APPENDIX F:
Database Dictionary

CEC-200-2023-017-APF

The CEUS team processed raw survey data into a *working dataset*, which consolidated raw data into a number of calculated fields such as total cooled floorspace, or annual operation hours. These fields are defined in the table below. If the data field is directly, or very closely related to raw data collected in the survey, then the survey form prompt is included for reference in the last column.

CEUS Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_id_1	Header	The sequential site_id given by the CEUS tool for a surveyed site.	numeric	na	na
site_stratum_1	Scheduling/Sampling	site_stratum_1, renamed to be in header	numeric	unitless	0
site_forecasting_zone_1	Scheduling/Sampling	The Forecasting sub-zone the survey is located in. For example this column specifies whether an SDG&E survey site is in the coastal(12c) or inland(12i) subzone of the forecasting zone 12.	string	na	0
site_participation_status_1	Contact Information	The Survey Completion Status is updated when the surveyor leaves the survey-site and has determined if the survey-site is ineligible, needs further contact, or if the survey has been completed.	dropdown list	na	Survey Completion Status
site_completed_1	Scheduling/Sampling	Flag set by surveyor stating whether the survey was successfully completed	1 or 0	na	0
site_name_1	Contact Information	The name of the business or account of a survey-site. Pre-filled.	string	na	Business Name
site_name_alternate_1	Contact Information	The business name of a survey-site. Input by a surveyor if Site_name_1 is not the business name.	string	na	Alternate Business Name
site_street_number_1	Contact Information	The street number of the address.	numeric	unitless	Street Name/Address
site_street_1	Contact Information	The street name of the address.	string	na	Street Number
site_suite_1	Contact Information	The suite number of the address.	string	na	Suite #
site_city_1	Contact Information	The city a survey-site belongs to.	string	na	City
site_zip_1	Contact Information	The ZIP code a survey-site belongs to.	numeric	ZIP Code	Zip Code
site_lat_1	Contact Information	Latitude of survey-site	numeric	latitude	0
site_lng_1	Contact Information	Longitude of survey-site	numeric	longitude	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_language_1	Contact Information	The language spoken at the survey-site.	dropdown list	na	What language is required to schedule appointment or conduct survey?
site_site.id_1	Scheduling/Sampling	The unique clustering identifier of a survey-site.	string	na	0
site_adm_id_1	Scheduling/Sampling	The unique ADM site code: The code list the utility provider, then the forecasting zone, then the CEC building type based on the utility NAICS code, then the Vintage of the survey-site, then the stratum and the last number I am unsure of what is.	numeric	unitless	0
site_site_not_commercial_1	Scheduling/Sampling	The option for the caller to make a determination that a survey-site is non-commercial upon calling the survey-site in a recruitment attempt.	string	na	0
site_site_id_combined_1	Contact Information	This is used to note that this survey site is by itself an incomplete cluster, and should be combined with another survey site. The Site ID of the other site is to be entered here.	string	na	Combined with another Survey-Site
site_electric_provider_1	Energy Services	The electric provider of the survey-site.	string	na	Electric Utility Provider
site_natural_gas_provider_1	Energy Services	The natural gas provider of the survey-site.	string	na	Gas Utility Provider
Contacts_name_1	Contact Information	The name of the 1st contact.	string	na	Primary Contact Name:
Contacts_title_1	Contact Information	The title of the 1st contact.	string	na	Primary Contact Title:
Contacts_phone_1	Contact Information	The phone number of the 1st contact.	string	na	Primary Contact Phone #:
Contacts_phone_alt_1	Contact Information	The alternate phone number of the 1st contact.	string	na	ext.

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
Contacts_email_1	Contact Information	The email of the 1st contact.	string	na	Primary Contact Email
Contacts_reports_to_location_1	Contact Information	Indicates if the 1st contact reports to the survey-site's location [1] or not [0].	1 or 0	na	Does this contact report to this location?
Contacts_note_1	Contact Information	Any notes about the 1st contact left by the surveyor.	string	na	Notes
Contacts_name_2	Contact Information	The name of the 1st contact.	string	na	Primary Contact Name:
Contacts_title_2	Contact Information	The title of the 1st contact.	string	na	Primary Contact Title:
Contacts_phone_2	Contact Information	The phone number of the 1st contact.	string	na	Primary Contact Phone #:
Contacts_phone_alt_2	Contact Information	The alternate phone number of the 1st contact.	string	na	ext.
Contacts_email_2	Contact Information	The email of the 1st contact.	string	na	Primary Contact Email
Contacts_reports_to_location_2	Contact Information	Indicates if the 1st contact reports to the survey-site's location [1] or not [0].	1 or 0	na	Does this contact report to this location?
Contacts_note_2	Contact Information	Any notes about the 1st contact left by the surveyor.	string	na	Notes
site_contact_disposition_1	Scheduling/Sampling	The Contact Disposition is updated whenever the caller makes contact with a survey-site and this indicates how the call went and what steps need to be taken next in order to survey the survey-site.	dropdown list		Survey-Site /Contact Log Options
site_notes_contact_1	Scheduling/Sampling	Any notes about the site contact attempt left by the surveyor or scheduler	string	na	Notes
site_entrance_longitude_1	Scheduling/Sampling	The longitude of the survey-site when the surveyor pushes the "Save Entrance Location" button.	numeric	longitude	0

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_entrance_latitude_1	Scheduling/Sampling	The latitude of the survey-site when the surveyor pushes the "Save Entrance Location" button.	numeric	latitude	0
site_entrance_date_1	Scheduling/Sampling	The exact date and time the surveyor hits the "Save Entrance Location" button. The surveyor can always hit the button more than once, overriding the previous location coordinates. The date and time saved showed as the output is shown in UTC time.	date-time	na	0
site_schedule_start_1	Scheduling/Sampling	Scheduled start time for CEUS site visit	date-time	na	not in survey form
site_schedule_end_1	Scheduling/Sampling	Scheduled end time for CEUS site visit	date-time	na	not in survey form
site_scheduled_by_id_1	Scheduling/Sampling	The User ID of the caller who scheduled the appointment.	numeric	unitless	0
site_scheduled_at_1	Scheduling/Sampling	The time and date the caller scheduled the appointment. If the output is NA then the site may have been a canvassed site.	date-time	na	0
site_caller_general_notes_1	Scheduling/Sampling	The general notes a call center caller is able to add about the survey-site/appointment. These notes appear in the Contact Log field in the Contact Notes tab in the Survey-Site and Contact section.	string	na	0
Surveyor_name	Scheduling/Sampling	Surveyor name	string	na	0
site_uniqueness_1	NAICS/Vintage/Building Type	This field provides information on the business activity and energy usage if this cannot be determined easily from the business name.	string	na	site_unieuqness
site_physical_type_1	NAICS/Vintage/Building Type	The physical type of the building that best describes how many buildings and/or businesses are included in the survey-site chosen by the surveyor.	dropdown list	na	Physical Type

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_number_of_buildings_1	NAICS/Vintage/Building Type	The number of buildings that are included in the survey-site.	numeric	buildings	How many buildings are part of this survey-site?
site_building_type_1	NAICS/Vintage/Building Type	The building type (12) of the survey-site with the highest percentage.	string	na	Building Type (1)
site_building_type_2_1	NAICS/Vintage/Building Type	The building type (12) of the survey-site with the second highest percentage.	string	na	Building Type (2)
site_building_type_3_1	NAICS/Vintage/Building Type	The building type (12) of the survey-site with the third highest percentage.	string	na	Building Type (3)
site_building_type_percentage_1	NAICS/Vintage/Building Type	The percentage of the first building type.	numeric	percentage	Percent of Site Area (1)
site_building_type_percentage_2_1	NAICS/Vintage/Building Type	The percentage of the second building type.	numeric	percentage	Percent of Site Area (2)
site_building_type_percentage_3_1	NAICS/Vintage/Building Type	The percentage of the third building type.	numeric	percentage	Percent of Site Area (3)
site_building_type_by_NAICS_1	None-analysis product	The CEC building type that maps to site_naics_selected_1	character	CEC Building Type	0
site_naics_selected_1	NAICS/Vintage/Building Type	The most accurate NAICS code that the surveyor chooses after looking at the list of NAICS codes provided by the utility, the caller, and the surveyor.	numeric	NAICS code	Business Characterization Data Block
site_naics_utility_1	NAICS/Vintage/Building Type	The NAICS code provided by the utility.	numeric	NAICS code	Utility Database
site_naics_contractor_assigned_1	NAICS/Vintage/Building Type	The NAICS code chosen by the surveyor.	numeric	NAICS code	Surveyor (You)
site_naics_customer_supplied_1	NAICS/Vintage/Building Type	NAICS code provided by customer during interview	numeric	NAICS code	Customer supplied NAICS code
site_naics_caller_1	NAICS/Vintage/Building Type	The NAICS code chosen by the caller after some research online and a call to the contact.	numeric	NAICS code	ADM Pre-On-Site Interview/Research

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_naics_sample_frame_1	NAICS/Vintage/Building Type	The NAICS code in the sample frame (in case utility codes were altered)	numeric	NAICS code	Sample Frame
site_year_built_1	NAICS/Vintage/Building Type	What year was the majority of the survey-site built?	numeric	Gregorian calendar year	What year was the majority of the survey-site built?
site_year_built_estimated_1	NAICS/Vintage/Building Type	[1] If the year the survey-site was built is estimated.	1 or 0	na	checkboxes
site_year_moved_in_estimated_1	NAICS/Vintage/Building Type	[1] If the year the business moved into the survey-site is estimated.	1 or 0	na	checkboxes
site_year_moved_in_1	NAICS/Vintage/Building Type	The year the business moved into the survey-site.	numeric	Gregorian calendar year	What year was the primary business established at this survey-site?
site_computed_mwh_1	Energy Usage	This is the summation of the annual energy usage of the electric meters of the survey-site.	numeric	MWh/year	0
site_computed_therms_1	Energy Usage	This is the summation of the annual energy usage of the gas meters of the survey-site.	numeric	therms/year	0
site_mwh_1	Energy Usage	Annual energy usage of site	numeric	MWh/year	0
site_notes_other_energy_1	Energy Services	Any notes about any of the other energy questions left by the surveyor.	string	na	0
site_notes_provider_1	Energy Services	Any notes about any of the utility provider questions left by the surveyor.	string	na	0
other_energy_service_accounts_fuel_type_1	Energy Services	The fuel type of any other energy service accounts.	dropdown list	na	0
other_energy_service_accounts_fuel_type_2	Energy Services	The fuel type of any other energy service accounts.	dropdown list	na	0
other_energy_service_accounts_fuel_type_3	Energy Services	The fuel type of any other energy service accounts.	dropdown list	na	0

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
other_energy_service_accounts_fuel_type_4	Energy Services	The fuel type of any other energy service accounts.	dropdown list	na	0
other_energy_service_accounts_average_annual_usage_1	Energy Services	The average annual usage of the other energy service account.	numeric	varies	0
other_energy_service_accounts_average_annual_usage_2	Energy Services	The average annual usage of the other energy service account.	numeric	varies	0
other_energy_service_accounts_average_annual_usage_3	Energy Services	The average annual usage of the other energy service account.	numeric	varies	0
other_energy_service_accounts_average_annual_usage_4	Energy Services	The average annual usage of the other energy service account.	numeric	varies	0
other_energy_service_accounts_usage_unit_1	Energy Services	The units for the average annual usage of the other energy service account.	dropdown list	na	0
other_energy_service_accounts_usage_unit_2	Energy Services	The units for the average annual usage of the other energy service account.	dropdown list	na	0
other_energy_service_accounts_usage_unit_3	Energy Services	The units for the average annual usage of the other energy service account.	dropdown list	na	0
other_energy_service_accounts_usage_unit_4	Energy Services	The units for the average annual usage of the other energy service account.	dropdown list	na	0
onsite_power_generations_generator_type_1	On-Site Generation	The type of equipment used on-site for power generation.	dropdown list	na	On-Site Generation Type
onsite_power_generations_generator_type_2	On-Site Generation	The type of equipment used on-site for power generation.	dropdown list	na	On-Site Generation Type
onsite_power_generations_capacity_1	On-Site Generation	The capacity, in kW, of the on-site power generator.	numeric	kW	What is the plant generation capacity? (kW)
onsite_power_generations_capacity_2	On-Site Generation	The capacity, in kW, of the on-site power generator.	numeric	kW	What is the plant generation capacity? (kW)
onsite_power_generations_full_load_hours_1	Energy Usage	Annual full load hours for generation type 1	numeric	hours	Annual Full Load Hours
onsite_power_generations_full_load_hours_2	Energy Usage	Annual full load hours for generation type 2	numeric	hours	Annual Full Load Hours

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
onsite_power_generations_sold_back_percent_1	On-Site Generation	The percentage of the on-site power generated sold back to the utility.	numeric	percentage	What percent of generated electricity is sold back to the utility?
onsite_power_generations_sold_back_percent_2	On-Site Generation	The percentage of the on-site power generated sold back to the utility.	numeric	percentage	What percent of generated electricity is sold back to the utility?
onsite_power_generations_battery_storage_1	On-Site Generation	Indicates if there is battery storage for later power generation [1] or not [0].	1 or 0	na	Is there electric battery storage for excess power?
onsite_power_generations_battery_storage_2	On-Site Generation	Indicates if there is battery storage for later power generation [1] or not [0].	1 or 0	na	Is there electric battery storage for excess power?
onsite_power_generations_thermal_energy_type_1	On-Site Generation	The type of combined heat and power thermal energy of the on-site power generation.	dropdown list	na	CHP Thermal Usage if "other" above
onsite_power_generations_thermal_energy_usage_1	On-Site Generation	The usage of combined heat and power thermal energy of the on-site power generation.	string	na	CHP Thermal Energy Usage
onsite_power_generations_thermal_energy_type_2	On-Site Generation	The type of combined heat and power thermal energy of the on-site power generation.	dropdown list	na	CHP Thermal Usage if "other" above
onsite_power_generations_thermal_energy_usage_2	On-Site Generation	The usage of combined heat and power thermal energy of the on-site power generation.	string	na	CHP Thermal Energy Usage
N_Electric_Meters	Meters	Number of electric meters entered by surveyor	numeric	na	na
N_Gas_Meters	Meters	Number of gas meters entered by surveyor	numeric	na	na
First_Addition_Year	Additions and Renovations	Earliest year that an addition occurred	numeric	Year	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
First_Renovation_Year	Additions and Renovations	Earliest year that a renovation occurred	numeric	Year	na
Total_Addition_Sqft_Since_2005	Additions and Renovations	Total Sqft of building additions since 2005.	numeric	square feet	na
Total_Addition_Sqft	Additions and Renovations	Total Sqft of building additions.	numeric	square feet	na
Interior_Lighting_Percent_Updated_Since2014	End-Use	Percent of Interior Lighting Updated since 2014	numeric	percentage	na
Exterior_Lighting_Percent_Updated_Since2014	End-Use	Percent of Exterior Lighting Updated since 2014	numeric	percentage	na
Water_Heater_Percent_Updated_Since2014	Additions and Renovations	Percent of floor area associated with water heater updates since 2014	numeric	percentage	na
Solar_PV_Installed	Additions and Renovations	Percent of floor area associated with solar PV updates since 2014	numeric	percentage	na
Equipment_Percent_Updated_Since2014	Additions and Renovations	Percent of floor area associated with non-HVAC equipment (e.g. EVSE) updates since 2014	numeric	percentage	na
HVAC_Percent_Updated_Since2014	Additions and Renovations	Percent of floor area associated with HVAC equipment updates since 2014	numeric	percentage	na
Envelope_Percent_Updated_Since2014	Additions and Renovations	Percent of floor area associated with Envelope updates since 2014	numeric	percentage	na
Interior_Lighting_Percent_Updated_Since2004	Additions and Renovations	Percent of Interior Lighting Updated since 2004	numeric	percentage	na
Exterior_Lighting_Percent_Updated_Since2004	Additions and Renovations	Percent of Exterior Lighting Updated since 2004	numeric	percentage	na
Water_Heater_Percent_Updated_Since2004	Additions and Renovations	Percent of floor area associated with water heater updates since 2004	numeric	percentage	na
Equipment_Percent_Updated_Since2004	Additions and Renovations	Percent of floor area associated with non-HVAC equipment (e.g. EVSE) updates since 2004	numeric	percentage	na
HVAC_Percent_Updated_Since2004	Additions and Renovations	Percent of floor area associated with HVAC equipment updates since 2004	numeric	percentage	na
Envelope_Percent_Updated_Since2004	Additions and Renovations	Percent of floor area associated with Envelope updates since 2004	numeric	percentage	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
Interior_Lighting_Percent_Updated_Ever	Additions and Renovations	Percent of Interior Lighting Updated.	numeric	percentage	na
Exterior_Lighting_Percent_Updated_Ever	Additions and Renovations	Percent of Exterior Lighting Updated.	numeric	percentage	na
Water_Heater_Percent_Updated_Ever	Additions and Renovations	Percent of floor area associated with water heater updates.	numeric	percentage	na
Equipment_Percent_Updated_Ever	Additions and Renovations	Percent of floor area associated with non-HVAC equipment (e.g. EVSE) updates.	numeric	percentage	na
HVAC_Percent_Updated_Ever	Additions and Renovations	Percent of floor area associated with HVAC equipment updates.	numeric	percentage	na
Envelope_Percent_Updated_Ever	Additions and Renovations	Percent of floor area associated with Envelope updates.	numeric	percentage	na
site_percent_vacancy_1	Occupancy	The percentage of the survey-site that is unused area.	numeric	percentage	All survey-sites: What % of the usable floor space is currently vacant, empty, or not used?
site_percent_using_electronic_office_equipment_1	Occupancy	The percent of employees that use electronic office eqipment.	numeric	percentage	All survey-sites: What % of employees use electronic office equipment on a regular basis?
site_lodging_total_usable_rooms_1	Occupancy	The total number of usable rooms or residential units at the survey-site. Only if building type is lodging.	numeric	rooms	Lodging: Total number of usable rooms/residential units
site_lodging_average_percent_rooms_occupied_1	Occupancy	The average percent of occupancy of the rooms or units at the survey-site. Only if building type is lodging.	numeric	percentage	Lodging: Average % of rooms occupied
site_restaurants_number_meals_served_per_day_1	Occupancy	The number of meals served per day. Only if building type is restaurant.	numeric	meals per day	Average number of meals served per day

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_restaurants_number_meals_served_per_day_units_1	Occupancy	Units associated with number of meals served per day. Only if building typpe is restaurant.	Character	na	Restaurants: Units (meals, transactions, customers, donuts, items, gallons, lbs., oz.)
site_hospital_number_of_beds_1	Occupancy	The number of beds at a survey-site. Only if building type is health care.	numeric	beds	Hospital/Health: Number of beds in hospital
site_hospital_average_percent_of_beds_occupied_1	Occupancy	The average percent of beds occupied at the survey-site. Only if building type is health care.	numeric	percentage	Hospital/Health: Average % of beds occupied
site_education_average_number_of_enrolled_students_1	Occupancy	The average number of enrolled students at the survey-site. Only if building type is school or college.	numeric	students	Education: Average number of enrolled students (Average daily attendance)
N_Tenants_Sampled	Occupancy	Number of tenants sampled by surveyor	numeric	integer	na
tenants_peak_annual_FTE	Occupancy	Aggregated peak FTE of all sampled tenants	numeric	FTE	na
tenants_sqft	Occupancy	Aggregated sqft of all sampled tenants	numeric	square feet	na
tenants_typical_annual_FTE	Occupancy	Aggregated typical FTE of all sampled tenants	numeric	FTE	na
site_typical_FTE	Occupancy	Typical FTE for survey site (sums full, half, 1-4 time)	numeric	FTE	na
site_peak_FTE	Occupancy	Peak FTE for survey site (sums full, half, 1-4 time)	numeric	FTE	na
site_number_of_holidays_1	Operation Schedule	The number of holidays or shutdown days at the survey-site in a typical year.	numeric	holidays	Holidays
site_notes_schedule_1	Operation Schedule	Any notes about any of the schedule/seasonal schedule questions left by the surveyor.	string	na	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
Schedule_description_1	Operation Schedule	A description of the seasonal schedule if there is more than one season at a survey-site.	string	na	0
Schedule_description_2	Operation Schedule	0	numeric	holidays	Holidays
Schedule_description_3	Operation Schedule	The number of holidays or shutdown days at the survey-site in a typical year.	numeric	holidays	Holidays
Schedule_description_4	Operation Schedule	The number of holidays or shutdown days at the survey-site in a typical year.	numeric	holidays	Holidays
Schedule_description_5	Operation Schedule	The number of holidays or shutdown days at the survey-site in a typical year.	numeric	holidays	Holidays
Schedule_percent_full_capacity_1	Operation Schedule	The percent of full capacity of the nth seasonal schedule.	numeric	percentage	0
Schedule_percent_full_capacity_2	Operation Schedule	The ending day of the nth seasonal schedule.	numeric	day	0
Schedule_percent_full_capacity_3	Operation Schedule	The ending day of the nth seasonal schedule.	numeric	day	0
Schedule_percent_full_capacity_4	Operation Schedule	The ending day of the nth seasonal schedule.	numeric	day	0
Schedule_percent_full_capacity_5	Operation Schedule	The ending day of the nth seasonal schedule.	numeric	day	0
ndays_1	Operation Schedule	Total # of days/year associated with schedule 1	numeric	days	na
ndays_2	Operation Schedule	Total # of days/year associated with schedule 2	numeric	days	na
ndays_3	Operation Schedule	Total # of days/year associated with schedule 3	numeric	days	na
ndays_4	Operation Schedule	Total # of days/year associated with schedule 4	numeric	days	na
ndays_5	Operation Schedule	Total # of days/year associated with schedule 5	numeric	days	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
weekly_hours_1	Operation Schedule	Total weekly hours associated with schedule 1	numeric	hours	na
weekly_hours_2	Operation Schedule	Total weekly hours associated with schedule 2	numeric	hours	na
weekly_hours_3	Operation Schedule	Total weekly hours associated with schedule 3	numeric	hours	na
weekly_hours_4	Operation Schedule	Total weekly hours associated with schedule 4	numeric	hours	na
weekly_hours_5	Operation Schedule	Total weekly hours associated with schedule 5	numeric	hours	na
max_floors	Footprint	Max # of floors in survey site.	numeric	floors	na
site_sqft_best_method_number_1	Footprint	The square footage obtained by the surveyor using the best method.	numeric	square feet	survey-site sqft
site_sqft_best_method_1	Footprint	The best method the surveyor used to obtain the square footage.	dropdown list	na	best source
site_notes_site_sqft_1	Footprint	Any notes about any of the square footage questions left by the surveyor.	string	na	0
site_sqft_next_method_number_1	Footprint	The square footage obtained by the surveyor using the next best method.	numeric	square feet	survey-site sqft (2)
site_sqft_next_method_1	Footprint	The next best method the surveyor used to obtain the square footage.	dropdown list	na	second best source
site_has_unconditioned_area_1	Footprint	Indicates if a survey-site has unconditioned area [1] or not [0].	1 or 0	na	Does the survey-site have unconditioned space?
site_unconditioned_sqft_best_method_number_1	Footprint	The square footage of the unconditioned area obtained by the surveyor using the best method.	numeric	square feet	Survey-Site Area best method sqft unconditioned
site_unconditioned_sqft_best_method_1	Footprint	The best method the surveyor used to obtain the square footage of the unconditioned area.	dropdown list	na	Survey-Site Area best method unconditioned
site_unconditioned_sqft_next_method_number_1	Footprint	The square footage of the unconditioned area obtained by the surveyor using the next best method.	numeric	square feet	Survey-Site Area next method sqft unconditioned

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_unconditioned_sqft_next_method_1	Footprint	The next best method the surveyor used to obtain the square footage of the unconditioned area.	dropdown list	na	Survey-Site Area next method unconditioned
site_parking_garage_sqft_1	Footprint	The square footage of the parking garage.	numeric	square feet	Total Garage Floor Area in square feet?
site_has_parking_garages_1	Footprint	Indicates if a survey-site has parking garage(s) [1] or not [0].	1 or 0	na	na
site_exterior_wall_thickness_1	Footprint	Thickness of building exterior wall.	numeric	inches	na
Electric_Cooled_Sqft	Fuel Saturation	Total sqft that are cooled (electric)	numeric	square feet	na
Gas_Cooled_Sqft	Fuel Saturation	Total sqft that are cooled (gas)	numeric	square feet	na
SharedChilledWater_Cooled_Sqft	Fuel Saturation	Total sqft that are cooled (shared chilled water)	numeric	square feet	na
Electric_Heated_Sqft	Fuel Saturation	Total sqft that are heated (electric)	numeric	square feet	na
Gas_Heated_Sqft	Fuel Saturation	Total sqft that are heated (gas)	numeric	square feet	na
SharedHotWater_Heated_Sqft	Fuel Saturation	Total sqft that are heated (shared hot water)	numeric	square feet	na
Propane_Heated_Sqft	Fuel Saturation	Total sqft that are heated (propane)	numeric	square feet	na
Ventilated_Sqft	Fuel Saturation	Total sqft that are ventilated	numeric	square feet	na
Refrigerated_Sqft	Fuel Saturation	Total sqft that are refrigerated	numeric	square feet	na
Frozen_Sqft	Fuel Saturation	Total sqft that are frozen	numeric	square feet	na
Conditioned_Sqft	Fuel Saturation	Total conditioned floorspace computed from partition entries by surveyor	numeric	square feet	na
Unconditioned_Sqft	Fuel Saturation	Total sqft that are unconditioned	numeric	square feet	na
Total_Partition_Sqft	Fuel Saturation	Total floorspace computed from partition entries by surveyor	numeric	square feet	na
site_cooling_type_1	HVAC	The type of Primary Cooling System.	dropdown list	na	Select the Primary Cooling System type
site_heating_type_1	HVAC	The type of Primary Heating System.	dropdown list	na	Select the Primary Heating System type

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_air_distibution_system_type_1	HVAC	The type of Air Distribution system used in the building.	dropdown list	na	If the survey-site has a Central Plant, then select the Air Distribution System
site_office_includes_office_equipment_1	Office Equipment	Indicates if the survey-site has office equipment [1] or not [0].	1 or 0	na	Is there office equipment present on the survey-site?
site_office_includes_server_equipment_1	Office Equipment	Indicates if the survey-site has IT/web-server racks [1] or not [0].	1 or 0	na	Are there any web / IT server racks present at the survey-site?
site_office_it_sqft_1	Office Equipment	The square footage of the floor space in areas with an IT/web-server rooms.	numeric	na	what is square footage of server space?
site_air_compressor_includes_air_compressors_1	Motors	Indicates if there is any air compressors at the survey-site [1] or not [0].	1 or 0	na	Are there any air compressors present at the survey-site?
site_motors_includes_motors_larger_than_6_1	Motors	Are there any motors > 6" in diameter present at the survey-site?	1 or 0	na	Are there any motors > 6" in diameter present at the survey-site?
site_lighting_exterior_lights_by_meter_1	Lighting	Indicates if the survey-site has any exterior lights fed by the meter [1] or not [0].	1 or 0	na	Are there any exterior lights at the survey-site fed by the meter(s)?

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_lighting_major_exterior_lights _by_meter_1	Lighting	Indicates if the survey-site has any major exterior lights fed by the meter [1] or not [0].	1 or 0	na	Are there any major* exterior lights, such as a parking lot lights, at the survey-site fed by the meter(s)?
site_lighting_exterior_lights_by_m eter_minor_1	Lighting	Indicates if the survey-site has any minor exterior lights fed by the meter [1] or not [0].	1 or 0	na	Are there minor exterior Lights on this meter(s)?
site_interior_led_percent_1	Lighting	The percent of the interior lighting that is LED.	numeric	percentage	What percent of the interior lighting is LED?
site_exterior_led_percent_1	Lighting	The percent of the exterior lighting that is LED.	numeric	percentage	What percent of the exterior lighting is LED?
site_misc_equipment_includes_mis c_electric_equipment_1	Miscellaneous Equipment	Indicates if the survey-site has miscellaneous electric equipment [1] or not [0].	1 or 0	na	Is there any electric miscellaneous equipment present at the survey-site?
site_misc_equipment_includes_mis c_gas_equipment_1	Miscellaneous Equipment	Indicates if the survey-site has miscellaneous gas equipment [1] or not [0].	1 or 0	na	Is there any natural gas miscellaneous equipment present at the survey-site?
site_number_electric_vehicle_char ging_stations_unknown_1	Electric Vehicles	The quantity of electric vehicle charging stations that are of unknown (L1/L2/DC) type	numeric	ev charge stations	Unknown Type Charger Quantity
site_number_electric_vehicle_char ging_stations_120v_1	Electric Vehicles	The quantity of electric vehicle charging stations at level 1, 120 volts.	numeric	ev charge stations	Level 1 (120 volt) Quantity
site_number_electric_vehicle_char ging_stations_240v_1	Electric Vehicles	The quantity of electric vehicle charging stations at level 2, 240 volts.	numeric	ev charge stations	Level 2 (240 volt) Quantity

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_number_electric_vehicle_charging_stations_dc_1	Electric Vehicles	The quantity of electric vehicle charging stations at level 3, DC fast.	numeric	ev charge stations	Level 3 (DC Fast) Quantity
site_has_vehicle_charging_stations_1	Electric Vehicles	Indicates if there are electric vehicle charging stations powered by a survey-site electric meter [1] or not [0].	1 or 0	na	Are there Electric Vehicle (EV) chargers powered by a survey-site electric meter?
site_ev_charging_stations_120v_access_type_1	Electric Vehicles	The access type to the level 1, 120 volts electric vehicle charging station(s).	dropdown list	na	Level 1 (120 volt) Access Type
site_ev_charging_stations_240v_access_type_1	Electric Vehicles	The access type to the level 2, 240 volts electric vehicle charging station(s).	dropdown list	na	Level 2 (240 volt) Access Type
site_ev_charging_stations_dc_access_type_1	Electric Vehicles	The access type to the level 3, DC fast, electric vehicle charging station(s).	dropdown list	na	Level 3 (DC Fast) Access Type
site_re_freezer_units_central_compressors_enabled_1	Refrigeration	Indicates if there are freezer units with central/remote compressors [1] or not [0].	1 or 0	na	Freezer Units
site_re_freezer_units_self_contained_enabled_1	Refrigeration	Indicates if there are freezer units that are self-contained [1] or not [0].	1 or 0	na	Freezer Units
site_re_refrigerated_units_central_compressors_enabled_1	Refrigeration	Indicates if there are refrigerated units with central/remote compressors [1] or not [0].	1 or 0	na	Non-Residential Refrigerated Units
site_re_refrigerated_units_self_contained_enabled_1	Refrigeration	Indicates if there are refrigerated units that are self-contained [1] or not [0].	1 or 0	na	Non-Residential Refrigerated Units
site_re_walk_in_freezers_central_compressors_enabled_1	Refrigeration	Indicates if there is a walk-in freezer with central/remote compressors [1] or not [0].	1 or 0	na	Walk-In Freezer
site_re_walk_in_freezers_self_contained_enabled_1	Refrigeration	Indicates if there is a walk-in freezer that is self-contained [1] or not [0].	1 or 0	na	Walk-In Freezer
site_re_walk_in_refrigerators_central_compressors_enabled_1	Refrigeration	Indicates if there is a walk-in refrigerator with central/remote compressors [1] or not [0].	1 or 0	na	Walk-In Refrigeration

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_re_walk_in_refrigerators_self_contained_enabled_1	Refrigeration	Indicates if there is a walk-in refrigerator that is self-contained [1] or not [0].	1 or 0	na	Walk-In Refrigeration
site_re_includes_refrigeration_equipment_1	Refrigeration	Indicates if the survey-site has refrigeration equipment [1] or not [0].	1 or 0	na	Is there any refrigeration equipment present at the survey-site?
site_re_floor_space_refrigerated_storage_1	Refrigeration	The square footage of the floor space in areas with refrigerated storage.	numeric	square feet	How much floor space (in sq ft) is refrigerated storage?
site_re_self_contained_residential_style_1	Refrigeration	Indicates if the self-contained refrigeration is residential style [1] or not [0].	1 or 0	na	Residential Refrigerator
site_cooking_all_electric_1	Cooking	Indicates if all commercial grade cooking equipment is electric [1] or not [0].	1 or 0	na	0
site_cooking_major_equipment_1	Cooking	Indicates if there is any major cooking equipment at the survey-site [1] or not [0].	1 or 0	na	major cooking equipment
site_cooking_minor_equipment_1	Cooking	Indicates if there is any minor cooking equipment at the survey-site [1] or not [0].	1 or 0	na	Minor Cooking equipment
site_cooking_kitchen_sqft_1	End-Use	Square footage of kitchen and dining area, but only for non-restaurant sites	numeric	square feet	For non-restaurant survey-sites, with restaurants or cafeterias, what is the total square footage of the Kitchen and Dining floor areas?

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_cooking_percent_provided_by _electric_1	Cooking	The percent of major cooking provided by electricity.	numeric	percentage	Percent of Major Cooking by electricity
site_cooking_percent_provided_by _gas_1	Cooking	The percent of major cooking provided by natural gas.	numeric	percentage	Percent of Major Cooking by gas
site_cooking_percent_provided_by _propane_1	Cooking	The percent of major cooking provided by propane or another fuel.	numeric	percentage	Percent of Major Cooking by propane
site_cooking_minor_percent_provi ded_by_gas_1	Cooking	The percent of minor cooking provided by natural gas.	numeric	percentage	Minor Cooking equipment by gas
CookingElectricTherm	Joint ADM CEC QC	Total electric energy usage, in units of therms, estimated from inventory of commercial cooking equipment by surveyor.	numeric	therms/year	na
CookingGasTherm	Joint ADM CEC QC	Total gas energy usage, in units of therms, estimated from inventory of commercial cooking equipment by surveyor.	numeric	therms/year	na
CookingOtherTherm	Joint ADM CEC QC	Total other (likely propane) energy usage, in units of therms, estimated from inventory of commercial cooking equipment by surveyor.	numeric	therms/year	na
site_hot_water_available_1	Hot Water	Indicates if there is hot water at the survey-site [1] or not [0].	1 or 0	na	0
site_hot_water_percent_electricity _1	Hot Water	The percent of fuel for the water heater that is electricity.	numeric	percentage	Water Heating by electricity
site_hot_water_percent_gas_1	Hot Water	The percent of fuel for the water heater that is natural gas.	numeric	percentage	Water Heating by gas
site_hot_water_percent_heat_reco very_1	Hot Water	The percent of fuel for the water heater that is heat recovery.	numeric	percentage	Water Heating by heat recovery
site_hot_water_percent_propane_ or_other_1	Hot Water	The percent of fuel for the water heater that is propane or another source.	numeric	percentage	Water Heating by propane or other

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_hot_water_percent_purchased_or_shared_1	Hot Water	The percent of fuel for the water heater that is purchased/shared.	numeric	percentage	Water Heating by purchased or shared
site_hot_water_percent_solar_1	Hot Water	The percent of fuel for the water heater that is solar.	numeric	percentage	Water Heating by solar
site_hot_water_percent_access_1	Hot Water	The percent of the survey-site that has access to hot water.	numeric	percentage	What percent of survey-site has access to hot water?
site_hot_water_info_source_1	Hot Water	Information source for hot water determination	dropdown list	na	Information Source
site_survey_area_question_0_1	Notes	Can meters be verified?	dropdown list	na	Can meters be verified…
site_survey_area_question_1_1	Notes	Whether meters match utility data	dropdown list	na	Meters found and…
site_survey_area_question_2_1	Notes	Whether customer is a property manager or owner-occupied	dropdown list	na	Utility Customer is…
site_survey_area_question_2a_1	Notes	If property manager meters are for common area or other businesses	dropdown list	na	Property Manager meter(s)…
site_survey_area_question_2b_1	Notes	If business meters serve part or al of the facility	dropdown list	na	Business meters(s)…
site_general_comments_1	Notes	The general notes field in the Notes tab of the Photos and Notes section.	string	na	0
site_utility_electric_notes_1	Notes	The electric provider open-text field of the survey form in the Utilities Tab of the Utilities and Meters section.	string	na	0
site_utility_gas_notes_1	Notes	The gas provider open-text field of the survey form in the Utilities Tab of the Utilities and Meters section.	string	na	0
site_notes_interview_1	Notes	The general notes section of the survey form in the Interview tab of the Interview section	string	na	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
site_notes_meter_1	Notes	The general notes section of the survey form in the Meters tab of the Utilities and Meters section	string	na	0
site_notes_on_site_power_1	Notes	The general notes section of the survey form in the On-site Generation and Storage tab of the Other Energy section	string	na	0
site_notes_site_drawing_1	Notes	The general notes section of the survey form in the Drawing section	string	na	0
site_notes_end_use_by_partition_1	Notes	The general notes section of the survey form in the End-Use by Partitions tab of the End-Use section	string	na	0
site_notes_end_use_whole_site_1	Notes	The general notes section of the survey form in the End-Use by Whole Survey-Site Partitions tab of the End-Use section	string	na	0
site_notes_photos_1	Notes	The general notes section of the survey form in the Photos section	string	na	0
site_notes_tenant_1	Notes	The general notes section of the survey form in the Tenants tab of the Interview section	string	na	0
site_natural_gas_provider_uniform	Joint ADM CEC QC	Uniform name for natural gas providers.	Character	na	na
Plot_Building_Type	Joint ADM CEC QC	Just a more user friendly list of building types that fit on plot axes	Character	na	na
Plot_Building_Size	Joint ADM CEC QC	Building sizes for histogramming	Character	na	na
Plot_Physical_Type	Joint ADM CEC QC	More user friendly list of physical types to fit on plot axes	Character	na	na
QC_N_Partitions	Joint ADM CEC QC	Number of distinct partitions entered by surveyor, for the purpose of calculating fuel saturations	numeric	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Sqft_Per_FTE	Joint ADM CEC QC	This is QC_Tenants_Sqft_Per_FTE (see below) if the site has tenants, and QC_Site_Sqft_Per_FTE if the site has no tenants	numeric	square feet/FTE	na
QC_Site_Sqft_Per_FTE	Joint ADM CEC QC	Total Sqft / Total FTE, for sites w/o tenants	numeric	square feet/FTE	na
QC_Tenants_Sqft_Per_FTE	Joint ADM CEC QC	Total Sqft / Total FTE for all sampled tenants in a site	numeric	square feet/FTE	na
QC_N_Schedules	Joint ADM CEC QC	QC_N_Schedules counts all nontrivial schedules.	1=good, 0=bad	na	0
QC_N_Days_Accounted_For	Joint ADM CEC QC	The total number of days accounted for by ndays_1-ndays_5. Need to update if we ever see an ndays_6.	1=good, 0=bad	na	0
QC_Annual_Hours_Open	Joint ADM CEC QC	Total hours business is open based on multiplying n_days_i and weekly_hours_i	1=good, 0=bad	na	0
QC_Has_Gas_Equipment	Joint ADM CEC QC	This binary field has a value of 1 if any gas equipment are found.	1 or 0	na	na
QC_Has_Gas_Provider	Joint ADM CEC QC	This binary field has a value of 1 If has provided is identified	1 or 0	na	na
QC_Site_Has_Fossil_Fuel_Tanks	Joint ADM CEC QC	If the site gets bottled gas/propane, Kerosene, or Diesel, this has a value of 1	1 or 0	na	na
QC_Site_Has_Shared_Services	Joint ADM CEC QC	This binary field has a value of 1 if shared services were discovered on site	1 or 0	na	na
QC_Has_Solar_Panels	Joint ADM CEC QC	This binary field has a value of 1 if solar panels were discovered on site	1 or 0	na	na
QC_Has_Solar_DHW	Joint ADM CEC QC	This binary field has a value of 1 if solar water heaters were discovered on site	1 or 0	na	na
QC_Has_NonSolar_Generation	Joint ADM CEC QC	This binary field has a value of 1 if non-solar generators were discovered on site	1 or 0	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Solar_kWh	Joint ADM CEC QC	Total solar capacity times total solar equivalent full-load hours.	numeric	kWh/year	na
QC_Non_Solar_kWh	Joint ADM CEC QC	Total non-solar capacity times total non-solar equivalent full-load hours.	numeric	kWh/year	na
QC_Site_Has_Partial_DHW_Access	Joint ADM CEC QC	This binary field has a value of 1 if site access to hot water is partial, not zero or full	1 or 0	na	na
QC_Major_Cooking_Percent_Electric_by_Inventory	Joint ADM CEC QC	Percent of commercial cooking energy usage that is electric, based on typical energy usages from cooking equipment inventory (CookingElectricTherm/CookingGasTherm/CookingOtherTherm)	numeric	percentage	na
QC_Major_Cooking_Percent_Gas_by_Inventory	Joint ADM CEC QC	Percent of commercial cooking energy usage that is gas, based on typical energy usages from cooking equipment inventory (CookingElectricTherm/CookingGasTherm/CookingOtherTherm)	numeric	percentage	na
QC_Major_Cooking_Percent_Other_by_Inventory	Joint ADM CEC QC	Percent of commercial cooking energy usage that is not electric or gas, based on typical energy usages from cooking equipment inventory (CookingElectricTherm/CookingGasTherm/CookingOtherTherm)	numeric	percentage	na
QC_Site_Has_Walkins	Joint ADM CEC QC	This binary field has a value of 1 if walk-in coolers or freezers were discovered on site	1 or 0	na	na
QC_Site_Has_Commercial_Refrigeration	Joint ADM CEC QC	This binary field has a value of 1 if commercial refrigeration equipment was discovered on site	1 or 0	na	na
QC_Meter_Account_Listed	Joint ADM CEC QC	This binary field has a value of 1 if an electric meter with associated account number was discovered on site	1 or 0	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Meter_Status_Code_Exists	Joint ADM CEC QC	This binary field has a value of 1 if an electric meter was discovered on site, and the surveyor entered a status code	1 or 0	na	na
QC_Has_Shared_Meter	Joint ADM CEC QC	This binary field has a value of 1 if a shared electric meter was discovered on site	1 or 0	na	na
QC_Has_Added_Meter	Joint ADM CEC QC	This binary field has a value of 1 if a surveyor requested to add a meter to the site	1 or 0	na	na
QC_Has_Removed_Meter	Joint ADM CEC QC	This binary field has a value of 1 if a surveyor requested to remove a meter from the site	1 or 0	na	na
QC_Heating_Cooling_Systems_Compatible_Score	Joint ADM CEC QC	The heating system and cooling system must be compatible (e.g. package system to package system, swamp cooler + room heating, chiller+boiler) or else the score is 0	1=good, 0=bad	na	na
QC_Cooking_Quantity_Score	Joint ADM CEC QC	Cannot have more than nine of any commercial cooking equipment (e.g. 10 toasters, etc.) if more than 9, score is 0	1=good, 0=bad	na	na
QC_Refrig_and_Cool_Consistent_Score	Joint ADM CEC QC	A space cannot be both cooled and refrigerated. If so, score is 0	1=good, 0=bad	na	na
QC_Refrig_and_Heat_Consistent_Score	Joint ADM CEC QC	A space cannot be both heated and refrigerated. If so, score is 0	1=good, 0=bad	na	na
QC_HVAC_and_Vent_Consistent_Score	Joint ADM CEC QC	A site cannot have HVAC without ventilation. If so, the score is 0. Note that false positives are possible with baseboard heating (rare, lodging) or with radiant heating (rare except for in auto repair shops)	1=good, 0=bad	na	na
QC_HVAC_and_Outside_Consistent_Score	Joint ADM CEC QC	A partition cannot have HVAC if it is outside. If so, score is 0.	1=good, 0=bad	na	na

Database Dictionary

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_All_Partition_Attributes_Defined_Score	Joint ADM CEC QC	If the sqft, or cooling fuel, heating fuel, outside/inside bit, ventilation, or refrigeration type is undefined, this gets a score of 0.	1=good, 0=bad	na	na
QC_Site_Has_Photos_Score	Joint ADM CEC QC	If server addresses are not defined for first 5 photos, the site gets a 0	1=good, 0=bad	na	na
QC_Name_Score	Joint ADM CEC QC	site_name_1 is not empty	1=good, 0=bad	na	0
QC_Address_Score	Joint ADM CEC QC	site_street_1 is not empty	1=good, 0=bad	na	0
QC_Contact_Score	Joint ADM CEC QC	Contacts_name_1 and Contacts_name_2 are not both not empty, Contacts_phone_1 and Contacts_phone_2 are not both empty	1=good, 0=bad	na	0
QC_Participation_Status_Score	Joint ADM CEC QC	site_participation_status_1 = "Everything OK"	1=good, 0=bad	na	0
QC_Site_Building_Type_by_NAICS_Score	Joint ADM CEC QC	QC_Site_Building_Type_by_NAICS (which is mapped from site_naics_selected_1) is one of the 12 official Building Types.	1=good, 0=bad	na	0
QC_Uniqueness_Score	Joint ADM CEC QC	site_uniqueness_1 is not empty	1=good, 0=bad	na	0
QC_Physical_Type_Score	Joint ADM CEC QC	site_physical_type_1 is at least 6 characters long	1=good, 0=bad	na	0
QC_Site_Building_Type_Score	Joint ADM CEC QC	site_building_type_1 is not blank	1=good, 0=bad	na	0
QC_Site_Building_Type_1_Score	Joint ADM CEC QC	site_building_type_1 is one of the 12 official Building Types	1=good, 0=bad	na	0
QC_Site_Building_Type_2_Score	Joint ADM CEC QC	site_building_type_2 is one of the 12 official Building Types	1=good, 0=bad	na	0
QC_Site_Building_Type_3_Score	Joint ADM CEC QC	site_building_type_3 is one of the 12 official Building Types	1=good, 0=bad	na	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Building_Type_Total_Percent_Score	Joint ADM CEC QC	The specified weights of the three selected building types add up to 100%	1=good, 0=bad	na	0
QC_Site_FTE_Score	Joint ADM CEC QC	site_typical_FTE is less than or equal to site_peak_FTE	1=good, 0=bad	na	0
QC_Site_Vacancy_Score	Joint ADM CEC QC	site_percent_vacancy_1 is numeric, and less than 30.	1=good, 0=bad	na	0
QC_Tenant_Employee_Score	Joint ADM CEC QC	If any tenants are sampled, then tenants_typical_annual_FTE and tenants_peak_annual_FTE must be specified	1=good, 0=bad	na	0
QC_Tenant_FTE_Score	Joint ADM CEC QC	tenants_typical_annual_FTE is less than or equal to tenants_peak_annual_FTE	1=good, 0=bad	na	0
QC_Office_Equip_Exists_if_Employees_Use_Score	Joint ADM CEC QC	If site_percent_using_electronic_office_equipment_1>0, then site_office_includes_office_equipment_1 must not be zero	1=good, 0=bad	na	0
QC_Lodging_Tbl7_Score	Joint ADM CEC QC	If the building type is Lodging, then site_lodging_average_percent_rooms_occupied_1 must be numeric and bounded by 0%-100%	1=good, 0=bad	na	0
QC_Restaurant_Tbl7_Score	Joint ADM CEC QC	If building type is Restaurant, then site_restaurants_number_meals_served_per_day_1 must be numeric and bounded by 0-3000	1=good, 0=bad	na	0
QC_Hospital_Tbl7_Score	Joint ADM CEC QC	If NAICS code is hospital (622110,622210,622310), then site_hospital_average_percent_of_beds_occupied_1 must be numeric and bounded by 0%-100%	1=good, 0=bad	na	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Education_Tbl7_Score	Joint ADM CEC QC	If building type is School or College, thensite_education_average_number_of_enrolled_students_1 must be numeric and bounded by 0-50000	1=good, 0=bad	na	0
QC_Sqft_Per_FTE_Score	Joint ADM CEC QC	If the QC_Sqft_Per_FTE is undefined, or if it is less than 50 sqft, or if it is over 3000 for anything but Lodging, Warehouses, or Refrigerated Warehouses, the score is 0	1=good, 0=bad	na	na
QC_Number_of_Buildings_Score	Joint ADM CEC QC	site_number_of_buildings_1 is numeric and bounded by 0-30	1=good, 0=bad	na	0
QC_Year_Built_vs_Moved_Score	Joint ADM CEC QC	Cannot move in before building was built.	1=good, 0=bad	na	0
QC_Interior_Lighting_Renovation_Matches_LED_Score	Joint ADM CEC QC	If site_interior_led_percent_1 was determined, and Interior_Lighting_Percent_Updated_Since2014 was also determined, let the absolute value of the % of lights or % of sqft associated with those two be less than 40%. Using 40% as a cutoff since it is still possible to update lights after 2014, but to go with non-LED lamps.	1=good, 0=bad	na	0
QC_Exterior_Lighting_Renovation_Matches_LED_Score	Joint ADM CEC QC	If site_exterior_led_percent_1 was determined, and Exterior_Lighting_Percent_Updated_Since2014 was also determined, let the absolute value of the % of lights or % of sqft associated with those two be less than 40%. Using 40% as a cutoff since it is still possible to update lights after 2014, but to go with non-LED lamps.	1=good, 0=bad	na	0

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_LEDs_Show_Up_As_Interior_Renovation_Score	Joint ADM CEC QC	If at least 50% of interior lights are LEDs, but LEDs are not listed as a renovation, the score is 0	1=good, 0=bad	na	na
QC_LEDs_Show_Up_As_Exterior_Renovation_Score	Joint ADM CEC QC	If at least 50% of exterior lights are LEDs, but LEDs are not listed as a renovation, the score is 0	1=good, 0=bad	na	na
QC_EV_Charging_Exists_Score	Joint ADM CEC QC	site_has_vehicle_charging_stations_1 is determined	1=good, 0=bad	na	0
QC_EV_Charging_Reflected_In_Renovation_Score	Joint ADM CEC QC	If site_has_vehicle_charging_stations_1 is 1, then Equipment_Percent_Updated_Since2014 should not be zero. I actually would prefer to remove this. What sqft would one assign to EV chargers?	1=good, 0=bad	na	0
QC_N_EV_Charger_Score	Joint ADM CEC QC	If site_has_vehicle_charging_stations_1 is determined, then it should be numeric and bounded by 0-200	1=good, 0=bad	na	0
QC_Year_Built_Conistent_With_Renovation_Year_Score	Joint ADM CEC QC	Cannot make upgrades before 2004 (2014) if building is constructed after 2004 (2014)	1=good, 0=bad	na	0
QC_Renovated_Floor_Area_Score	Joint ADM CEC QC	If the percentage of floor are renovated is less than 0 or greater than 100, score is zero	1=good, 0=bad	na	na
QC_Year_Built_Conistent_With_Addition_Year_Score	Joint ADM CEC QC	Cannot make additions before building is constructed.	1=good, 0=bad	na	na
QC_Addition_Floor_Area_Score	Joint ADM CEC QC	If the percentage of floor space added is less than 0 or greater than 100, score is zero	1=good, 0=bad	na	na
QC_Number_of_Holiday_Score	Joint ADM CEC QC	site_number_of_holidays_1 is determined, numeric, and bounded by 0-20	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Number_of_Holiday_Odd_Score	Joint ADM CEC QC	If any building except Lodging, Health, Food, Restaurant, and Misc. have zero holidays, score is 0	1=good, 0=bad	na	na
QC_Schedule_Description_Score	Joint ADM CEC QC	Schedule_description_1-5 cannot all be empty	1=good, 0=bad	na	na
QC_Schedule_Capacity_Score	Joint ADM CEC QC	Schedule_percent_full_capacity_1-5 cannot all be empty	1=good, 0=bad	na	na
QC_N_Schedules_Score	Joint ADM CEC QC	QC_N_Schedules cannot be zero	1=good, 0=bad	na	na
QC_365_Days_Accounted_For_Score	Joint ADM CEC QC	QC_N_Days_Accounted_For must be 365	1=good, 0=bad	na	na
QC_N_Schedules_For_Schools_Score	Joint ADM CEC QC	Schools (611110, 611210, 611310) must have at least two schedules, or score is 0	1=good, 0=bad	na	na
QC_Annual_Hours_Score	Joint ADM CEC QC	QC_Annual_Hours_Open must be bounded by 100-8760	1=good, 0=bad	na	na
QC_Electric_Provider_Score	Joint ADM CEC QC	Electric provider must be one of the five participating in the survey or else the score is 0	1=good, 0=bad	na	na
QC_Gas_Equipment_Provider_Consistent_Score	Joint ADM CEC QC	If a site has gas equipment, but the gas provider is not identified, the score is 0	1=good, 0=bad	na	na
QC_Shared_Services_Odd_Building_Type_Score	Joint ADM CEC QC	If Schools, Small Offices, Food Stores, or Restaurants have shared services, score is 0	1=good, 0=bad	na	na
QC_Solar_kWh_Score	Joint ADM CEC QC	Calculated solar annual generation in kWh must exceed 1,000 kWh, but be less than 30 kWh per sqft of floor space, or else score is 0	1=good, 0=bad	na	na
QC_Non_Solar_kWh_Score	Joint ADM CEC QC	Calculated non-solar kWh must be defined, and should be between 0 and 30 kWh per sqft of floor space, or else score is 0	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Partitions_Match_Bldg_Sqft_Score	Joint ADM CEC QC	Sum sqft of all partitions must be within 10% of total site sqft, or else score is 0	1=good, 0=bad	na	na
QC_Conditioned_Partitions_Match_Bldg_Sqft_Score	Joint ADM CEC QC	Sum sqft of all conditioned partitions must be within 10% of total site conditioned sqft, or else score is 0	1=good, 0=bad	na	na
QC_Unconditioned_Partitions_Match_Bldg_Sqft_Score	Joint ADM CEC QC	Sum sqft of all unconditioned partitions must be within 10% of total site unconditioned sqft, or else score is 0	1=good, 0=bad	na	na
QC_Max_Floors_Score	Joint ADM CEC QC	Max floors must be defined and between 1 and 100, else score is 0	1=good, 0=bad	na	na
QC_Wall_Thickness_Score	Joint ADM CEC QC	Wall thickness must be defined and must be between 2 and 15 inches, else the score is 0	1=good, 0=bad	na	na
QC_Sqft_Similarity_Score	Joint ADM CEC QC	The first and second method conditioned sqft estimates must be within 15%, else the score is 0	1=good, 0=bad	na	na
QC_Sqft_Score	Joint ADM CEC QC	If the sqft is less than 100, score is zero. If the sqft exceeds 500,000, but the site is not a Warehouse, College, Large Office, or Lodging, then the score is 0.	1=good, 0=bad	na	na
QC_Unconditioned_Sqft_Similarity_Score	Joint ADM CEC QC	The first and second method unconditioned sqft estimates must be within 15%, else the score is 0	1=good, 0=bad	na	na
QC_Parking_Garage_Score	Joint ADM CEC QC	Score is 0 if Refrigerated Warehouses, Restaurants, Food Stores, and Warehouses have parking garages. This should be rare.	1=good, 0=bad	na	na
QC_Parking_Garage_Sqft_Score	Joint ADM CEC QC	If parking garage sqft is more than half the survey site sqft, then the score is 0	1=good, 0=bad	na	na
QC_Refrigerated_Warehouse_Must_Have_Refrigerated_Partition_Score	Joint ADM CEC QC	Refrigerated warehouses should have refrigerated partitions at least 2000 sqft, else the score is 0	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Heating_Gas_Service_Score	Joint ADM CEC QC	If a site has gas heating, but the gas provider is not identified, the score is 0	1=good, 0=bad	na	na
QC_Heating_Propane_Service_Score	Joint ADM CEC QC	If a site has propane heating, but no propane / fossil fuel tanks are identified, the score is 0	1=good, 0=bad	na	na
QC_Building_Type_With_Boiler_Score	Joint ADM CEC QC	Refrigerated Warehouses, Food Stores, Schools, or Restaurants should not have boilers for space heating. If so, score is 0.	1=good, 0=bad	na	na
QC_Building_Type_With_Chiller_Score	Joint ADM CEC QC	Warehouses, Food Stores, Schools, or Restaurants should not have chillers for space cooling. If so, score is 0.	1=good, 0=bad	na	na
QC_Air_Distribution_Type_Score	Joint ADM CEC QC	Buildings with central plants should have fan coils, single-duct, or dual-duct air distribution systems identified or else score is 0.	1=good, 0=bad	na	na
QC_DHW_Available_Score	Joint ADM CEC QC	Lodging, School, Large Office, Health Care, Restaurant, College, Food Stores should have hot water, or else score is 0	1=good, 0=bad	na	na
QC_DHW_Gas_Service_Score	Joint ADM CEC QC	If a site has gas water heating, but the gas provider is not identified, the score is 0	1=good, 0=bad	na	na
QC_DHW_Solar_Equip_Score	Joint ADM CEC QC	If hot water fuel is identified as solar, then the site must have a solar water heater. If inconsistent, score is 0	1=good, 0=bad	na	na
QC_DHW_CHP_Equip_Score	Joint ADM CEC QC	If hot water fuel is listed as heat recovery, then require them to have either waste heat recovery or a CHP engine (excluding back pressure turbine). If inconsistent, score is 0.	1=good, 0=bad	na	na
QC_DHW_Percentages_Add_Up_Score	Joint ADM CEC QC	Fuel percentages for hot water must add up to 100%, or else score is 0	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Office_Equip_Score	Joint ADM CEC QC	Site must have office equipment or else score is 0.	1=good, 0=bad	na	na
QC_IT_Server_Space_Score	Joint ADM CEC QC	If the IT server space is more than half of overall site sqft, then the score is zero. Some false positives possible at data centers	1=good, 0=bad	na	na
QC_IT_Server_Equip_Score	Joint ADM CEC QC	If IT Server equipment are found in a refrigerated warehouse, food store, restaurant, warehouse, or retail, then the score is 0.	1=good, 0=bad	na	na
QC_Exterior_Lighting_Score	Joint ADM CEC QC	If exterior lighting is found on the meter, but the survey site is only a part of a building, the score is set to 0	1=good, 0=bad	na	na
QC_Small_Site_But_Major_Exterior_Lighting_Score	Joint ADM CEC QC	If major exterior lighting is found, but the survey site is under 5,000 sqft, the score is set to zero.	1=good, 0=bad	na	na
QC_Minor_Cooking_Score	Joint ADM CEC QC	Restaurant must have minor cooking equipment or else score is 0 - recommend removing since all cooking equip at restaurant could be major	1=good, 0=bad	na	na
QC_Minor_Cooking_Gas_Score	Joint ADM CEC QC	If more than 75% of minor cooking equipment fuel is provided by gas, the score is 0.	1=good, 0=bad	na	na
QC_Major_Cooking_Score	Joint ADM CEC QC	Restaurant must have major cooking equipment or else score is 0	1=good, 0=bad	na	na
QC_Major_Cooking_Fuels_Add_Up_Score	Joint ADM CEC QC	Major cooking fuel percentages must add up to 100% or else score is 0	1=good, 0=bad	na	na
QC_Kitchen_Sqft_Score	Joint ADM CEC QC	kitchen must be at least 50 sqft, but smaller than entire survey site sqft, else score is zero	1=good, 0=bad	na	na
QC_Major_Cooking_Equip_Listed_But_No_Major_Cooking_Equip_Score	Joint ADM CEC QC	If major cooking equipment are identified, but the field site_cooking_major_equipment_1 is zero, then the score is 0	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Gas_Cooking_Service_Score	Joint ADM CEC QC	If gas cooking is identified, but the natural gas provider is not identified, then the score is 0	1=good, 0=bad	na	na
QC_Propane_Cooking_Service_Score	Joint ADM CEC QC	If propane cooking is identified, but the propane/fossil fuel tanks are not identified, then the score is 0	1=good, 0=bad	na	na
QC_Has_Refrigeration_Score	Joint ADM CEC QC	Food, Health Care, Lodging, Large Offices, Refrigerated Warehouses, Restaurants, Schools, Warehouses must have refrigeration, or else the score is 0	1=good, 0=bad	na	na
QC_Has_Walkin_Score	Joint ADM CEC QC	Food stores and restaurants must have walk-ins or else the score is 0	1=good, 0=bad	na	na
QC_Refrigerated_Space_Too_Big_Score	Joint ADM CEC QC	If refrigerated space is larger than total site sqft, the score is 0	1=good, 0=bad	na	na
QC_Tall_Building_Must_Have_Motors_Score	Joint ADM CEC QC	Buildings taller than three stories should have elevators, thus motors. If no motors identified for such buildings, score is 0	1=good, 0=bad	na	na
QC_Misc_Electric_Equip_Score	Joint ADM CEC QC	If no misc. electric equipment are found, score is 0	1=good, 0=bad	na	na
QC_Gas_Misc_Service_Score	Joint ADM CEC QC	If gas misc. equipment are identified, but the natural gas provider is not identified, then the score is 0	1=good, 0=bad	na	na
QC_Added_Found_Meters_Score	Joint ADM CEC QC	If additional meters are found that serve more than 5% of site, but surveyor did not request to add the meters, then the score is 0	1=good, 0=bad	na	na
QC_Removed_Excluded_Meters_Score	Joint ADM CEC QC	If some of the pre-filled meters in the tool are not present at the site, but surveyor did not request to remove the meters, then the score is 0	1=good, 0=bad	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Common_Area_Partial_Building_Score	Joint ADM CEC QC	If the spaces to be surveyed according to the flowchart are just the common area and property manager office, then the physical type must be a partial building and not a full building. If inconsistent, score is 0	1=good, 0=bad	na	na
QC_Common_Area_Tenants_Building_Score	Joint ADM CEC QC	If the spaces to be surveyed according to the flowchart are just the common area and property manager office, then there should be no tenants surveyed. If inconsistent, score is 0	1=good, 0=bad	na	na
QC_Sampled_With_Three_or_Fewer_Tenants_Score	Joint ADM CEC QC	If the meters are serving three or fewer businesses, then all businesses should be surveyed (no sampling). Therefore the surveyed sqft of all tenants should be within 20% of the building (20% to allow for measurement resolution and for common areas). If inconsistent, score is 0	1=good, 0=bad	na	na
QC_Table_3_and_5_NAICS_Match_Flag	Joint ADM CEC QC	If the initial NAICS provided by surveyor was changed in Table 5, this flag takes on value 1	1=watch, 0=normal	na	na
QC_NAICS_Not_Same_Flag	Joint ADM CEC QC	This flag takes on value of 1 if any of the NAICS codes provided for the site differ from each other.	1=watch, 0=normal	na	na
QC_Building_Type_Sameness_Flag	Joint ADM CEC QC	The flag is 0, but is a 1 if QC_Site_Building_Type_by_NAICS is not site_building_type_1	1=watch, 0=normal	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Tenants_Sqft_Flag	Joint ADM CEC QC	If the sqft from sampled tenants does not match the total building square feet within +/15%, this flag takes on a value of 1. Note that the flag will often be a 1 if tenants are sampled, since the sqft of sampled tenants may be a small fraction of building square feet. This is not a problem, but it's good to flag in case we need to review.	1=watch, 0=normal	na	na
QC_Number_of_Buildings_Flag	Joint ADM CEC QC	The flag is 0, but is a 1 if site_number_of_buildings_1 is greater than 1	1=watch, 0=normal	na	na
QC_Number_of_Buildings_for_Type_Flag	Joint ADM CEC QC	This flag takes on a value of 1 if a food store, restaurant, warehouse, or refrigerated warehouse has more than one building	1=watch, 0=normal	na	na
QC_N_Buildings_N_Partitions_Flag	Joint ADM CEC QC	This flag takes on a value of 1 if a site has multiple buildings but just one (or fewer) partitions. Note that one partition may be totally fine for multiple buildings, if they all have the same ventilation and fuel mix for HVAC.	1=watch, 0=normal	na	na
QC_Year_Established_Conistent_With_Renovation_Year_Flag	Joint ADM CEC QC	If they customer moved in after the earliest renovation, this flag takes on a 1. This is still a valid scenario, but just verify that the dates are correct.	1=watch, 0=normal	na	na
QC_Year_Established_Conistent_With_Addition_Year_Flag	Joint ADM CEC QC	If they customer moved in after the earliest addition, this flag takes on a 1. This is still a valid scenario, but just verify that the dates are correct.	1=watch, 0=normal	na	na

Data Field	Data Block	Description	Data Type	Units	Survey Form Prompt
QC_Small_Building_Has_Generation_Flag	Joint ADM CEC QC	If a building smaller than 5,000 sqft has solar panels, or a if a building smaller than 10,000 sqft has non-solar generation, this flag is set to 1	1=watch, 0=normal	na	na
QC_Max_Floors_Flag	Joint ADM CEC QC	If Warehouses or Restaurants have more than one floor, this flag is set to 1	1=watch, 0=normal	na	na
QC_IT_Server_Equip_Flag	Joint ADM CEC QC	Set to 1 if IT Server Equipment is found	1=watch, 0=normal	na	na
QC_Electric_Cooking_Fractions_Agree_Flag	Joint ADM CEC QC	If the electric fuel cooking fraction as determined by interview differs by 50% from the electric fuel cooking fraction as determined from surveyor inventory of equipment, this flag is set to 1	1=watch, 0=normal	na	na
QC_Gas_Cooking_Fractions_Agree_Flag	Joint ADM CEC QC	If the gas fuel cooking fraction as determined by interview differs by 50% from the gas fuel cooking fraction as determined from surveyor inventory of equipment, this flag is set to 1	1=watch, 0=normal	na	na
QC_Gas_Service_Electric_Cooking_Flag	Joint ADM CEC QC	If the site has gas service but the cooking is all-electric, this flag is set to 1	1=watch, 0=normal	na	na
QC_Odd_Site_For_Commercial_Frig_Flag	Joint ADM CEC QC	If small offices or warehouses have commercial refrigeration equipment, the flag is set to 1. All other building types are more likely to have some commercial refrigeration	1=watch, 0=normal	na	na
QC_Odd_Air_Compressor_Flag	Joint ADM CEC QC	If the building is a large office and they have air compressors, the flag is set to 1	1=watch, 0=normal	na	na