Revisions to the Transit Rule

CAPCOA Mobile Source Committee
ARB
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Highlights of Current Rule

- 2 paths - requirements differ by path
  - Alternative fuel path
  - Diesel path
- New bus standards
  - PM starting in 2002 same as 2007 truck (0.01 g)
  - NOx:
Highlights of Current Rule (cont.)

- Zero emission requirement
  - Demo requirement
  - 15% new purchases
    - 2008 diesel path
    - 2010 alt fuel path
- NOx cap on fleet
- Retrofit current fleet with PM filters

Status

- Paths chosen
- NOx cap met
- Retrofit with filters underway
- No new diesel buses during 2004-6 for sale
  - Only 7 transit districts took advantage of provision to buy higher NOx buses if fleet NOx reduced more
- Hybrid diesel buses emerging - don’t meet 0.5 g NOx
Status (cont.)

- Some smaller and larger buses being used by transit districts
  - Not covered by current rule
- EPA adopted 2007-9 NOx standard different than what we thought (1.2 g vs 0.2g)
- ZEBs much more expensive in low volume
  - Demo buses less in number than required and late to enter service

Facts About NG Bus Emissions

- Toxic emissions about the same as diesel with filter (2002+ buses)
- NOx emissions better in 2004-6
  - 1.5-1.8 g NOx  NG bus
  - 2.2 g NOx  Diesel bus
- At 0.2 g NOx (2010 standard) emissions about the same
Schedule for Resolution of Issues

- June 2004 staff proposal
  - Allow diesel path districts to buy new hybrid diesel buses in 2004-6
    - 1.8 g NOx or less (NG equivalent)
    - Offset forgone NOx emissions (1.8 g vs 0.5 g)
  - Reduce number of demo zero emission buses from 12 to 6, and adjust schedule to match availability (2/06 instead of 7/03)

- Late 2004 proposal
  - Expand scope of rule to include commuter buses and smaller buses in in-use fleet requirements
Schedule for Resolution of Issues

- **Summer 2005**
  - Determine if 2007 0.2 g NOx standard is achievable
    - Original intent was to match the federal rule (EPA proposed 0.2 g NOx but adopted 1.2 g for 2007-9)
    - No diesel buses will be meet 0.2 g NOx standard until 2010
    - Uncertain if NG buses will meet 0.2g NOx in 2007 - delay needed to better assess this

Policy Issues - Summary

- Can any technology (diesel or NG) meet the 0.2 g standard by 2007?
- Should whole state be required to purchase NG buses?
- Is the emission difference worth it?
  - 3 years of lower NOx (0.2g vs 1.2g in 2007-9) from NG
  - In 2010 all engines meet 0.2g NOx