## BEFORE THE U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C. 20585

In the Matter of:	)
AeroSys, Inc.,	) Case Number: 2010-CE-01/0201 ) and 2010-SE-0302
Respondent	) and 2010-SE-0302

# <u>ORDER</u>

By the General Counsel, U.S. Department of Energy:

- 1. In this Order, I adopt the attached Compromise Agreement entered into between the U.S. Department of Energy ("DOE") and AeroSys, Inc. ("Respondent"). The Compromise Agreement resolves two cases. DOE case number 2010-CE-01/0201 pursued a civil penalty for violations of the compliance certification requirements at 10 C.F.R. § 430.62. In DOE case number 2010-SE-0302, DOE determined that Respondent had distributed in commerce in the United States central air conditioners and central air conditioning heat pumps that did not meet the applicable minimum efficiency standards found at 10 C.F.R. § 430.32
- 2. The DOE and Respondent have negotiated the terms of the Compromise Agreement that resolve this matter. A copy of the Compromise Agreement is attached hereto and incorporated by reference.
- 3. After reviewing the terms of the Compromise Agreement and evaluating the facts before me, I find that the public interest would be served by adopting the Compromise Agreement to complete the adjudication of the case.
- 4. Based on the information in the case file, I find that Respondent committed Prohibited Acts<sup>1</sup> under Section 332<sup>2</sup> of the Energy Policy and Conservation Act, of 1975, as amended (EPCA),<sup>3</sup> and I hereby assess a civil penalty of \$25,000 to be paid pursuant to the Compromise Agreement.

<sup>3</sup> 42 U.S.C. § 6291 et seq.

<sup>&</sup>lt;sup>1</sup> 42 U.S.C. § 6302 lays out the specific acts prohibited by the Energy Policy and Conservation Act, of 1975, as amended, 42 U.S.C. § 6291 *et seq*. Specifically, I find that Respondent failed to comply with Sections 325(d) and 326(d) of EPCA.

<sup>&</sup>lt;sup>2</sup> Specifically, paragraphs (a)(3) and (a)(5).

5. Accordingly, **IT IS ORDERED** that, pursuant to Section 333 of EPCA,<sup>4</sup> the Compromise Agreement attached to this Order **IS ADOPTED**.

U.S. DEPARTMENT OF ENERGY

Scott HARRIS

Scott Blake Harris General Counsel

<sup>&</sup>lt;sup>4</sup> 42 U.S.C. § 6303.

# Before the U.S. Department of Energy Washington, D.C. 20554

In the Matter of:	)
AeroSys, Inc., Respondent	) Case Numbers: 2010-CE-01/0201 ) and 2010-SE-0302

## COMPROMISE AGREEMENT

The U.S. Department of Energy, Office of the General Counsel, initiated the above-captioned actions against AeroSys, Inc. (AeroSys), pursuant to 10 CFR §§ 430.71 and 430.74 by an Amended Notice of Proposed Civil Penalty and two Notices of Noncompliance Determination. The Amended Notice of Proposed Civil Penalty, issued on March 2, 2010, (Penalty Notice) alleged that AeroSys had failed to submit a certification report and a compliance statement for central air conditioners and central air conditioning heat pumps AeroSys distributes in commerce in the United States. The Notices of Noncompliance Determination, issued on March 25 and April 13, 2010, respectively, gave AeroSys notice that the DOE had determined a total of three (3) models had failed compliance testing and explained AeroSys' obligations, *inter alia*, to cease distribution and to give written notification to all persons to whom AeroSys had distributed units of the noncompliant models. AeroSys and the DOE, by their authorized representatives, hereby enter into this Compromise Agreement for the purpose of settling these actions.

#### I. DEFINITIONS

For the purposes of this Compromise Agreement, the following definitions shall apply:

- (a) "Act" or "EPCA" means the Energy Policy and Conservation Act of 1975, as amended, 42 U.S.C. § 6291 et seq.
- (b) "Adopting Order" means an Order of the General Counsel adopting the terms of this Compromise Agreement without change, addition, deletion, or modification.
- (c) "Complete test results" is defined in Attachment B.
- (d) "DOE" means the U.S. Department of Energy.
- (e) "DOE Rules" means DOE's energy conservation regulations found in Title 10, Part 430, of the Code of Federal Regulations.
- (f) "Matters Addressed" means all violations of the EPCA by Respondent related to the actions, occurrences or events identified or alleged in the

Penalty Notice and Notices of Noncompliance issued by DOE to Respondent, including all violations identified in such Notices.

- (g) "Parties" means the DOE and Respondent.
- (h) "Respondent" means AeroSys, Inc. and any parent, subsidiary, division or other related entity.

#### II. RECITALS

WHEREAS, DOE, pursuant to 42 U.S.C. §§ 6291 et seq., is responsible for the promulgation and enforcement of the energy conservation requirements set forth in the DOE Rules; and

WHEREAS, DOE has promulgated energy conservation standards for air conditioners and air conditioning heat pumps at 10 CFR  $\S$  430.32 and requires manufacturers to submit information and reports to ensure compliance with those standards at 10 CFR  $\S$  430.62; and

WHEREAS, DOE, pursuant to 42 U.S.C. §§ 6296, 6302, & 6303 and 10 CFR §§ 430.61, 430.73, and 430.74, is authorized to assess civil monetary penalties for actions prohibited by the Act, including failing to make reports or provide other required information and for distributing in commerce a new covered product which is not in conformity with an applicable energy conservation standard established in or prescribed in 42 U.S.C. § 6291 et seq.; and

WHEREAS, Respondent, pursuant to 42 U.S.C. §§ 6295 & 6302 and 10 CFR §§ 430.61 and 430.71 is prohibited from distributing in commerce a new covered product which is not in conformity with an applicable energy conservation standard established in or prescribed in 42 U.S.C. § 6291 et seq.; and

WHEREAS, DOE, on March 2, 2010, initiated an action to assess a civil penalty for Respondent's failure to (1) certify 11 models of air conditioners and (2) certify properly 18 models of air conditioners and air conditioning heat pumps that Respondent had distributed in commerce; and

# WHEREAS, Respondent admits:

- Respondent manufactured and distributed air conditioners and air conditioning heat pumps, including but not limited to basic model(s) THDC-18P, THDC-18R, THDC-18S, THDC-18T, THDC-24P, THDC-24R, THDC-24S, THDC-24T, THDC-30P, THDC-30R, THDC-30S, THDC-30T, THHP-18R, THHP-18S, THHP-18T, THHP-24R, THHP-24S, THHP-24T, THHP-30R, THHP-30S, THHP-30T, THDC-18PG, THDC-18RG, THDC-18SG, THDC-18TG, THDC-24PG, THDC-24RG, THDC-24SG, and THDC-24TG.
- These basic models have been in distribution in the United States at least since July 2009.

WHEREAS, Respondent provided evidence that it is a small business, that the proposed penalty would cause financial hardship, and that it would be unable to pay the proposed civil penalty; and

WHEREAS, DOE, as the agency charged with developing and administering a balanced and coordinated national energy policy, concludes that, in light of the circumstances, this Compromise Agreement properly balances the policies recognized in the Energy Policy and Conservation Act and is the appropriate way to resolve this matter;

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements set forth below, the sufficiency and adequacy of which are hereby acknowledged, the Parties agree as follows:

#### III. Terms of the Agreement

1. Adopting Order. The Parties agree that the provisions of this Compromise Agreement shall be subject to final approval by the General Counsel of DOE by incorporation of such provisions by reference in the Adopting Order without change, addition, modification, or deletion.

#### 2. Obligations of Respondent and DOE.

The complete terms of the obligations of Respondent and DOE are detailed in Attachment A, which is fully incorporated into this agreement.

- 3. <u>Jurisdiction and Governing Law</u>. This Compromise Agreement is entered pursuant to the DOE's authority to interpret and enforce its rules for energy efficiency and to enter into its own agreements interpreting and applying those rules. The Parties agree that the DOE has jurisdiction over Respondent and exclusive jurisdiction over the matters contained in this Compromise Agreement and has the authority to enter into this Compromise Agreement.
- 4. <u>Effective Date</u>. The Parties agree that this Compromise Agreement shall become effective on the date on which the DOE General Counsel issues the Adopting Order. Upon release, the Adopting Order and this Compromise Agreement shall have the same force and effect as any other Order of the General Counsel. Any violation of the Adopting Order or of the terms of this Compromise Agreement by AeroSys shall constitute a violation of a DOE Order, entitling the DOE to exercise any rights and remedies attendant to the enforcement of a DOE Order.
- 5. <u>Waivers</u>. Respondent and DOE agree not to seek judicial review or otherwise contest or challenge the validity of the terms and penalties set out in this Compromise Agreement or the Penalty Notice or Notices of Noncompliance issued by DOE to Respondent and resolved by this Compromise Agreement. If either Party (or the United States on behalf of the DOE) brings a judicial action to enforce the terms of this Compromise Agreement, neither Respondent nor the DOE shall contest the validity of the Compromise Agreement, and Respondent shall waive any statutory right to a trial *de novo* with respect to the matters addressed by this Compromise Agreement. Respondent hereby agrees to waive any claims it may otherwise have

- under the Equal Access to Justice Act, 5 U.S.C. § 504, relating to the matters addressed in this Compromise Agreement.
- Final Settlement. The Parties agree and acknowledge that this Compromise
  Agreement shall constitute a final settlement between the Parties with respect to all
  matters addressed.
- 7. Merger. This Compromise Agreement constitutes the entire agreement between the Parties and supersedes all previous understandings and agreements between the Parties, whether oral or written.
- 8. <u>Modifications</u>. This Compromise Agreement cannot be modified without the advance written consent of both Parties.
- 9. <u>Invalidity.</u> In the event that this Compromise Agreement in its entirety is rendered invalid by any court of competent jurisdiction, it shall become null and void and may not be used in any manner in any legal proceeding.
- 10. <u>Authorized Representative</u>. Each party represents and warrants to the other that it has full power and authority to enter into this Compromise Agreement.
- 11. <u>Counterparts</u>. This Compromise Agreement may be signed in any number of counterparts (including by facsimile), each of which, when executed and delivered, shall be an original, and all of which counterparts together shall constitute one and the same fully executed instrument.
- 12. No Admission. Except as specifically provided for in this Compromise Agreement, by entering into this Compromise Agreement, Respondent does not admit any issue of fact or law alleged by DOE or any liability under the EPCA. Except in an action to enforce the terms of this Compromise Agreement, this Compromise Agreement shall not be admissible in any administrative or judicial proceeding. Nothing in this Compromise Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Compromise Agreement.

President AeroSys, Inc.

Timothy G. Lynch	
Deputy General Counsel for Litigatio and Enforcement	n
U.S. Department of Energy	

7/1/10

6/30/10 Date

# Obligations of AeroSys and DOE

#### I. Test Units

- AeroSys will have two units of each of the following models tested at Intertek in Cortland, New York, in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M: THDC-18S, THDC-18T, THDC-24S, and THDC-24T ("R-22 models"). Eight units (2 THDC-18S, 2 THDC-18T, 2 THDC-24S, and 2 THDC-24T) will be provided by AeroSys to Intertek.
- 2. Following the testing by Intertek, AeroSys will test at AeroSys's testing facility the units tested by Intertek.
- 3. Purpose of the testing:
  - a. Intertek's testing of these units will serve as the basis for AeroSys' certification of these model(s), for DOE's determination of compliance/non-compliance, and to create a baseline for evaluating the accuracy of AeroSys' testing facility.
  - b. AeroSys testing of these units will serve as the basis for evaluating the accuracy of AeroSys' testing facility through comparison with the Intertek test results and DOE review of AeroSys' complete test results.
- 4. AeroSys will have one unit of model THDC-24S tested at Intertek in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M. The unit will be obtained from a distributor and shipped directly to Intertek for testing. The results from the testing of this unit will be used to determine whether the Paragraph I.1. units are sufficiently representative of units distributed into commerce to permit certification based on the Paragraph I.1. units.

#### II. Blind Testing

- A. Phase 1 Intertek testing
- 1. With respect to the Intertek testing:
  - a. Representatives of AeroSys may be present during the "set up," which will include charging of the units and establishment of the correct static pressure. Once the set up is complete, these representatives must leave and may not be present at or witness the actual testing of the units. These representatives also may not view or receive any test data that might be generated during or as part of the setup, except for the data specified in Paragraph II.B.2.
  - b. DOE and AeroSys understand paragraph II.A.1.a. to mean that the representatives will not view or receive any measurements or test data that might be generated during or as part of the setup, with the exception of air pressure measurements (including airflow rate measurements), air temperatures (dry bulb and wet bulb) at the inlet to the air-handling unit

and the inlet to the condensing unit, and refrigerant pressure and temperature measurements, except to the extent provided in Paragraph II.B.2.

- c. AeroSys shall ensure that Intertek clearly documents in writing the set up, including the configuration of ducting, use of plenums, etc. (which may not be visible in photographs), and, if possible, photograph or video the set up. Copies of the detailed written description of the set up and the photographs/video of the setup will be sent to (1) AeroSys and (2) Laura Barhydt in the Office of the General Counsel at the U.S. Department of Energy. AeroSys shall ensure that Intertek provides this information as soon as possible to allow DOE to verify the units were set up in accordance with DOE regulations.
- d. AeroSys shall instruct Intertek to retain the test results and not provide to, or discuss the results (in any form) with, AeroSys until further notified.
- 2. AeroSys shall ensure that Intertek verifies to DOE that no representative from AeroSys was present except as provided in Paragraphs II.A.1.a and II.A.1.b. AeroSys shall ensure that Intertek provides to DOE the date on which it first provided test results and/or test data to AeroSys. AeroSys shall ensure that Intertek will verify to DOE that the unit in Paragraph I.2 was shipped directly from the distributor to Intertek. AeroSys will authorize Intertek to make these disclosures to DOE.
- 3. Intertek may return the units in Paragraph I.1. to AeroSys as it completes its testing. The unit in Paragraph I.2. will be returned to the distributor.
- B. Phase 2 AeroSys testing
- 1. AeroSys will test each of the units in Paragraph I.1 after the testing at Intertek is complete.
- 2. Prior to AeroSys's testing, AeroSys will contact Intertek in writing to request that Intertek provide AeroSys the following information for each unit tested. A copy of that written request shall be provided to DOE:
  - Indoor Entering Dry Bulb;
  - b. Indoor Entering Wet Bulb;
  - c. Indoor External Static Pressure;
  - d. Jumper/dip switch/electrical settings on the indoor air handler;
  - e. Outdoor Entering Dry Bulb;
  - f. Barometric Pressure in inches Hg; and
  - g. Subcooling in degrees F at the service valve

- 3. In performing its testing, AeroSys will perform the C and D tests on at least four units.
- 4. The testing by AeroSys for purposes under this Phase 2 will be performed in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M ("DOE test method") except as follows:

AeroSys will install the unit and achieve the temperature and humidity profile specified in the Appendix M test method. AeroSys will then adjust the entering wet bulb control to achieve the enthalpy measured at the Intertek facility. This adjustment may result in the entering wet bulb being outside of the tolerances specified in Appendix M. AeroSys must maintain the same tolerances on wet-bulb temperatures as specified in the DOE test procedure, even if the nominal wet-bulb temperature is not the same as specified in the Intertek test and/or the nominal web-bulb temperature that would ordinarily be used under the DOE test method. AeroSys will provide to DOE a complete description of how it calculated the nominal wet-bulb temperature based on the enthalpy from the Intertek test. This description should be sufficiently detailed to enable DOE to reproduce the calculation.

- 5. Upon completion of AeroSys' testing, AeroSys will provide its complete test results for all tests to DOE.
- 6. AeroSys will not notify Intertek that it may release the test results described in Paragraph II.A.1.d. until after DOE has confirmed that the AeroSys test results provided to DOE under Paragraph II.B.5 are complete. Once DOE has so confirmed, AeroSys will notify Intertek in writing to release the test results in accordance with Paragraph II.B.7.
- 7. Upon receipt of the notification from AeroSys under Paragraph II.B.6, AeroSys shall ensure that Intertek provides its complete test results at the same time to (1) AeroSys and (2) Laura Barhydt in the Office of the General Counsel at the U.S. Department of Energy.
- C. Phase 3 Testing verification
- 1. The testing performed at AeroSys' facility will be verified in accordance with the provisions of this Section.
- 2. DOE and AeroSys will review the Intertek and AeroSys test data to determine whether all testing was conducted in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (except as modified by Paragraph II.B.4).
- 3. Any test of an individual unit that was not conducted in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (or as modified by Paragraph II.B.4), will be rejected and will not be considered for any purpose.

- a. DOE and AeroSys will attempt to reach agreement as to whether the testing of a unit was conducted in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (or as modified by Paragraph II.B.4).
- b. If the parties cannot reach agreement on this issue, and DOE believes that a unit has not been tested in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (or as modified by Paragraph II.B.4), DOE will provide to AeroSys a written determination explaining the basis for its determination.
- c. In response to DOE's written explanation, AeroSys may submit information and/or data to DOE challenging DOE's determination within 14 days of receipt of DOE's determination.
- d. Following receipt of any information submitted by AeroSys, DOE will make a final determination of whether a unit has been tested in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (or as modified by Paragraph II.B.4).
- 4. The results obtained by AeroSys and Intertek will be compared as follows:
  - a. For units for which AeroSys does not perform the C and D tests, the EERa and EERb results achieved by AeroSys and Intertek will be compared.
  - b. For units for which AeroSys does perform the C and D tests, the SEER achieved by AeroSys and Intertek will be compared.
- 5. For at least 7 of the 8 units tested, the AeroSys results must be within ±5% of the Intertek results; for the remaining unit, the AeroSys results must be within ±8% of the Intertek results. Where EERa and EERb values are compared in lieu of the SEER (due to AeroSys not performing the C and D tests), both the EERa and EERb values obtained by Intertek and AeroSys must be within ±5% of each other.
- 6. If the conditions of Paragraph II.C.5 are not met, AeroSys must use an independent third party test lab as the basis for certifying (and distributing) any models for three years.

## III. Compliance Determination

- Any test of an individual unit that was not conducted in accordance with the test method specified in 10 CFR Part 430, Subpart B, Appendix M (or as modified by Paragraph II.B.4, above), will be rejected and will not be considered for any purpose.
- The SEER for the four R-22 models shall be calculated in accordance with 10 CFR § 430.24(m) using Intertek test data.

- 3. AeroSys will take the actions specified in Section III for any model determined not to meet the applicable energy conservation standard.
- 4. If the SEER of the unit obtained from a distributor (as described in Paragraph I.4) is not within ±5% of the average SEER of the two units of the same model tested under Phases 1 and 2, then DOE may require testing of additional distributor units of AeroSys' R-22 THDC() or THHP() models before any R-22 models may be certified.
- 5. If the SEER of the unit obtained from a distributor (as described in Paragraph I.4) is within ±5% of the average SEER of the two units of the same model tested under Phases 1 and 2, then no further testing of AeroSys' R-22 THDC() or THHP() models will be required, except that, if AeroSys intends to distribute any units of any R-22 models which were not tested, then AeroSys must comply with the terms of Paragraphs V.3 and V.4.

#### IV. Remedy for Noncompliant Models

- If, using the Intertek test data, an R-22 model is determined not to meet the
  required minimum SEER in accordance with the criteria detailed in 10 CFR
  § 430.24(m) and 10 CFR § 430.32(c), AeroSys will provide within 7 days written
  notification to all persons to whom AeroSys has distributed units of the basic
  model that the model is noncompliant.
- As part of that notification, AeroSys will offer to buy-back, replace or repair any noncompliant units. Before providing any repair, AeroSys must certify the model as a new basic model (supported by complete test data) meeting the applicable energy conservation standard.

#### V. Certification

- AeroSys will submit a certification report for any model determined under Section II to meet the applicable energy conservation standard within 10 days of a DOE determination of compliance. AeroSys will submit a compliance statement, if it has not done so by that time.
- 2. For three years following the date of the Adopting Order, AeroSys will not certify any basic model without providing complete test data to DOE.
- AeroSys will not distribute in commerce any model until a certification report and compliance statement is submitted to DOE which shows the model complies with the applicable energy conservation standard in 10 CFR Part 430.
- 4. If AeroSys wishes to certify other models designed to use the R-22 refrigerant, it must comply with Paragraph V.2. If AeroSys has met the conditions of Paragraph II.C.5., then AeroSys may provide DOE with its in-house test data, including any previously generated test data.

5. The terms related to the modified testing conditions specified in Paragraph II.C. apply only to the testing performed under this Compromise Agreement. These conditions do not necessarily reflect the actual conditions denoted by the applicable test procedure prescribed in 10 CFR Part 430, but are intended solely for the purpose of verifying the ability of AeroSys to test its products in accordance with that procedure within the context of the above-captioned matter. This Agreement does not permit AeroSys to continue to use, or otherwise rely on, these specified conditions for any other purpose, including certifying its products as being compliant with the applicable Federal standards. Accordingly, the testing conditions specified in this Agreement should in no way be construed as providing AeroSys with a continuing exception to its responsibilities to adhere to the requirements prescribed in 10 CFR Part 430.

#### VI. Civil Penalty

AeroSys will pay a civil penalty of \$25,000 to the U.S. Treasury no later than July 30, 2010. Payment instructions are in Attachment C.

# COMPLETE TEST RESULTS

## Assumptions/Limitations

Below are the *minimum* content requirements for a complete test report for a through-the-wall (TTW) air conditioner. These requirements assume:

- · Ducted, split system
- Non-reversible system (air-conditioning only)
- · Single-speed compressor
- Blower-coil air-handling unit, with fixed-speed or constant-air-volume-rate indoor fan
- · Cooling capacity less than 65,000 Btuh
- Outdoor air enthalpy used as secondary method to determine cooling capacity.

# **Equipment Description**

Manufacturer, model number, serial number, nominal voltage, and nominal frequency for the TTW unit.

Compressor type, manufacturer, model, and serial number.

Refrigerant type.

Manufacturer, model number, serial number, nominal voltage, and nominal frequency for the air-handling unit.

Type of blower in the air-handling unit (such as multi-speed, variable-speed constant CFM, variable-speed constant torque, etc.)

# Set Up and Operating Procedures

Indicate secondary method used to determine cooling capacity.

Descriptions of measurement equipment (manufacturer, model, resolution, and calibration date) used. Examples (depending on experimental set up) include:

- · Refrigerant temperatures and pressures
- Indoor-loop air temperatures (dry bulb and wet bulb), pressures, and flow rates
- Outdoor-room air temperatures
- Electric power draw and energy consumption
- Outdoor air temperatures (DB and WB), pressures, and flow rates.

## Descriptions of:

- Interconnecting piping (Inner Diameter, length, insulation, portion contained in the indoor room, and portion contained in the outdoor room)
- Any ductwork, plenum, or baffle connected to, or adjacent to, the TTW unit
- · Electronic-control-board-pin or dip-switch settings used on air-handling unit.

Description of refrigerant charging procedure.

#### Photos of:

- Air-handling unit, as installed, instrumented and operated.
- TTW unit, as installed, instrumented and operated, including any ductwork, plenum, or baffle used.

#### **Measured Test Results**

For each of the required tests (A, B, C, and D), report maximum, minimum, and average values of:

- Barometric pressure (single measurement for each test is adequate)
- External static pressure
- All air pressures used to determine indoor and outdoor airflow rates
- · Wet-bulb and dry-bulb air temperatures entering air-handling unit
- Wet-bulb and dry-bulb air temperatures exiting air-handling unit
- Wet-bulb and dry-bulb air temperatures entering the TTW unit
- · Wet-bulb and dry-bulb air temperatures exiting the TTW unit
- Refrigerant pressure and temperature entering the evaporator
- Refrigerant temperature leaving the evaporator
- Refrigerant pressure and temperature entering the condenser
- Refrigerant temperature leaving the condenser
- TTW unit voltage, current, and power draw
- · Air-handling unit voltage, current, and power draw
- · Time period over which measurements are averaged
- Frequency at which instantaneous measurements were recorded during this time period.

Provide all raw data used to determine the above-listed values.

#### Calculated Test Results

For the A, B, C, and D tests<sup>1</sup>, report:

- · Air enthalpy entering air-handling unit
- Air enthalpy leaving air-handling unit
- Air enthalpy entering TTW unit
- · Air enthalpy leaving TTW unit
- Actual and standard indoor air flow rates
- Actual and standard outdoor air flow rates
- Sensible Heat Ratio

<sup>&</sup>lt;sup>1</sup> C and D test s are optional if the default degradation coefficient is used.

#### Attachment B

- Fan heat adjustment (if external static pressure exceeds minimum required)
- Fan power adjustment (if external static pressure exceeds minimum required)
- Cooling capacity (primary method)
- Cooling capacity (secondary method)
- Heat balance (ratio of secondary-to-primary cooling capacities)
- Total power draw and energy consumption
- EER

# Also show calculations and report:

- Cooling Load Factor (CLF)
- Degradation Coefficient (CD) (unless default value is used)
- Part Load Factor (PLF)
- SEER



# **Department of Energy**

Washington, DC 20585

Payment Instructions for Checks, Money Orders, or Credit Cards

Below you will find instructions for three different methods of payment. Please choose the method most convenient for you. Please include the referenced bill number on all forms or payment to the Department of Energy.

You may submit your personal check electronically (via ACH Debit) or use a credit card at the following website:

https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=18573422.

Option 1: Electronic Check payment: please complete the first screen, including the type of payment and the bill number, and then click on the Submit Data button. A second screen will appear for your on-line electronic payment. The first Option on the screen is for submitting your own check for payment electronically. Fill in the required\* fields with your personal check information and select 'Continue with ACH Payment.' The third screen displays the payment summary and allows you to edit your information. This screen will also initiate an e:mail confirmation receipt, sent to your e:mail address, as well as any cc: e:mail addresses. Please include in the cc: e:mail address block AR@hq.doe.gov and carol.fuster@hq.doe.gov to ensure the Department of Energy accounts receivable team is aware your payment is in the system. Review your payment information and select 'Submit Payment." From the confirmation page, please print a copy of the electronic receipt for your records. You will receive an e:mail notification of the transaction as well. Please mark your personal check PAID ELECTRONICALLY.

Option 2: Credit Card payment: please complete the first screen, including the type of payment and the bill number, and then click the Submit Data button. A second screen will appear for your on-line payment. Scroll down to the second Option on the screen to submitting your credit card payment electronically. Fill in the required\* fields with your personal credit card information and select 'Continue with Plastic Card Payment.' The third screen displays the payment summary and allows you to edit your information. This screen will also initiate an e:mail confirmation receipt, sent to your e:mail address, as well as any cc: e:mail addresses. Please include in the cc: e:mail address block AR@hq.doe.gov and carol.fuster@hq.doe.gov to ensure the Department of Energy accounts receivable team is aware your payment is in the system. Review your payment information and select 'Submit Payment." From the confirmation page, please print a copy of the electronic receipt for your records. You will receive an e:mail notification of the transaction as well.

Option 3: Money Order or Paper Check: mail payment to:
US Department of Energy
Cash Deposits
P O Box 979019
St. Louis, MO 63197-9000

## **Certificate of Service**

This is to certify that on July 2, 2010, the undersigned served a copy of the "Order" in case numbers 2010-CE-01/0201 and 2010-SE-0302 on the party listed below in the manner indicated.

Thomas G. Echikson, Esq. Sidley Austin LLP Counsel for AeroSys, Inc. techikso@Sidley.com

E-mail

Laura L. Barhydt