RPS Adjustment: Past and Future

December 14, 2015

Presentation Outline

- AB 32 Requirements
- RPS Adjustment and Specified Source Imports
  - Rationale
  - Regulatory Requirements
- Overview of RPS Adjustment Impacts on Compliance Obligations and Reporting Issues
- Program Implementation Challenges
- Next Steps

AB 32 Requirements

- AB 32 seeks to reduce statewide GHG emissions, including “all emissions of greenhouse gases from the generation of electricity delivered to and consumed in California”*
- Need to track actual electricity consumed in California
  - In-state generation
  - Imported electricity

Quoted section from AB 32, 38505(m)

Rationale for RPS Adjustment (1)

- Originally implemented in 2010 MRR and Cap-and-Trade Regulation
- Represents an optional "adjustment to the compliance obligation to recognize the cost to comply with the RPS program"
- Intended to recognize that cost <u>only</u> in cases in which electricity was not directly delivered to California
- "Not a recognition of avoided emissions"
  - Emissions reporting and accounting is built on direct delivery of electricity

Quoted sections from 2010 MRR FSOR, pp 108-109

Rationale for RPS Adjustment (2)

- Except in limited circumstances, RECs do **not** carry the emissions benefit in the Cap-and-Trade Program
  - RPS adjustment-eligible transaction may reduce compliance obligation in limited circumstances
  - RPS adjustment does not change an emissions profile or "carbon footprint"
- Purpose of RPS program is to encourage development of eligible renewable energy; distinct from Cap-and-Trade Program's role to provide cost-effective GHG emissions reductions

Accounting for Specified Source Imports (1)

- Imported electricity is basis for emissions accounting under MRR and C&T; "the focus is direct, source-based emissions associated with electricity that is directly delivered"

- Imports **must be** reported as from a specified source in cases in which the importer is a generation-providing entity or the importer has a written power contract and power is directly delivered

Quoted sections from 2010 MRR FSOR, pp 108-109

Accounting for Specified Source Imports (2)

- Contract, delivery, and emissions profile of resource determine emission factor
  - REC serial numbers must be reported (if applicable) to support transparency, but specified emission factor remains valid and import still must be reported as specified regardless of REC reporting
    - Purpose of REC serial number reporting for specified sources "is to allow for public monitoring for double counting of the zero emissions" and to provide the public "information that the underlying electricity for that REC was reported as zero emissions"
    - ARB has not posted these REC serial numbers because of the inconsistent methods used to report them
    - Non-reporting of REC serial numbers for specified sources has led to qualified positive emissions data verification statements (i.e., nonconformances) for not complying with MRR

Quoted sections from 2013 C&T FSOR, pp 209

ARB Requirements for RPS Adjustment

- RPS adjustment provides a reduction in compliance obligation for electricity procured from a California-eligible RPS facility when importers meet the following requirements:
  - Electricity is **not** directly delivered to California
  - Ownership or contract right for electricity and RECs
  - RECs purchased and retired
  - Additional requirements per C&T Reg 95852(b)(4)
- Reporting is *optional*; if any requirements not met, entity must remove RPS adjustment or receive adverse verification statement

Impact on Compliance Obligation

	Data Year 2014
RPS adjustment claimed (MWh)	5,119,958 (5% of total MWh imported)
RPS adjustment claimed ($MTCO_2e$)	2,191,342
Importers claiming RPS adjustment	16 (19% of importers)
Importers with RPS adjustment issues	At least 7
Total RPS adjustment initially claimed in violation of MRR/C&T Reg. ($MTCO_2e$)	>600,000

- Issues with RPS adjustment reporting were discovered through staff's quality control efforts and may not reflect the extent of RPS adjustment misreporting, as staff does not have access to complete information
- Staff has identified issues with inaccurate claims of unspecified power, but cannot be sure of the overall impact based on the reported data

Program Implementation Challenges: Power Directly Delivered

- Same electricity claimed as zero emission import and RPS adjustment, resulting in double counting of zero emission power
- Challenges presented:
  - RPS adjustment claim is not eligible; however, RPS adjustment claimant may not know the power was being directly delivered
  - Verifier may have difficulty gaining assurance that power associated with the RECs claimed in RPS adjustment was **not** directly delivered
  - Electricity counterparty may be reluctant to provide such data
  - Where only portions of RPS-eligible power is imported, “splitting” power and RECs among entities is difficult to impossible to report and verify
  - Individual REC serial numbers are difficult or impossible to connect to actual imported power

Program Implementation Challenges: Inaccurate Claims of Unspecified Power

- Some generation-providing entities (GPE) were reporting specified imported power as unspecified with understanding that counterparty would claim RPS adjustment

- Accurate reporting of imports is required by AB 32 and MRR (95111(a)(4)), and is pertinent to accurate accounting of imported electricity and GHG emissions; RPS adjustment is voluntary component of the C&T Program

- Challenges presented:

  - Some GPEs had contracts with counterparties that entitled the RPS entity, and not the importer, to the emissions benefit of the renewable power under MRR, which is in violation of MRR

Additional Challenges with Program Implementation

- ARB staff dedicated significant time prior to September 2015 on accurate implementation of specified source and RPS adjustment reporting
- ARB only has access to data reported under MRR and it changes throughout verification period
- Confidentiality restrictions limit ARB staff’s ability to facilitate counterparty discussions
- Implementation of Clean Power Plan, as out-of-State renewables play role in meeting emissions reduction targets

Next Steps

- Staff to release additional regulatory guidance on the RPS adjustment in early 2016
- Staff seeks stakeholder feedback on future of RPS adjustment as part of regulatory amendment process
- Outcome could include removal of RPS adjustment and REC serial reporting for specified sources from MRR and the Cap-and-Trade Regulation
- At a minimum, staff plans to align section 95852(b)(3) of the Cap-and-Trade Regulation with MRR (i.e., to make clear that claims of specified source electricity can/must be made when the entity does not report the RECs associated with the electricity)

Questions and Comments

- Comment webpage available at: http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=capandtradecpplan-ws&comm_period=1
- Mandatory Reporting Regulation Contacts
  - Brieanne Aguila, Manager
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SB 350 Discussion

December 14, 2015

SB 350 Requirements

- For the CPUC and IOUs:
- Commencing in **2017**, and to be updated regularly thereafter, the commission shall adopt a process for each load-serving entity, as defined in Section 380, to file an integrated resource plan, and a schedule for periodic updates to the plan, to ensure that load-serving entities do the following:
  - Meet the **greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the commission and the Energy Commission, for the electricity sector and each load-serving entity** that reflect the electricity sector’s percentage in achieving the economy wide greenhouse gas emissions reductions of 40 percent from 1990 levels by 2030.

SB 350 Requirements, cont.

- For the CEC and certain POUs:
- This section shall apply to a local publicly owned electric utility with an annual electrical demand exceeding 700 gigawatthours, as determined on a three-year average commencing January 1, 2013.
- On or before January 1, **2019**, the governing board of a local publicly owned electric utility shall adopt an integrated resource plan and a process for updating the plan at least once every five years to ensure the utility achieves all of the following:
  - Meets the **greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the commission and the Energy Commission, for the electricity sector and each local publicly-owned electric utility** that reflect the electricity sector's percentage in achieving the economy wide greenhouse gas emissions reductions of 40 percent from 1990 levels by 2030.

Purpose of Targets

- Allow for load serving entities to develop long-term plans that include consideration of reducing GHGs to achieve the 2030 statewide GHG target
- Support LSE participation in decarbonizing the economy as a whole (e.g., vehicle electrification)
- Targets are <u>not meant</u> to be an individual load serving entity, or an electricity sector-wide, target within the California Cap-and-Trade Program
  - Staff proposal must not disrupt the efficient operation of the economy-wide program or introduce opportunities for market manipulation

Options for Targets

- Minimize regulatory cost of reducing greenhouse gas emissions
- Minimize *total* cost of utility procurement plans while accounting for regulatory cost of reducing greenhouse gas emissions
- Benchmarks (GHG tons/MWh)
- Mass-based targets used to shape resource procurement
- Considerations for all options:
  - Static versus scale over time
  - Appropriate process to establish
  - Appropriate coverage of utility portfolios (e.g., accounting for vehicle electrification or other out-of-sector efforts)

Stakeholder Input Requested

- Type of target
  - Metric
  - Static vs scaling
  - Rigor and ability to establish individual LSE targets
- Options for accounting for vehicle electrification
- Process to establish
- Frequency to update
- Other

Questions and Comments

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