MeterData

int8 meter_data_id (pk)
char(23) mac_id
char meter_name
char util_device_id
datetime created

MeterData records indicate a series of data down the register branch or the reading branch and do not contain unique meter records

meter_data_id

meter_data_id

RegisterData

int8 meter_data_id (fk)
int8 register_data_id (pk)
datetime end_time
int2 number_reads
datetime start_time

IntervalReadData

int8 interval_read_data_id (pk)
int8 meter_data_id (fk)
datetime end_time
int2 interval_length
int4 number_intervals
datetime start_time

register_data_id

interval_read_data_id

RegisterRead

int8 register_data_id (fk)
int8 register_read_id (pk)
datetime gateway_collected_time
datetime read_time
varchar register_read_source
int2 season

Interval

int8 interval_read_data_id (fk)
int8 interval_id (pk)
int2 block_sequence_number
datetime end_time
datetime gateway_collected_time
int2 interval_sequence_number

IntervalStatus

Yellow highlights indicate columns upon which to differentiate unique records within the register branch and the reading branch.

register_read_id

interval_id

Tier

int8 register_read_id (fk)
int8 tier_id (pk)
int2 number

Reading

int8 interval_id (fk)
int8 reading_id (pk)
float4 block_end_value
int2 channel
int2 raw_value
varchar uom
float4 value

ChannelStatus

tier_id

Register

int8 tier_id (fk)
int8 register_id (pk)
float4 cumulative_demand
varchar demand_uom
int2 number
float4 summation
varchar summation_uom

MECO Schema Derived from Export Data

Daniel Zhang
University of Hawaii Smart Energy Project