# NSR Working Group

May 12, 2009

# Demand-Side Solutions Near-Term

# Timing of Surrendering Offsets

- Proposal Surrender offsets prior to start of equipment operation
- Discussion
  - Allow offsets to be surrendered prior to start of equipment operation
    - Provides additional time to surrender offsets
    - Consistent with other air districts in state
  - Clarify existing rules such that no offsets needed for equipment replacements for first 90 days after startup of new equipment
    - Consistent with Rule 1313 (d)
    - Enforceable conditions to sunset existing permits
- Proposed SB288 Demonstration
  - No emissions impact
  - Allowing offsets to be surrendered prior to start up requires rule change
  - Clarification to Rule 1313 (d) requires no substantive change to Rule 1313

# Functional Identical Replacement Provision under 1304 (a)(1)

- Proposal
  - Revise provision for functionally identical replacement provided no increase in potential to emit any air contaminant
- Discussion
  - Rule 1304 (a)(1) currently allows "functionally identical modification to a source and there is no increase in maximum rating, and the potential to emit of any air contaminant"
  - Remove reference to "maximum rating"
  - Encourages more energy efficient equipment
  - Requirement
    - Maintain "functionally identical" concepts
    - BACT for new equipment
    - No increase in mass emissions
- Initial Agency Comments
  - Supportive in concept
- SB288 Demonstration
  - No increase in emissions

# Example for Replacement by Equipment Family

Existing Boiler – 40 MMBTU

PTE/BARCT: 75 lbs/day



New Boiler – 55 MMBTU

PTE/BACT: ≤75 lbs/day

## **Aggregate Emission Sources**

## Proposal

- Allow existing equipment to lower its emissions cap through enforceable permit conditions and such reductions not assumed in the SIP (see R1304(c)(2)(A) thru (D))
- Emissions from new sources, at BACT, must be equal to or less than reductions from existing sources (above)
- No offsets required from open market or AQMD account

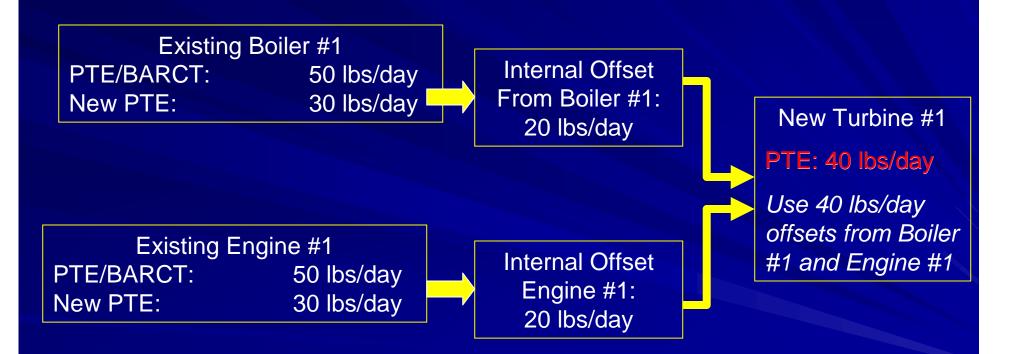
### Discussion

- Equipment involved can be one to many or many to one
- Onsite use only, not tradable

# Aggregate Emission Sources

- Discussion (Continued)
  - Limited banking (e.g., new permit applications filed within 12 months of reductions)
  - Allow base-load power plants to peakers that have higher generation capacity (MW), but lower capacity factor via permit conditions
  - Internal offset ratio of 1.3 to 1 for VOC and NOx and major sources (extreme non-attainment for ozone)
    - Potentially more stringent than off-site offsets
- SB288 Demonstration
  - Encourage greater reductions through facility modernization
  - Facilitates implementation of AB32 for energy efficiency improvements

# Example for Aggregating Emission Sources



# Concurrent Facility Modification

#### Proposal

- Expand R1304 (c)(2) description of "Concurrent Facility Modification"
- Remove R1306 reference
- No offset required from open market or AQMD account provided no increase in PTE

#### Discussion

- On-site only, not tradable
- Emission reductions can occur prior to submittal of permit application, but not to exceed 12 months
- Start-up emissions within 90 days allowed
- Existing equipment to lower its emission cap through enforceable permit conditions and reductions meet the requirements R1304(c)(2)(A) thru (D)
  - Same PTEs if already exist; otherwise last two year actual as PTE
- EPA's "internal trading ratio"

#### SB288 Demonstration

- Benefits of equipment modernization
- No change to existing emission tracking

# **Annual Credits**

### Proposal

- Issue new ERCs as annual instead of daily credits
- Convert existing ERCs to annual credits
- Considering to allow current ERC holders to retain daily credits for use at their own facility only

#### Discussion

- Future ERC issuance in total #/year based on R1306(c)(1) and modified (c)(4)
- Future offset requirements also in #/yr (modified R1306 (b))
- Existing ERC conversion to annual credits
  - based on records when credits were issued
  - if not available (orphan shutdowns), assuming 40 hrs/wk and 52 wks/year (~ RECLAIM procedures)
- Current ERC holders (as of rule adoption) can elect to retain #/day unit to offset requirements in #/day at own facilities

#### SB288 Demonstration

- Potentially more stringent for ERC generation; less stringent for offset requirements
- Need to develop methodology to show not a relaxation

# Supply-Side Solutions Near Term

# Future Shutdown Credits Where No Offsets Previously Provided

#### Proposal

- Require offsets generated from facility shutdowns to be returned to the AQMD if sources did not previously provide their own offsets (non-orphans)
- Limit offsets generated from individual equipment shutdowns (facility continues to operate) to be non-tradable if sources did not previously provide their own offsets (non-orphans)

#### Discussion

- On an equipment-by-equipment basis
- Offsets to be auctioned off to all sources
- Offsets obtained from AQMD are non-tradable and can be leased from the district for the first 5 years
- If unused, offsets to be returned to the district with applicable discount
- When equipment shuts down, offsets initially obtained from AQMD return to the district
- Open to long-term leasing discussion
- Fees collected to be re-invested for emission reduction projects in the impacted communities

#### SB288 Demonstration

Not applicable

# Adjust NSR Debt to BARCT

## Proposal

 Adjust positive NSR balance to reflect current BARCT level when paying back debt (i.e., at the time of applying for ERCs)

## Discussion

May be implemented through policy change

## ■SB288 Demonstration

Not applicable if implemented through policy change

# Pre-Consultation Prior to Generating ERCs

## Proposal

- Establish procedures for pre-consultation
- Tier I: BACT/BARCT determination, NSR balance, and source test protocol determination
- Tier II: Pre-approval of ERC quantification
- Cost recovery fees

### Discussion

- Improvement in program efficiency
- Can potentially lead to more credit generating opportunities
- Provides additional information for market participants
- Potential staff resource impacts
- Reg III amendments for cost recovery

### SB288 Demonstration

None

# ERCs Purchased by R1309.1 Facilities

## Proposal

- Exempt R1309.1 (d)(6) provisions for EPS that have purchased ERCs between January 2009 and re-activation of R1309.1
  - ERCs not yet surrendered for permit application
  - ERCs surrendered but have not commenced the operation of new equipment
  - ERCs already used

### Discussion

- Address EPS projects during permit moratorium
- Linked to timing of surrendering offsets
- Cost recovery for EPS
- Not allowed if already used per CAA

### SB288 Demonstration

No change in offset requirements

# ERC Issuance: BARCT/BACT Discount Approach

## Proposal

- ERCs 2-tiered discount at time of issuance
  - BARCT discount applicable for the first five years; BARCT= R1304 (c)(2)(A) thru (D)
  - BACT discount from 6<sup>th</sup> year and thereafter

### Discussion

- Value of ERCs depending on when used
- Potentially creating 5-year credit stream

## ■SB288 Demonstration

- Need to show not a relaxation
  - Current BACT discount approach prevents over-controls as a viable credit generation option from stationary sources
  - Potentially achieves greater voluntary emission reductions at stationary sources
  - Current emission reductions vs. banked shutdown credits