

# **Reporting by Electricity Importers**

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August 26, 2011

**CALIFORNIA AIR RESOURCES BOARD**

# MRR Design Principles-1

- Maintain accurate GHG emissions inventory
- Support C&T objective to reduce GHG emissions economy-wide at least cost
- To maintain integrity of the cap— “a ton is a ton”—provide for
  - Sector neutrality
  - Jurisdiction neutrality

## MRR Design Principles-2

Full accounting of all electricity and associated emissions:

$$\text{Total electricity} = \text{In-state generation} + \text{Out-of-state generation delivered and consumed in CA}$$

# MRR: AB 32 Requirements

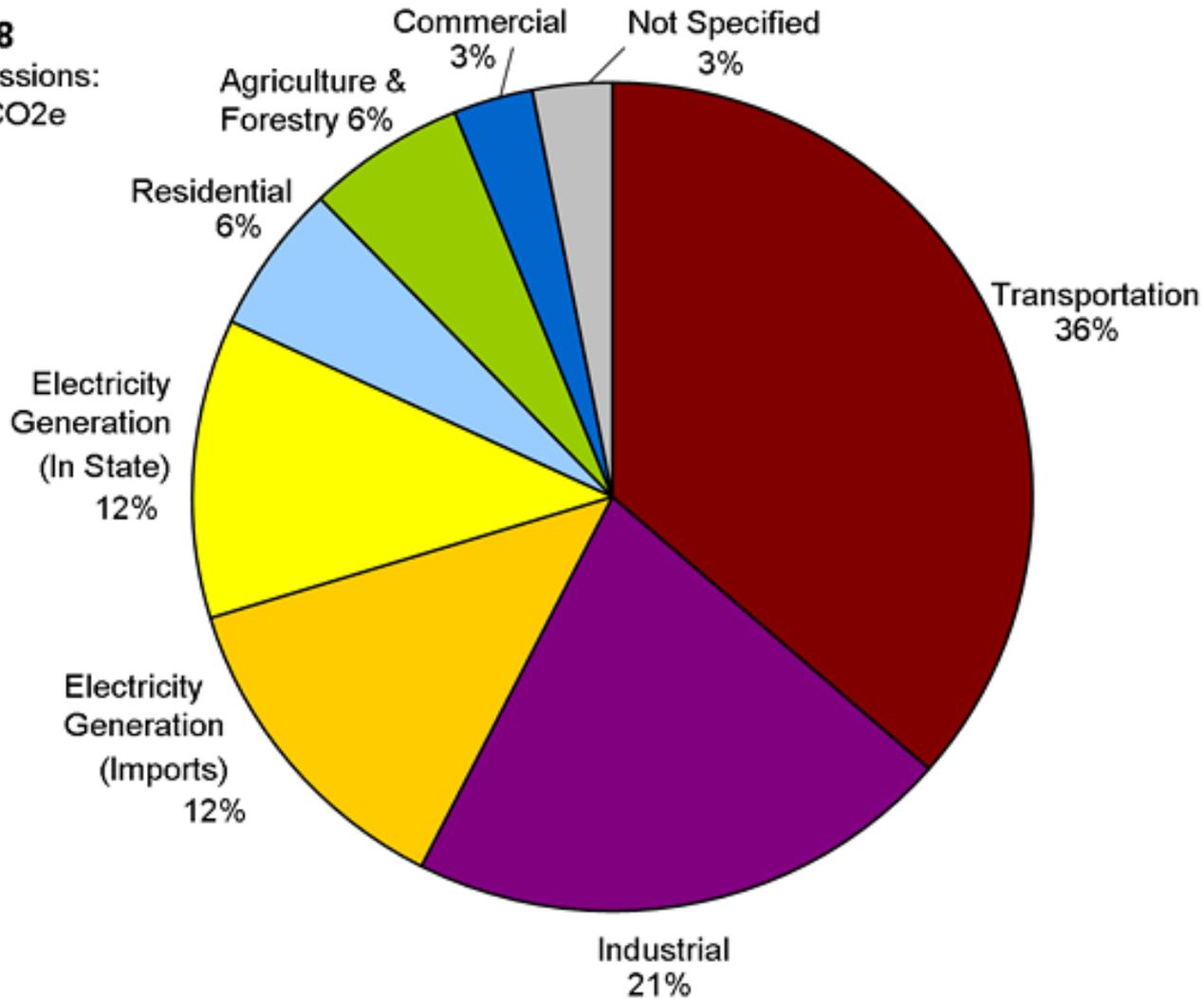
## CHAPTER 3. Definitions

### 38505. (m) "**Statewide greenhouse gas emissions**" means

- *the total annual emissions of greenhouse gases in the state,*
- *including all emissions of greenhouse gases from the generation of electricity delivered to and consumed in California, ....*

# GHG Inventory

**Year 2008**  
Total gross emissions:  
477.7 MMT CO<sub>2</sub>e



## **MRR Design Principles-3**

Design data reporting to enable future linkage:

- Common point of regulation
- Common definition of delivery
- Common data source

# **MRR Design Principles-3.1**

## **Common Point of Regulation**

For energy transmitted across BAs,  
first deliverer means

- last PSE on the physical path segment that crosses a state boundary
- just before the final point of delivery.

# **MRR Design Principles-3.2**

## **Common Definition of Delivery**

Consistent for all first deliverers and all states with significant imports

- All deliveries must be reported to the state with the final POD, disaggregated by the first POR.
- Assures no double-counting.
- Assures neutrality between in-region and out-of-region electricity sources.

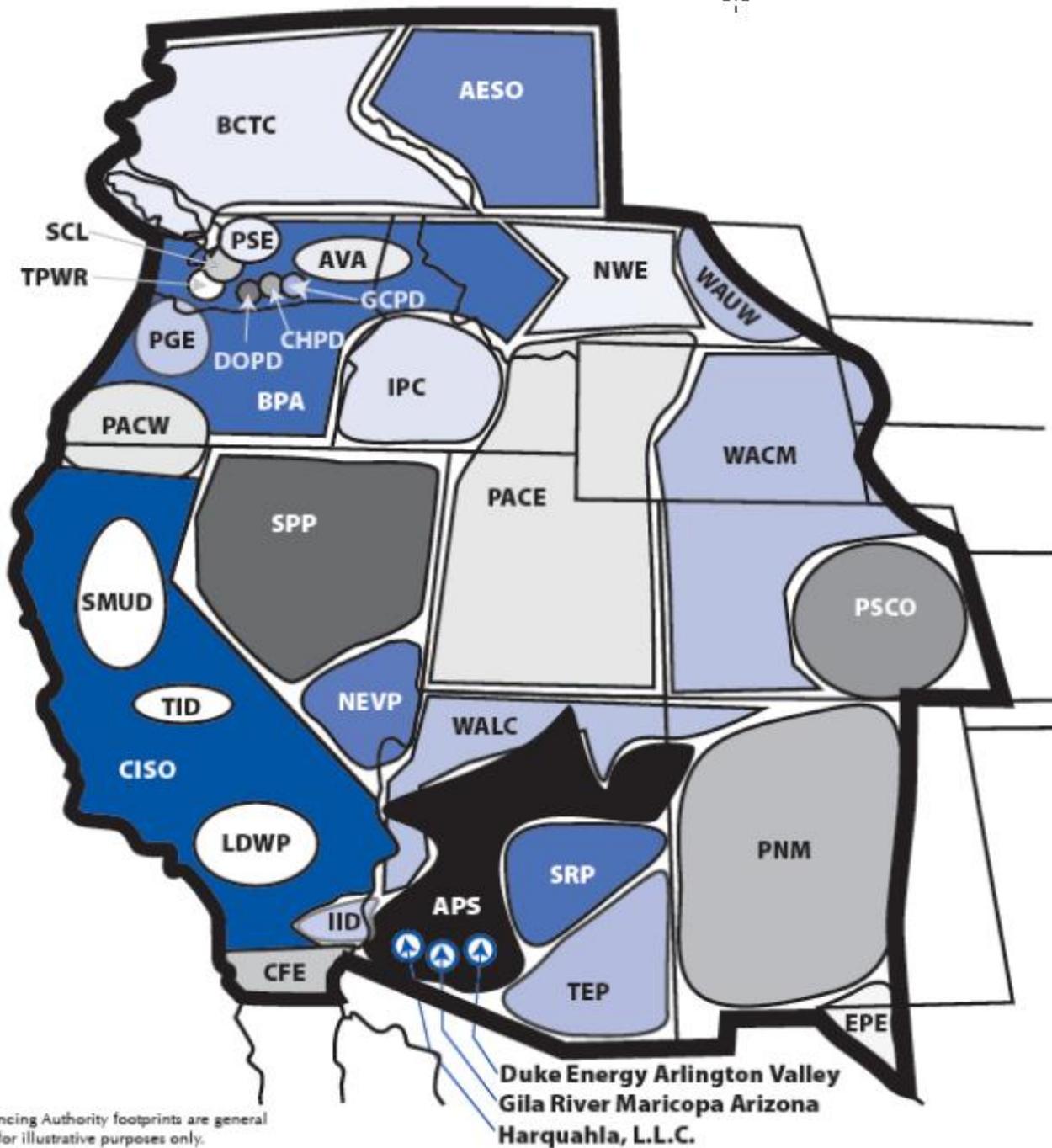
# MRR Design Principles-3.3

## Common Data Source

- Direct delivery across BAs is documented by NERC e-tags
- Direct delivery on transmission across state boundaries, but not across BAs, is accepted based on verified EDRs

Example:

- Intermountain Power Plant in Utah



# WECC BAs

Balancing Authority footprints are general and for illustrative purposes only.

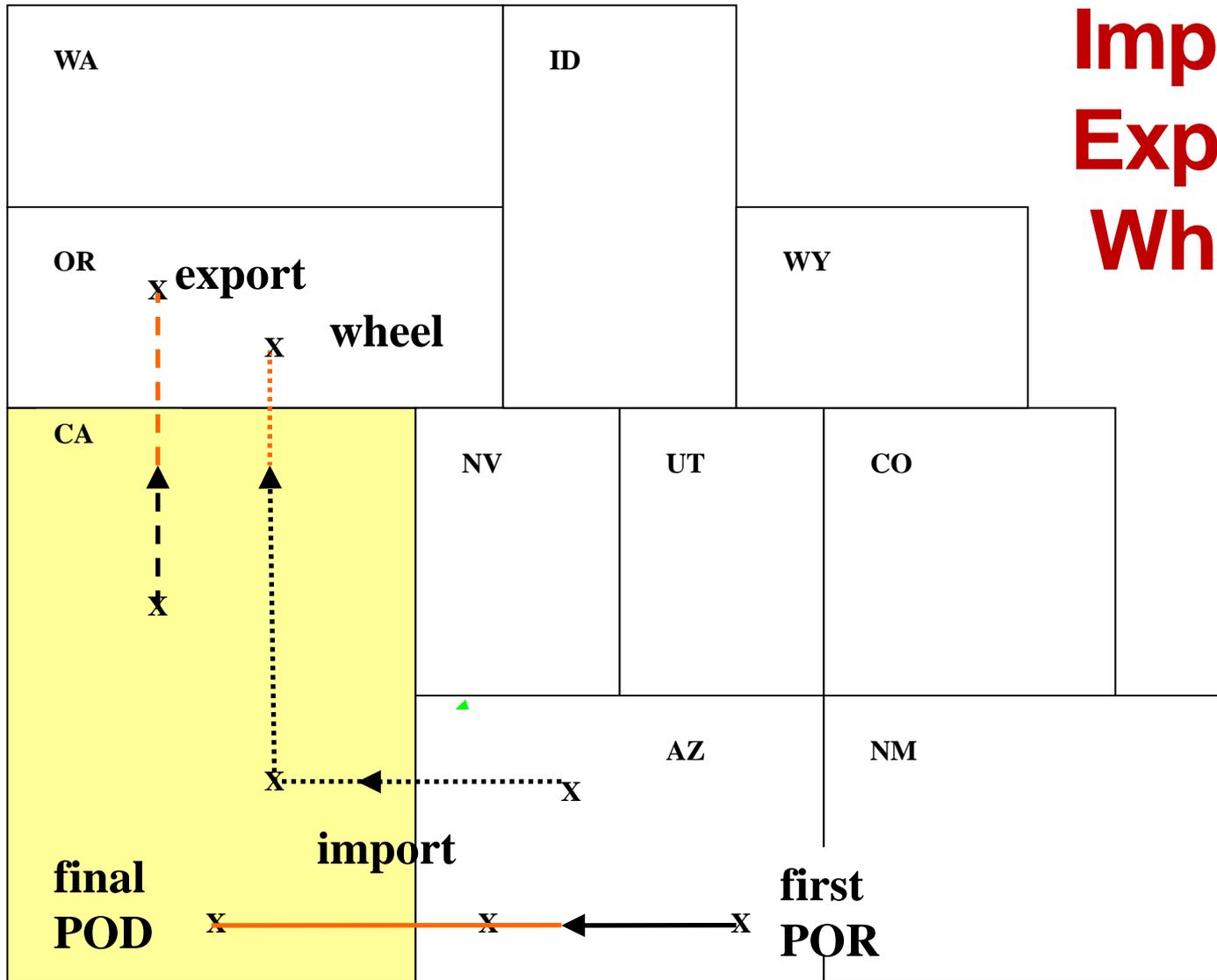


# MRR: 95111(a) General Req's

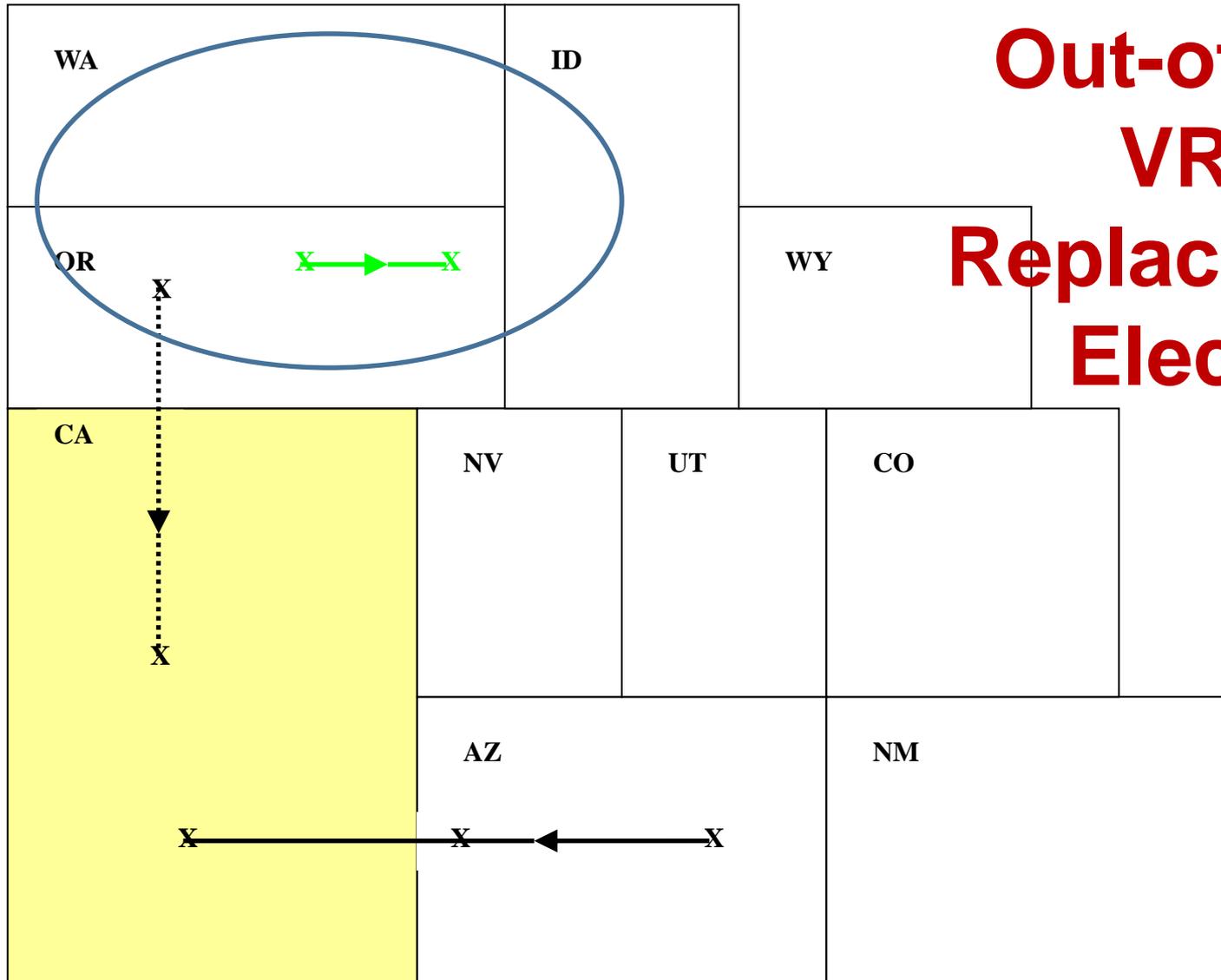
## Electricity Importer-E-tag Data

CISO Tagging Template			-				
IMPORT			FOURCORNE345 to SP15				
			Physical Path				
CA	TP	PSE	POR	POD	Sched Entities	Contract	Misc
	"- - - -"	"- - - -"	"- - - - -"	FOURCORNE345	"- - - - -"		
	CISO	"- - - -"	FOURCORNE345	ELDORADO500	AZPS		
	CISO	"- - - -"	<b>ELDORADO 500</b>	<b>SP15</b>	CISO		Yes
	CISO	"- - - -"	SP15	"- - - - -"	CISO		

# Imports, Exports, Wheels



# Out-of-state VRR and Replacement Electricity



# Mandatory Reporting Regulation

## Key Provisions for Electricity Importers

- § 95111. Data Requirements and Calculation Methods
- § 95102. Definitions
- § 95105(d). GHG Inventory Program

# Mandatory Reporting Regulation

## § 95111. Data Requirements and Calculation Methods

- (a). General Requirements and Content for EDRs**
- (b). Calculating GHG Emissions**
- (g). Req's for Claims of Specified Sources**

Additional Requirements:

- (c). Retail Providers
- (d). Multi-Jurisdictional Retail Providers
- (e). WAPA and DWR
- (f). Asset-Controlling Suppliers

## **MRR: 95111(a) General Req's**

- (1) GHG emissions by category, MT CO<sub>2</sub>e
- (2) Delivered electricity, MWh
- (3) Imports from unspecified and specified sources
- (4) Imports treated as specified when BPA is PSE at first POR
- (5) Exported and wheeled
- (6) Exchange agreements
- (7) Verification documentation-section 95105
- (8) Electricity and cogeneration units

# MRR: 95111(b) Emissions Calculations

- (1) From Unspecified Sources
- (2) From Specified Sources
- (3) From Asset-Controlling Suppliers (BPA)
- (4) For MJRPs
- (5) Emissions Covered under Cap-and-Trade**

# MRR: 95111(b)(5) C&T Emissions Calculation

$$\text{CO}_2\text{e covered} = (1) + [(2) - (3)] - (4) - (5) - (6)$$

- (1) Emissions from Unspecified Sources
- (2) Emissions from Specified Sources
- (3) Emissions from Specified Sources not covered pursuant to C&T 95852.2
- (4) Adjustment for replacement electricity associated with VRR purchases
- (5) Adjustment for qualified exports
- (6) Emissions recognized via linkage

# MRR: 95111(b)(5) C&T Emissions Calculation

$$CO_2 e_{VRR\_adjustment} = MWh_{VRR} \times AF$$

When replacement electricity is unspecified

$$\rightarrow AF = EF_{unspec'd}$$

When replacement electricity is specified *and* its assoc'd EF < EF unspec'd

$$\rightarrow AF = EF_{spec'd}$$

When replacement electricity is specified *and* its assoc'd EF > EF unspec'd

$$\rightarrow AF = \cancel{EF_{spec'd}} - EF_{unspec'd}$$

# MRR: 95111(b)(5) C&T Emissions Calculation

$$CO_2e_{QE\_adjustment} = MWh_{QE} \times AF$$

# MRR: 95111(g) Req's for Claims of Specified Sources

- (1) Registration of Specified Sources
- (2) Emission Factors
- (3) Delivery Tracking Conditions
- (4) **Additional information related to resource shuffling**
- (5) Substitute Electricity

# **MRR: 95111(g)(4) Req's for Claims of Specified Sources: Additional Information**

- (A) Historically Consumed in California
- (B)-(C) Federally-Owned Hydro
- (D) New Facilities
- (E) Additional Capacity at Existing Facilities

# Defined Terms

- Electricity importer and purchasing-selling entity
- Imported electricity and unspecified vs. specified sources
- Direct delivery of electricity
- Generation providing entity
- Substitute electricity
- Variable renewable resource and replacement electricity
- Qualified exports

# GHG Inventory Program

NERC E-tags determine:

- Reporting entity (PSE)
- Jurisdiction with first POR
- Jurisdiction with final POD

NERC tags also specify MWh in each category:

- Imports
- Exports
- Wheels
- Qualified exports

# GHG Inventory Program

To justify whether imports and exports are specified or unspecified

- Review ownership, contracts, settlements data, GPE status

Specified claims require proof of

- Registration with ARB
- Delivery
- Ownership/right to claim energy from the facility
- Generation at the time of import

# Contact Us

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