SUBSTATION SCOUT

# Site Scanner

37.957128, -121.745876

Report ID 93af7678-38c0-4a15-be3b-1cb775adb4b2  Created 2026-11-22T15:56:36.329Z

## 1 FRANCHISE UTILITY

## PACIFIC GAS & ELECTRIC CO. resolved

Determined by point-in-polygon match against a single EIA/HIFLD certified service area boundary.

**Also overlapping (wholesale/federal, not a retail franchise)**

- WAPA-- WESTERN AREA POWER ADMINISTRATION *[FEDERAL]*

| | |
|---|---|
| Ownership type | INVESTOR OWNED |
| Holding company | PACIFIC GAS & ELECTRIC CORPORATION |
| Control area | CISO |
| Customers | 5,604,453 |
| Data year | 2022 |

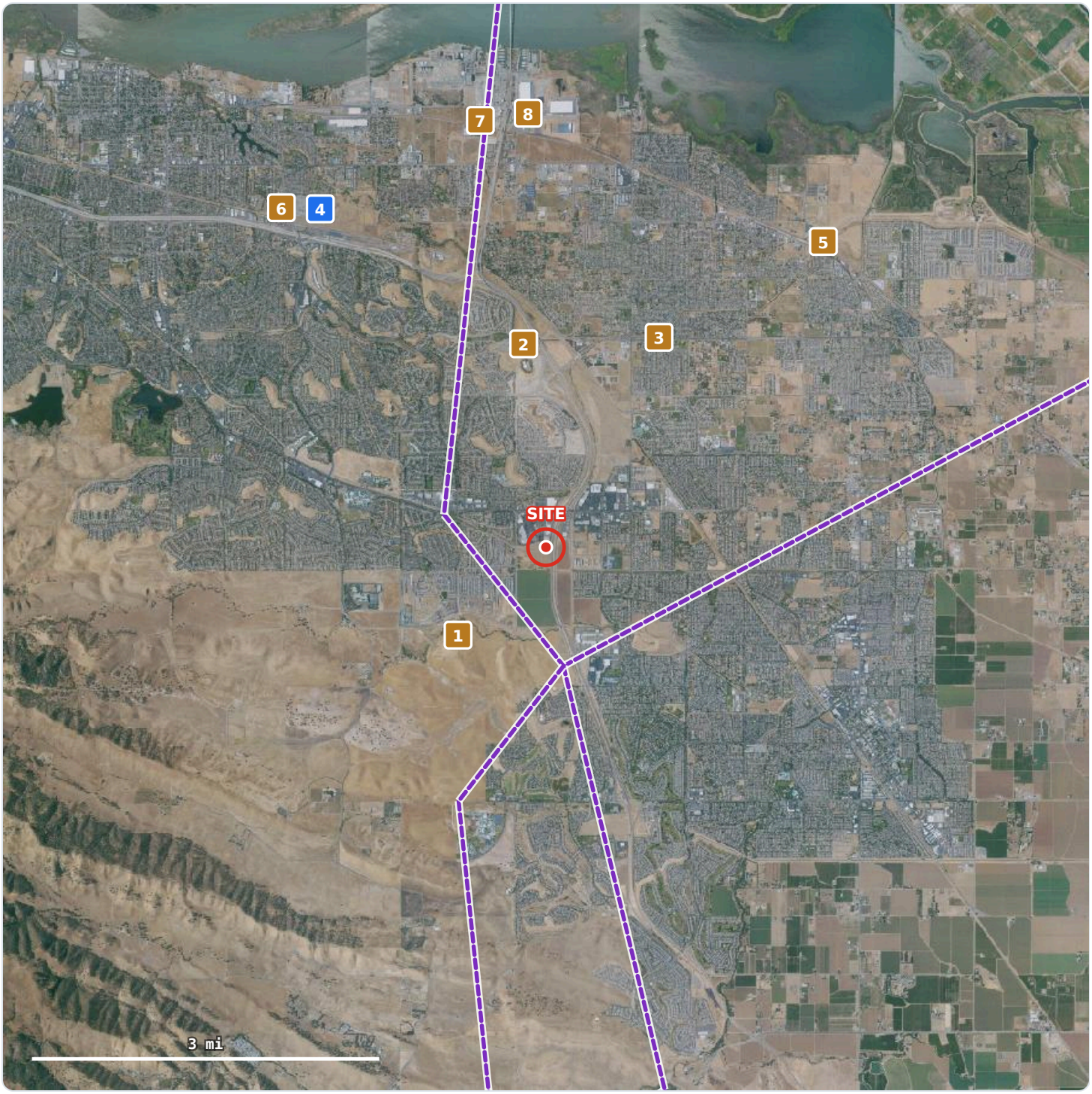
Source: HIFLD/EIA Electric Retail Service Territories (public ArcGIS mirror) · source date 2023-08-01
https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Electric_Retail_Service_Territories_HIFLD/FeatureServer/0

## 2 NEAREST HIGH-VOLTAGE INFRASTRUCTURE

| # | DISTANCE | VOLTAGE | LINES | NAME | FACILITY TYPE |
|---|---|---|---|---|---|
| 1 | **1.07** mi | 230 kV | 2 | LONE TREE *<br>ANTIOCH, CA | named terminal facility |
| 2 | **1.77** mi | 60 kV | 1 | CONTRA COSTA 4 *<br>ANTIOCH, CA | named terminal facility |
| 3 | **2.06** mi | 60 kV | 2 | CONTRA COSTA 3 *<br>OAKLEY, CA | named terminal facility |
| 4 | **3.51** mi | 230 kV | 11 | CONTRA COSTA<br>ANTIOCH, CA | utility substation |
| 5 | **3.57** mi | 66 kV | 2 | CONTRA COSTA *<br>OAKLEY, CA | named terminal facility |
| 6 | **3.72** mi | *not recorded* | *n/r* | *line tap point* *<br>PITTSBURG, CA | line tap point |

| # | DISTANCE | VOLTAGE | LINES | NAME | FACILITY TYPE |
|---|---|---|---|---|---|
| 7 | **3.73** mi | 60 kV | 1 | GWF 4 *<br>ANTIOCH, CA | named terminal facility |
| 8 | **3.75** mi | 60 kV | 1 | DU PONT *<br>OAKLEY, CA | named terminal facility |

n/r = not recorded in source data · search radius 10 miles




1 LONE TREE · 1.07 mi · 230 kV

2 CONTRA COSTA 4 · 1.77 mi · 60 kV

3 CONTRA COSTA 3 · 2.06 mi · 60 kV

4 CONTRA COSTA · 3.51 mi · 230 kV

5 CONTRA COSTA · 3.57 mi · 66 kV

6 unnamed record · 3.72 mi · kV n/r

7 GWF 4 · 3.73 mi · 60 kV

8 DU PONT · 3.75 mi · 60 kV

Intrastate gas pipeline

Aerial imagery: USDA NAIP imagery via USGS The National Map — Public domain (USDA/USGS), retrieved 2026-10-22. Gas pipelines: EIA Natural Gas Interstate and Intrastate Pipelines (Esri Living Atlas copy), layer last edited 2025-12-04 — mapped approximations at varying scale, not surveyed routes and not a locate. 2 of 2 listed gas facilities fall outside this frame; the gas map in the natural gas section shows them. Marker positions are the source dataset's own coordinates; where records coincide, markers are separated slightly so each stays visible. Distances in the

*** Not necessarily an interconnection point.**

- **named terminal facility** — Named facility with only 2 line connections. May be a distribution substation or a dedicated customer service rather than a transmission-level interconnection point.
- **line tap point** — Named TAP<id> in the source data — a junction on a transmission line rather than a load-serving substation. Not normally an interconnection point.

- Distances are straight-line (haversine), **not** engineering route length.
- HIFLD does not record substation ownership. Proximity does not imply availability — a nearby facility may be a customer-owned on-site substation serving an adjacent property.
- 1 of 8 substations listed have no voltage recorded in the source dataset. Absence of a voltage is not evidence of low voltage.
- 1 of 8 carry a placeholder name in the source dataset.

Source: HIFLD Electric Substations (Oregon Explorer / OSU 2022 mirror)
`https://services1.arcgis.com/CD5mKowwN6nIaqd8/arcgis/rest/services/project_renewable_us_substations_2022/FeatureServer/10`

## ALSO MAPPED IN OPENSTREETMAP

Substations at 69 kV and up within 10 miles that OpenStreetMap maps and the HIFLD dataset above does not. These are often yards built since HIFLD's snapshot. A yard is listed only when no HIFLD point lies inside its mapped outline or within 500 feet of it (0.3 mile for a yard mapped only as a point), and none of the same name within a mile; the list above is unchanged by this table.

| # | DISTANCE | VOLTAGE (KV) | NAME | OPERATOR, AS TAGGED | TYPE, AS TAGGED |
|---|---|---|---|---|---|
| 1 | 8.69 mi | 115 | *unnamed*<br>way 1240704364 | *n/r* | transition |
| 2 | 9.50 mi | 115 | *unnamed*<br>way 1240697974 | *n/r* | transition |
| 3 | 9.60 mi | 200 | Pittsburg Converter Station<br>way 292295991 | *n/r* | converter |
| 4 | 9.87 mi | 230 | *unnamed*<br>way 1259168924 | *n/r* | transition |

n/r = not tagged in OpenStreetMap · distance to the mapped outline

- OpenStreetMap is mapped by volunteers. Coverage varies by area, and name, operator, voltage and type are as tagged, not verified. It records no owner and no in-service date.
- "Industrial" usually marks a customer-owned yard. Proximity does not imply availability.

Source: OpenStreetMap, © OpenStreetMap contributors (ODbL 1.0) · data as of 2026-11-20
`https://www.openstreetmap.org/copyright`

Mapped gas transmission pipelines and pipeline facilities near this point, from public EIA and HIFLD datasets. The map below is scaled to the gas network; pipelines within its frame are also drawn on the site map in section 2.

### Gas distribution company

## PACIFIC GAS & ELECTRIC CO mapped territory

Gas local distribution company whose mapped service territory contains this point · investor-owned · 4,453,482 customers as recorded. Polygons in this layer are often county- or town-shaped approximations.

### Transmission pipelines within 25 miles

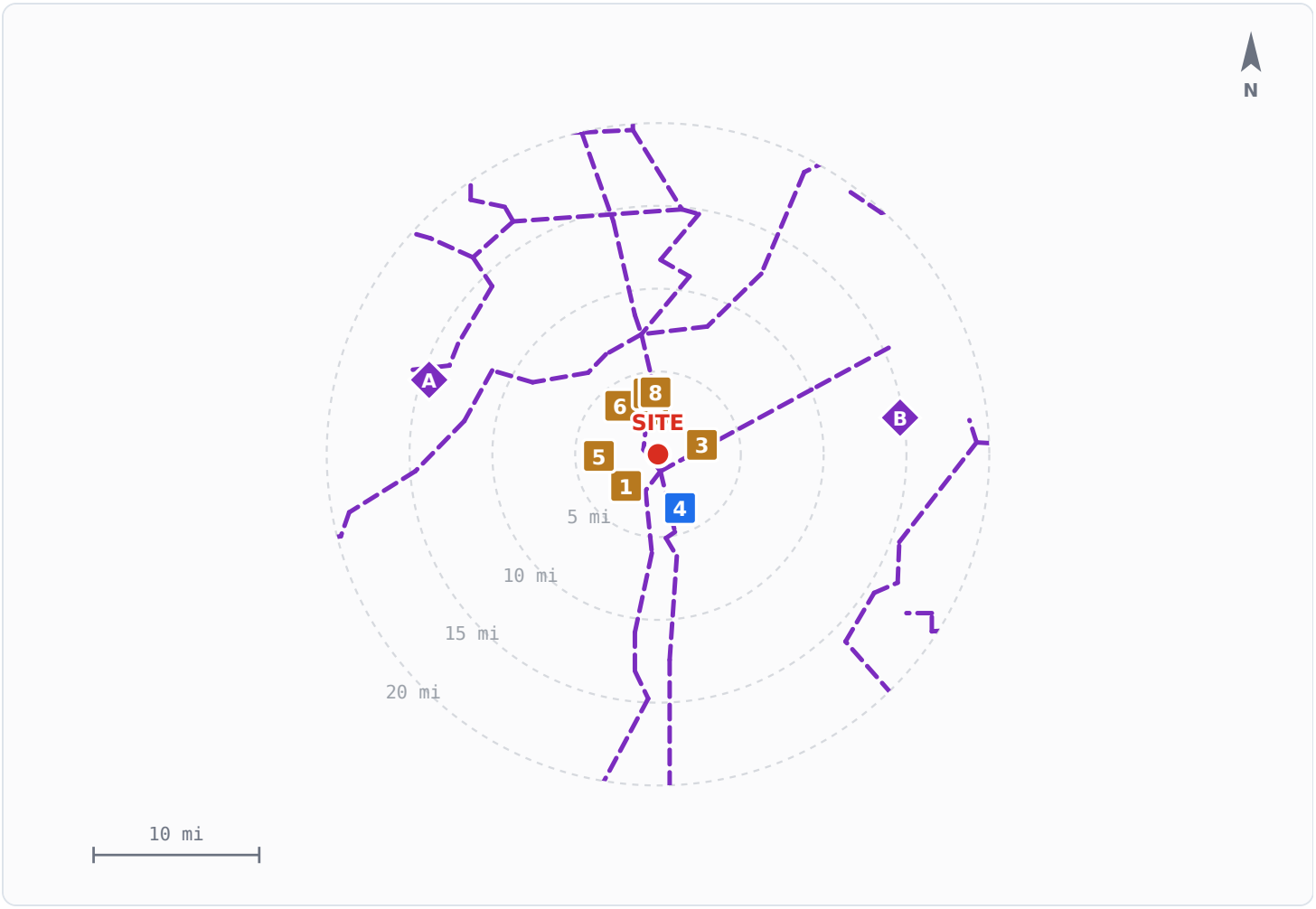
| DISTANCE | OPERATOR (AS RECORDED) | TYPE | STATUS |
|---|---|---|---|
| **0.52** mi | California Gas Transmission Co | Intrastate | Operating |

One row per operator and type: the nearest point of that operator's mapped line. 1 within 25 mi.

### Pipeline facilities within 15 miles

| MAP | DISTANCE | FACILITY | NAME | OPERATOR | SOURCE DATE |
|---|---|---|---|---|---|
| A | **14.53** mi | Storage field | LOS MEDANOS<br>PITTSBURG, CA | PACIFIC GAS AND ELECTRIC COMPANY<br>depleted field | 2018-12-01 |
| B | **14.78** mi | Storage field | MCDONALD ISLAND<br>MCDONALD ISLAND, CA | PACIFIC GAS AND ELECTRIC COMPANY<br>depleted field | 2018-12-01 |

Within 15 mi, nearest first. Letters match the gas map below. No compressor station within 15 mi; the nearest recorded is BETHANY, 48 mi away.




Intrastate gas pipeline  Gas facility (natural gas section)

Pipelines: EIA Natural Gas Interstate and Intrastate Pipelines (Esri Living Atlas copy), layer last edited 2025-12-04. Facilities: HIFLD Open snapshot. Lines are mapped approximations at varying scale, not surveyed routes and not a locate. Lettered diamonds match the facility table above; numbered squares are the section 2 substations. Distances in the tables are measured, not scaled off this drawing.

- Distances are straight-line to the mapped line or point. EIA compiles the pipeline layer from many sources at varying scale and accuracy: it is not a surveyed route and not a locate. Call 811 before any ground disturbance.
- **Proximity to a transmission pipeline is not access to gas.** Taking service needs a tap or delivery point, capacity on the line and the operator's agreement. None of these is recorded in these datasets, and the pipeline layer records no diameter, pressure or capacity.
- Facility records are a HIFLD Open snapshot (source dates on the rows above: 2018). Facilities built or retired since are not reflected.
- Receipt/delivery points are where gas enters or leaves an interstate pipeline. They are not retail service points, and many carry duplicate records at one location.

Sources: EIA Natural Gas Interstate and Intrastate Pipelines (Esri Living Atlas copy) · layer last edited 2025-12-04; HIFLD Natural Gas Compressor Stations (2021 HIFLD Open mirror) and companion HIFLD layers (see section 7).
`https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Natural_Gas_Interstate_and_Intrastate_Pipelines_1/FeatureServer/0`

## 4 SITE CONTEXT

WATERSHED

### San Joaquin Delta

HUC-8 18040003

Source: USGS Watershed Boundary Dataset (WBD) · retrieved 2026-09-22
`https://hydro.nationalmap.gov/arcgis/rest/services/wbd/MapServer/4`

FEMA FLOOD ZONE

### Zone X not in SFHA

AREA OF MINIMAL FLOOD HAZARD
Outside the 0.2% annual chance floodplain (minimal hazard)
FIRM panel 06013C
Parcel centroid only — a single point, not the whole site.

Source: FEMA National Flood Hazard Layer (NFHL) · retrieved 2026-09-22
`https://hazards.fema.gov/arcgis/rest/services/public/NFHL/MapServer/28`

LOCAL MORATORIA

### None recorded for these jurisdictions

Census places this point in Contra Costa County · East Contra Costa CCD · Brentwood city. This dataset tracks moratoria only — not project proposals, planning-commission reviews, or permanent zoning rules — so active local debate over a specific project will not appear here.
2 other instruments recorded within 25 miles (1 active or extended), measured to jurisdiction centroids.
Recorded is not the same as applicable, and the dataset is a lower bound: an absence here is not evidence that no moratorium exists. Detail and scope caveats: Appendix B.

Source: Moratorium Data 2026 (Bommarito) — local moratorium inventory · current through 2026-09-23
`https://github.com/mjbommar/moratorium-data-2026`

## 5 DATA COMPLETENESS

6 of 6 expected fields resolved

Resolved: location, franchiseUtility, nearestSubstation, substationVoltage, watershed, floodZone

## 6 WHAT THIS REPORT DOES NOT TELL YOU

- Available load capacity at any substation. No utility publishes this for large loads; this report is a screening aid, not a system impact study.
- Interconnection cost or timeline for a specific project.
- Zoning approval likelihood.
- Interconnection queue activity at these substations. None of them could be checked: each is either unnamed in the source dataset or in a county with no PJM, ERCOT, BPA, APS, DUKE, LGE-KU, MISO, SOCO, SPP or TVA filings.
- Planned transmission work at these substations. The expansion tracker covers PJM planning materials and ERCOT's transmission project tracking workbook, and no substation above matched one of its entries.
- Substations built or planned since the substation dataset was compiled.
- Whether a local moratorium covers this site. Instruments recorded for the jurisdictions containing the point are listed in Appendix B, but their scope is set by their own text, which this report does not read.
- The utility's terms for large customers. No large-load tariff is on record for the named utility; the records cover a hand-verified set of utilities, not all of them, so this is not evidence that none exists.
- Whether natural gas service is available here, or the capacity, pressure, tap or lateral cost of any pipeline listed. The gas datasets record where facilities are mapped, not what they can deliver.
- Transmission line proximity — substations only.
- Whether a substation is physically accessible, expandable, or has available bay positions.

This report is built to **rule out sites with no nearby transmission infrastructure**. A site with nothing in range is a defensible elimination. The reverse does not hold: proximity to the facilities listed above is not access to power, and nothing here establishes that a connection is available, affordable or achievable on any schedule.

## 7 SOURCES AND DATA VINTAGE

SUBSTATIONS

### HIFLD Electric Substations (Oregon Explorer / OSU 2022 mirror)

`https://services1.arcgis.com/CD5mKowwN6nIaqd8/arcgis/rest/services/project_renewable_us_substations_2022/FeatureServer/10`

Publisher vintage 2022-06-03 · ingested 2026-08-30 · 78,373 records · None (Public Use) — HIFLD Open

FRANCHISE TERRITORIES

### HIFLD/EIA Electric Retail Service Territories (public ArcGIS mirror)

`https://services3.arcgis.com/OYP7N6mAJJCyH6hd/arcgis/rest/services/Electric_Retail_Service_Territories_HIFLD/FeatureServer/0`

Publisher vintage 2023-08-01 · ingested 2026-08-30 · 2,845 records · HIFLD Open / EIA-861 derived (public-use US Government data)

WATERSHED

### USGS Watershed Boundary Dataset (WBD)

`https://hydro.nationalmap.gov/arcgis/rest/services/wbd/MapServer/4`

Retrieved 2026-09-22 · Public domain (USGS/USDA-NRCS)

FLOOD HAZARD

### FEMA National Flood Hazard Layer (NFHL)

`https://hazards.fema.gov/arcgis/rest/services/public/NFHL/MapServer/28`

Retrieved 2026-09-22 · Public domain (FEMA)

LOCAL MORATORIA

### Moratorium Data 2026 (Bommarito) — local moratorium inventory

`https://github.com/mjbommar/moratorium-data-2026`

Publisher vintage 2026-09-23 (commit dbaab04d84f8) · ingested 2026-10-04 · 1,291 records · CC-BY-4.0 (data) — attribution: Bommarito, Michael J. (2026), Moratorium Nation

JURISDICTIONS

### US Census Bureau Geocoding Services — geographies by coordinates

`https://geocoding.geo.census.gov/geocoder/geographies/coordinates`

Retrieved 2026-10-22 · Public domain (US Government work)

ALSO MAPPED IN OPENSTREETMAP

### OpenStreetMap substations (power=substation), © OpenStreetMap contributors

`https://www.openstreetmap.org/copyright`

OSM data as of 2026-11-20 · built 2026-11-21 · Open Database License 1.0. The substation layer derived from it (OSM yards at 69 kV and up with no HIFLD point at or near their outline) is available under the same license on request.

GAS PIPELINES

### EIA Natural Gas Interstate and Intrastate Pipelines (Esri Living Atlas copy)

`https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Natural_Gas_Interstate_and_Intrastate_Pipelines_1/FeatureServer/0`

Publisher vintage 2025-12-04 · ingested 2026-10-16 · 32,850 records · Public domain (US Government work — U.S. Energy Information Administration)

GAS COMPRESSOR STATIONS

### HIFLD Natural Gas Compressor Stations (2021 HIFLD Open mirror)

`https://services5.arcgis.com/HDRa0B57OVrv2E1q/arcgis/rest/services/Natural_Gas_Compressor_Stations/FeatureServer/0`

Publisher vintage 2020-05-07 · ingested 2026-10-16 · 1,382 records · None (Public Use) — HIFLD Open

GAS RECEIPT/DELIVERY POINTS

### HIFLD Natural Gas Receipt/Delivery Points (2021 HIFLD Open mirror)

`https://services5.arcgis.com/HDRa0B57OVrv2E1q/arcgis/rest/services/Natural_Gas_Receipt_Delivery_Points/FeatureServer/0`

Publisher vintage 2016-01-15 · ingested 2026-10-16 · 9,476 records · None (Public Use) — HIFLD Open

GAS STORAGE FACILITIES

### HIFLD Natural Gas Storage Facilities (2021 HIFLD Open mirror)

`https://services5.arcgis.com/HDRa0B57OVrv2E1q/arcgis/rest/services/Natural_Gas_Storage_Facilities/FeatureServer/0`

Publisher vintage 2018-12-01 · ingested 2026-10-16 · 416 records · None (Public Use) — HIFLD Open

GAS PROCESSING PLANTS

### HIFLD Natural Gas Processing Plants (2021 HIFLD Open mirror)

`https://services5.arcgis.com/HDRa0B57OVrv2E1q/arcgis/rest/services/Natural_Gas_Processing_Plants/FeatureServer/0`

Publisher vintage 2019-01-01 · ingested 2026-10-16 · 670 records · None (Public Use) — HIFLD Open

GAS DISTRIBUTION TERRITORIES

### HIFLD Natural Gas Local Distribution Company Service Territories (2021 HIFLD Open mirror)

`https://services5.arcgis.com/HDRa0B57OVrv2E1q/arcgis/rest/services/Natural_Gas_Local_Distribution_Company_Service_Territories/FeatureServer/0`

Publisher vintage 2017-12-31 · ingested 2026-10-16 · 1,290 records · None (Public Use) — HIFLD Open

LARGE-LOAD TARIFFS

### Substation Scout large-load tariff records (state commission filings)

`https://substationscout.com/large-load-tariffs/`

8 records · documents retrieved 2026-10-20 · exported 2026-10-22

EXPANSION TRACKER (ERCOT)

### ERCOT, Transmission Project and Information Tracking (TPIT), compiled from Transmission Service Provider submissions

`https://substationscout.com/substation-tracker/ercot/`

Data as of 2026-10-01 · 39 releases read · retrieved 2026-10-26 · exported 2026-11-21

EXPANSION TRACKER

### PJM Interconnection, L.L.C. — TEAC and Sub-Regional RTEP Committee meeting materials, pjm.com

`https://substationscout.com/substation-tracker/`

Documents dated 2024-10-08 to 2026-11-13 · 664 documents · exported 2026-11-21

**Screening aid, not an engineering study.** This report helps prioritize sites before committing to engineering due diligence. It is not a system impact study and carries no warranty. Underlying public datasets are published on their own schedules and may have changed since the retrieval dates shown above. Every figure in this report is reproducible from the cited sources; nothing is estimated, modelled, or generated.

## B APPENDIX — LOCAL MORATORIA

Local moratorium instruments — temporary pauses on accepting or approving certain development, most often data centers — as recorded in a third-party research dataset. Rows are reproduced as published; this report does not read the instruments themselves. This dataset tracks moratoria only — not project proposals, planning-commission reviews, or permanent zoning rules — so active local debate over a specific project will not appear here.

> **A recorded instrument is not a determination that this site is covered.** Which applications, zoning districts and sectors an instrument reaches — and whether a county instrument applies inside incorporated municipalities — is set by its text. Confirm with the jurisdiction before relying on any row.

### Jurisdictions containing this point

The dataset records no instrument for **Contra Costa County**, **East Contra Costa CCD**, **Brentwood city**. That is a statement about moratoria only: a proposal under review or a planning-commission decision in these jurisdictions would not appear in it.

The publisher states its counts are lower bounds — small townships that do not post minutes online are the known gap — and that anything after 2026-09-23 is not included.

### Within 25 miles

| JURISDICTION | TYPE | STATUS | SECTORS | ADOPTED | ENDS | CENTROID |
|---|---|---|---|---|---|---|
| Oakley, CA | City | extended | data centers | 2026-04-14 | 2027-04-14 | 3.3 mi |
| Solano County, CA | County | replaced | battery storage | 2024-01-23 | *n/r* | 20.5 mi |

Distance is to the jurisdiction's centroid, not its boundary — a large county can begin much closer than the figure shown.

### State-level actions — CA

| ACTION | STATUS | MECHANISM | PROVISIONS AS RECORDED |
|---|---|---|---|
| **SB57 (2025-2026)** | enacted | other | Requires CPUC report to the Legislature by 2027-01-01 on whether new data center loads shift electrical costs to other customers; repeals 2031-01-01. |

13 state-policy actions tracked for CA in total; only those the publisher records as enacted or in force are listed. Where the publisher's legal-effect field reads “unknown”, the current effect of an enacted measure has not been checked by the publisher, and it is omitted here rather than guessed. 33 local instruments recorded statewide.

Source: Moratorium Data 2026 (Bommarito) — local moratorium inventory · current through 2026-09-23 · commit dbaab04d84f8 · 1,291 instruments · CC-BY-4.0 (data) — attribution: Bommarito, Michael J. (2026), Moratorium Nation
`https://github.com/mjbommar/moratorium-data-2026`

- Each instrument is tied to a Census county, county subdivision or incorporated place only when the Census places the publisher's own centroid inside a geography of the same name and kind. 70 of 1,291 rows could not be tied this way and do not appear in this appendix.

- The publisher compiles the dataset from municipal records and news coverage with AI-assisted research and documents its known gaps in the repository.

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