

Clean Power Plan & Cap-and-Trade

December 14, 2015

Clean Power Plan & Cap-and-Trade Interactions

- ▣ There may be several ways for the CPP and the Cap-and-Trade Regulation to relate to one another. These include:
 - ▣ Use of Cap-and-Trade as a “state measure” under the CPP, with a federally-enforceable backstop
 - ▣ Use of Cap-and-Trade as a “state measure” with federally-enforceable “emission standards” for affected EGUs, plus a federally-enforceable backstop
 - ▣ Separate state measures or CPP regimes that are accounted for in Cap-and-Trade to ensure environmental integrity
- ▣ The appropriate federal enforceability of Cap-and-Trade (and Mandatory Reporting Regulation) requirements is a key factor in determining plan structure (Other structural shifts may also be necessary for integration)

Clean Power Plan & Cap-and-Trade Interactions, cont.

- US EPA describes considerations for “emission budget trading programs with broader source coverage and other flexibility features” at 80 Fed. Reg. 64891. These considerations include the treatment of offsets and other flexibility mechanisms.
- Decisions on plan structure may be relevant to:
 - Operation of current Cap-and-Trade Regulation
 - Possible amendments to the Regulation
 - Relationship between the California/Québec market to markets that may develop under the federal CPP, or other federal, Canadian, and state programs
- This presentation explores implications of some of these design choices

“State Measures” Plan Design

- Integrating CPP requirements into Cap-and-Trade and Mandatory Reporting Regulations could support state measures plan design
- Areas of ARB Regulations that may require amendments or additions to accomplish this:
 - Deadlines for reporting, verification, and Cap-and-Trade Compliance
 - Compliance periods
 - Allowance borrowing
 - Backstop

Comparison of Annual Deadlines

Cap-and-Trade		Clean Power Plan (111(d))
	January	Emissions Reporting (for previous year)
	May	
EGU Emissions Reporting (for previous year)	April	
	July	State Report to U.S. EPA (after compliance periods)
Emissions Verification	September	
Cap-and-Trade Compliance	November	

Potential changes to align annual deadlines

- California's program designed to allow time from certification of emissions reports (April 10) to obtain third-party verification services
- Verification and annual/triennial compliance deadlines are currently the same for all entities covered by Cap-and-Trade
- Alignment of California reporting periods and compliance deadlines to CPP would require Cap-and-Trade Regulation changes, along with complementary Mandatory Reporting Regulation changes
 - Changes would need to be coordinated with linked partner(s)
 - If alignment changes were proposed only for EGUs, potential market and implementation impacts would need to be assessed
 - These impacts may vary based on whether compliance periods, reporting periods, or both were changed
- Note that some additional information (including compliance information) may need to be reported

Comparison of Compliance Periods

California and Quebec Linked Cap and Trade	Date	Clean Power Plan (111(d))
2021-2023 Compliance Period	2021	2022-2024 Compliance Period
	2022	
	2023	
2024-2026 Compliance Period	2024	2025-2027 Compliance Period
	2025	
	2026	
2027-2029 Compliance Period	2027	2028-2029 Compliance Period
	2028	
	2029	
2030-2032 Compliance Period	2030	2030-2031 Compliance Period
	2031	
	2032	

Potential changes to align compliance periods

- California adopted three-year compliance periods to provide covered entities flexibility in acquiring compliance instruments
 - This reflects recognition of annual and multi-year variability in electricity sector (e.g., low hydro, drought, etc.)
- Alignment of California compliance periods to CPP (for EGUs or for all entities) would require Cap-and-Trade Regulation changes
 - Changes would need to be coordinated with linked partner(s) to ensure similar periods or result in different compliance period lengths and compliance dates
 - Staggered compliance periods were initially contemplated in WCI design, but were not adopted because of additional implementation complexity and potential program impacts

Allowance Borrowing

- The Cap-and-Trade Regulation allows implicit borrowing (use of future vintages) for compliance in several cases
 - EGUs satisfying 4:1 Adjusted Emissions Obligation
 - Use of allocation true-ups in compliance
 - Entities becoming covered in the last year of a compliance period
 - Purchase of “unvintaged” allowances from the Allowance Price Containment Reserve (APCR)
 - Purchase of future vintage allowances from APCR when the top tier has been exhausted

CPP Prohibits Borrowing

- CPP does not allow borrowing of allowances from future compliance periods. Further analysis is needed to determine which Cap-and-Trade “borrowing” provisions are implicated by this prohibition.
- Potential implications of prohibiting this for the Cap-and-Trade Regulation
 - Entities may be unable to find “current” vintage allowances to fulfill Adjusted Emissions Obligation
 - The Adjusted Emissions Obligation could further tighten the market, creating chances for exercise of market power
 - Could reduce the size of the existing APCR since some allowances in the APCR are issued under future budget years
 - Could eliminate use of future vintages to replenish the APCR
 - Could eliminate source of allowances for Allocation True-up
 - Could increase compliance burden on late entrants

CPP Backstop Requirement

- ❑ Backstops are required for plans that rely on “state measures”
- ❑ Backstops triggered by a departure of more than 10% from state glide path
- ❑ Must bring units into compliance to make up any emissions shortfall
- ❑ Backstops are triggered after state compliance reports; and CPP seems to require they be implemented with results within 18 months of the trigger
- ❑ Backstops could require California entities to draw from a pool of California allowances that would yield emissions reductions reestablishing State glide path
- ❑ Obligations under a backstop could be derived from sector-wide noncompliance, or adjusted based on unit performance, or other factors

Imported Power

- ▣ Cap-and-Trade Program covers in-state generated and imported power
 - ▣ All imported power to California holds a compliance obligation
- ▣ Clean Power Plan applies to instate electricity generation units, so does not speak to imported power
- ▣ Western power market continues to evolve and integration is increasing (EIM, etc.)
- ▣ Are there any policy reasons to adjust the policy for “accounting” for imported power post 2022?

Clean Power Plan & Cap-and-Trade Covered Units

- US EPA and ARB use different metrics to determine which units are covered by the CPP and by Cap-and-Trade. U.S. EPA focuses on operating characteristics; ARB focuses on emissions
- The result is that a small number of units may be covered by the CPP, but may not currently be covered by Cap-and-Trade
- Other units may be included in Cap-and-Trade, but do not have compliance obligations because of treatment of “but-for” cogeneration units
- ARB is considering how best to account for both classes of units if Cap-and-Trade is used for CPP compliance
- Note, for all covered units, that cessation from Cap-and-Trade could be affected, because CPP applies indefinitely

Title V Permitting

- Title V permits are required for major sources of emissions - includes power plants
- These permits are required to contain conditions showing emissions unit compliance with federal requirements
- Applicable emissions standards established by California's CPP plan will be federal requirement
- Power plant permits will need to include CPP conditions for any applicable emissions standards.

Title V Permitting, cont.

ARB, CEC and CAPCOA are working together to:

- ▣ Ensure CPP compliance strategy harmonizes with air district requirements
- ▣ Develop model CPP conditions to ensure consistency
- ▣ Ensure CPP conditions are enforceable
- ▣ Ensure that any CPP emission standards can be enforced without disrupting the carbon market, while appropriately protecting market confidential information

Stakeholder Input

- ▣ Compliance Period Timing and Deadlines
 - ▣ If amendments are made to align with CPP compliance periods and deadlines, should all sectors within California's Cap-and-Trade Program be required to adjust to the same schedule, or just EGUs covered by the CPP?
 - ▣ Is alignment with CPP compliance periods and deadlines necessary for all linked programs?
- ▣ Backstop (Pool of allowances, backstop application sector-wide or specific unit(s))
- ▣ Imported Power Policy
- ▣ Currently Non-Covered Units
- ▣ Permitting Implications
- ▣ Other?

Next Steps

- ▣ ARB plans to submit comments on model federal and state plans
- ▣ ARB will review stakeholder feedback on plan design options and move towards proposals in early 2016
- ▣ ARB will continue to participate in regional and national working groups and stakeholder discussions

Questions and Comments

- Comment webpage available at:
http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=capandtradecpplan-ws&comm_period=1