# DRAFT 2016 RGGI Program Review Reference Case Results

February 2, 2016

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### **DRAFT 2016 PR Reference Case Projections**

- The following slides present select projections from the latest RGGI Reference Case to support the 2016 RGGI Program Review (2016 PR Reference Case).
- Projections are based on assumptions in place as of January 22, 2016.
- These projections are draft and may change as ICF makes refinements based on review and input by the States.
- Detailed 2016 PR Reference Case assumptions are summarized in accompanying materials.

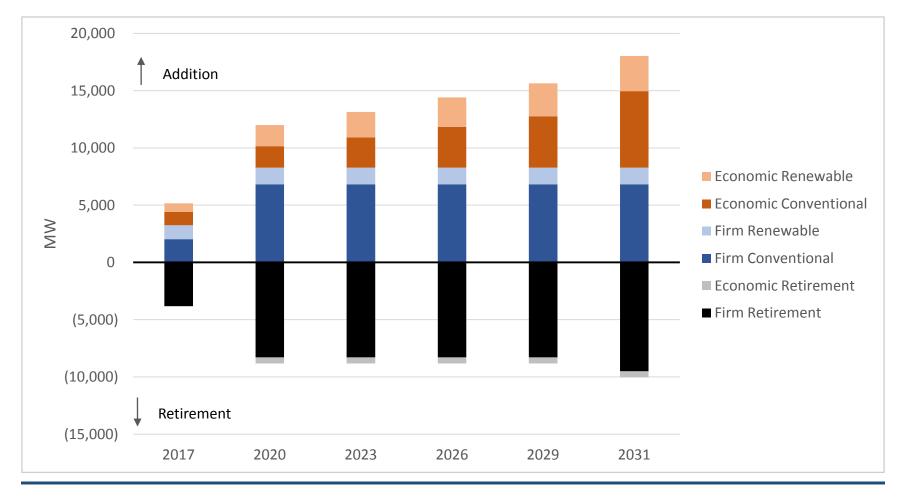
### **Reference Case Assumptions Overview**

• Note that some assumptions have changed since the assumptions reviewed in the November 17, 2015, stakeholder meeting.

Input	Sources of Assumptions			
	EIA	EPA	ISOs	Other
Energy and Peak Demand	X (Rest of US)		X (RGGI, PJM)	
Reserve Margin Requirements			Х	
Natural Gas Prices	Х			
Coal Prices				Х
Cost of New Capacity	Х			
Planned Retirement/Additions			X (RGGI)	X (Rest of US)
Transmission Capability/Additions			Х	х
State Policies				X (States)
RGGI Program				X (States)
Clean Power Plan	Not applicable for Reference Case			

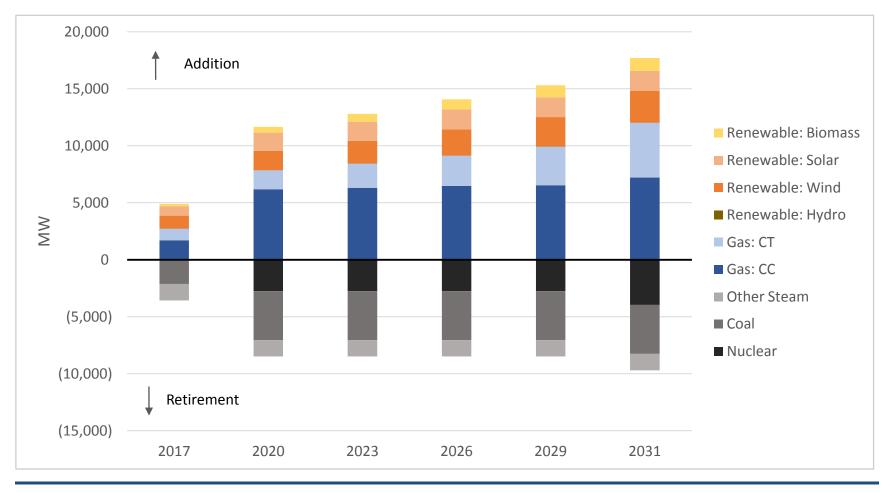
## **Projections:** Cumulative Capacity Additions

• The chart shows the distribution of capacity additions and retirements across firmly planned ("Firm") and model-projected ("Economic") types.



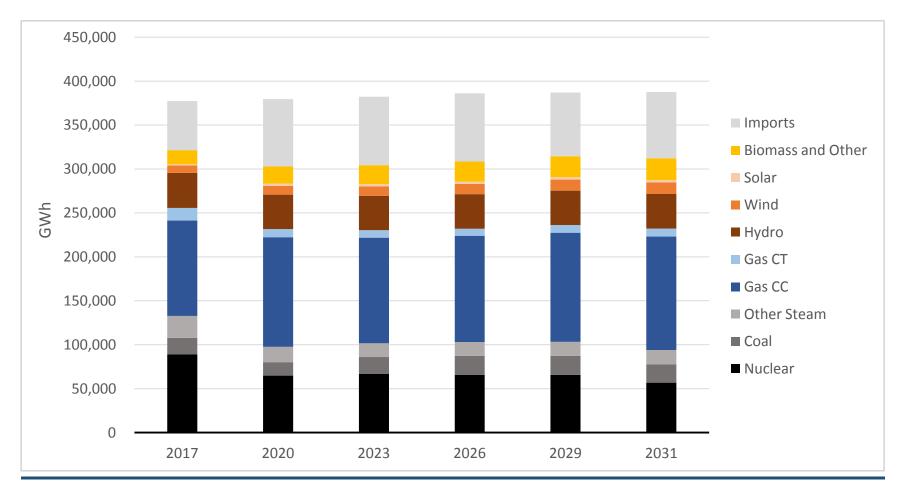
## **Projections:** Cumulative Capacity Additions

- The chart shows the distribution of capacity additions and retirements by capacity type.
- Wind and solar additions are shown at nameplate capacity.



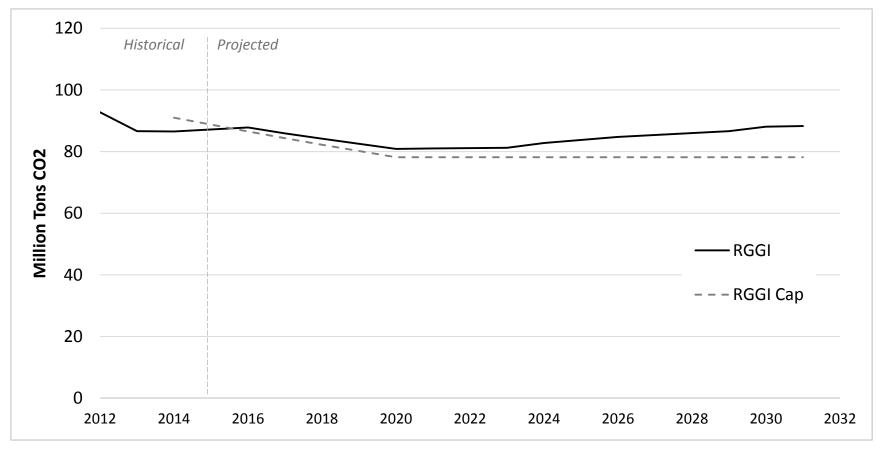
### **Projections:** Generation Mix

• The chart shows the projected generation mix for the RGGI states by capacity type, a well as total imports into the RGGI states.



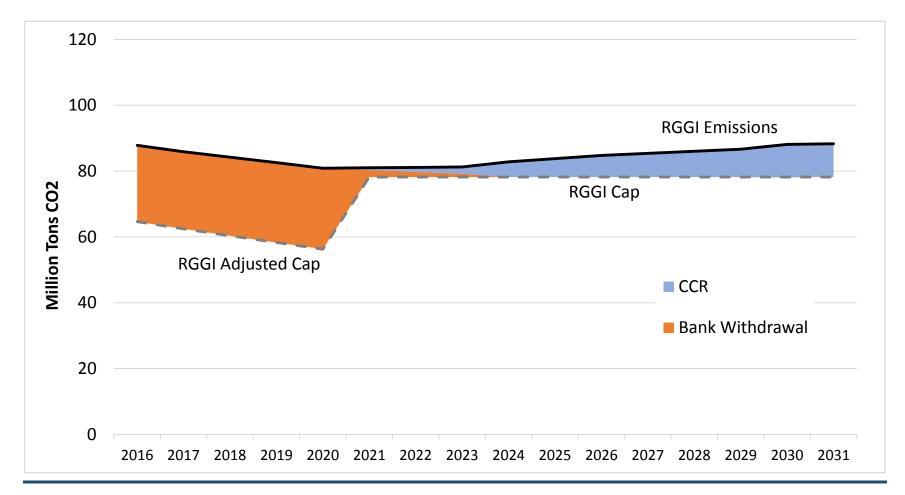
### **Projections:** *RGGI* CO<sub>2</sub> *Emissions*

- The chart shows projected CO<sub>2</sub> emissions.
- Emissions exceed the RGGI Cap when allowances are withdrawn from the bank or purchased at the CCR trigger price.



### **Projections: CO<sub>2</sub> Emission Reductions**

• The chart shows the projected CO<sub>2</sub> emissions relative to the cap and the use of banked allowances and CCR allowances used for compliance.



### **Projections: RGGI Allowance Prices**

- The charts show the projected RGGI allowance prices in real and nominal dollars.
- Allowance prices exceed the CCR trigger price in 2031 because affected sources must reduce emissions even after acquiring the 10 million CCR allowances.

