## **Section 4 – Economizer Operation**

## Ventilation Verification and Energy Optimization Assessment

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|  | Verify Economizer Operation |

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| Step | | | Passing this test verifies the DCV and associated CO2 sensor operates as designed. | | Results | |
| Step 1: | Disable demand control ventilation systems (if applicable) | | | | |
| Step 2: | Enable the economizer and simulate a cooling demand large enough to drive the economizer fully open (record all of the following): | | | | |
|  | a. | | Economizer damper modulates 100% open and that the return air damper modulates 100% closed. | | P/F |
|  | b. | | All applicable fans and dampers operate as intended to maintain building pressure. | | P/F |
|  | c. | | The unit heating is disabled (if applicable). | | P/F |
| Step 3: | Disable the economizer and simulate a cooling demand (record all of the following): | | | | |
|  | a. | | Economizer damper closes to its minimum position. | | P/F |
|  | b. | | All applicable fans and dampers operate as intended to maintain building pressure. | | P/F |
|  | c. | | The unit heating is disabled (if unit has heating capability). | | P/F |
| Step 4: | If unit has heating capability, simulate a heating demand and set economizer so that it is capable of operating (i.e., actual outdoor air conditions are below lockout setpoint). (record all of the following): | | | | |
|  | a. | | Economizer is at minimum position. | | P/F/NA |
|  | b. | | Return air damper opens. | | P/F/NA |
| Step 5: | Turn off the unit. Record if the Economizer damper closes completely. | | | | P/F |
| Step 6: | Restore demand control ventilation systems (if applicable) and remove all system overrides initiated. | | | | |

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| Y/N | **Economizer functions as designed** | |
|  | **If economizer does not function as designed and requires adjustment or repairs:**   * Document Required Repairs and Adjustments * Document information required for a repair or adjustment (i.e. measurements, model, serial, etc.) | |
|  | * Include relevant photographic documentation |  |

*This document is intended to be used solely as an aide when developing the methods, procedures, and forms used in the Ventilation Verification and Energy Optimization Assessment.  It is the responsibility of each contractor, supervisor, and technician to ensure that the methods, procedures, and forms used meet the requirements of the local mechanical codes.  The National Energy Management Institute Committee makes no representations, whatsoever, that drafting procedures or forms based on this document will meet that requirement of local mechanical codes and expressly disclaims any liability or responsibility regarding the use of this document.*