\_NO     - On Selected Building / Unit, Get Agreement No:   EXEC RSP\_PM\_GET\_AGREEMENT\_BY\_UNIT 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Selected Floor Id', 'Selected Unit Id', 'Login User Id'   * + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - On Selected Building / Unit, Get Tenant:   EXEC RSP\_PM\_GET\_AGREEMENT\_BY\_UNIT 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Selected Floor Id', 'Selected Unit Id', 'Login User Id' |  |
| * On Click button "Refresh", Load Update Meter No List:   EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Dept Code', 'Selected Trans Code', 'Selected Ref No', 'Selected Unit Id', 'Selected Floor Id', 'Selected Building Id', 'Login User Id'   * + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE\_NAME   + "Charge"     - Textbox     - Field = CCHARGES\_NAME (CCHARGES\_ID)   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Status"     - Textbox     - Field = CSTATUS   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * Load Update Meter No Detail:   EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * + "Utility Type"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', ',01,02,03,04', 'Login Language Id')   * + "Charge"     - Textbox     - Field = CCHARGES\_ID, CCHARGES\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Meter Start"     - Textbox     - Field = CSTART\_DATE   + "Tax Code"     - Textbox     - Field = CTAX\_CODE   + "Start Invoice Period"     - Combobox     - Field = CINV\_PERIOD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Invoice Group"     - Textbox     - Field = CINV\_PRD |  |

#### UPDATE METER NO BUTTON

##### USER INTERFACE



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * Update Agreement Info      * + "Agreement No"     - Textbox     - Field = CREF\_NO     - Disabled   + "Agreement Unit(s)"     - Textbox     - Field = CAGREEMENT\_UNIT\_LIST     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_ID, CUNIT\_NAME     - Disabled   + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - Disabled   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE     - Disabled   + "Meter No"     - Textbox     - Field = CMETER\_NO     - Disabled   + "Meter Start\*"     - Textbox     - Field = CMETER\_START   + "Start Invoice Period\*"     - Combobox     - Field = CSTART\_INV\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Start Date"     - Textbox     - Field = CSTART\_DATE     - Format Date = YYYYMMDD |  |

##### UPDATE METER NO PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Update Meter No Process   EXEC RSP\_PM\_UPDATE\_UTILITY\_METER\_NO  CCOMPANY\_ID  , CPROPERTY\_ID  , CDEPT\_CODE  , CTRANS\_CODE  , CREF\_NO  , CUNIT\_ID  , CFLOOR\_ID  , CBUILDING\_ID  , CUTILITY\_TYPE  , CMETER\_NO  , NMETER\_START  , NBLOCK1\_START  , NBLOCK2\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id |  |

#### CHANGE METER NO BUTTON

##### USER INTERFACE



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * Update Agreement Info      * + "Agreement No"     - Textbox     - Field = CREF\_NO     - Disabled   + "Agreement Unit(s)"     - Textbox     - Field = CAGREEMENT\_UNIT\_LIST     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_ID, CUNIT\_NAME     - Disabled   + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - Disabled   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE     - Disabled   + "From Meter No"     - Textbox     - Field = CFROM\_METER\_NO     - Disabled   + "Meter End\*"     - Textbox     - Field = CMETER\_END   + "To Meter No"     - Combobox     - Field = CTO\_METER\_NO   + "Meter Start\*"     - Textbox     - Field = CMETER\_START\_NO   + "Start Invoice Period\*"     - Combobox     - Field = CSTART\_INV\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Start Date"     - Textbox     - Field = CSTART\_DATE     - Format Date = YYYYMMDD |  |

##### CHANGE METER NO PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Change Meter No Process   If Utility Type IN (‘01’,’02’) Then  EXEC RSP\_PM\_CHANGE\_UTILITY\_METER\_NO\_EC  CCOMPANY\_ID  , CPROPERTY\_ID  , CREF\_NO  , CUNIT\_ID  , CTENANT\_ID  , CUTILITY\_TYPE  , IFROM\_METER\_NO  , IMETER\_END  , ITO\_METER\_NO  , IMETER\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id  Else If Utility Type IN (‘03’,’04’) Then  EXEC RSP\_PM\_CHANGE\_UTILITY\_METER\_NO\_WG  CCOMPANY\_ID  , CPROPERTY\_ID  , CREF\_NO  , CUNIT\_ID  , CTENANT\_ID  , CUTILITY\_TYPE  , IFROM\_METER\_NO  , IMETER\_END  , ITO\_METER\_NO  , IMETER\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id  End |  |

## TAB – OTHER UNIT [CR01]

### TAB – UTILITY USAGE

#### TAB – GENERAL INFO

##### USER INTERFACE

**Electricity and Chiller**





**Water and Gas**





##### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * "Download" * "Upload" * "Photo"   Untuk upload photo Meter No   * "Undo" |  |

##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Filter Header Utility List:   + "Utility Type\*"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', ',01,02,03,04', 'Login Language Id')   * + "All Building"     - Radio Button     - Field = LALL\_BUILDING     - Value = [0] Unchecked / [1] Checked   + "Building"     - Combobox     - Field = CBUILDING\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_LIST 'Login Company Id', 'Selected Property Id', 'Login User Id'   * + "All Floor"     - Radio Button     - Field = LALL\_FLOOR     - Value = [0] Unchecked / [1] Checked   + "Floor"     - Combobox     - Field = CFLOOR\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_FLOOR\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Login User Id'   * + "Invoice Period\*"     - Combobox     - Field = CINV\_PERIOD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + Flag "Invoiced"     - Checkbox     - Field = LINV\_FLAG     - Value = [0] Unchecked / [1] Checked   + "Utility Period\*"     - Combobox     - Field = CUTILITY\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Utility Period Date\*" From     - Datetime Picker     - Field = CSTART\_DATE     - Default Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_INFO 'Login Company Id', ’Selected Year’, ’Selected Period No’   * + "Utility Period Date" To     - Datetime Picker     - Field = CEND\_DATE     - Default Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_INFO 'Login Company Id', ’Selected Year’, ’Selected Period No’   * + - Validation: "Utility Period Date" To cannot be earlier than "Utility Period Date\*" From |  |
| * On Click button "Refresh" and Utility Type IN (01,02), Load Utility List (Electricity and Chiller):   EXEC RSP\_PM\_GET\_UTILITY\_USAGE\_LIST\_EC 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  ~~, Flag "All Floor"~~  , Selected "Invoice Period\*"  , Flag "Invoiced"  , Selected "Utility Period\*"  , Selected "Utility Period Date\*" From  , Selected "Utility Period Date" To  , @LOTHER\_UNIT = 1  , 'Login User Id'   * + "**🗸**" *Checked*     - Checkbox     - Field = LSELECTED     - Value = [0] Unchecked / [1] Checked   + "Building"     - Textbox     - Field = CBUILDING\_NAME     - Disabled   + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START     - Disabled   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START     - Disabled   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   + "Beban Bersama"     - Textbox     - Field = IBEBAN\_BERSAMA   + "Block I Usage"     - Textbox     - Field = IBLOCK1\_USAGE     - Disabled   + "Block II Usage"     - Textbox     - Field = IBLOCK2\_USAGE     - Disabled   + "Avg Block I Usage"     - Textbox     - Field = IAVG\_BLOCK1\_USAGE     - Disabled   + "Avg Block II Usage"     - Textbox     - Field = IAVG\_BLOCK2\_USAGE     - Disabled   + "Unit Description\*"     - Textbox     - Field = CUNIT\_DESCRIPTION   + "Status"     - Textbox     - Field = CSTATUS     - Disabled   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * On Click button "Refresh" and Utility Type IN (03,04), Load Utility List (Water and Gas):   EXEC RSP\_PM\_GET\_UTILITY\_USAGE\_LIST\_WG 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  , Selected "Invoice Period\*"  , Flag "Invoiced"  , Selected "Utility Period\*"  , Selected "Utility Period Date\*" From  , Selected "Utility Period Date" To  , @LOTHER\_UNIT = 1  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START     - Disabled   + "Meter End"     - Textbox     - Field = IMETER\_END   + "Meter Usage"     - Textbox     - Field = IMETER\_USAGE     - Disabled   + "Avg Meter Usage"     - Textbox     - Field = IAVG\_METER\_USAGE     - Disabled   + "Total Amount"     - Textbox     - Field = ITOTAL\_AMOUNT     - Disabled   + "Unit Description\*"     - Textbox     - Field = CUNIT\_DESCRIPTION   + "Status"     - Textbox     - Field = CSTATUS     - Disabled   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |

##### PHOTO BUTTON

###### USER INTERFACE



###### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Utility Info   EXEC RSP\_PM\_GET\_UTILITY\_INFO 'Login Company Id', 'Selected Property Id', 'Selected Ref No', 'Login User Id'   * + "Property"     - Textbox     - Field = CPROPERTY\_NAME   + "Building"     - Textbox     - Field = CBUILDING\_NAME   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit"     - Textbox     - Field = CUNIT\_NAME   + "Unit Type"     - Textbox     - Field = CUNIT\_TYPE\_NAME   + "Meter No"     - Textbox     - Field = CMETER\_NO   + "Capacity"     - Textbox     - Field = ICAPACITY   + "CF"     - Textbox     - Field = ICF   + "Invoice Period"     - Textbox     - Field = CINV\_PERIOD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block I Usage"     - Textbox     - Field = IBLOCK1\_USAGE   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   + "Block II Usage"     - Textbox     - Field = IBLOCK2\_USAGE |  |

##### TEMPLATE PROCESS

**OUTPUT FILE:**

|  |  |
| --- | --- |
|  | **Test** |
| * Download Utility Usage File from Server * Tampilkan file directory untuk user melakukan save as |  |

##### UPLOAD PROCESS

###### USER INTERFACE



###### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * “Open File Explorer” – Untuk membuka File Explorer yang digunakan untuk mencari source file MS-Excel yang akan di-import ke dalam table Database. * “**L**oad” – untuk menampilkan file MS-Excel yang dipilih ke dalam List Load Utility Usage. * “**P**rocess” – Untuk melakukan proses import data – data yang ada di List Load Utility Usage. * “**C**ancel” – Untuk keluar dari program Load Department dan kembali ke program Utility Usage. |  |

###### OUTPUT

|  |  |
| --- | --- |
|  | **Test** |
| * Data pada table Utility Usage. |  |

###### ROLES

|  |  |
| --- | --- |
|  | **Test** |
| * Program ini dijalankan oleh operator yang mempunyai hak kewenangan menjalankan Utility Usage. |  |

###### INITIAL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Form:   + Kosongkan “Source File (Excel)” Textbox.   + Kosongkan List Load Utility Usage (Read Only).   + Disabled semua button.   + Enabled button Open File Explorer.   + Enabled button Process & Cancel.   + Set Focus pada Textbox “Source File (Excel)”. |  |

###### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tampilkan data List of Load Utility Usage EC   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Block I End"     - Textbox     - Field = IBLOCK1\_END   + "Block II End"     - Textbox     - Field = IBLOCK2\_END   “Valid”   * + - Textbox (Y/N)   + “Notes“     - Textbox |  |
| * Tampilkan data List of Load Utility Usage WG   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START   + "Meter End"     - Textbox     - Field = IMETER\_END   + “Valid”     - Textbox (Y/N)   + “Notes“     - Textbox |  |

###### PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  , NBEBAN\_BERSAMA numeric(16,2)  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG(CCOMPANY\_ID VARCHAR(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Jumlah Progress Bar: 20 Step   * IF VAR\_RESULT.IERROR\_COUNT=0   + Display message ‘Utility uploaded successfully!’, OK   + ELSE     - Display error message where NO < 0 * ELSE   + Set Button Process / Save to Excel Label=Save to Excel   + Update DTO WHERE NO EXISTS IN Error Message NO     - set VALID=N     - Set NOTES=Error messages di resource berdasarkan kode resource di error messages (**CEK DENGAN RnD untuk utility buat convert multiple error messages ke dalam 1 baris**)   + Refresh Utility Usage GRID dengan DTO   + Set Valid=Number of DTO where VALID=Y   + Set Invalid= Number of DTO where VALID=N   + Display error message where NO < 0 |  |
| * Setelah Process selesai, Jalankan “**DISPLAY PROCESS**” |  |

###### CANCEL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tutup program dan kembali ke General Info List |  |

##### SAVE AND VALIDATION PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Save and Validation Process   If Utility Type IN (‘01’,’02’) Then  “List of DTO” selected di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC (NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  , NBEBAN\_BERSAMA numeric(16,2)  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| If Utility Type IN (‘03’,’04’) Then  “List of DTO” selected di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG (NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| * Back To Display Process |  |

#### TAB – DETAIL INFO

##### USER INTERFACE

**Electricity and Chiller**



**Water and Gas**



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Utility Info   EXEC RSP\_PM\_GET\_UTILITY\_INFO 'Login Company Id', 'Selected Property Id', 'Selected Ref No', 'Login User Id'   * + "Building"     - Textbox     - Field = CBUILDING\_NAME   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Tenant"     - Textbox     - Field = CTENANT\_NAME   + "Charge"     - Textbox     - Field = CCHARGE\_NAME   + "Invoice Period"     - Textbox     - Field = CINV\_PERIOD   + "Utility Period"     - Textbox     - Field = CUTILITY\_PERIOD |  |
| * Load Electricity and Chiller info |  |
| * Load Water and Gas Info |  |

### TAB – CUT OFF

#### USER INTERFACE

**Electricity and Chiller**



**Water and Gas**



#### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
|  |  |
| * Filter Header Cut Off List:   + "Utility Type\*"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', '', 'Login Language Id')   * + "All Building"     - Radio     - Field = LALL\_BUILDING     - Value = [0] Unchecked / [1] Checked   + "Building"     - Combobox     - Field = CBUILDING\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_LIST 'Login Company Id', 'Selected Property Id', 'Login User Id'   * + "All Floor"     - Radio     - Field = LALL\_FLOOR     - Value = [0] Unchecked / [1] Checked   + "Floor"     - Combobox     - Field = CFLOOR\_ID     - Value =   EXEC RSP\_GS\_GET\_BUILDING\_FLOOR\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Login User Id'   * + "Utility Period\*"     - Combobox     - Field = CUTILITY\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year] |  |
| * On Click button "Refresh", Load Utility List (Electricity and Chiller):   EXEC RSP\_PM\_GET\_UTILITY\_CUTOFF\_LIST\_EC 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  ~~, Flag "All Floor"~~  , Selected "Utility Period\*"  , @LOTHER\_UNIT = 1  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "Utility Period"     - Textbox     - Field = CUTILITY\_PERIOD   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * On Click button "Refresh", Load Utility List (Water and Gas):   EXEC RSP\_PM\_GET\_UTILITY\_CUTOFF\_LIST\_WG 'Login Company Id'  , 'Selected Property Id'  , 'Selected Building Id'  , Selected "Utility Type\*"  , Selected "Floor"  ~~, Flag "All Floor"~~  , Selected "Utility Period\*"  , @LOTHER\_UNIT = 1  , 'Login User Id'   * + "Floor"     - Textbox     - Field = CFLOOR\_NAME     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME     - Disabled   + "Meter No."     - Textbox     - Field = CMETER\_NO     - Disabled   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Meter Start"     - Textbox     - Field = IMETER\_START   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |

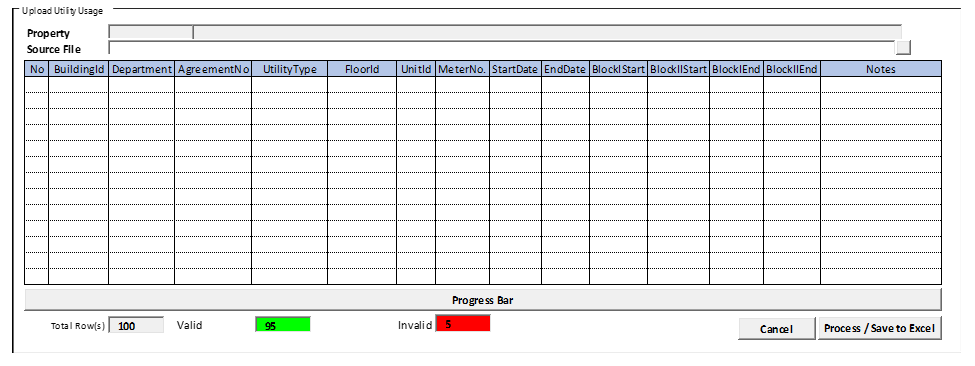
#### TEMPLATE PROCESS

**OUTPUT FILE:**

|  |  |
| --- | --- |
|  | **Test** |
| * Download Tenant File from Server * Tampilkan file directory untuk user melakukan save as |  |

#### UPLOAD PROCESS

##### USER INTERFACE



##### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * “Open File Explorer” – Untuk membuka File Explorer yang digunakan untuk mencari source file MS-Excel yang akan di-import ke dalam table Database. * “**L**oad” – untuk menampilkan file MS-Excel yang dipilih ke dalam List Load Utility Cut Off Usage. * “**P**rocess” – Untuk melakukan proses import data – data yang ada di List Load Utility Cut Off Usage. * “**C**ancel” – Untuk keluar dari program Load Department dan kembali ke program Utility Cut Off Usage. |  |

##### OUTPUT

|  |  |
| --- | --- |
|  | **Test** |
| * Data pada table Utility Cut Off Usage. |  |

##### ROLES

|  |  |
| --- | --- |
|  | **Test** |
| * Program ini dijalankan oleh operator yang mempunyai hak kewenangan menjalankan Lease Management. |  |

##### INITIAL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Load Form:   + Kosongkan “Source File (Excel)” Textbox.   + Kosongkan List Load Utility Usage (Read Only).   + Disabled semua button.   + Enabled button Open File Explorer.   + Enabled button Process & Cancel.   + Set Focus pada Textbox “Source File (Excel)”. |  |

##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tampilkan data List of Load Utility Usage EC   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Block I Start"     - Textbox     - Field = IBLOCK1\_START   + "Block II Start"     - Textbox     - Field = IBLOCK2\_START   “Valid”   * + - Textbox (Y/N)   + “Notes“     - Textbox |  |
| * Tampilkan data List of Load Utility Usage WG   + Definisi Fields:   + "Building"     - Textbox     - Field = CBUILDING\_ID   + "Department\*"     - Textbox     - Display = CDEPT\_CODE   + "Agreement No\*"     - Textbox     - Field = CREF\_NO   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE   + "Floor"     - Textbox     - Field = CFLOOR\_NAME   + "Unit Id"     - Textbox     - Field = CUNIT\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Utility Period"     - Textbox     - Field = CUTILITY\_PRD   + "Start Date"     - Textbox     - Field = CSTART\_DATE   + "End Date"     - Textbox     - Field = CEND\_DATE   + "Meter Start"     - Textbox     - Field = IMETER\_START   + “Valid”     - Textbox (Y/N)   + “Notes“     - Textbox |  |

##### PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Simpan data dari file XLSX kedalam List of DTO (Object sesuai dengan Upload Type) dan kemudian “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_WG  CREATE TABLE #UTILITY\_USAGE\_WG(CCOMPANY\_ID VARCHAR(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| Jumlah Progress Bar: 20 Step   * IF VAR\_RESULT.IERROR\_COUNT=0   + Display message ‘Utility uploaded successfully!’, OK   + ELSE     - Display error message where NO < 0 * ELSE   + Set Button Process / Save to Excel Label=Save to Excel   + Update DTO WHERE NO EXISTS IN Error Message NO     - set VALID=N     - Set NOTES=Error messages di resource berdasarkan kode resource di error messages (**CEK DENGAN RnD untuk utility buat convert multiple error messages ke dalam 1 baris**)   + Refresh Utility Usage GRID dengan DTO   + Set Valid=Number of DTO where VALID=Y   + Set Invalid= Number of DTO where VALID=N   + Display error message where NO < 0 |  |
| * Setelah Process selesai, Jalankan “**DISPLAY PROCESS**” |  |

##### CANCEL PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Tutup program dan kembali ke Cut Off List |  |

#### SAVE AND VALIDATION PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Save and Validation Process   If Utility Type IN (‘01’,’02’) Then  “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_EC(NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID varchar(20)  , CDEPT\_CODE varchar(20)  , CTRANS\_CODE varchar(10)  , CREF\_NO varchar(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID varchar(20)  , CFLOOR\_ID varchar(20)  , CBUILDING\_ID varchar(20)  , CCHARGES\_TYPE varchar(2)  , CCHARGES\_ID varchar(20)  , CSEQ\_NO varchar(3)  , CINV\_PRD varchar(6)  , CUTILITY\_PRD varchar(6)  , CSTART\_DATE varchar(8)  , CEND\_DATE varchar(8)  , CMETER\_NO varchar(50)  , IBLOCK1\_START int  , IBLOCK2\_START int  , IBLOCK1\_END int  , IBLOCK2\_END int  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_CUTOFF\_EC     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| If Utility Type IN (‘03’,’04’) Then  “List of DTO” di COPY BULK kedalam temporary table #UTILITY\_USAGE\_EC  CREATE TABLE #UTILITY\_USAGE\_WG(NO INT  , CCOMPANY\_ID varchar(8)  , CPROPERTY\_ID VARCHAR(20)  , CDEPT\_CODE VARCHAR(20)  , CTRANS\_CODE VARCHAR(10)  , CREF\_NO VARCHAR(30)  , CUTILITY\_TYPE varchar(2)  , CUNIT\_ID VARCHAR(20)  , CFLOOR\_ID VARCHAR(20)  , CBUILDING\_ID VARCHAR(20)  , CCHARGES\_TYPE VARCHAR(2)  , CCHARGES\_ID VARCHAR(20)  , CSEQ\_NO VARCHAR(3)  , CINV\_PRD VARCHAR(6)  , CUTILITY\_PRD VARCHAR(6)  , CSTART\_DATE VARCHAR(8)  , CEND\_DATE VARCHAR(8)  , CMETER\_NO VARCHAR(50)  , IMETER\_START INT  , IMETER\_END INT  )   * + Jalankan RSP\_PM\_UPLOAD\_UTILITY\_USAGE\_WG     - CCOMPANY\_ID = Login Company Id     - CPROPERTY\_ID = Selected Property Id     - CTRANS\_CODE = 'Trans Code'     - @USER\_ID = [Login User].[CUSER\_ID]     - @KEY\_GUID = [Auto Generated Key GUID] |  |
| * Back To Display Process |  |

### TAB – UPDATE METER NO

#### USER INTERFACE



#### BUTTON DEFINITION

|  |  |
| --- | --- |
|  | **Test** |
| * "Add Meter No"   Run Form GSM02500 - Property Profile, Tab Unit - Utility   * "Update Meter No"   For Update Meter No.   * "Change Meter No"   For Change Meter No. |  |

#### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Header Info   + "Building"     - Lookup     - Field = CBUILDING\_ID, CBUILDING\_NAME     - Value = Lookup GS - **GSL02200 – BUILDING LOOKUP**   With Parameter:   * + - * Login Company Id       * Selected Property Id       * Login User Id      * + "Unit"     - Lookup     - Field = CUNIT\_ID, CUNIT\_NAME     - Value = Lookup GS - **GSL02300 – UNIT LOOKUP**   With Parameter:   * + - * Login Company Id       * Selected Property Id       * Login User Id   + "Agreement No"     - Textbox     - Field = CREF\_NO     - On Selected Building / Unit, Get Agreement No:   EXEC RSP\_PM\_GET\_AGREEMENT\_BY\_UNIT 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Selected Floor Id', 'Selected Unit Id', 'Login User Id'   * + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - On Selected Building / Unit, Get Tenant:   EXEC RSP\_PM\_GET\_AGREEMENT\_BY\_UNIT 'Login Company Id', 'Selected Property Id', 'Selected Building Id', 'Selected Floor Id', 'Selected Unit Id', 'Login User Id' |  |
| * On Click button "Refresh", Load Update Meter No List:   EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_LIST 'Login Company Id', 'Selected Property Id', 'Selected Dept Code', 'Selected Trans Code', 'Selected Ref No', 'Selected Unit Id', 'Selected Floor Id', 'Selected Building Id', 'Login User Id'   * + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE\_NAME   + "Charge"     - Textbox     - Field = CCHARGES\_NAME (CCHARGES\_ID)   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Status"     - Textbox     - Field = CSTATUS   + "Updated By"     - Textbox     - Display = CUPDATE\_BY     - Disabled   + Updated "Date"     - Textbox     - Display = DUPDATE\_DATE     - Disabled   + "Created By"     - Textbox     - Display = CCREATE\_BY     - Disabled   + Created "Date"     - Textbox     - Display = DCREATE\_DATE     - Disabled |  |
| * Load Update Meter No Detail:   EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * + "Utility Type"     - Combobox     - Field = CUTILITY\_TYPE     - Value =   SELECT CCODE, CDESCRIPTION FROM RFT\_GET\_GSB\_CODE\_INFO  ('BIMASAKTI', 'Login Company Id', '\_BS\_UTILITY\_CHARGES\_TYPE', ',01,02,03,04', 'Login Language Id')   * + "Charge"     - Textbox     - Field = CCHARGES\_ID, CCHARGES\_NAME   + "Meter No."     - Textbox     - Field = CMETER\_NO   + "Meter Start"     - Textbox     - Field = CSTART\_DATE   + "Tax Code"     - Textbox     - Field = CTAX\_CODE   + "Start Invoice Period"     - Combobox     - Field = CINV\_PERIOD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Invoice Group"     - Textbox     - Field = CINV\_PRD |  |

#### UPDATE METER NO BUTTON

##### USER INTERFACE



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * Update Agreement Info      * + "Agreement No"     - Textbox     - Field = CREF\_NO     - Disabled   + "Agreement Unit(s)"     - Textbox     - Field = CAGREEMENT\_UNIT\_LIST     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_ID, CUNIT\_NAME     - Disabled   + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - Disabled   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE     - Disabled   + "Meter No"     - Textbox     - Field = CMETER\_NO     - Disabled   + "Meter Start\*"     - Textbox     - Field = CMETER\_START   + "Start Invoice Period\*"     - Combobox     - Field = CSTART\_INV\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Start Date"     - Textbox     - Field = CSTART\_DATE     - Format Date = YYYYMMDD |  |

##### UPDATE METER NO PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Update Meter No Process   EXEC RSP\_PM\_UPDATE\_UTILITY\_METER\_NO  CCOMPANY\_ID  , CPROPERTY\_ID  , CDEPT\_CODE  , CTRANS\_CODE  , CREF\_NO  , CUNIT\_ID  , CFLOOR\_ID  , CBUILDING\_ID  , CUTILITY\_TYPE  , CMETER\_NO  , NMETER\_START  , NBLOCK1\_START  , NBLOCK2\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id |  |

#### CHANGE METER NO BUTTON

##### USER INTERFACE



##### DISPLAY PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| EXEC RSP\_PM\_GET\_AGREEMENT\_UTILITIES\_DT 'Login Company Id'  , 'Selected Property Id'  , Selected "Building"  , Selected "Unit"  , Selected Charges Type  , Selected Charges Id  , 'Login User Id'   * Update Agreement Info      * + "Agreement No"     - Textbox     - Field = CREF\_NO     - Disabled   + "Agreement Unit(s)"     - Textbox     - Field = CAGREEMENT\_UNIT\_LIST     - Disabled   + "Unit Id"     - Textbox     - Field = CUNIT\_ID, CUNIT\_NAME     - Disabled   + "Tenant"     - Textbox     - Field = CTENANT\_ID, CTENANT\_NAME     - Disabled   + "Utility Type"     - Textbox     - Field = CUTILITY\_TYPE     - Disabled   + "From Meter No"     - Textbox     - Field = CFROM\_METER\_NO     - Disabled   + "Meter End\*"     - Textbox     - Field = CMETER\_END   + "To Meter No"     - Combobox     - Field = CTO\_METER\_NO   + "Meter Start\*"     - Textbox     - Field = CMETER\_START\_NO   + "Start Invoice Period\*"     - Combobox     - Field = CSTART\_INV\_PRD     - Value =   EXEC RSP\_GS\_GET\_PERIOD\_DT\_LIST 'Login Company Id', [Today Year]   * + "Start Date"     - Textbox     - Field = CSTART\_DATE     - Format Date = YYYYMMDD |  |

##### CHANGE METER NO PROCESS

|  |  |
| --- | --- |
|  | **Test** |
| * Change Meter No Process   If Utility Type IN (‘01’,’02’) Then  EXEC RSP\_PM\_CHANGE\_UTILITY\_METER\_NO\_EC  CCOMPANY\_ID  , CPROPERTY\_ID  , CREF\_NO  , CUNIT\_ID  , CTENANT\_ID  , CUTILITY\_TYPE  , IFROM\_METER\_NO  , IMETER\_END  , ITO\_METER\_NO  , IMETER\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id  Else If Utility Type IN (‘03’,’04’) Then  EXEC RSP\_PM\_CHANGE\_UTILITY\_METER\_NO\_WG  CCOMPANY\_ID  , CPROPERTY\_ID  , CREF\_NO  , CUNIT\_ID  , CTENANT\_ID  , CUTILITY\_TYPE  , IFROM\_METER\_NO  , IMETER\_END  , ITO\_METER\_NO  , IMETER\_START  , CSTART\_INV\_PRD  , CSTART\_DATE  , User Login Id  End |  |

# ERROR CODE / WARNING MESSAGE DEFINITION

|  |  |
| --- | --- |
| **Error Code / Warning Message** | **Error Message** |
|  |  |
|  |  |
|  |  |

# CR LIST

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| --- | --- | --- |
| **CR** | **Description** | **Notes** |
| **CR01**  **IB, 12 Sep 2024** | * Menambahkan Unit Description di Utility Usage * Save Utility Usage berdasarkan data yang selected * Menambahkan Tab Other Unit |  |
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