



Amendments to Mandatory Reporting and Cap-and-Trade Regulations

February 24, 2016

Workshop Materials and Submitting Comments

- ▣ This presentation is posted at:
<http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm>
- ▣ The presentation webcast is available at:
<http://www.calepa.ca.gov/broadcast/?BDO=1>
- ▣ Written comments may be submitted until 5 pm (PDT) on Friday, March 11, 2016, at a link found here:
<http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm>
- ▣ During this workshop, e-mail questions to:
auditorium@calepa.ca.gov

Workshop Agenda

- Introduction
- Potential revisions to Mandatory Greenhouse Gas Reporting Regulation (MRR)
 - Questions and Comments
- Amendments to MRR and Cap-and-Trade Regulation for alignment with Clean Power Plan
 - Questions and Comments
- Adjourn

Potential Regulatory Updates for GHG Mandatory Reporting Rule

Presentation Outline

- ▣ Potential Revisions to MRR
- ▣ Next Steps
- ▣ Questions and Comments

General Revisions (1)

- ▣ Align with Cap-and-Trade Regulation
 - ▣ Support 3rd compliance period and post-2020 Program
 - ▣ Clarify product data definitions as needed
- ▣ Updates to support U.S. EPA Clean Power Plan
 - ▣ Presentation to follow later today
- ▣ Modify applicability threshold to include oil and gas flaring emissions for abbreviated reporters
- ▣ Clarify cessation provisions for reporting & verification and streamline requirements with Cap-and-Trade Regulation

General Revisions (2)

- Clarify requirements for temporary and alternative methods
- Clarify requirements for GHG monitoring plans and require schematics for refineries and oil and gas production facilities
- Require reporters to indicate whether purchased natural gas is pipeline quality or non-pipeline quality

Verification Deadline

- Change verification deadline from September 1 to August 1
 - Better supports Cap-and-Trade Regulation allocation and compliance
- Reporters and verifiers can more effectively use time leading up to verification deadline
 - On average, 50% of conflict of interest assessments not submitted until June or later, and 50% of site visits not conducted until July or August

	Total 2011-2014 Data Years (%)					
	March	April	May	June	July	Aug
COI Submittals	1%	16%	33%	25%	19%	6%
Site Visits	0%	4%	14%	32%	36%	14%

Petroleum and Natural Gas Systems

- ▣ Clarify methods used to convert volumes to standard conditions
- ▣ Clarify that, when using Equations 35 and 36, the default factor of 0.995 for “fraction of gas combusted” should be used for all combustion devices
- ▣ Correct typographical errors and make minor clarifications
- ▣ Staff is considering eliminating the use of engineering estimates for quantifying flare gas (and fuel gas)
 - ▣ Quantification would be subject to 95103(k) measurement accuracy requirements
 - ▣ Staff believes most reporting entities are already not using engineering estimates and is requesting feedback from stakeholders

Refineries and Hydrogen

- ▣ Report CWB liquid hydrocarbon volume throughputs at standard temperature of 60 degrees F
- ▣ Allow for isomerization unit recycled feed to be reported as covered product data
- ▣ Consolidate finished product and primary refinery product reporting
- ▣ Clarify requirements for reporting hydrogen sales data
- ▣ Fix typographical errors

Transportation Fuel Suppliers

- ▣ Clarify that first deliverer across a rack is required to report fuel in cases where fuel is delivered across multiple racks
- ▣ Require suppliers to report volume of fuel excluded from emissions due to export out-of-State or marine/aviation use
- ▣ ARB must ensure ethanol and biodiesel is not double counted by enterers/producers and downstream position holders
- ▣ Staff is considering removing the requirement for enterers and in-State producers of ethanol and biodiesel to report those volumes
 - ▣ Under this approach would ARB be missing any fuel volume that should be captured?
 - ▣ Staff is requesting feedback from stakeholders

Natural Gas Suppliers

- Clarify the definition of intrastate pipeline suppliers
 - All operators delivering natural gas (including associated gas) to end-users must report as an intrastate pipeline operator
 - Includes gas plants and oil/gas producers
 - Clarify what constitutes a “pass-through” situation with respect to deliveries from utilities and interstate pipelines
- Staff is considering allowing gas utilities to report biomethane delivered on behalf of biomethane vendors to non-regulated end users as an optional provision
 - The purchaser of the biomethane contract (e.g., CNG fueling station) could provide necessary documentation to the utility to verify biomethane eligibility
 - Staff is requesting feedback from stakeholders

Suppliers of LPG and LNG

- Change point of regulation for imported liquefied petroleum gas (LPG) and liquefied natural gas (LNG)
 - Reporting entity would be “importer”
 - Change will ensure more complete reporting of California’s LPG and LNG emissions
 - Aligns with Cap-and-Trade Regulation
 - Some existing consignee reporters may drop out, and some new importers may be required to report
- Clarify requirements for in-State producers of LNG
 - Report LNG sold to gas utility customers and covered facilities to prevent double counting
 - Require imported LNG to be reported separately from LNG produced in-state

Electric Power Entities (1)

- ▣ Clarify requirements for the lesser of analysis
 - ▣ Remove energy imbalance market (EIM) exception
 - ▣ Allow analysis to be conducted voluntarily
- ▣ Clarify requirements for reporting sales into CAISO
- ▣ Clarify definitions for “first point of receipt”
 - ▣ Generation source as shown on e-tag
- ▣ RPS adjustment
 - ▣ Discussed at December 14, 2015 workshop

Electric Power Entities (2)

- ▣ Clarify specified power reporting requirements for generation providing entities (GPE)
 - ▣ If GPE is the importer, they must report the power as specified
- ▣ Energy Imbalance Market (EIM)
 - ▣ Working with CAISO to ensure EIM market design and information supports MRR and Cap-and-Trade Program
- ▣ Potential CAISO market expansion
 - ▣ Working with CAISO to ensure accurate accounting of imported electricity emissions in potential expanded day-ahead and real-time markets

Verification (1)

- ▣ Streamline processes to support August 1 verification deadline
 - ▣ Improvements to timeline and review process for conflict of interest (COI) and Notice of Verification Services (NOVS)
 - ▣ Facilitate expedient communication between ARB and verification body regarding potential adverse verification statements and ARB audits
 - ▣ Implement timeline to prevent last-minute reporting and facilitate verification completion
 - ▣ Staff is considering requiring reporting entities to certify reports at least 7 days prior to the verification deadline

Verification (2)

▣ Impartiality provisions

- ▣ Staff is considering including medium COI risk consulting services in assessment of 6-year time limit on providing verification services to the same reporting entity
- ▣ Clarify consequences for emerging potential for conflict of interest during and up to one year after verification services

▣ Accreditation requirements

- ▣ Clarify that verifier upgrade to a lead position may be considered after general verifier exam is taken when experience requirements are met
- ▣ Allow for accreditation to be extended to a fourth year if corrective action plans have been effective during the current accreditation period

Additional Information

- ▣ Main GHG Mandatory Reporting Program page:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>

Q&A

Meeting Break

- CPP schedule:
 - Cap-and-Trade Regulation and MRR – Revisions for Clean Power Plan alignment
 - Questions and Comments
 - Adjourn



Amendments to Mandatory Reporting and Cap-and-Trade Regulations for Alignment with Clean Power Plan

February 24, 2016

Introduction

- California economy-wide Cap-and-Trade Program is one of a suite of measures to achieve the AB 32 statewide target of 1990 emissions levels by 2020
- US EPA Clean Power Plan (CPP) goal is to reduce power sector emissions by 32 percent below 2005 levels by 2030
- Today's presentation provides staff proposal on using the Cap-and-Trade Program to comply with CPP requirements

State Measures Plan

- CPP allows economy-wide trading systems to be used for CPP compliance if submitted as “state measures” plans
 - Allows for continued operation of economy-wide program, including linkages, provided that there are federally enforceable emissions standards for covered units and a “backstop”
- Cap-and-Trade Program and MRR are well-positioned to provide compliance structures for CPP
 - Minimizes administrative and regulatory burden for entities already covered by the Program
 - Allows for future linkage with other trading systems developed for CPP compliance

California Linkage Status

- ▣ Existing and planned linkages:
 - ▣ Linked California and Québec programs
 - ▣ Ontario (4/15) and Manitoba (12/15) announced plans to implement economy-wide carbon markets to link with Western Climate Initiative (WCI) market
- ▣ California is not in formal discussions to link with other states' CPP programs at this time

Staff Proposal for CPP

- Use Cap-and-Trade Program to pursue State Measures approach for CPP
 - CPP covered electricity generation units (EGU) may use allowances and offsets for compliance with both the Cap-and-Trade Program and CPP
- Proposal includes amendments to both the Cap-and-Trade Regulation & MRR
- Changes to Cap-and-Trade Regulation must be coordinated with Western Climate Initiative partners

Proposed Mandatory Reporting Regulation Amendments to Align with Clean Power Plan

Proposed Mandatory Reporting Regulation Amendments

- Requirement for EGUs to record & report information relevant to CPP
 - Under CPP, EGUs must report unless all operations cease and shut down – requires minor MRR applicability and cessation changes
 - May extend verification requirement to the few EGUs with emissions below verification threshold
 - Staff considering whether or not to include
 - Must include if these EGUs become regulated under the Cap-and-Trade Program

Other Proposed MRR Amendments

- Unit-Level Reporting – Most, but not all, EGUs already opt to report disaggregated unit-level emissions
 - Required under CPP
 - MRR is proposed to be amended to reflect this requirement
- Data collection – CPP units must change emissions reporting methods from Subpart C of Part 98 method to Subpart D of Part 75 method
 - Reporting would still be subject to existing missing data requirements in MRR
- EGUs will need to report hourly Watt meter data and thermal and mechanical output

Other Proposed MRR Amendments

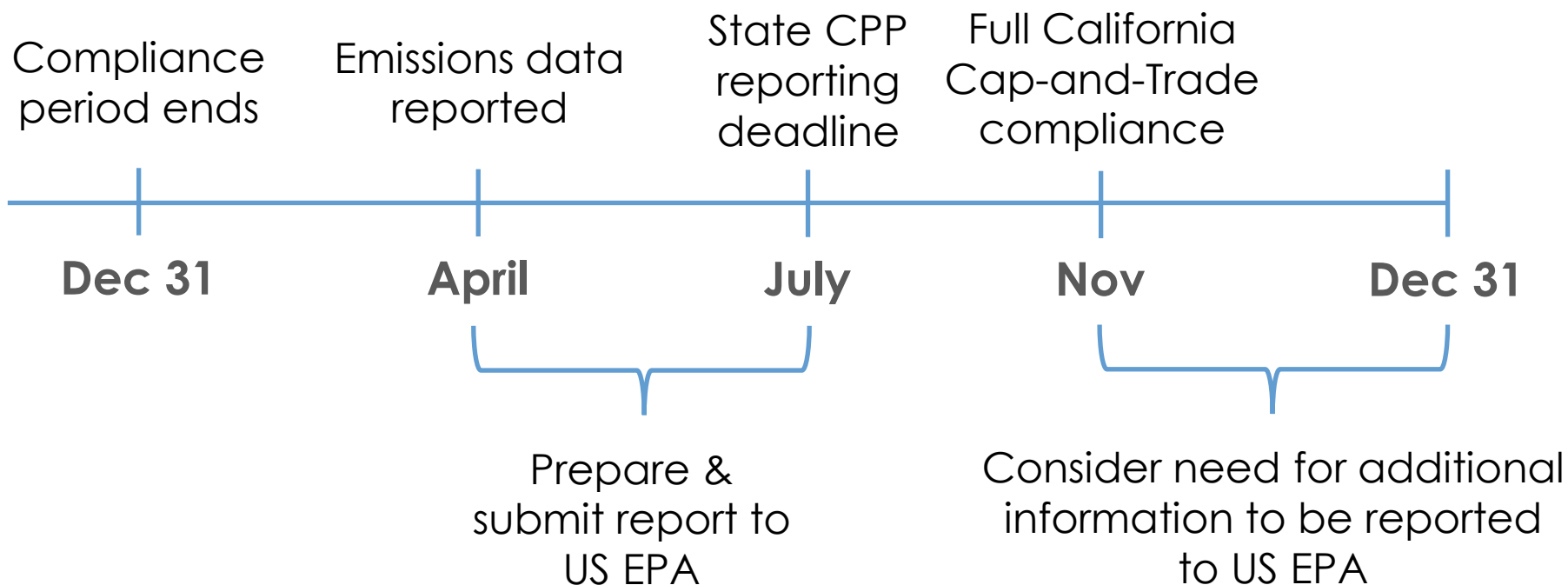
- Recordkeeping – Modify MRR to require 2 years of onsite recordkeeping of CPP-relevant records for affected EGUs
 - Does not change length of existing MRR record retention requirements
- Calibration – Meter calibration transition from once per compliance period to once every 36 months

Proposed Cap-and-Trade Regulation Amendments to Align with Clean Power Plan

Proposed Compliance Periods

- Post-2020 compliance period alignment with CPP for *all* covered entities
 - Jan 1, 2021 – Dec 31, 2022 (Bridge Period)
 - Jan 1, 2023 – Dec 31, 2024
 - Jan 1, 2025 – Dec 31, 2027
 - Jan 1, 2028 – Dec 31, 2029
 - Jan 1, 2030 – Dec 31, 2031
- After 2030-2031, each compliance period will have duration of two years

State CPP Reporting Requirement



Emissions Forecast and Federal Backstop

- State modelling shows that the Cap-and-Trade Program achieves CPP compliance for EGUs even under combination of drought, high electricity demand, and low carbon prices
 - Thus, staff proposes interim “Glide Path” emissions targets at or near federal targets
 - Modeling continues to develop State targets
- Must have backstop measure for CPP compliance if EGU emissions exceed targets
 - Unlikely California EGUs will exceed Federal limits

Staff Proposal for CPP Backstop

- Set-aside pool of allowances from within post-2020 caps that are available only to CPP EGUs
 - Initial proposal is 10 million allowances
 - Use of offsets is not allowed for backstop purposes
- If pool is depleted, recharge with allowances from the Allowance Price Containment Reserve (APCR)
 - The portion of allowances redirected from the APCR would be proportional to the EGU sector's aggregate share of overall Program reported and verified emissions

Staff Proposal for CPP Backstop

- If the backstop is triggered, each affected EGU must purchase and retire allowances proportional to their share of sector emissions

$$\mathbf{EGU}_{\text{Backstop}} = (\mathbf{AvgEGU}/\mathbf{AvgSector}) * \mathbf{Gap}$$

- **EGU_{Backstop}**: Amount of allowances individual EGU must purchase and retire
- **AvgEGU**: Average of most-recent 3 years of individual EGU's reported and verified emissions
- **AvgSector**: Average of most-recent 3 years of all covered EGU reported and verified emissions
- **Gap**: Previous compliance period's EGU sector emissions exceedance

Allocation, Banking, and Borrowing

- California anticipates no changes to these provisions
- CPP prohibits borrowing from future periods
 - Staff believes this provision addresses deferral of compliance to future periods, which the Cap-and-Trade Regulation also does not allow
 - Staff believes this provision does not apply to the limited uses of vintage-less or of other vintage under linked California-Québec cap-and-trade programs (i.e., true-up allocation, vintage-less APCR, and untimely surrender)

Leakage Prevention

- Concern with CPP regulation of leakage from existing EGUs to new sources (new EGUs)
 - In California, new and existing generators are all covered by the economy-wide cap and face the same allowance price
 - California caps and resulting allowance prices are more stringent than Federal CPP, so CPP does not change incentives
 - Staff does not believe formal “new source complement” is necessary to address leakage
 - California system already provides uniform incentives

Regulatory Schedule for Amendments to Cap-and-Trade Regulation and MRR

Date	Event
March 18, 2016	SRIA to Department of Finance
Late May, 2016	45-day Regulation and Initial Statement of Reasons released
July 21, 2016	First Board Hearing
Spring 2017	Second Board Hearing
Summer 2017	Final Regulation and Final Statement of Reasons to Office of Administrative Law & CPP Final Plan Submission
October 2017	Adopted Regulation becomes effective

Tentative Workshop Schedule

Date	Expected Workshop Topic
February 24	Alignment of MRR and Cap-and-Trade Regulation
mid- to late-March (tent. March 22)	Sector-based offsets (scope, reference level, crediting baseline, reporting)
March 29	Cap-setting and allocation
April 5	Cost-containment and sector-based offsets (reversals, registries, verification)
April 25	Leakage studies
Late April (tent. April 29)	Linkage process (Ontario and sector-based offsets) Sector-based offsets – safeguards

Scoping Plan Schedule

Date	Event
May 2016	Discussion draft of Scoping Plan released
June 23, 2016	First Board Hearing
August 2016	Public release of draft Scoping Plan with full CEQA and economic analyses
November 2016	Second Board Hearing

Standardized Regulatory Impact Assessment (SRIA)

- Due to Department of Finance March 18th
- Provide best estimate economic analysis of “major regulations”
- Requesting alternatives for the preferred proposal
 - Known proposed alternatives
 - Carbon fee
 - Prescriptive Regulations
 - Others?

Additional Information

- ▣ Cap and Trade Program:
<http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- ▣ Clean Power Plan:
<http://www.arb.ca.gov/cc/powerplants/powerplants.htm>
- ▣ Mandatory Greenhouse Gas Reporting Regulation (MRR):
<http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm>

Q&A