**Test Assertions for VVSG 1.1, Volume 1, Section 7.5.5**

**September 23, 2016**

**VVSG 1.1, Vol 1, Requirement 7.5.5:** **Election Returns**

If the voting system provides access to election returns or interactive inquiries, the system shall:

1. Allow authorized administrators the ability to disable or restrict access to election returns (for equipment that operates in a central counting environment). This requirement applies as well to polling place equipment that contains a removable memory module or that may be removed in its entirety to a central place for the consolidation of polling place returns.
2. Design voting system software and its security environment such that data accessible to interactive queries resides in an external file or database created and maintained by the elections software under the restrictions applying to any other output report:
   1. The output file or database has no provision for write access back to the system
   2. Persons whose only authorized access is to the file or database are denied write access, both to the file or database, and to the system.

**Test Assertions**

**TA755a-1:** IF the voting system meets the following ***preconditions***, then these ***sub-assertions*** apply:

**PRECONDITIONS:**

1. Voting system provides access to election returns OR voting system provides access to interactive queries AND
   1. Voting equipment operates in a central count environment OR
   2. Voting equipment operates in a polling place environment with equipment that contains a removable memory module OR that may be removed in its entirety to a central place for the consolidation of polling place return.

**SUBASSERTIONS:**

**TA755a-1-1:** The voting system SHALL allow authorized administrators the ability to disable access to election returns.

**TA755a-1-2:** The voting system SHALL allow authorized administrators the ability to restrict access to election returns.

**TA755b-1:** The voting system software SHALL be designed such that data accessible to interactive queries reside in an external file OR that data reside in a database created and maintained by the elections software under the restrictions applying to any other output report.

**TA755b-2:** The voting system software’s security environment SHALL be designed such that data accessible to interactive queries reside in an external file OR that data reside in a database created and maintained by the elections software under the restrictions applying to any other output report.

**TA755bi-1:** The output file or database SHALL NOT have any provision for write access back to the system.

**TA755bii-1:** Persons whose only authorized access is to the file SHALL be denied write access, to the file.

**TA755bii-2:** Persons whose only authorized access is to the file SHALL be denied write access, to the voting system.

**TA755bii-3:** Persons whose only authorized access is to the database SHALL be denied write access to the database.

**TA755bii-4:** Persons whose only authorized access is to the database SHALL be denied write access to the voting system.