



ES&S Review of Saguache County General Election

Purpose

The purpose of this document is to provide a basic overview of the assistance provided by ES&S in the Saguache County 2010 General Election.

Audience

The audience for this document is the Colorado Secretary of State's Office and other interested parties.

Overview

Saguache County ("County") purchased one (1) ES&S Model 650 central ballot tabulator ("M650") from ES&S in September 2010. The County purchased the M650 to replace the older Premier Election Solutions, Inc. AccuVote OS tabulators previously used by the County.

ES&S delivered to the County the M650 and the Election Reporting Module (ERM) software in October 2010 and provided the County with one (1) day of training as requested by the County. During the County's training day, a trainer from ES&S provided training on both the M650 as well as ERM. It should be noted that the County had not originally planned to use ERM; however due to an earlier coding issue, ES&S provided ERM to the county for its use in consolidating election returns.

ES&S Analysis

Based on information provided by the County, the County ran the ballots through the M650 on November 2, 2010 and imported the results from the M650 into ERM. The County then produced an unofficial results report through ERM which identified the preliminary results of each race. This report was distributed to the public at the conclusion of the unofficial count on November 2, 2010.

On November 3, 2010, the County contacted ES&S' Helpdesk. The County indicated they had found a discrepancy in the reported unofficial results. ES&S' technical specialist assisted the County with resetting the results in ERM Reporting Group 3 – Mail-In. A M650 zip disk was read into ERM and reset the results in ERM Reporting Group 3 – Mail-In. After this was completed, the County still believed the results were incorrect. At that point, the ES&S technician recommended the County run a Grand Totals Report from the M650 and compare results. The new report which was printed from ERM matched the report from the M650. The County advised ES&S that they would call back later if they could not correct the problem themselves.



ES&S received no further calls from the County until November 8, 2010 at which time ES&S was advised that the County conducted a recount on November 5, 2010. ERM was not utilized by the County for this recount. It is ES&S' understanding that the results report from the M650 was used as the official results for this recount.

On November 8, 2010 the County attempted to import the results of the November 5, 2010 recount into ERM. At this time, the County contacted ES&S' helpdesk because the County was experiencing an issue when attempting to import from a back-up zip disk from the M650. The files had been saved on a computer hard drive and then were transferred back to the zip disk. Tim King, an ES&S technical specialist, determined that the files on the disk had been corrupted at some point during the transfer process from the computer back to the zip disk.

Later that same week, the County requested the services of an onsite ES&S technician. On November 15, 2010, ES&S fulfilled this request and sent Mr. King to the County to assist state elections staff in their review and to look for any factors that may have caused the inaccuracy.

In reviewing the ERM audit log, Mr. King discovered that an error had occurred when the County was importing the election results from the M650 into one of the ERM Reporting Groups. The County had Reporting Groups 2 through 5 created in ERM to load its results. Standard operating procedure when importing results into ERM, is to use the "replace mode" option. When updating results in "replace mode" all previous results which have been imported are overwritten and only the results from the current import are saved.

Mr. King determined that the County on November 2, 2010 at 11:44 p.m. read a M650 zip disk with results for precincts 5-3 and 5-4 into Reporting Group 4 – Polling Place. At 12:59 a.m. on November 3, 2010 the same M650 zip disk was read into Reporting Group 3 – Mail In, causing the Polling Place results for precincts 5-3 and 5-4 to replace the previously entered Mail In results for those two precincts. This issue went unnoticed on Election Night and the results were released. (See Figure 1 below)



Loaded Precincts 0001 through 00024 (all precincts) from 650 results disk
11/03 @ 12:59am Precinct 5-3 had 574 ballots cast
11/03 @ 12:59am Precinct 5-4 had 150 ballots cast
574+150 = 724

They then almost immediately loaded a 650 results zip that contained only precincts 5-3 and 5-4 Polling Place results into the Mail-in group replacing the totals above.

11/03 @ 12:59am Precinct 5-3 then had 401 ballots cast
11/03 @ 12:59am Precinct 5-4 then had 126 ballots cast
401+126 = 527

The difference between the two updates is 197, if we subtract that from the correct number of 2,848 the result is the incorrect total of 2,651 which was on the reports.

Figure 1: excerpt from Tim King's report to Melinda Myers on his on-site review

In addition to Mr. King's review of the ERM audit log, Mr. King had the following observations:

- The M650 System Log printer jammed on election night so there is no log data for events which occurred later on in the night on the M650.
- No reports were printed on the M650 on election night; these are generally run to compare side-by-side with the ERM reports to verify that all totals were imported.
- Other than the one error loading totals in precincts 5-3 and 5-4, Mr. King did not find any other procedural issues in his on-site review.

Additional Item – ERM Laptop

In addition to the matter discussed above, the laptop loaned to the County by ES&S which included the ERM program has come under scrutiny. There have been several Colorado Open Records Act (CORA) requests submitted to the County requesting the release of the files contained on the laptop which was used by the County on Election Day. It is our understanding that the County released printed copies of the reports contained on the laptop, but did not release the digital files. The digital files were determined to be proprietary information belonging to ES&S and could not be released.

ES&S received the laptop back from the County on December 8, 2010. Upon ES&S' receipt of the laptop from the County, Mr. King reviewed the ERM system audit log to determine which files were contained on laptop. In reviewing the ERM system audit log, Mr. King found that the ERM vote totals were reset to zero on December 3, 2010. Please be advised that in accordance with the Colorado



Attorney General's office, the laptop has been kept in secure lockup in the condition that it was in when it was returned to ES&S on December 8th, 2010.

Conclusion

The County purchased one (1) M650 central ballot tabulator in September 2010 and ES&S later provided the County with ERM in order for the County to tabulate and report its election results for the November 2, 2010 General Election. ES&S provided the County with training in October on both the M650 and the ERM software.

The County utilized the M650 and ERM module for its November 2, 2010. This was the County's first use of its newly purchased system. Based upon ES&S review of ERM logs, it is the opinion of ES&S that a procedural error occurred during the updating of M650 zip disks into ERM causing incorrect totals in ERM which were released on Election Night. In addition, the laptop that the County used for ERM is being held in a secure locked-up location at ES&S' headquarters at the request of the Colorado Attorney General.