

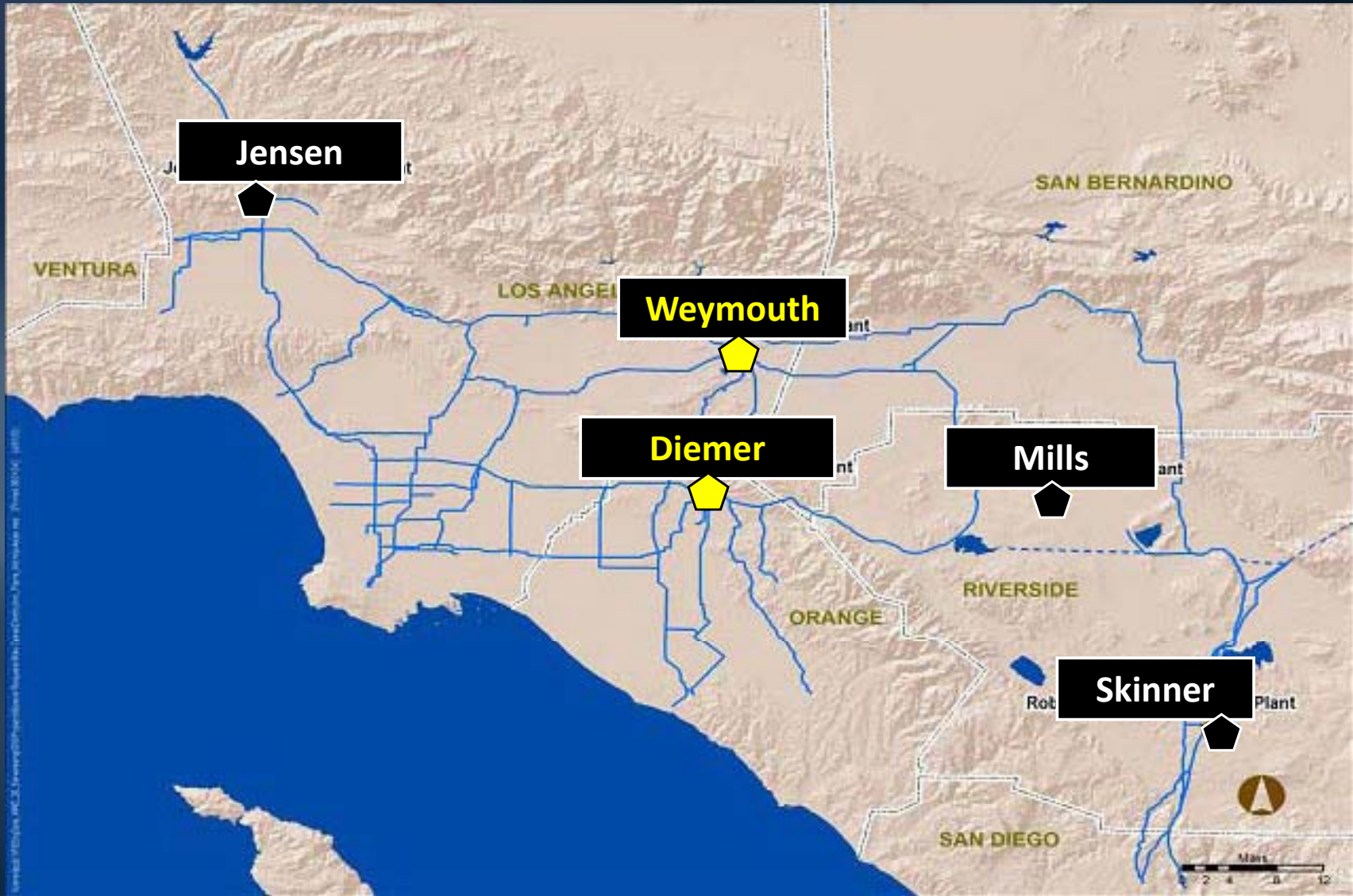
Authorize Purchase of Nitrogen Oxide Emission Credits for Standby Generators

Water Quality & Operations Committee
Item 8-5
June 8, 2009

Scope of Action

- Authorize purchase of nitrogen oxide (NO_x) emission reduction credits for emergency generators
 - Diemer not-to-exceed amount of \$900,000
 - Weymouth not-to-exceed amount of \$800,000
- Funds available from prior appropriations

Metropolitan Water Treatment Plants



Background

- Emergency generators essential to support plant operations during power outages
 - Power outages occurred 19 times at water treatment plants in FY 08/09
 - Designed to support multi-day power outages
- Diemer Oxidation Retrofit Program
 - Under construction
 - Two 1.5 megawatt generators
- Weymouth Power System Upgrade
 - In final design
 - Two 2.25 megawatt generators

Air Contaminants

- Air toxics
 - Pose hazards to human health
 - Benzene, asbestos, chromium, lead
- Criteria (common-air) pollutants
 - Stringently controlled if exceed national ambient air quality standards
 - South Coast: NO_x, VOC, PM₁₀, SO_x
- Ozone depleting substances
- Greenhouse gases

Permitting Emergency Generators

- Air quality permits needed for emergency generators
 - Maximum operation of 200 hours per year
 - Up to 50 hours per year for maintenance/testing
- Pollution credits required to offset emissions from maintenance and testing (not emergency)
 - Controls emissions within non-compliance air basins
 - Credits issued at no cost for essential public services
- Legal action against SCAQMD in November 2008 blocked this past practice

Impact of Legal Action

- South Coast Air Quality Management District issued a permit moratorium
- Emission credits now must be purchased on open market
 - Coastal NOx credits cost \$80,000 - \$120,000 per lb/day
 - Inland NOx credits cost \$65,000 - \$90,000 per lb/day
- Potential remedies
 - Regulatory: Revise environmental analysis
 - Legal: Appeal court decision
 - Legislative: SB 696 (Wright) restores offsets
 - Resolution not expected within next 6-12 months
- Affects on-going MWD projects

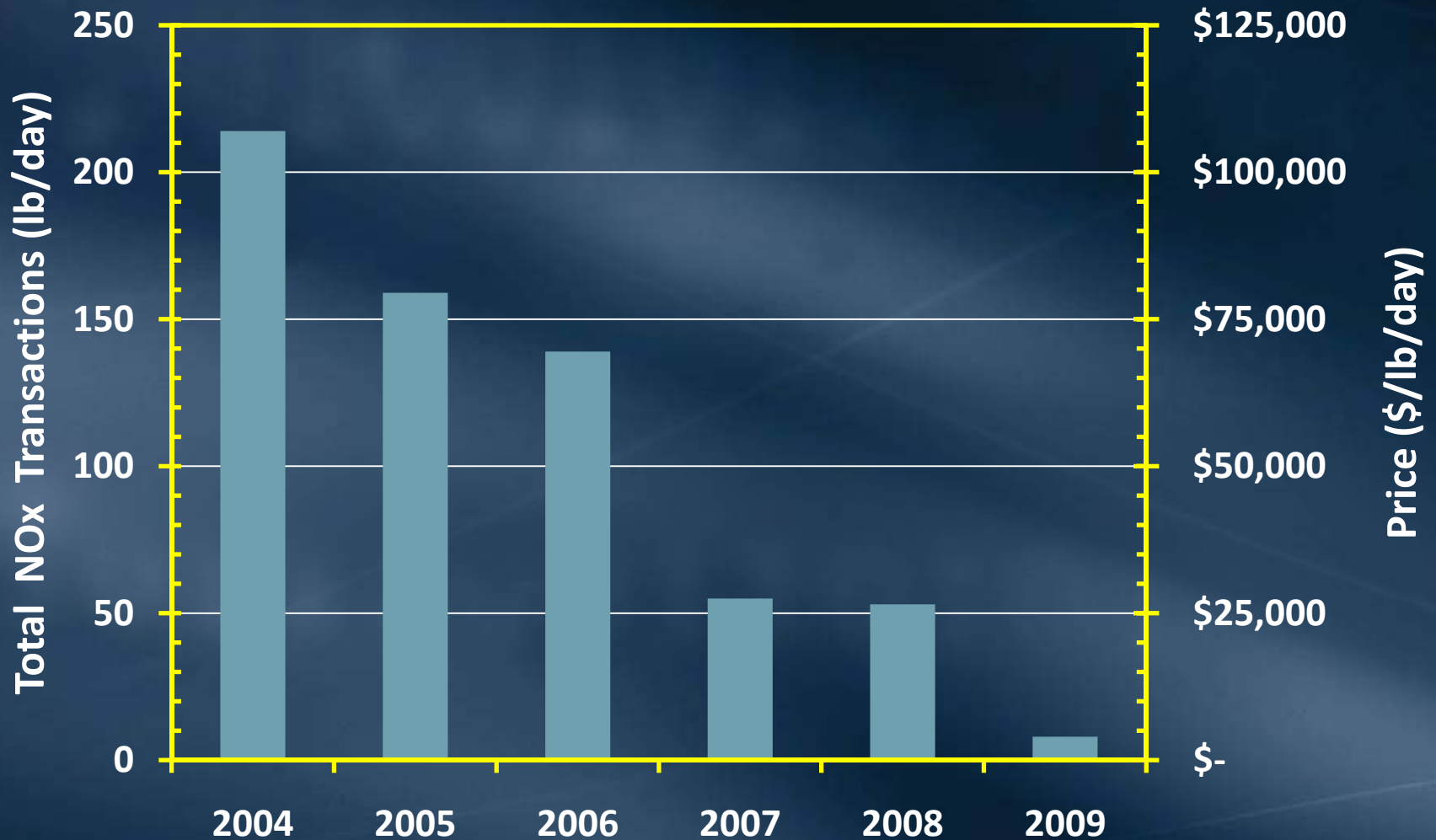
Alternatives Considered

- Reduce project scope and maintenance
 - Reduce from two to one generator
 - Reduce testing from 50 hrs/year to 6 hrs/year
 - Not recommended because of loss of reliability
- Procure credits on open market

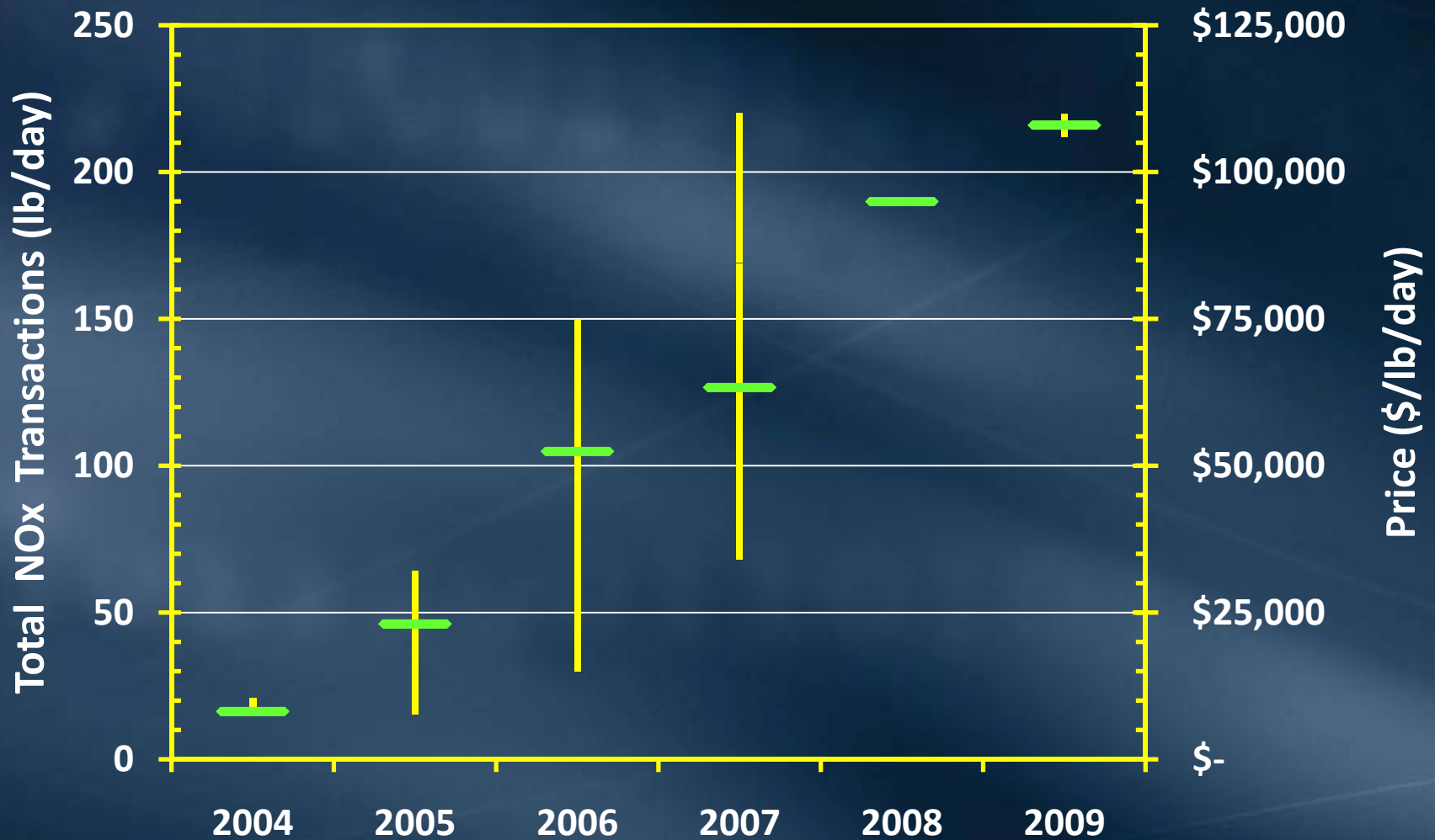
Recommended actions

- Procure credits as soon as possible
 - Allows projects to continue without restriction
 - Direct purchase of Coastal credits from Orange County Sanitation District
 - Competitive bid for Inland credits
- Procure credits for industry-standard maintenance practices
 - Diemer: 7 lb/day of NO_x (Coastal)
 - Weymouth: 8 lb/day of NO_x (Inland)

Decreasing Supply of NOx in Market



Price of NOx Credits Increasing



Board Options

● Option 1

- Adopt CEQA determination
- Authorize purchase of NOx credits for Diemer (\$900,000)
- Authorize purchase of NOx credits for Weymouth (\$800,000)

● Option 2

- Adopt CEQA determination
- Authorize purchase of NOx credits for Diemer (\$900,000)

● Option 3

- Do not proceed with purchase of NOx credits

Staff Recommendation

- Option 1