

Webinar: Reporting Updates for the Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment

FEBRUARY 22, 2023



Today's Webinar

- All participants will be muted during the presentation
- During the Q&A session, use the “Raise Hand” function in the GoToWebinar toolbar as shown by the hand icon
- When staff calls your name, please “Unmute” yourself by clicking the red microphone icon and proceed to introduce yourself
- If we are not able to respond to your question, or if you have additional questions, please follow up after the webinar
- The slides and a video recording of this presentation will be posted on our webpage: <https://ww2.arb.ca.gov/our-work/programs/elect-tandd/meetings-workshops>



Purpose

- The Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment (Regulation) became effective January 1, 2022, replacing the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear
- Today's webinar will include:
 - Summary of revised regulatory concepts, including new terminology used in the revised Data Year 2022-2024 Reporting Form
 - Live demonstration of the revised reporting form
 - Clarify common reporting errors
 - Process to amend prior year reports
 - Question & Answers session

Reportable Gases and Equipment

- Covered Insulating Gas means an insulating gas with a Global Warming Potential (GWP) greater than one
- GWP measures the potency of a GHG relative to carbon dioxide (SF₆: 22,800)
- Report in pounds (lb) and Metric Tons of Carbon Dioxide Equivalent (MTCO₂e)
- Only report Covered Insulating Gas(es) within a gas blend (section 95354(m))
 - Example: 100 pounds of a gas blend with 5% Covered Insulating Gas is emitted. Only report the 5 pounds of Covered Insulating Gas.
- Gas-Insulated Equipment (GIE) instead of Gas-Insulated Switchgear (GIS)
 - Change does not affect the type of electrical power equipment covered
 - GIE includes *all* elec. power equip. providing insulating/interrupting functions regardless of insulating medium. Entities only report GIE using Covered Insulating Gas.

Covered Insulating Gas at Activation

- For GIE Acquired and activated after 12/31/21, Covered Insulating Gas at Activation (CIGAA) replaces Nameplate Capacity to avoid future issues with Nameplate Capacity inaccuracies
- CIGAA is calculated by summing Covered Insulating Gas:
 - In GIE when Acquired (section 95354(a)(10)(A)2.)
 - Added to GIE during activation process (section 95354(a)(10)(A)3.b.)
- For GIE Acquired on or before 12/31/21, or Acquired after but not yet activated, CIGAA equals Nameplate Capacity

Average System Capacity

- Average System Capacity is the average amount of a Covered Insulating Gas within Active GIE over a Data Year (pounds)
 - Calculated using equation in section 95353(b):

$$C_{avg,j,i} = \sum_k^n \frac{(d_{k,j} * C_{k,j})}{D_i}$$

- Sum of each Active GIE device's CIGAA ($C_{k,j}$) prorated by the number of days ($d_{k,j}$) the device was active during the Data Year
- Convert "Average System Capacity" to MTCO₂e to get "Average CO₂e Capacity"

Emissions Limit

$$\text{Emissions Limit} = \frac{AEF}{100} * (\text{Average CO}_2\text{e capacity} + EAC_{\leq 10})$$

- AEF (annual emission factor) is based on GIE Owner's Average CO₂e Capacity
- Smaller-capacity GIE Owners (<10,000 MTCO₂e) have a larger AEF
- EAC_{≤10} is the GIE Owner's Early Action Credit, up to 10% of 2021 Average CO₂e Capacity
- Minimum emissions limit is 50 MTCO₂e

Year	AEF for GIE Owners with Average CO ₂ e Capacity ≥10,000 MTCO ₂ e	AEF for Other GIE Owners
2021-2034	1.0	2.0
2035 and beyond	0.95	1.9

GIE Device Status Changes

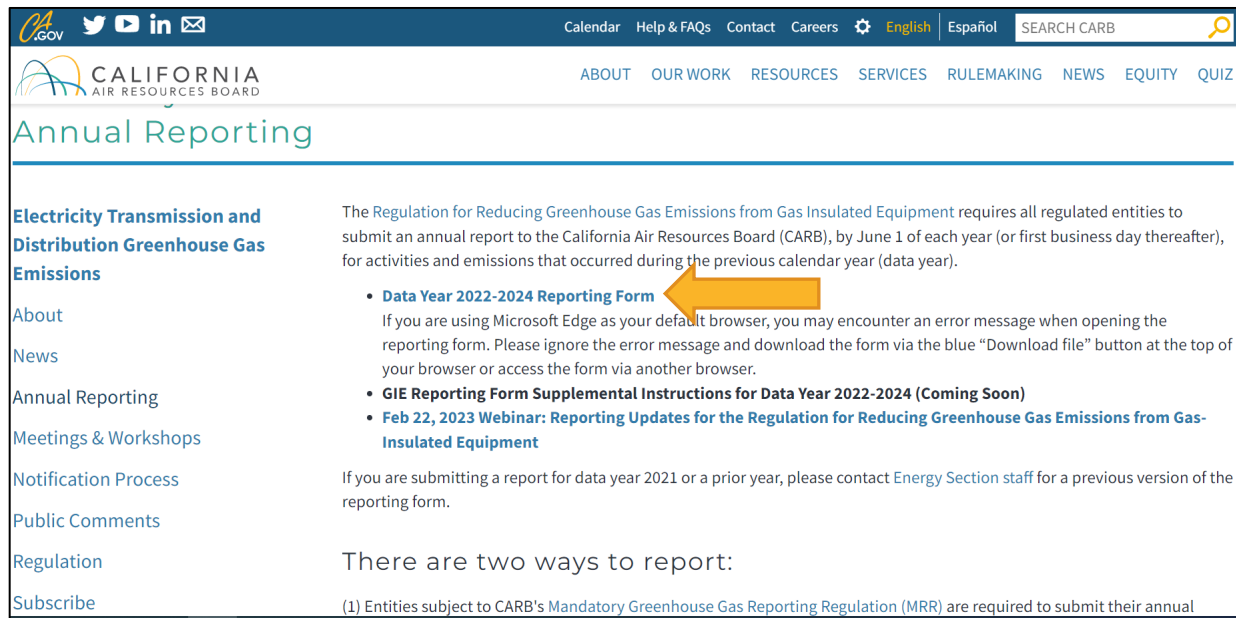
- Previously Active GIE are considered “removed from regular use” when gas is extracted, which must be within one year of the GIE device being:
 - Inactive for five consecutive years, *or*
 - Inactive for less than five consecutive years and removed from inventory, *or*
 - Taken out of active service and removed from inventory
- GIE added to/removed from inventory without being taken out of active service are considered “transferred while in use”

Nameplate Capacity Adjustment

- Optional process allows GIE owners to conduct Nameplate Capacity revisions
- Step 1: [Notify CARB](#) with list of GIE that will undergo adjustment process
- Step 2: Follow process in section 95357.2(c) for applicable GIE
- Step 3: Update GIE device labeling per process in section 95357.2(d)
- Step 4: Report adjusted nameplate value starting in the Data Year in which the measurement was performed (see section 95357.2(e) for detail)
- Follow process only once per device, unless there is a change in physical capacity after the initial adjustment (section 95357.2(a)(2))
- There is no time limit for making Nameplate Capacity adjustments

Accessing the Reporting Form

- The Data Year 2022-2024 Reporting Form is available for download via our webpage or Cal e-GGRT
- Reporting instructions will be available soon



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Annual Reporting

Electricity Transmission and Distribution Greenhouse Gas Emissions

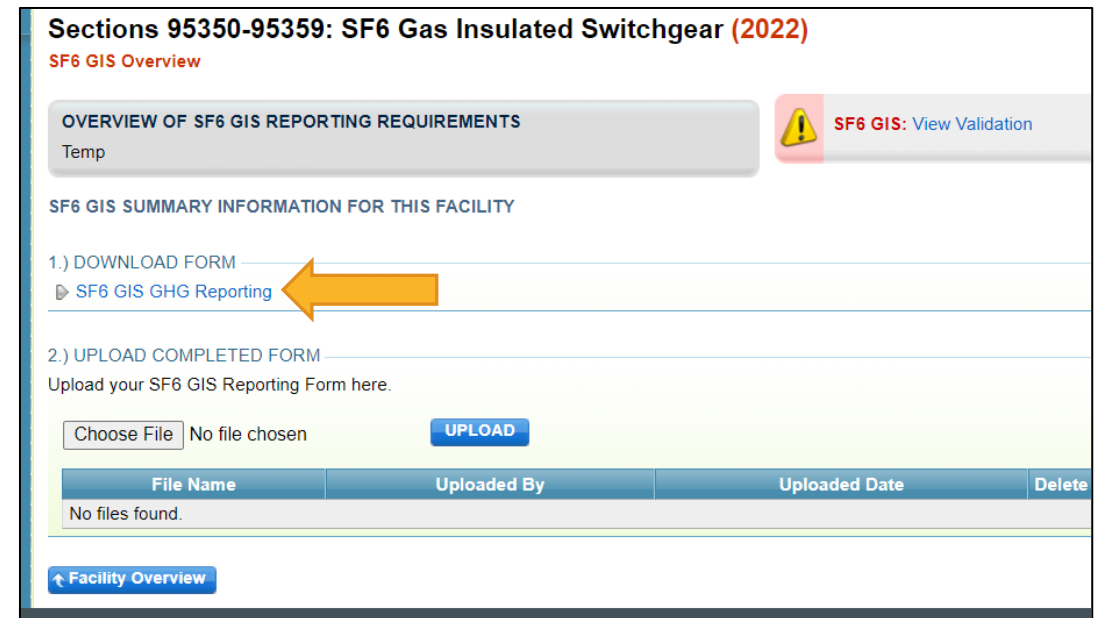
The Regulation for Reducing Greenhouse Gas Emissions from Gas Insulated Equipment requires all regulated entities to submit an annual report to the California Air Resources Board (CARB), by June 1 of each year (or first business day thereafter), for activities and emissions that occurred during the previous calendar year (data year).

- **Data Year 2022-2024 Reporting Form** ←
- If you are using Microsoft Edge as your default browser, you may encounter an error message when opening the reporting form. Please ignore the error message and download the form via the blue "Download file" button at the top of your browser or access the form via another browser.
- **GIE Reporting Form Supplemental Instructions for Data Year 2022-2024 (Coming Soon)**
- **Feb 22, 2023 Webinar: Reporting Updates for the Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment**

If you are submitting a report for data year 2021 or a prior year, please contact Energy Section staff for a previous version of the reporting form.

There are two ways to report:

(1) Entities subject to CARB's Mandatory Greenhouse Gas Reporting Regulation (MRR) are required to submit their annual



Sections 95350-95359: SF6 Gas Insulated Switchgear (2022)

SF6 GIS Overview

OVERVIEW OF SF6 GIS REPORTING REQUIREMENTS
Temp

SF6 GIS: View Validation

SF6 GIS SUMMARY INFORMATION FOR THIS FACILITY

1.) DOWNLOAD FORM
SF6 GIS GHG Reporting ←

2.) UPLOAD COMPLETED FORM
Upload your SF6 GIS Reporting Form here.

Choose File | No file chosen | **UPLOAD**

File Name	Uploaded By	Uploaded Date	Delete
No files found.			

Facility Overview

Reporting Form: Major Changes (1)

- Enter Covered Insulating Gas(es) and Data Year on Facility Info tab first
- Separate tabs for Hermetically Sealed GIE and Non-Hermetically Sealed GIE:
 - Drop-down menu for Equipment Type
 - Enter details of joint ownership, if applicable
 - Additional details required for GIE Acquired after 12/31/21
 - Additional operational status details

Facility Information

Enter data for all applicable fields. If a field does not apply, leave it blank. **Enter a data year and at least one covered insulating gas.**

Today's date 2/17/2023

Data Year:

Which covered insulating gases were present in GIE, gas containers, and/or gas carts during the data year?

Covered Insulating Gas	Covered Insulating Gas' GWP
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

GIE Owner's Name:

ARB ID (if assigned):

Telephone Number:

Addresses of GIE Owner's Headquarters (not required if submitting through Cal e-GGRT)

Physical Address

Street:

City:

State:

ZIP Code:

Mailing Address

Street:

City:

State:

Reporting Form: Major Changes (2)

- Gas Containers and Carts tab: Includes new details (e.g., Vessel Type, whether owned by/stored on GIE Owner's property, gas type, and amount of gas in the vessel at the beginning of the year)
- New tab for CARB-Approved Emergency Event Exemptions, if applicable
- New tab for System Capacity, Emissions, and Emissions Limit info
 - Includes all inputs to Emissions and Emissions Limit calculations
- New tab for Nameplate Capacity Adjustments, if applicable
- No longer report: Container size and location, transfers in/out of GIE *except* at activation/retirement

Data Year 2022-2024 Reporting Form Demonstration

Submitting the Reporting Form

- Entities subject to CARB's Mandatory Greenhouse Gas Reporting Regulation must submit annual reports using Cal e-GGRT:
 - Upload the MS Excel spreadsheet, generate the report, and certify
- Cal e-GGRT has built-in data validation checks to flag potential issues
 - Some flags may prevent report submission if the issue is not corrected
 - Allocate sufficient time to work with this feature prior to the June 1 deadline
- Other entities are encouraged to report via Cal e-GGRT but may email the spreadsheet and attestation statement to energy@arb.ca.gov

Important Clarifications: Correcting Common Mistakes

- Average System Capacity:
 - Does not include inactive GIE or Hermetically Sealed GIE
 - The denominator in the equation, D_i , represents number of days in the year, not the total number of GIE
- All Containers and Carts, including those not owned by/stored on GIE Owner's property and those that are empty, must be reported
- All GIE owned for at least one day during the year, regardless of operational status, need to be reported
- Only report a GIE device as Hermetically Sealed if it meets Reg. definition
- For GIE "removed from regular use," include CIGAA and gas recovered in Annual Emissions calculation (see section 95354.1(a))

Amending Annual Reports

- When an error is discovered:
 - Notify CARB staff ASAP
 - Send staff a revised report for review
 - CARB staff will unlock the GIE Owner's Cal e-GGRT account so the report can be officially re-submitted and re-certified
- “[e]ach day or portion thereof that any report [...] contains an incomplete, untrue or inaccurate data field [...] shall constitute a single, separate violation of this subarticle.”
- Records must be retained for a minimum of:
 - Five years if generated on January 1, 2022 or later
 - Three years if generated prior to this date

Q&A and More Information

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Thank you

