

THE REGIONAL GREENHOUSE GAS INITIATIVE

An Initiative of the Northeast and Mid-Atlantic States of the U.S.

2016 Program Review: Modeling Scenarios Discussion

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Analysis of RGGI Program Design Elements

- ◆ IPM electricity sector modeling will inform the 2016 Program Review (PR) and implementation of the EPA Clean Power Plan (CPP)
- ◆ The 2016 PR Reference Case is BAU without the CPP
- ◆ Additional potential modeling includes:
 - Reference Case that would apply the CPP nationally (but not within RGGI)
 - Sensitivity analyses of the reference case to consider higher and lower emission scenarios
 - Initial policy scenarios (2-3) reflecting a range of stakeholder comments

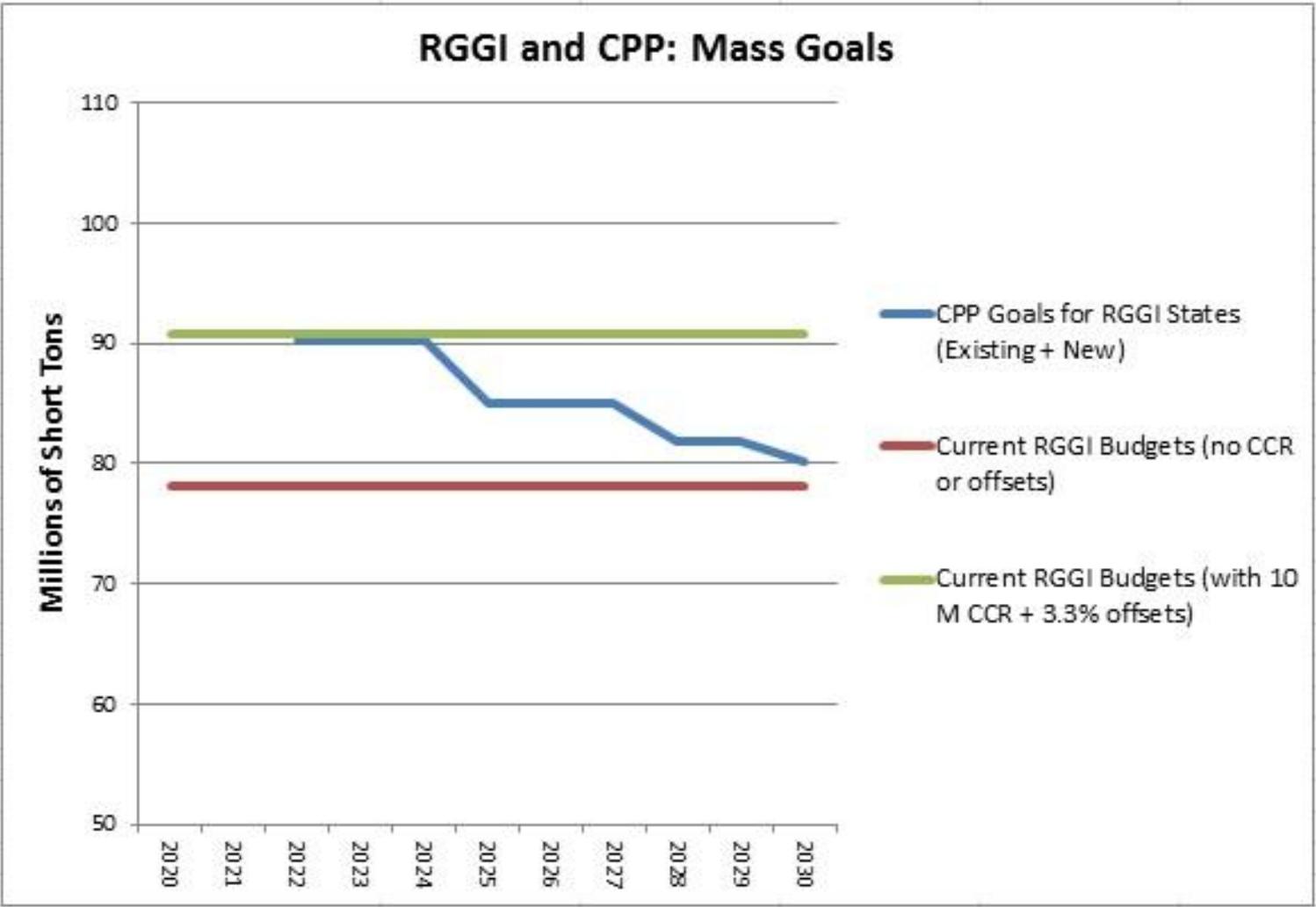


Analysis of RGGI Program Design Elements

- ◆ These analyses do not reflect a preference for any specific policy
- ◆ The modeling will provide information to inform consideration of:
 - CPP State Plan Options
 - Cap Level and CO₂ Emissions Reductions
 - Flexibility Mechanisms, i.e. Cost Containment Reserve, Offsets, Banking, Control Periods
 - Broadening Trading Markets
 - Regulated Sources



Analysis of RGGI Program Design Elements



IPM Modeling Runs for Discussion

- ◆ CPP Applied Nationally -- Reference Case
- ◆ Modeling Policy Scenarios
- ◆ Sensitivities of Reference Case



CPP Applied Nationally - New Reference Case

- ◆ Reference Case that incorporates nationwide CPP requirement (but not applied to RGGI)
- ◆ Proposed assumptions:
 - RGGI assumptions the same as 2016 PR Reference case
 - Assume CPP mass based targets (existing and new source complement) for states outside of RGGI
 - Assume trading among RGGI states
 - Assume trading among states outside RGGI
- ◆ Other considerations?



Modeling Policy Scenarios

- ◆ Developing initial policy scenarios that would change key RGGI design elements
- ◆ Discuss assumptions for initial runs and for alternative runs
- ◆ Proposed assumptions:
 - CPP mass based targets (existing and new source complement) added to RGGI states as constraint
 - Outside RGGI assume CPP mass based targets (existing and new sources complement)
 - Assume trading among RGGI states
 - Assume trading among states outside RGGI



Modeling Policy Scenarios

- ◆ Additional Proposed Assumptions model run #1
 - CCR and offsets can only be used up to the CPP targets
- ◆ Additional Proposed Assumptions model run #2
 - CCR and offsets are removed
 - RGGI cap is reduced annually by 2.5% of 2020 (1.95 M), per year and onwards
 - 2021 RGGI cap 76.2 M and declines to 56.7 M in 2031
- ◆ Other considerations?



Sensitivities of Reference Case

- ◆ Based on past experience, states are considering two Reference Case sensitivities
 - Low emissions combination that would combine several assumption changes
 - High emissions combination that would combine several assumptions changes
 - Assumptions under consideration include, but are not limited to Load, Fuel Prices, Renewable Energy targets



Reference Case Sensitivities

- Are the sensitivity projections most informative if applied to the 2016 PR Reference Case or the CPP Applied Nationally-Reference Case?
- Other considerations?

