

Henry Hago  
07-12-6

# South Coast AQMD Staff Comments on Proposed At-Berth Ocean-Going Vessel Regulation



South Coast Air Quality Management District

Agenda Item No. 07-12-6  
California Air Resources Board Meeting  
El Monte, CA  
December 6, 2007

## Recommended Revised Targets

Date	Reduced Onboard Power Option (Grid)	Equivalent Emission Reduction Option
January 1, 2010	<del>Ships must use shore power if available</del> <u>20% visits and power demand</u>	<del>40</del> <u>20%</u> reduction
January 1, 2012	<del>Ships must use shore power if available</del> <u>40% visits and power demand</u>	25 <u>40%</u> reduction
January 1, 2014	<del>50</del> <u>60%</u> visits and power demand	50 <u>60%</u> reduction
January 1, 2017	70% visits and power demand	70% reduction
January 1, 2020	80% visits and power demand	80% reduction

05-15-10  
05-15-10

## Compliance Flexibility to Grid-Based Power Option

- Prior to 2014:
  - Allow Equivalency demonstration on a port-wide basis to the 2010 and 2012 targets. The equivalency demonstration would be submitted by the Port Authority.
  - Exemption if a vessel operator demonstrates meeting the 2010 or 2012 emission reduction targets is not feasible due to physical limitations, safety, or other reasons.  
(The vessel operator must demonstrate that the only choice is grid-based electric power and show progress to developing the necessary infrastructure.)

## Non-Grid Power Generation

- Should be BACT and Consistent with Local Air District Regulations
- Revise NOx Emission Limits [(Section (d)(2)(E))]:
  - 0.2 g/kW-hr – Prior to 2014
  - 0.03 g/kW-hr – Beginning January 1, 2014

## Emission Reductions and Costs

- Recommended Revised Targets Result in Greater NOx Emission Reductions:
  - 1.6 tons/day - 2010
  - 2.6 tons/day - 2012
  - 1.9 tons/day - 2014
- Cost Analysis Based on 20% Compliance for a Typical Terminal
  - Grid Power: \$2.30 per TEU
  - Fuel Cell: \$3.40 per TEU
  - LNG Dockside Generator with SCR: \$0.80 to \$3.50 per TEU

## Summary

- Urge Adoption of Proposed At-Berth Ocean-Going Vessel Regulation with Proposed Revisions