

***Low Carbon Fuel Standard
Refinery-Specific
Incremental Deficit Option***

June 20, 2013

Agenda

- Refinery-specific incremental deficit option
- Innovative crude production method provision
- 2012 Crude Average Carbon Intensity

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Resolution 11-39

Resolution 11-39 directed the Executive Officer to evaluate and propose, as appropriate, an option for individual regulated parties to have their deficits for gasoline and diesel determined on a refinery-specific basis that accounts for the carbon intensity of domestic and imported crude oils, intermediate products, and finished fuels.

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Refinery-specific Incremental Deficit

- Approach under consideration
- Only applies to calculation of incremental deficit
- Does not affect calculation of base deficit
 - California average 2010 Baseline CI not affected
 - CARBOB and ULSD CI values not affected
 - Compliance targets not affected
- Challenge to make October 2013 amendments

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Why limit to incremental deficit?

- Avoids complexity of separate:
 - CARBOB and ULSD CI values
 - Compliance targets
- Avoids differential credit/deficit generation for the same fuels

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Optional Provision

- Refineries given one-time opportunity to opt for refinery-specific accounting
- Decision required prior to implementing the provision and cannot be reversed
- Refineries not opting for refinery-specific accounting will be treated as a “group”
 - Group 2010 Baseline CI
 - Group Annual CI
 - Incremental deficit assessed if Group Annual exceeds Group Baseline

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Basic Provisions for Participating Refineries

- Refinery 2010 Baseline Crude Average CI
- Refinery Annual Crude Average CI
- Incremental deficit assessed if Refinery Annual exceeds Refinery Baseline
- Participating refineries must:
 - Work with ARB staff to properly characterize California-produced crudes supplied to the refinery
 - Provide descriptions and volumes of major intermediate refinery feedstocks and blendstocks
 - Provide volumes of finished products imported into California

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Primary Advantages of Refinery-Specific

- Assigns incremental deficit to responsible refinery
- Allows interested refineries to “control their own destiny”
- Greater incentive to consider crude CI in purchasing decisions
- Greater incentive for oil producers to reduce CI of crudes supplied to California refineries

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Primary Disadvantages of Refinery-Specific

- Requires more detailed knowledge of the distribution of California-produced crudes
- Refineries will be held to individual 2010 baselines; therefore, held to past practices

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California-Produced Crude Names

- Used 2011 and 2012 refinery surveys to determine larger volume crude names
- Allocated fields to each crude name based on geographical location and API gravity
- Some fields allocated to two crude names
- Compared crude name volume to that reported in 2011 and 2012 surveys
- Crude name CI value is volume-weighted average of contributing fields
- Spreadsheet detailing of allocation of fields provided at workshop webpage

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Treating Intermediate Refinery Feedstocks

- Require reporting of descriptions, sources (if available), and volumes for opt-out refineries
- Monitor to ensure volume remains small compared to the crude volume

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Treating Imported Finished Product

- Reporting of volumes for participating refineries
- Monitor to ensure volume remains small compared to product produced at refinery
- Assigned same incremental deficit

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Questions?

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Innovative Crude Method Provision

Considering amendments to:

- Include solar and biomass based power generation as allowable innovative methods
- Require the crude producer to opt-in as a regulated party and earn credits based on volume supplied to California refineries
- Allow crude producer to sell credits to any refinery in California
- Remove the 1 g/MJ threshold for CI reduction

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2012 Crude Average CI

- Revised analysis of ANS crude based on comments received following March 5 workshop
- Revised analysis of OCS crude based on obtaining improved data
- Revised analysis of other US crudes based on comments and obtaining better state-level data
- Corrected minor errors in analysis for some crudes
- No revisions made to OPGEEv1.1 Draft A

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2012 Crude Average CI

- Revised 2010 Baseline Crude Average CI of 11.47 g/MJ (0.08 g/MJ increase from current)
- Revised 2012 Crude Average CI of 11.46 g/MJ
- Proposing no incremental deficit for 2014
- Proposing no revision to Lookup Table CI values for CARBOB and ULSD
- Proposing no revision to compliance schedule targets

Comments Due July 10

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Thank You
