SOUTH COAST GROUND SERVICE EQUIPMENT MEMORANDUM OF UNDERSTANDING

An Innovative Agreement to Achieve Cleaner Air

CALIFORNIA AIR RESOURCES BOARD ALASKA AIRLINES AMERICAN AIRLINES CONTINENTAL AIRLINES DHL AIRWAYS HAWAIIAN AIRLINES MIDWEST EXPRESS AIRLINES SOUTHWEST AIRLINES UNITED PARCEL SERVICE AIRBORNE EXPRESS AMERICA WEST AIRLINES AMERICAN TRANS AIR DELTA AIR LINES FEDERAL EXPRESS JETBLUE AIRWAYS CORP. NORTHWEST AIRLINES UNITED AIRLINES US AIRWAYS

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SOUTH COAST GROUND SERVICE EQUIPMENT <u>MEMORANDUM OF UNDERSTANDING</u>

This South Coast Ground Service Equipment Memorandum of Understanding ("GSE MOU" or "MOU") is entered into between the California Air Resources Board ("ARB") and the Participating Airlines (collectively the "Parties"). In order to achieve the emission reductions contemplated herein, the Parties have voluntarily arrived at the following mutual understandings and agreements.

I. MUTUAL UNDERSTANDINGS AND AGREEMENTS

- A. The Participating Airlines' Affirmative Proposal for the South Coast Ozone Nonattainment Area. This MOU reflects several years of negotiations among the airlines and federal, state, and local government agencies targeted at reaching a voluntary agreement to address the unique air quality problems of the South Coast Air Basin ("South Coast" or "Basin") in a manner consistent with a safe, efficient, and competitive National Airspace System. The airlines have participated in these negotiations principally through the Air Transport Association of America, Inc. ("ATA"), although major South Coast carriers have participated as well. The government agencies involved in this dialogue have been the U.S. Environmental Protection Agency ("EPA"), Federal Aviation Administration ("FAA"), ARB, and the South Coast Air Quality Management District ("District" or "SCAQMD"). The five major airports in the South Coast have also been participants. As a result of this cooperative public/private effort, the Participating Airlines, together with the airports, have voluntarily agreed to join ARB and EPA in an innovative effort to achieve cleaner air in the South Coast through reduction of emissions from Ground Support Equipment ("GSE"). Broad support for this MOU is evidenced by the Statement of Principles ("SOP"), which is Appendix 3 attached hereto.
- B. <u>The Role of GSE in Commercial Aviation</u>. GSE is critical to the safe and efficient functioning of the National Airspace System. GSE perform a myriad of functions, including, but not limited to: starting aircraft, aircraft maintenance, aircraft fueling, transporting cargo to and from aircraft, loading cargo, transporting passengers to and from aircraft, baggage handling, lavatory service, and food service.
- C. <u>The South Coast's Unique Air Quality Problems</u>. The South Coast's high levels of ozone pollution result from the large amount of emissions generated in the Basin, combined with the region's meteorology and topography. The South Coast is the only area currently classified under the Clean Air Act ("CAA") as an Extreme Ozone Nonattainment Area. The South Coast has unique air quality problems that call for unique, exceptional solutions. Because of these circumstances, many industries operating in the South Coast have been required to achieve more stringent levels of control of air pollutant emissions than are required for any other area of the nation.

D. <u>Reservation of Rights</u>. The Participating Airlines voluntarily agree to this MOU in light of the South Coast's unique air quality circumstances. The Parties acknowledge that this MOU does not constitute an admission by any of the Participating Airlines as to the legal authority of any federal, state, or local legislative body or administrative agency with respect to GSE. The Participating Airlines expressly reserve the right to challenge the exercise of any such legal authority.

II. GLOSSARY OF TERMS USED

"1997 Existing Fleet" means the collective GSE of the Participating Airlines at the District Airports as of December 31, 1997, as provided in Appendix 1 attached hereto, Table 4, and replacements of such GSE.

"2010 Goals" refers to those goals set forth in Section III.A. through III.C.

"ARB" means the California Air Resources Board.

"ATA" means the Air Transport Association of America, Inc.

"Average industry aggregate" or *"Aggregate"* means the average of all of the Participating Airlines' GSE fleets at all District Airports.

"Baseline" means the 1997 Existing Fleet.

"Basin" means South Coast Air Basin.

"*Class and category of GSE*" means one or more of the twenty four (24) categories of GSE identified in Appendix 2 attached hereto, which may be further distinguished by the duty cycle for the specific category (e.g., an aircraft tractor that is used for push back service versus an aircraft tractor that is used for extended aircraft tows).

"*Clean Air Act*" means the federal Clean Air Act, as amended in 1990, 42 U.S.C. §§ 7410 – 7671p.

"*Conversion*" or "*Convert*" means the replacement of an engine in a piece of GSE with an ARB certified engine.

"Diesel Engine" shall have the same meaning as the definition of "diesel" set forth at 40 C.F.R. § 86.090-2 (2000).

"Diesel GSE" means a GSE powered by a diesel engine.

"Diesel Oxidation Catalyst" ("DOCs") means an exhaust treatment device that is verified by ARB for use on off-road diesel engines, and which reduces hydrocarbon emissions and the soluble organic fraction of diesel particulate matter emissions through catalytic oxidation.

"*Diesel Particulate Filter*" ("*DPF*") means an exhaust treatment device that is verified by ARB for use on off-road diesel engines, which reduces particulate matter through filtration, and incorporates passive or active regeneration of the DPF. Passive regeneration relies on the energy of the diesel exhaust to oxidize diesel particulate; active regeneration relies on a source of energy beyond the heat of the exhaust stream itself to aid in regeneration of the DPF.

"*District Airports*" means Burbank-Glendale-Pasadena Airport, the John Wayne Airport, the Los Angeles International Airport, the Long Beach Municipal Airport, and the Ontario International Airport, unless another current or future commercial airport in the South Coast becomes a District Airport pursuant to Section V.E.

"Existing Fleet Emissions Rate Target" means the 1997 Existing Fleet Emissions Rate Goal.

"*Effective Date*" or "*Date of Execution*" reflects the date on which ARB and at least nine carriers execute the MOU.

"EPA" means the United States Environmental Protection Agency.

"Existing GSE" means a piece of GSE in the 1997 Existing Fleet.

"Fuel Cell Powered Equipment" ("FCPE") means any equipment including any vehicle powered by electricity generated from a fuel cell, which converts chemical energy directly into electricity by combining oxygen from the air with hydrogen gas.

"Ground Support Equipment," "Ground Service Equipment," or "GSE" means any vehicle listed in Appendix 1 attached hereto, Table 3 if: (a) such a vehicle lacks a license plate issued by the California Department of Motor Vehicles; (b) the engine powering the equipment is twenty five (25) horsepower or greater; and (c) the equipment is not subject to compliance with SCAQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under SCAQMD Rule XVI.

"Growth" or "Growth Fleet" means New GSE except as specifically provided herein.

"HC" means hydrocarbon emissions from GSE engine exhaust only.

"Individual Carrier Matrix" means the report matrix for an Individual Participating Airline, the form for which is set forth at Appendix 2 attached hereto, Tables 4 through 7.

"Individual District Airport" means one of the District Airports.

"Individual Participating Airline" or *"IPA"* means one of the individual airlines that is a signatory to this agreement, and does not refer to the Participating Airlines or to ATA.

"Low sulfur diesel fuel" means a diesel fuel that contains no more than fifteen (15) parts per million sulfur by weight.

"MOU Records" means those records required to be created or maintained pursuant to this MOU and Appendix 2 attached hereto.

"New GSE" or *"New Piece of GSE"* means GSE that an Individual Participating Airline brings into a District Airport after December 31, 2003 if an Individual Participating Airline has not designated such GSE as Replacement GSE.

"NOx" means oxides of nitrogen from GSE engine exhaust only.

"Nonparticipating Airline" or "NPA" means an airline that is not a signatory to the MOU.

"Participating Airlines" means the collective group of Individual Participating Airlines, which is as follows: Airborne Express, Alaska Airlines, America West Airlines, American Airlines, American Trans Air, Continental Airlines, Delta Air Lines, DHL Airways, Federal Express, Hawaiian Airlines, Jet Blue Airways Corp., Midwest Express Airlines, Northwest Airlines, Southwest Airlines, United Airlines, United Parcel Service, US Airways, and any other individual airline that is a signatory to this agreement. Participating Airlines does not mean ATA.

"PM" means particulate matter from GSE engine exhaust only.

"Replacement" or *"Replacement GSE"* means: (a) a piece of GSE that an Individual Participating Airline designates as having been purchased or brought into the South Coast to replace an Existing GSE after December 31, 1997; or (b) an Existing GSE that an Individual Participating Airline designates as converted or retrofitted after December 31, 1997.

"Retirement," "retire," or *"retired"* means, when used with respect to a piece of GSE, that an Individual Participating Airline has scrapped or destroyed that piece of GSE, and not replaced it with another piece of GSE.

"Retrofit" or *"retrofitted"* means the installation of an ARB-verified emission control system in a piece of GSE after its initial manufacture and sale.

"South Coast Air Basin" or *"South Coast"* means the areas of Los Angeles, Orange, Riverside, and San Bernardino Counties as defined in Title 17 of the California Code of Regulations.

"Tier 2 engine" means an engine certified to the Tier 2 emission standards listed in Title 13 of the California Code of Regulations.

"Tier 2 GSE" means a diesel GSE powered by a Tier 2 engine.

"Tier 3 engine" means an engine certified to the Tier 3 emission standards listed in Title 13 of the California Code of Regulations.

"Tier 3 GSE" means a diesel GSE powered by a Tier 3 engine.

"Zero Emission Vehicle" or *"ZEV"* means any vehicle that could meet the zero-emission standards set forth in the California Exhaust Emission Standards and Test Procedures for 2003 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes (Aug. 5, 1999), or is certified to meet applicable ZEV standards in Title 13 of the California Code of Regulations.

III. THE PARTICIPATING AIRLINES' EMISSION REDUCTION GOALS FOR THE SOUTH COAST

- A. <u>1997 Existing Fleet Emissions Rate Goal</u>. The Participating Airlines shall meet a 2.65 grams per brake-horsepower hour ("g/bhp-hr") emission rate goal for HC plus NOx, as an average industry aggregate, by December 31, 2010 for the 1997 Existing Fleet, as reflected in 2010 ("1997 Existing Fleet Emissions Rate Goal").
 - 1. The 1997 Existing Fleet Emissions Rate Goal shall be determined in accordance with Equation 1 of Appendix 1 attached hereto.
 - 2. If the Participating Airlines collectively do not meet the 1997 Existing Fleet Emissions Rate Goal as an average industry aggregate, liquidated damages shall be assessed against each Individual Participating Airline that has not met that goal, as provided in this MOU.
- B. <u>1997 Existing Fleet ZEV Goal</u>. The Participating Airlines will, in aggregate, have ZEVs represent at least thirty percent (30%) of the 1997 Existing Fleet, as reflected in December 31, 2010, by December 31, 2010 ("1997 Existing Fleet ZEV Goal").
 - 1. The 1997 Existing Fleet ZEV Goal shall be met as an average industry aggregate by the Participating Airlines, and shall be determined in accordance with Equation 3 of Appendix 1 attached hereto.
 - 2. If the Participating Airlines collectively do not meet the Existing Fleet ZEV Goal as an average industry aggregate, liquidated damages shall be assessed against each Individual Participating Airline that has not met that goal, as provided in this MOU.
- C. <u>New GSE ZEV Goal</u>. The Participating Airlines will, in aggregate, have ZEVs represent at least forty-five percent (45%) of New GSE by December 31, 2010. The New GSE ZEV Goal shall not apply to the following four categories of GSE: cargo loaders, ground power units ("GPUs"), air starts, and cargo tractors. These categories will be revisited during the 2006 Technology Review discussed in Section V.A.
 - 1. The New GSE ZEV Goal shall be met as an average industry aggregate by the Participating Airlines, and shall be determined in accordance with Equation 4 of Appendix 1 attached hereto.
 - 2. If the Participating Airlines collectively do not meet the New GSE ZEV Goal as an average industry aggregate, liquidated damages shall be assessed against each Individual Participating Airline that has not met the

goal, as provided in this MOU and Equation 4 of Appendix 1 attached hereto.

- 3. All Non-ZEV New GSE purchased as part of the growth fleet will meet on-road and nonroad clean diesel and gasoline engine standards that are applicable for that engine at the time that the Non-ZEV New GSE is brought into the South Coast.
- D. <u>Diesel Particulate Obligations</u>. The Participating Airlines agree to reduce diesel particulate emissions from their diesel GSE in the South Coast by installing ARB-verified diesel particulate control technology as described below. Before the Participating Airlines are required to install diesel particulate filters ("DPFs") on specific categories of GSE as part of this MOU, ARB must verify that DPFs are technically feasible for installation on specific classes and categories of diesel GSE, do not pose safety or reliability problems, and are cost-effective. Where DPFs are not feasible, safe, reliable, or cost effective, verified diesel oxidation catalysts ("DOCs") must be installed for such classes and categories of diesel GSE. Compliance with this section shall be determined on an average industry aggregate basis, except for Subsection D.6 below, Low Sulfur Diesel Fuel Requirements.
 - 1. <u>GSE Manufactured Prior to 1990</u>. By December 31, 2005, the Participating Airlines shall install DOCs on diesel GSE that were manufactured before 1990, provided that such DOCs are verified by ARB for use on off-road diesel engines with similar horsepower and duty cycle as diesel GSE.
 - a. Where there are DOCs verified for a class and category of GSE on or before June 30, 2003, the installation of verified DOCs is to be made on the following schedule:
 - (1) 25% by December 31, 2003;
 - (2) 65% by December 31, 2004; and
 - (3) 100% by December 31, 2005.
 - b. If DOCs are not verified by ARB for use on a class and category of GSE on or before June 30, 2003, this installation schedule for that class and category of GSE is to be delayed until such time as ARB makes the appropriate findings to support verification. Following such verification, the Participating Airlines shall be given three years to make the appropriate DOC retrofits as follows:
 - (1) 25% one year after verification;
 - (2) 65% within two years of verification; and

- (3) 100% within three years of verification.
- c. If ARB verified DPFs are shown to be available and technically feasible, safe, reliable, and cost effective for the pre-1990 diesel GSE, such GSE must be outfitted with a DPF by December 31, 2010. However, no DPF will be required for such GSE if:
 - (1) It will be converted to Tier III or ZEV by December 31, 2010; or
 - (2) An Individual Participating Airline has petitioned and ARB has waived this obligation for good cause. Good cause for such a waiver exists if the piece of GSE is to be replaced or retired within a reasonable period of time.
- 2. <u>GSE Manufactured in or After 1990</u>. The Participating Airlines shall install verified DPFs or verified DOCs, as appropriate, on GSE manufactured in or after 1990, on the following schedule:
 - a. 25% within twelve (12) months of issuance of verification by ARB;
 - b. 65% within twenty four (24) months of issuance of verification by ARB; and
 - c. 100% within thirty six (36) months of verification by ARB.
 - d. However, no diesel particulate controls are required for those GSE identified by a Participating Airline for conversion to either ZEV technology or Tier III diesel by December 31, 2008.
- 3. <u>GSE Operated Less than Two Hundred (200) Hours Per Year</u>. All diesel GSE used less than two hundred (200) hours per year, regardless of year of manufacture, will be retrofitted with verified DOCs as set forth below.
 - a. Where there are DOCs verified for a class and category of GSE on or before June 30, 2003, the installation of verified DOCs is to be made on the following schedule:
 - (1) 25% by December 31, 2003;
 - (2) 65% by December 31, 2004; and
 - (3) 100% by December 31, 2005.
 - b. If DOCs are not verified by ARB for a class and category of GSE on or before June 30, 2003, the installation schedule for that class and category of GSE is to be delayed until such time as ARB

verifies the DOC. Following such verification, the Participating Airlines shall make the appropriate DOC retrofits as follows:

- (1) 25% one year after verification;
- (2) 65% within two years of verification; and
- (3) 100% within three years of verification.
- c. No further diesel particulate control requirements, including DPFs, apply to GSE operated less than two hundred (200) hours per year.
- 4. <u>Technology Demonstration Program</u>. The Participating Airlines and ARB shall participate in a jointly funded demonstration project to identify technically feasible, safe, reliable, and cost effective diesel particulate retrofits.
 - a. <u>Funding and Mutual Agreement</u>. ARB and ATA will contribute at least \$500,000 each to the Technology Demonstration Program. The scope and execution of the demonstration project will be mutually agreed to among ARB, Participating Airlines, and original equipment manufacturers of diesel engines and particulate control technology.
 - b. <u>Minimum Scope of Study</u>. The Technology Demonstration Program will identify whether DPF technology is technically feasible and cost-effective for retrofit on GSE taking into consideration GSE duty cycle and activity; minimum performance and operating requirements for GSE; and minimum particulate control efficiency and performance requirements of the DPF. The following categories of GSE may be considered for inclusion in the Technology Demonstration Program: air conditioners, air starts, ground power units, aircraft tractors, cargo loaders, belt loaders, baggage and cargo tractors. The Technology Demonstration Program will also consider variations in the age of the unit, horsepower and load, duty cycle, and the exhaust temperature.
 - c. <u>Consideration of Other Data</u>. The Technology Demonstration Program may consider data or analyses generated from other reputable DPF studies, provided that these data are representative of the minimum performance requirements, duty cycle, operating conditions, and exhaust temperature for specific categories of GSE.
 - d. <u>ARB Findings</u>: The results of the Technology Demonstration Program must be mutually agreed to among the Participating Airlines, ARB, original engine manufacturers and DPF vendors.

- 5. <u>Tier III Diesel</u>. All Tier III diesels are presumed to employ DPF controls, or otherwise comply with ARB particulate emission standards required for diesel engines sold in California for model year 2006 and later.
- 6. <u>Low Sulfur Diesel Fuel</u>. Each Individual Participating Airline will purchase and use low sulfur diesel fuel (fifteen (15) ppm maximum sulfur content by weight) for all diesel GSE operating in the South Coast beginning after December 31, 2003, except where one or more of following conditions occurs:
 - a. The incremental cost of low sulfur diesel fuel when compared to the price of California diesel is ten (10) cents per gallon or more at the time of execution of a purchase order for purchase of the same quantity of diesel fuel;
 - b. Low sulfur diesel fuel is not available from any major fuel supplier or refiner in the South Coast;
 - c. An Individual Participating Airline demonstrates to ARB that low sulfur diesel fuel fails to achieve ASTM D 975 fuel specifications, or that the low sulfur diesel fuel will adversely affect the performance of the diesel engine. Performance means the estimated useful life of the engine, fuel economy, or rated brake horsepower; or
 - d. An Individual Participating Airline demonstrates to ARB that it cannot meet the requirements of this provision for reasons beyond its control, including, but not limited to, infrastructure limitations, the failure of a fuel supplier to timely deliver fuel, or the failure of a fuel supplier to meet fuel specifications.
- 7. <u>Compliance with Diesel Particulate Obligations</u>. Participating Airlines shall not be required to comply with the retrofit requirements of this MOU for existing diesel engines that are subsequently covered by a rule adopted by ARB pursuant to the Diesel Risk Reduction Plan, to the extent that such ARB regulations apply to existing diesel GSE operated within the South Coast.
- 8. <u>Interim Goals</u>. The Participating Airlines shall meet the Interim Goals as set forth in Section IV.D.2a.-b.
- E. <u>Fate Of Old Equipment Obligations</u>. Each Individual Participating Airline agrees not to transfer any piece of GSE from the South Coast Air Basin to another airport in the United States except under the following conditions:
 - 1. It has been improved as follows: for spark ignition engines—retrofitted with three-way catalyst with a minimum of eighty percent (80%) control of

HC + NOx; for compression ignition engines—meets 6.9 g/bhp/hr NOx, or is modified by four (4) degrees timing retard, turbo-charging, and after-cooling, unless demonstrated not to be feasible to the satisfaction of ARB; or

- 2. It has been moved to accommodate growth or an equipment change. For purposes of this Subsection F, growth is defined as a carrier-specific year over year increase at the airport in question of either scheduled departures or cargo ton miles that require additional GSE. An equipment change is defined as the use of a new aircraft type at the airport in question that requires additional GSE; or
- 3. It results in a net emissions benefit at the airport to which the GSE is transferred. Net emissions benefit is calculated using Equation 1 in Appendix 2 attached hereto.
- 4. If a diesel GSE is transferred within California, it shall be equipped with a verified diesel particulate filter ("DPF"), if available, but if a DPF is not available, a verified oxidation catalyst ("DOC"), if available.
- 5. If an Individual Participating Airline sells a piece of GSE after the GSE MOU's execution, the sales agreement must identify the GSE purchaser and include a provision requiring compliance with this section, unless the sale is otherwise subject to the MOU pursuant to Sections V.Q-R. An Individual Participating Airline shall have no responsibility for ensuring that a GSE purchaser complies with the terms of the sales agreement.
- 6. The obligations under this Subsection F terminate on the effective date of an MOU or another instrument implementing a national program to regulate GSE, currently being negotiated by the airlines, EPA, FAA, state regulators and non-governmental organizations. In addition, if an MOU or another instrument implementing a program to regulate GSE is entered into at any airport in California, the obligations of this Subsection F no longer apply to the equipment transferred to that airport.

IV. ADMINISTRATIVE PROVISIONS

- A. <u>Recordkeeping</u>.
 - 1. <u>Existing and New GSE</u>. For each piece of Existing and New GSE, each Individual Participating Airline shall keep records identified in Appendix 2 attached hereto.
 - 2. <u>1998-2003 Fleet GSE</u>. For GSE added in the time period between the 1997 Baseline Inventory and December 31, 2003, each Individual Participating Airline shall keep records identified in Appendix 2 attached hereto.

- 3. <u>Diesel Particulate</u>. Each Individual Participating Airline shall document compliance with the diesel particulate reduction requirements of Section III.D.
- 4. <u>Fate of Old Equipment</u>. Each Individual Participating Airline shall meet the recordkeeping obligations for GSE moved outside the South Coast that are set forth in Appendix 2 attached hereto.
- 5. <u>Recordkeeping Forms</u>. Each Individual Participating Airline will use the forms set forth in Appendix 2 attached hereto, or the functional equivalent of such forms, to record the information required by this section.
- 6. <u>Availability of MOU Records</u>. Within thirty (30) days of receipt of a written request from ARB, an Individual Participating Airline shall make available to ARB all records required to be kept pursuant to this section ("MOU Records"). ARB shall request such information only for an Individual Participating Airline that is required to submit Individual Carrier Matrices as provided herein.
- 7. <u>Schedule of Record Retention</u>. Each Individual Participating Airline shall retain MOU Records from the effective date of this MOU until December 31, 2013; provided that if any Party has invoked the limited dispute resolution process set forth in Section IV.D.6, the Individual Participating Airline that is a party to that process shall maintain the MOU Records until the conclusion of that process, or December 31, 2013, whichever is later.
- B. <u>Reports</u>. Unless otherwise expressly stated in this section, the Progress Report and Compliance Reports (the "MOU Reports") may be prepared for the Participating Airlines collectively demonstrating compliance on an aggregate basis without identifying in any manner whatsoever the Individual Participating Airlines. The reports may be prepared by a designated third-party but the Individual Participating Airlines shall be responsible for the accuracy of any report submitted under this section.
 - 1. <u>2003 Progress Report</u>. By July 1, 2004, the Participating Airlines will provide a Progress Report to ARB of GSE replaced by new or retrofitted units between January 1, 1998 and December 31, 2003, and identify the GSE added between January 1, 1998 and December 31, 2003. The form for the 2003 Progress Report is set forth at Appendix 2 attached hereto.
 - 2. <u>2005 Compliance Report</u>. By July 1, 2006, the Participating Airlines shall provide a Compliance Report to ARB on the composition of the aggregate industry GSE fleet as of December 31, 2005. The 2005 Compliance Report shall include an update as necessary of the information provided in the 2003 Progress Report and a composite matrix setting forth the composition of the Participating Airlines' aggregate GSE fleet at each

District Airport in the South Coast Air Basin as of December 31, 2005. The form for this composite matrix is set forth at Appendix 1 attached hereto, Table 4. For purposes of the 2005 Compliance Report, the emissions calculations are to be made in accordance with the equations in Appendix 1 attached hereto, as applicable. The 2005 Compliance Report shall contain a demonstration that the Participating Airlines have taken specific actions to ensure compliance with the 2007 Interim Goals and the 2010 Goals as provided herein. Specifically, the Participating Airlines shall provide a demonstration that a sufficient number of ZEVs have been placed in service and that a sufficient number of existing equipment has been replaced, converted, or retrofitted to provide ARB reasonable expectation that the Participating Airlines will meet electrification goals and the fleetwide average HC plus NOx emissions goal for 2010. Reasonable expectation of meeting goals is defined as numbers of ZEVs, and replaced, converted, or retrofitted equipment that are at a level defined by a straight line extrapolation of the 1997 baseline values between 2003 and the 2010 goals. Any deviation therefrom must be reported to and approved by ARB. For diesel oxidation catalysts or diesel particulate filters, the Participating Airlines shall meet the retrofit schedule specified in Section III.D. The form for the 2005 Compliance Report is set forth at Appendix 2 attached hereto.

- 3. <u>2007 Compliance Report</u>. By July 1, 2008, the Participating Airlines will provide the 2007 Compliance Report to ARB. The 2007 Compliance Report will update, as needed, the information provided in the 2005 Compliance Report to reflect changes in the data from January 1, 2006 through December 31, 2007. The form for the 2007 Compliance Report is set forth at Appendix 2 attached hereto. In addition, the 2007 Compliance Report shall demonstrate that the Participating Airlines collectively met the 2007 Interim Goals, which are as follows:
 - a. ZEV goal for 1997 Existing Fleet: at least eighteen percent (18%)
 - b. ZEV Goal for New GSE (other than Air Starts, GPUs, Cargo Tractors and Cargo Loaders): at least twenty-eight percent (28%)
 - c. Diesel Oxidation Catalyst/Diesel Particulate Filters Commitments, as specified in Section III.D.
- 4. <u>2010 Final Compliance Report</u>. By March 15, 2011, the Participating Airlines shall provide the 2010 Final Compliance Report to ARB, which shall be calculated consistent with the equations in Appendix 1 attached hereto and Appendix 2 attached hereto. The 2010 Final Compliance Report shall provide: the Participating Airlines g/bhp-hr emission rate for the period January 1, 2010 through December 31, 2010; the number and percentage of ZEVs in the 1997 Existing Fleet as of December 31, 2010;

the number and percentage of New GSE that are ZEVs as of December 31, 2010; and certification that the diesel GSE are equipped with appropriate diesel particulate control technology.

- C. <u>Compliance Process</u>.
 - 1. <u>Consultations</u>.
 - a. The Participating Airlines collectively, or one or more Individual Participating Airline(s), may at any time initiate informal consultations with ARB to identify and resolve concerns or other issues regarding compliance herewith.
 - b. ARB may at any time initiate informal consultation with the Participating Airlines, or an Individual Participating Airline, to identify and resolve concerns or other issues relating to this MOU.
 - 2. <u>Completeness Determinations</u>. Within 30 days of receipt of an MOU Report, ARB shall provide the Participating Airline(s) a written notice of completeness ("notice of completeness") or incompleteness ("notice of incompleteness"). A notice of completeness shall state that an MOU report is complete because it contains all of the report elements specified in Section IV.B. and Appendix 2 attached hereto. A notice of incompleteness shall identify any report elements specified in Section IV.B and Appendix 2 attached hereto that are not contained in the MOU Report. The Participating Airline(s) shall correct any deficiency identified by ARB within 30 days after its receipt of the notice of incompleteness. If the Participating Airline(s), for good cause, more than 30 days to respond, it may request, and ARB will not unreasonably deny, a further extension.
 - 3. Effect of Individual Participating Airline's Failure to Provide MOU <u>Records Necessary for Reports</u>. Should any Individual Participating Airline(s) fail to provide MOU Records to the authorized representative of the Participating Airlines for the purposes of preparing the MOU Reports, the remaining Participating Airlines shall still submit a report based upon the data from those remaining airlines. The report shall identify any Individual Participating Airline(s) that failed to provide MOU Records for timely report submittal. Provided that the report contains such identification, it shall not be deemed "incomplete" under Section IV.C.2 as to any Individual Participating Airline, with the exception of the nonreporting airline(s), solely because of the failure of another Individual Participating Airline(s) to provide MOU Records for timely report submittals. The submitting airline(s) shall be subject to all requirements of this MOU as if the non-submitting airline(s) were not a party to this

agreement. The non-submitting airline(s) shall be subject to liquidated damages as set forth herein.

- 4. <u>Aggregate Compliance Determinations</u>
 - a. ARB shall first determine whether the Participating Airlines collectively comply with the goals of Section III.A. through III.E, as applicable. If ARB determines that the Participating Airlines met such goals on an aggregate basis, ARB shall issue a determination of compliance and liquidated damages may not be imposed against an Individual Participating Airline. This determination shall be made on the basis of the MOU Reports submitted in accordance with the provisions of this agreement.
 - b. If ARB finds that the Participating Airlines did not collectively comply with the applicable goals, ARB shall issue to the Participating Airlines a written determination of noncompliance with the applicable goals. The written compliance determination shall specifically identify the goals that ARB determines that the Participating Airlines collectively did not comply with, and the reasons for that determination. At the request of the Participating Airlines, and as set forth in Section IV.D.6, this final written determination of noncompliance may be subject to limited dispute resolution.
- 5. <u>Individual Participating Airline Compliance Determinations</u>.
 - a. If ARB has issued a final compliance determination that finds that the Participating Airlines collectively did not comply with an MOU goal set forth in Sections III.A through III.E, and such determination has been upheld in any limited dispute resolution process, or if an Individual Participating Airline is otherwise required to submit separate compliance information under Section IV.D.2.h, the Individual Participating Airlines shall submit their Individual Carrier Matrices. ARB shall review the Individual Carrier Matrices and determine which Individual Participating Airlines met the requirements of this MOU.
 - b. ARB shall provide a preliminary written non-compliance determination for an Individual Participating Airline. The preliminary written non-compliance determination shall specifically identify the goals that ARB finds the Individual Participating Airline did not comply with, and the reasons for that finding. The preliminary written non-compliance determination shall also set forth the proposed amount of liquidated damages due to ARB, if any, for the Individual Participating Airline. ARB shall

provide the Individual Participating Airline with its preliminary written non-compliance determination as expeditiously as practical, but not later than 30 days after receiving one of the following, whichever is received later: an Individual Carrier Matrix for the Individual Participating Airline, or any MOU Records for the Individual Participating Airline. The time periods provided for ARB to make a preliminary non-compliance determination may be extended by written agreement between the ARB and the Individual Participating Airline.

- c. The Individual Participating Airline shall have thirty (30) days to respond to ARB's preliminary written non-compliance determination. During the thirty (30) day response period, the Individual Participating Airline shall be provided an opportunity to meet and confer with ARB regarding the preliminary written noncompliance determination. The response may contain any information and analysis demonstrating compliance with the MOU. The time periods provided for a response may be extended by written agreement between ARB and the Individual Participating Airline.
- d. If, after review and consideration of the response to the preliminary written non-compliance determination including any information provided during the meet-and-confer session, ARB finds that the Individual Participating Airline did not comply with one or more of the applicable goals, ARB shall provide to the Individual Participating Airline a final written non-compliance determination with respect to whether the Individual Participating Airline complied with such goals. ARB shall issue the final written noncompliance determination within thirty (30) days of the receipt of the written response or the meet-and-confer session, whichever is later. The final written non-compliance determination shall specifically identify the goals that ARB determines that the Individual Participating airline did not comply with, the reasons for the determination, and the liquidated damages due, if any, from the Individual Participating Airline. As set forth in Section IV.D.6, this final written non-compliance determination shall be subject to limited dispute resolution.

D. <u>Remedies</u>.

1. <u>ARB's Role</u>. ARB is designated as the agency responsible for the enforcement of this agreement. The enforcement authorities specified herein may only be exercised by ARB. Nothing herein shall be interpreted as granting rights to the public or to any person not a party hereto.

- 2. <u>Liquidated Damages for Failure to Meet Industry Goals</u>. The parties agree that any determination of damages resulting from a breach of this agreement would be speculative and uncertain. The Parties, accordingly, agree to the payment of liquidated damages for breach of this agreement, as expressly specified in this section.
 - a. <u>Interim ZEV Goal for Existing GSE</u>. The Participating Airlines commit, in aggregate, to having ZEVs represent at least eighteen percent (18%) of the 1997 Existing GSE, as reflected in December 31, 2007. Aggregate compliance by the Participating Airlines with the Interim ZEV Goal for Existing GSE shall be determined in accordance with Equation 3 of Appendix 1 attached hereto.
 - <u>Compliance Formula</u>. If the Participating Airlines collectively do not meet the Interim ZEV Goal for Existing GSE, each Individual Participating Airline that has not met that Goal is liable for liquidated damages for its share of the ZEV shortfall as provided in Equation 3 of Appendix 1 attached hereto.
 - (2) <u>Schedule of Liquidated Damages</u>. The Individual Participating Airline shall pay \$5,000 in liquidated damages for each piece of GSE short of the Interim ZEV Goal for Existing GSE for each six month period until compliance is achieved or until December 31, 2010.
 - b. <u>Interim ZEV Goal for New GSE</u>. The Participating Airlines commit, in aggregate, to having ZEVs represent at least twentyeight percent (28%) of the GSE brought into the South Coast or purchased new to meet growth needs ("Interim ZEV Goal for New GSE") (other than Air Starts, GPUs, Cargo Tractors, and Cargo Loaders), as reflected in December 31, 2007. Aggregate compliance of the Participating Airlines with the Interim ZEV Goal for New GSE shall be determined in accordance with Equation 4 of Appendix 1 attached hereto.
 - <u>Compliance Formula</u>. If the Participating Airlines collectively do not meet the Interim ZEV Goal for New GSE, each Individual Participating Airline that has not met that goal is liable for liquidated damages for its share of the ZEV shortfall as provided in Equation 4 of Appendix 1 attached hereto.
 - (2) <u>Schedule of Liquidated Damages</u>. The Individual Participating Airline shall pay \$5,000 in liquidated damages for each piece of GSE short of the Interim ZEV Goal for

New GSE for each six month period until compliance is achieved or until December 31, 2010.

- c. <u>Existing Fleet Emissions Rate Goal</u>. As set forth in Section III.A, the Participating Airlines shall meet a 2.65 g/bhp-hr emission rate goal for HC plus NOx as an average industry aggregate by December 31, 2010 for the 1997 Existing Fleet, as reflected in 2010. Aggregate compliance of the Participating Airlines with the Existing Fleet Emissions Rate Goal shall be determined in accordance with Equation 1 of Appendix 1 attached hereto.
 - (1) <u>Compliance</u>. If the Participating Airlines collectively do not meet the Existing Fleet Emissions Rate Goal, each Individual Participating Airline that has not met that goal is liable for liquidated damages for its share of the exceedance based on excess emissions of HC plus NOx as provided in Equation 2 of Appendix 1 attached hereto.
 - (2) <u>Schedule of Liquidated Damages</u>. An Individual Participating Airline shall pay liquidated damages to ARB based on the difference between the tons of HC plus NOx per year at 2.65 g/bhp-hr and the actual tons of HC plus NOx per year reflecting the overage on the following schedule:

Excess Emissions	Liquidated Damages per Ton
<2 Tons	\$5,000
2.0 to 5.9 Tons	\$10,000
6.0 to 9.9 Tons	\$15,000
10.0 to 19.9 Tons	\$25,000
>20 Tons	\$50,000

- d. <u>Existing Fleet ZEV Goal</u>. As set forth in Section III.B, the Participating Airlines commit, in aggregate, to having ZEVs represent at least thirty percent (30%) of the 1997 Existing Fleet, as reflected in December 31, 2010, by December 31, 2010 ("Existing Fleet ZEV Goal"). Aggregate compliance by the Participating Airlines with the Existing Fleet ZEV Goal shall be determined in accordance with Equation 3 of Appendix 1 attached hereto.
 - (1) <u>Compliance Formula</u>. If the Participating Airlines collectively do not meet the Existing Fleet ZEV Goal, each Individual Participating Airline that has not met that goal is liable for liquidated damages for its share of the ZEV shortfall as provided in Equation 3 of Appendix 1 attached hereto.

- (2) <u>Schedule of Liquidated Damages</u>. The Individual Participating Airline shall pay \$5,000 in liquidated damages for each six month period until compliance is achieved or until December 31, 2012, at which time the Participating Airline will pay to ARB the balance of \$50,000 for each piece of GSE short of the Existing Fleet ZEV Goal.
- e. <u>New GSE ZEV Goal</u>. As set forth in Section III.C, the Participating Airlines commit, in aggregate, to having ZEVs represent at least forty-five percent (45%) of New GSE by December 31, 2010. Aggregate compliance of the Participating Airlines with the New GSE ZEV Goal shall be determined in accordance with Equation 4 of Appendix 1 attached hereto.
 - <u>Compliance Formula</u>. If the Participating Airlines collectively do not meet the New ZEV GSE Goal, each Individual Participating Airline that has not met that goal is liable for liquidated damages for its share of the ZEV shortfall as provided in Equation 4 of Appendix 1 attached hereto.
 - (2) <u>Schedule of Liquidated Damages</u>. The Individual Participating Airline shall pay \$5,000 in liquidated damages for each six month period until compliance is achieved or until December 31, 2012, at which time the Participating Airline will pay to ARB the balance of \$50,000 for each piece of GSE short of the New GSE ZEV Goal.
- f. <u>Diesel Particulate Reduction Obligations</u>. The Participating Airlines shall reduce diesel particulate emissions by installing Diesel Oxidation Catalysts ("DOCs") and Diesel Particulate Filters ("DPF") on the schedule set out in Section III.D.
 - (1) <u>Compliance</u>. If Participating Airlines collectively do not meet these diesel particulate reduction requirements, each Individual Participating Airline that failed to meet such a requirement is liable for liquidated damages.
 - (2) <u>Schedule of Liquidated Damages</u>. The Individual Participating Airline shall pay liquidated damages to ARB in the amount of \$4,000 per DOC and \$15,000 per DPF not timely installed.
- g. <u>Low Sulfur Diesel Fuel Obligations</u>. As set forth in Section III.D.6, Individual Participating Airlines commit to purchase and use low sulfur diesel fuel after December 31, 2003. If an

Individual Participating Airline fails to meet this obligation, it shall be subject to liquidated damages as follows:

(1) An Individual Participating Airline shall make a liquidated damages payment based on the number of diesel GSE owned by the Individual Participating Airline at the applicable District Airport when the violation occurred, as set forth on the following schedule:

Diesel GSE	Liquidated Damages
0- 50	\$25,000
51 - 100	\$50,000
101-200	\$100,000
201 - 300	\$150,000
> 300	\$200,000

- In addition, an Individual Participating Airline shall pay \$0.10 per gallon for non-compliant fuel purchased and used in diesel GSE.
- (3) ARB shall waive the liquidated damages required in this section for de minimis violations or if the Individual Participating Airline can demonstrate that its violation of these obligations was the result of actions beyond its control.
- Failure to Provide MOU Records Necessary for Progress Reports. h. If any Individual Participating Airline(s) failed to provide MOU Records to ATA for purposes of preparing any MOU Report pursuant to Section IV.B, such Individual Participating Airline(s) shall be liable to ARB for liquidated damages in the amount of \$10,000. Thereafter, upon written notification from ARB, any non-submitting Individual Participating Airline shall be obligated to submit an Individual Carrier Matrix. If the Individual Participating Airline fails to submit the Individual Carrier Matrix within 10 days of receipt of notification, the Individual Participating Airline shall be liable for liquidated damages in the amount of \$5,000 per day until the Individual Carrier Matrix is received. In no event shall the Individual Participating Airline's liability for failure to provide records exceed \$100,000; however, if the Individual Participating Airline has not submitted the required information within thirty (30) days of notification by ARB, the Individual Participating Airline shall be deemed to be in noncompliance with the applicable goals.

- i. Willful and Intentional Material Breach of Recordkeeping, Reporting or Data Collection Terms. An Individual Participating Airline shall be subject to liquidated damages in the amount of \$2,000,000 for any willful and intentional material breach of the data collection, recordkeeping, and reporting requirements of Sections IV.A.-IV.B. Any liquidated damages imposed pursuant to this subsection shall be in lieu of any other liquidated damages that could otherwise be imposed pursuant to the MOU for the same vear. A breach of the data collection, recordkeeping, and reporting requirements of Sections IV.A. - IV.B by an Individual Participating Airline is "material" only if it precludes calculation by the Participating Airlines of the increment by which the Participating Airlines in the aggregate exceeded the g/b-hphr goals for new and existing GSE. A breach of the data collection, recordkeeping, and reporting requirements of Sections IV.A. -IV.B by an Individual Participating Airline is "willful and intentional" only if that airline fails to submit an Individual Carrier Matrix within one hundred twenty (120) days from receipt of notice from ARB that ARB has not received such matrix.
- 3. <u>Opportunity to Cure for 2007 Interim MOU Goals</u>. An Individual Participating Airline assessed liquidated damages for noncompliance with the Interim 2007 MOU goals shall, upon payment of a sum equal to the liquidated damages assessment into an escrow account established for that purpose (hereinafter referred to as "funds on deposit"), have an opportunity to cure such non-compliance.
 - a. <u>Period to Cure</u>. This opportunity to cure shall last one year, from January 1, 2008 to December 31, 2008.
 - b. <u>Notice of Intent to Cure</u>. By July 1, 2008, an individual participating airline that elects to cure shall file a written Notice of Intent to Cure with ARB and shall submit for deposit a sum equivalent to the liquidated damages. The Notice of Intent to Cure shall specify the measures to be taken to come into compliance with the MOU.
 - c. <u>Demonstration of Compliance</u>. By January 31, 2009, the Individual Participating Airline shall submit to ARB a written Demonstration of Compliance. The Demonstration of Compliance shall demonstrate that the Individual Participating Airline came into compliance with the MOU during the twelve (12) month cure period.
 - d. <u>Cure Determination</u>. If ARB agrees with the demonstration of compliance, ARB shall issue a written determination of

compliance and shall cause the funds on deposit plus any interest accrued to be returned to the Individual Participating Airline within ninety (90) days. If ARB finds that the Individual Participating Airline failed to cure any non-compliance ("Cure Determination"), ARB shall so notify the Individual Participating Airline in writing within thirty (30) days. If ARB determines that an Individual Participating Airline came into partial compliance with any Interim 2007 Goals, ARB shall assess the amount of liquidated damages based on such partial compliance. If ARB determines that an Individual Participating Airline failed to come into compliance with the 2007 Interim MOU Goals, the funds on deposit plus any interest accrued during the cure period shall revert to the ARB in the form of liquidated damages as assessed in the final written compliance determination subject to the limited dispute resolution provisions. ARB may, for good cause including partial curing, waive or reduce the liquidated damages otherwise payable under this MOU.

- 4. <u>Opportunity to Cure for 2010 Goals</u>. An Individual Participating Airline assessed liquidated damages for noncompliance with the 2010 Goals shall, upon payment of a sum equal to the liquidated damages assessment into an escrow account established for that purpose (hereinafter referred to as "funds on deposit"), have an opportunity to cure such non-compliance.
 - a. <u>Period to Cure</u>. This opportunity to cure shall last six months, from January 1, 2011 to June 30, 2011.
 - b. <u>Notice of Intent to Cure</u>. By March 15, 2011, an Individual Participating Airline that elects to cure shall file a written Notice of Intent to Cure with ARB and shall submit for deposit a sum equivalent to the liquidated damages. The Notice of Intent to Cure shall specify the measures to be taken to come into compliance with the 2010 Goals.
 - c. <u>Demonstration of Compliance</u>. By June 30, 2011, the Individual Participating Airline shall submit to ARB a written Demonstration of Compliance. The Demonstration of Compliance shall demonstrate that the Individual Participating Airline came into compliance with the MOU during the six (6) month cure period.
 - d. <u>Cure Determination</u>. If ARB agrees with the demonstration of compliance, ARB shall issue a written determination of compliance and shall cause the funds on deposit plus any interest accrued to be returned to the Individual Participating Airline within ninety (90) days. If ARB finds that the Individual Participating Airline failed to cure any non-compliance ("Cure Determination"),

ARB shall so notify the Individual Participating Airline in writing within thirty (30) days. If ARB determines that an Individual Participating Airline came into partial compliance with any 2010 Goals, ARB shall assess the amount of liquidated damages based on such partial compliance. If ARB determines that an Individual Participating Airline failed to come into compliance with the 2010 Goals, the funds on deposit plus any interest accrued during the cure period shall revert to the ARB in the form of liquidated damages as assessed in the final written compliance determination subject to the limited dispute resolution provisions. ARB may, for good cause including partial curing, waive or reduce the liquidated damages otherwise payable under this MOU.

- 5. <u>Use of Emissions Trading</u>. An Individual Participating Airline may elect to use up to four (4) tons of emission credits from any mobile source emissions reduction credit program in accordance with regulations of the South Coast Air Quality Management District to comply with the 1997 Existing GSE Emissions Rate Goal in order to avoid but not reduce the amount of liquidated damages otherwise payable under this MOU. An Individual Participating Airline seeking to use emission credits for such purposes shall submit a written request to ARB that demonstrates the emission reductions to be achieved through the purchase of emission credits. Within thirty (30) days of receiving such submission, ARB shall in writing approve or deny, in whole or part, the Individual Participating Airline's request.
- <u>Limited Dispute Resolution.</u> The Participating Airlines, or an Individual Participating Airline, as applicable, may submit disputes arising hereunder between such Airlines and ARB for limited dispute resolution, including, but not limited to, any final written determination of noncompliance. Preliminary written compliance determinations may not be submitted for limited dispute resolution.
 - a. The limited dispute resolution panel shall be comprised of one member selected by ARB; one member selected by the Participating Airlines collectively or by the Individual Participating Airline(s); and a third member selected by the initial two members. The panel shall evaluate evidence provided by the parties, shall make decisions by majority vote, and shall render its decision as expeditiously as practicable under the circumstances. Decisions of the panel shall be binding on the parties unless judicial review is sought pursuant to Section IV.D.6.b.
 - b. Any party dissatisfied with the outcome of the limited dispute resolution process may seek <u>de novo</u> review of the dispute in any court of competent jurisdiction located in California.

- c. Any liquidated damages under this MOU shall become due to ARB within thirty (30) days of the later of (1) the final resolution, pursuant to the limited dispute resolution process, of any final written compliance determination assessing such damages; or (2) final resolution, pursuant to the limited dispute resolution process, of any Cure Determination (defined below) pursuant to Sections IV.D.3 IV.D.4 of this MOU.
- 7. <u>Payment of Liquidated Damages</u>. Liquidated damages payable pursuant to this MOU shall be deposited in an escrow account established for this purpose. All fees for the escrow account may be paid out of interest earned. All liquidated damages funds shall be used for air quality-related projects relating to District Airports, if such projects are mutually agreeable to ARB and the Individual Participating Airline(s) that paid the liquidated damages. Any liquidated damages not expended or allocated to a specific project with thirty-six (36) months of payment shall revert to the California Air Pollution Control Fund. The provisions of this MOU are for the benefit only of the parties, and no third party may seek to enforce or benefit from this section or any other provisions of this MOU.
- 8. <u>Compliance Based on Average Performance at all District Airports</u>. Liquidated damages shall not be assessed for failure to meet Section III goals at an Individual District Airport. For Aggregate Compliance Determinations, compliance shall be determined by averaging the Participating Airlines' fleets at all District Airports. For Individual Participating Airline Compliance Determinations, compliance shall be determined by averaging the Individual Participating Airline's GSE fleets at all District Airports.
- 9. <u>No Continuing Payment of Liquidated Damages</u>. Except as expressly provided herein, each breach of an obligation for which liquidated damages are specified herein shall require the one-time payment of liquidated damages as specified in that section of the MOU. Nothing in this MOU requires the payment of liquidated damages for such breaches on an annual, monthly, daily, continuing, or ongoing basis.
- 10. <u>Reduction or Waiver of Liquidated Damages</u>. ARB may, for good cause, waive or reduce the liquidated damages otherwise payable pursuant to this MOU.
- 11. <u>Exclusivity of Remedies</u>. The measures expressly identified in this section are the exclusive remedy for any noncompliance with the MOU, except as otherwise agreed to in writing between ARB and the Participating Airlines, or Individual Participating Airline, as applicable. The parties expressly agree that the Participating Airlines' or Individual Participating Airline's obligations pursuant to this MOU cannot be enforced by an order

for specific performance or similar injunction intended to compel compliance herewith, except as provided in Section V.R. The parties specifically disavow any desire or intention to create any third party beneficiary under this MOU, and specifically declare that no person or entity, except the parties hereto, shall have any remedy or right of enforcement hereof.

V. MISCELLANEOUS PROVISIONS

 <u>2006 Technology Review</u>. In 2006, ARB and the Participating Airlines shall meet and confer at a mutually agreeable date and place to conduct a technology review. The technology review shall consider all relevant information in order to determine whether the goals specified in Sections III.A. – III.C should be more or less stringent to reflect the availability of technology or lack thereof. Notwithstanding ARB or the Participating Airlines' views on that issue, no modification of this MOU shall result unless the requirements of Section V.B are satisfied.

B. <u>Modifications</u>

- 1. The terms of this agreement may be modified at any time, and from time to time, by mutual written agreement among the Parties, as specified in this section.
- 2. All Parties to this agreement agree to meet to discuss and negotiate any revisions hereof which, in the judgment of any Party, are needed to address significant changes in circumstances or to assure that this MOU continues to accomplish the objectives of the Parties.
- 3. The Participating Airlines may only seek to modify this agreement if two thirds or more of the Individual Participating Airlines so agree. In determining whether such agreement has been reached, ATA shall poll the Participating Airlines, and each Individual Participating Airline shall have one vote.
- 4. No amendment hereto shall be binding on the Parties unless in writing and signed by authorized representatives of ARB, and two-thirds or more of the Individual Participating Airlines, except as otherwise expressly provided herein.
- C. <u>Effective Term</u>. This agreement shall take effect on the date of execution and shall continue in full force and effect until the later of
 - 1. The termination of the agreement pursuant to Section V.H; or
 - 2. The date after performance of all MOU requirements.

- D. <u>Confidentiality</u>. Any information submitted by or on behalf of the Participating Airlines or by any Individual Participating Airline may be designated as confidential business information and will be treated as such by ARB in accordance with the provisions of the California Public Records Act ("CPRA") and implementing regulations.
- E. <u>The District Airports</u>. The GSE MOU will apply to the Participating Airlines' GSE at the five major commercial airports in the South Coast, namely the Burbank-Glendale-Pasadena Airport, the John Wayne Airport, the Los Angeles International Airport, the Long Beach Municipal Airport, and the Ontario International Airport (collectively "District Airports"). If commercial air carrier service (passenger and cargo) is initiated at another airfield in the South Coast, then Section III shall also apply at that airfield, as appropriate.
- F. <u>Notices</u>. All notices and other communications to be given hereunder shall be in writing and shall be deemed to have been duly given if delivered personally, delivered by certified or registered U.S. Mail, or a recognized overnight commercial carrier, or telecopied with receipt acknowledged, to the party at the address set forth below or such other address as such party shall have designated by ten (10) days prior written notice to the other parties. Each party's designated contact person shall be a management-level employee, with sufficient authority to act for the party pursuant to the terms hereof.
 - 1. If to ARB:

California Air Resources Board 1001 I Street Sacramento, CA 95814 Attention: Executive Officer Telephone: (916) 445-4383 Facsimile: (916) 322-4743

2. If to the Participating Airlines collectively:

Air Transport Association of America, Inc. 1301 Pennsylvania Avenue, N.W. Washington, D.C. 20004-1707 Attention: Managing Director of Environmental Affairs Telephone: (202) 626-4000 Facsimile: (202) 626-4139

- 3. If to an Individual Participating Airline, then to the designated contact person set forth in Appendix 1, Table 5 attached hereto.
- G. <u>Force Majeure</u>. The Participating Airlines, or an Individual Participating Airline, as applicable, shall not be responsible for failure to perform the terms hereof

where nonperformance is based upon circumstances that are beyond the reasonable control of the nonperforming party, and the events or circumstances affect the nonperforming party's ability to comply with the terms hereof.

- 1. Events of force majeure are not limited to Acts of God, and include but are not limited to, flood, earthquake, storm, fire and other natural catastrophes, epidemic, war (whether declared or undeclared), riot, acts of terrorism, civic disturbance or disobedience, strikes, labor disputes, sabotage of facilities, any order or injunction made by a court or public agency, accommodations to the government made in connections with a state of emergency, whether or not formally declared, and include the secondary effects of any such event.
- 2. Upon becoming aware that an occurrence constitutes an event of force majeure, the Participating Airlines or Individual Participating Airline, as applicable, shall promptly notify ARB and must use its best efforts to resume performance as quickly as possible, and may suspend performance only for such period of time and to the extent necessary as a result of the event or circumstances that constitutes a force majeure.

H. <u>Termination</u>.

- 1. ARB may terminate this agreement by providing written notice ("Notice of Termination") to the Participating Airlines in the event that:
 - a. ARB determines, after conclusion of the dispute resolution process provided in Section IV.D.6, that the Participating Airlines have materially breached their obligations set forth in this MOU.
 - b. In accordance with Section V.G, the Participating Airlines are excused from compliance with the requirement(s) of this MOU due to one or more events of force majeure continuing twenty four (24) months through December 31, 2007 or twelve (12) months thereafter through the remaining term of the MOU.
 - c. Based on its review of the 2005 Progress Report, and after consultation with the Participating Airlines, the ARB in its sole discretion has determined that there is a reasonable expectation that the Participating Airlines will not achieve their goals and provides written notification of this determination on or before December 31, 2006.
 - d. Any Individual Participating Airline(s) or its successor(s) (as a result of any transaction specified in Section V.Q or R) fails, refuses, or is otherwise unable to undertake actions necessary to achieve the emission reduction goals in Section III of this MOU and such IPA's (or IPAs') 1997 Existing Fleet constitutes twelve

percent (12%) of the aggregate industry 1997 Existing Fleet of the Participating Airlines.

- 2. If ARB issues a Notice of Termination to the Participating Airlines based on the action(s) or inaction of one or more Individual Participating Airlines, one or more of the remaining Participating Airlines may provide ARB a written statement committing those Participating Airlines to cure the grounds cited by ARB for terminating the MOU ("Termination Compliance Demonstration"). The Termination Compliance Demonstration shall be submitted within thirty (30) days of issuance of the Notice of Termination. If ARB accepts the Termination Compliance Demonstration, it shall withdraw the Notice of Termination.
- 3. The Participating Airlines may provide a Notice to Termination to ARB in the event that:
 - a. Appropriate and sufficient infrastructure, electrical power, or equipment is not available, as specified in Section V.I.
 - b. If, on or before December 31, 2005 any governmental party to the Statement of Principles, or the South Coast Air Quality Management District, has taken any final action, other than those in effect at the time of execution or voluntarily undertaken by one or more of the Individual Participating Airlines, that directly or indirectly affects GSE, including but not limited to any form of emission limits for GSE; restrictions on use, operation or movement of GSE; or any action to cap or limit emissions from any airport in California, regardless of whether the final action provides that airlines can satisfy its requirements by any alternative form of compliance. The Participating Airlines may terminate under this subsection on or before June 30, 2006. This provision does not apply to the national GSE program currently being negotiated under the auspices of EPA and FAA.
 - c. If, after December 31, 2005, any governmental party to the Statement of Principles, or the South Coast Air Quality Management District, has taken any final action, other than those in effect at the time of execution or voluntarily undertaken by one or more of the Individual Participating Airlines, that directly or indirectly affects GSE, including but not limited to any form of emission limits for GSE; restrictions on use, operation or movement of GSE; or any action to cap or limit emissions from any airport in California, regardless of whether the final action provides that airlines can satisfy its requirements by any alternative form of compliance. This provision does not apply to the national

GSE program currently being negotiated under the auspices of EPA and FAA.

- d. The U.S. Congress, California Legislature, or any local government body takes final action that if taken administratively by any federal, state, or local administrative agency would allow the Participating Airlines to terminate this MOU pursuant to Sections V.H.3.b.-d. above.
- e. An Individual Participating Airline having GSE in the 1997 Existing Fleet fails, refuses, or is otherwise unable to execute this MOU; provided, that this right to terminate must be exercised within six months of the Effective Date.
- f. For purposes of this section, the Participating Airlines may only terminate this agreement if two thirds or more of the Individual Participating Airlines so agree. In determining whether such agreement has been reached, ATA shall poll the Participating Airlines, and each Individual Participating Airline shall have one vote.
- 4. Termination of this MOU shall be effective from sixty (60) days of receipt by the Parties of a written Notice of Termination from ARB or the Participating Airlines, provided that ARB's termination shall not be effective if it has accepted a Termination Compliance Demonstration.
- 5. Notwithstanding any party's exercise of its termination right under this section, the Participating Airlines or Individual Participating Airline may use the limited dispute resolution process under Section III.D.6 for the purpose of resolving any unresolved matter subject to such process at the time of termination.

I. <u>Good Faith Undertakings</u>.

- 1. <u>Infrastructure and Electrical Power</u>. The Parties recognize that this MOU is premised upon the availability of an adequate supply of electricity and the appropriate infrastructure for refueling, electrical power, and other needs relating to achieving the emission reductions called for in this MOU. The Parties agree to make good faith efforts to cooperate with District Airports in those airports' efforts to secure such infrastructure and electrical power.
- 2. <u>Equipment</u>. The Parties acknowledge that this MOU is conditioned upon the practical availability of commercially viable GSE and/or retrofits sufficient to meet the emission reduction requirements set forth in Section III of the MOU. The Participating Airlines do not manufacture GSE; they purchase it from vendors.

- 3. <u>Parties May Invalidate MOU</u>. If appropriate infrastructure, electrical power or equipment is not available to meet the goals of the MOU, the Participating Airlines may choose to renegotiate the MOU as appropriate to reflect the impact of the unavailability of infrastructure, electrical power or equipment assumed at the time of signing. In the alternative, the Participating Airlines may choose to terminate the MOU as set forth in Section IV.H.
- J. <u>No Operating Restriction or Limit on GSE, Aircraft, or Commercial Aviation</u> <u>Activity</u>. The purpose of this MOU is to reduce emissions from GSE operations in the South Coast through implementation of the voluntary measures contained herein. Nothing in this MOU, however, constitutes, or shall be interpreted to constitute, any restriction or limit whatsoever on any commercial aviation activity in the South Coast, including, but not limited to, the operation of GSE and aircraft.
- K. <u>Effect on Grants and Other Aid</u>. Nothing herein shall be interpreted to preclude any Party from receiving any federal, state, local, or private grant or other aid in order to further the purposes of this MOU.
- L. <u>Entire Understanding/References</u>. This MOU and the Appendices hereto constitute all understandings and agreements among the parties with respect to reductions in emissions for GSE at District Airports, and supersede all prior oral or written agreements, commitments or understandings with respect thereto. The Appendices hereto are made part of this agreement. "Herein," "hereto," and like terms refer to this MOU and all Appendices and schedules attached to it. Headings are for convenience only and shall not be deemed a part hereof.
- M. <u>Participating in the South Coast Emissions Credit Trading Program</u>. Nothing in this MOU shall impair the ability of a Participating Airline to participate in any emission banking or trading program effective in the South Coast, provided that the emission reductions obligations of this agreement may not be met through the use of credits (except as expressly provided herein) and provided that credits created under this agreement may be used for other purposes only to the extent they are not required or relied upon for compliance with this MOU and are allowed by an applicable credit trading program. The Parties expressly recognize that the GSE MOU does not preclude the Participating Airlines from seeking emissions credits for emission reductions from the 1998-2003 Fleet pursuant to any current or future South Coast emissions banking or trading program.
- N. <u>Intercarrier Averaging</u>. At their election, two or more Participating Airlines may voluntarily agree at any time to average or trade the emissions from their respective GSE fleets, or portions thereof, for the purposes of individual compliance with the 1997 Existing Fleet Emissions Rate Goal, or determining the appropriate amount of liquidated damages for not meeting that goal. At their election, two or more Participating Airlines may also voluntarily agree to average

or trade at any time their respective fleet conversions, or portions thereof, for purposes of complying with the Existing Fleet ZEV Goal or New GSE ZEV Goal, or determining the appropriate amount of liquidated damages for not meeting those goals. Participating Airlines that agree to inter-carrier averaging must submit signed agreements to ARB and other information as necessary to demonstrate that emission reductions available for inter-carrier averaging or trading are not otherwise required or relied upon for compliance under this MOU.

- O. <u>Choice of Law</u>. This MOU shall be interpreted according to the laws of the United States and internal laws of the State of California.
- P. <u>Counterparts</u>. This MOU may be executed in any number of counterparts, each of which shall be considered an original, but all of which together constitute one and the same instrument.
- Q. <u>Transactions</u>.
 - 1. <u>Approval Authority Over Transactions</u>. The rights and obligations of an Individual Participating Airline under this MOU may be freely assigned and delegated by the Individual Participating Airline to a successor entity, or to the purchaser of its GSE or substantially all of its assets or business, at any time without the consent of any Party hereto. Nothing herein shall be interpreted to grant any Party the right to approve any transaction whatsoever by an Individual Participating Airline.
 - 2. <u>Transactions with Fixed Base Operators</u>. If, after the execution of the MOU, an Individual Participating Airline contracts with a third party to handle ground support activity and that third-party purchases or otherwise acquires twenty five percent (25%) or more of the Individual Participating Airline's Baseline Fleet, the Individual Participating Airline shall condition any contract with a third party for such services upon compliance with the terms of the MOU as they relate to the transferred GSE by naming ARB as a third party beneficiary of the contract with the right to enforce the terms of the MOU against the third party. An Individual Participating Airline shall not be subject to liquidated damages for the failure of the third party to fulfill its obligations under this MOU.
 - 3. <u>Transactions Among Individual Participating Airlines</u>. If any two or more Individual Participating Airlines (IPAs) enter into a merger, asset sale, or stock purchase transaction that results in a combination of IPAs, there shall be no change in the characterization of the Existing GSE or New GSE of either IPA for purposes of compliance with this MOU.
 - 4. <u>Transactions Among IPAs and Non-Participating Airlines (NPAs)</u>. If any one or more IPAs enter into a merger, asset sale, or stock purchase transaction that results in a combination of one or more IPAs with one or

more NPAs, the following provisions apply to the GSE fleets of the airlines:

- a. There shall be no change in the characterization of the Existing GSE or New GSE of the IPA for purposes of compliance with this MOU.
- b. If the IPA acquires the stock or assets of an NPA, or if the transaction is a merger and the IPA, or an entity affiliated with the IPA prior to the transaction, is the surviving entity, the NPA's GSE fleet shall be treated as follows:
 - If the NPA previously owned less than twenty five (25) GSE in the South Coast as of the date of the transaction, such GSE shall not be subject to the MOU and shall not be counted in any determination of compliance with the MOU after the transaction.
 - (2) If the NPA previously owned twenty five (25) or more GSE in the South Coast as of the date of the transaction, such GSE must (i) comply with the diesel particulate reduction requirements of Section III.D by the compliance date(s) of same, or within three (3) years of the transaction, whichever is earlier; and (ii) meet the 2.65 g/b-hphr and thirty percent (30%) ZEV goals of Section III.A and Section III.B of the MOU within five (5) years of the transaction, or by December 31, 2010, whichever is later.
 - (3) If the NPA acquires the stock or assets of an IPA, or if the transaction is a merger and the NPA, or an entity affiliated with the NPA prior to the transaction, is the surviving entity, the NPA's fleet shall not be subject to the MOU and shall not be counted in any determination of compliance with the MOU after the transaction.
- c. <u>Record-keeping Irregularities</u>. If an Individual Participating Airline (the "successor airline") purchases, acquires or otherwise obtains GSE from another airline (the "predecessor airline") through any of the transactions described in Section V.Q, and the successor airline's entire GSE fleet is then subject to the MOU, but the predecessor airline has not kept adequate records to allow the successor to meet the obligations of the MOU, the successor airline shall meet with ARB as soon as possible but no later than one year from the date of purchase to work out a mutually agreeable method for the successor airline to demonstrate compliance with the MOU.

- 5. <u>Obligations of an Individual Participating Airline Not Having Existing</u> <u>GSE</u>. The obligations of an Individual Participating Airline that did not own and operate GSE in the 1997 Existing Fleet are set forth below:
 - a. New GSE ZEV Goals set forth in Section III.C;
 - b. Diesel Particulate Obligations set forth in Section III.D;
 - c. Interim ZEV Goal for New GSE set forth in Sections III.E and IV.D;
 - d. Fate of Old Equipment Obligations set forth in Section III.F; and
 - e. Compliance with all applicable MOU provisions except for the emission reduction goals for the 1997 Existing Fleet.
- 6. <u>Obligations of an Individual Participating Airline Not Having Existing</u> <u>GSE that Executes the MOU After its Effective Date</u>. The obligations of an Individual Participating Airline that did not own or operate GSE in the 1997 Existing Fleet and that wishes to sign the MOU after its effective date are set forth below:
 - a. individually comply with the New GSE ZEV Goals set forth in Section III.C;
 - b. individually comply with the diesel particulate reduction requirements of Section III.D by the compliance date set forth herein or within three (3) years of signing the MOU, whichever is later;
 - c. reach agreement with ARB regarding the time-frames for individually meeting the Interim ZEV Goal for New GSE set forth in III.E and IV.D; and
 - d. individually meet all other applicable MOU provisions and reach agreement with ARB regarding the time frames for meeting such provisions.
- R. <u>Bankruptcy of an Individual Participating Airline</u>. Except as set forth below, in the event a case or proceeding under Title 11 of the United States Code, or any other applicable federal, state or foreign bankruptcy or other similar law, is filed by or against an Individual Participating Airline, or an Individual Participating Airline is otherwise deemed to be insolvent (a "Bankrupt Individual Participating Airline"), the Bankrupt Individual Participating Airline shall be excluded from any determination of compliance with this MOU and the other Individual Participating Airlines shall have the right to fulfill the reporting and other obligations hereunder without information or participation from the Bankrupt

Individual Participating Airline. A Bankrupt Individual Participating Airline may elect to participate, or to continue to participate, in the MOU (in which case it will be bound by the obligations herein), only if it agrees to remain bound to contracts, agreements and other legal documents that it has entered into to ensure compliance with the MOU. ARB shall not exercise its right to terminate this agreement under Section V.H.1.d. prior to seeking specific performance of the bankrupt IPA's MOU obligations in bankruptcy court; provided that if the bankruptcy court has not issued an order directing specific performance of the IPA's MOU obligations within nine (9) months after submission of such a request, ARB may terminate in accordance with Section V.H.1.d.

- S. <u>Severability</u>. Wherever possible, each provision of this MOU shall be interpreted in such manner as to be effective and valid under applicable law. If any provision hereof shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions hereof.
- T. <u>Time</u>. In interpreting this MOU, "days" means calendar days and "months" means calendar months.
CALIFORNIA AIR RESOURCES BOARD

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