

**Secretary of State Equipment Certification Advisory Committee**

(A.R.S. § 16-442)

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**Meeting Minutes of April 16, 2019**

**I. Call to Order**

Chairman Janine Petty, Assistant State Election Director, Secretary of State's Office, called the meeting to order at 8:49 a.m.

**II. Welcome & Roll Call**

**Committee Members Present:**

Janine Petty - Chairman

Dr. Jim Helm

Peter Silverman, Esq.

**Committee Staff Present:**

Tanner Robinson – Elections Specialist & Staff

Gina Swoboda – Elections Lobbying Specialist & Staff

Joseph LaRue – Assistant Attorney General

Kara Karlson – Assistant Attorney General

Chairman Petty began by introducing Election Systems & Software (ES&S) staff, along with the committee and staff members present, as well as representatives from Pima County.

**III. Approval of Minutes from February 13, 2019 Meeting**

Mr. Peter Silverman, Attorney, Baskin Richards, motioned to approve the previous committee meeting minutes from February 13, 2019. Chairman Petty seconded the motion, and the motion was carried unanimously.

**IV. Review of Voting Equipment Application for Certification of the Election Systems & Software (ES&S) EVS 6.0.2.1 Voting System**

Chairman Petty introduced the application including new software and upgrades to election equipment from ES&S.

Mr. Steve Pearson, Senior Vice President of Certification, ES&S, began by thanking the committee for the meeting. He introduced Susan Paulson-Parmer, State Certification Manager with ES&S, along with additional ES&S staff.

Ms. Paulson-Parmer described the overview of the equipment suite, as referenced in the packets available to the committee. She described the equipment in the suite, along with hardware and software system security parameters. Mr. Pearson commented that all actions are logged across the system and are trackable. He went on to say that he thought the hash validation was of particular importance.

Ms. Paulson-Parmer continued, noting the election software and election ware system, which includes the election reporting module, ballot review and adjudication, and additional functions. She went on to describe data export functionality, including on-screen ballot review, correction for voter intent, and ballot approval.

Dr. Jim Helm, Information Technology Program Chair, Arizona State University, arrived at the meeting at 8:59 a.m.

Ms. Paulson-Parmer's review continued with the write-in results review and reporting functionality. Mr. Pearson noted that this was quite a change to what the representatives from Pima County would be used to seeing in previous iterations.

Ms. Paulson-Parmer went on to describe secure port protection, digital encryption, and real-time report errors. She continued, noting the availability of Spanish text and audio. She described the DS200 collapsible ballot box within the hardware, control keys, locking panels, shipping and transport case, secure USB keys, folding touch screen, and additional digital safeguards. Mr. Dan Clark, Regional Sales Manager, ES&S, added that the collapsible ballot box was the only additional inclusion in this application. Ms. Paulson-Parmer continued, noting that the central count tabulators include quicker results aggregation, and a variety of methods for results exporting on the two equipment variants brought before the committee. Mr. Clark noted that the 850 is used with the larger counties, and the 450 is available and best suited in the smaller counties. Mr. Pearson noted that bar code and ballot scanning was referenced within the committee materials and in the presentation, with the current elections landscape and challenges in the country in mind. Ms. Paulson-Parmer noted the sample for reference is included in the committee packet. Mr. Pearson noted that a voter always has the opportunity to make any review steps they wish prior to casting a vote, and went on to say that the system knows where to look for votes during scanning. Dr. Helm asked what happens with stray marks. Mr. Pearson

responded, stating that only the ovals are scanned for marks. Dr. Helm asked what would happen to duplicates. Mr. Pearson answered, and said that over-vote protection is present in the system. Mr. Clark stated that he has not heard of any bar code inquiries from Arizona jurisdictions they work with.

Ms. Paulson-Parmer went on to describe the bar code printing functionality. Mr. Pearson stated that Express-Link is an application available during voter check-in. Margaret Dos Santos, Account Manager, ES&S, added that the counties typically use ePollbook functionality for polling place check-in, and went on to say that Mohave County does use this Express-Link technology.

Ms. Paulson-Parmer continued, describing the test-deck functionality for ballot programming, along with text-to-speech conversion files for accessible voting. Mr. Pearson indicated that the Toolbox function exists on a separate system, and added that the system function makes moving from one election to the next more fluid, stating that the sticks are wiped and restored to factory formats within 10 seconds. Dr. Helm inquired regarding internal wiping functionality during the reformatting process. Mr. Pearson responded, stating he does not know the exact process, but that he would get that information for him. Chairman Petty wanted to check that the sticks are not taken to an environment that is not controlled, and Mr. Silverman asked what happens to the sticks in regards to whether they are returned to ES&S. Mr. Pearson noted that they are not, and that this was a feature built in to this system release.

Chairman Petty reminded those present about the January 2018 conditional approval for a previous ES&S release, and inquired as to what version is being produced now to respond to the previous request, wanting to clarify which pieces of equipment that ES&S would be applying it to. Mr. Pearson noted that the firmware was upgraded on the ExpressVote, and noted that the same functionality is guaranteed system wide for this release.

Dr. Helm apologized for his lateness of arrival to the meeting.

## **V. Presentation of the Script to be Used for the Test of the ES&S EVS 6.0.2.1 Voting System**

Chairman Petty introduced the accessible test of the primary election, results upload, and optical portion of the test, and stated that it will continue after lunch with the general election portion for the test of equipment.

## **VI. Conduct Test of the ES&S EVS 6.0.2.1 Voting System**

The testing of equipment for the primary election began at 9:29 a.m.

Mr. Clark said that there is a new hardware function added for tabulation in the ExpressVote. Chairman Petty requested that she wanted to test out bar code functionality, and said that she wanted to make sure that language functionality was present. Mr. Silverman added that he wanted to make sure the equipment would not allow him to vote multiple times. Chairman Petty asked how she could distinguish whether she was voting a federal only ballot. Ms. Paulson-Parmer guided Chairman Petty through the voting procedure, and assisted Dr. Helm as well, noting how the over-vote functionality worked.

Chairman Petty asked that the committee would like to see a print out of a voter's vote by the required paper audit trail. Dr. Helm asked how the card can be returned via the keypad. Ms. Brooke Thernes, Regional Manager, Account Management, ES&S, guided him through the process. Dr. Helm asked how the system knows how to detect a write-in name different from the nominated candidates. Chairman Petty responded, stating that the system can detect this. Chairman Petty requested that the ballots be separated and scanned in the three tabulators present. Mr. Silverman asked whether the write-in ballots would be kept separate in tabulation. Chairman Petty clarified that she just wanted to see them run through the system, in answer to his question. Dr. Helm inquired whether Chairman Petty did wish to run some of his voted ballots through the three tabulators present. Chairman Petty asked whether the zero report was available from the Election Management System (EMS). ES&S staff confirmed that it was. Chairman Petty checked whether all of Mr. Silverman's test scripts were voted, and he confirmed that he had. Ms. Paulson-Parmer clarified whether she wanted precinct results, and Chairman Petty stated she just wanted to see the full report.

There was an inconsistency during results comparison of test scripts, which was found to be due to too many votes cast (a deviation from the testing script). There was an inconsistency for US Senate Democratic race votes. Chairman Petty just wanted to make sure there were five votes cast in the race. The committee worked to attempt to track down the inconsistency in the votes cast for a candidate named Rios in comparison to the test script. Chairman Petty wanted to be sure votes were tabulated correctly.

There was a second inconsistency, which involved the write-in votes cast for US Senate Democratic race. The committee worked to reconcile the inconsistency.

The last inconsistency involved the Corporation Commission race. The committee worked to reconcile those votes cast.

The inconsistencies were successfully traced to the precinct level results and the equipment was determined to have tabulated the results accurately, with the inconsistent votes included.

Chairman Petty wanted a reminder on what the pink dot marking was on the vote print outs. Ms. Dos Santos confirmed that it indicates a write-in vote.

Ballots were also set aside and ran through equipment for adjudication functionality testing purposes.

Dr. Helm questioned whether there was a computer interface issue regarding the ES&S equipment with the Secretary of State's projector. Ms. Thernes confirmed this, and apologized for presenting adjudication functionality on a smaller screen during the meeting. Dr. Helm wondered what would happen for over-votes, and Chairman Petty confirmed that this demonstration was for individuals who vote on the permanent early voting list. Ms. Thernes noted that adjudication software would pinpoint the ballot locations where ballot markings or voter intent is not clear, such as markings outside of an oval, and so on. Chairman Petty asked if this was a live ballot, and Ms. Thernes confirmed that it was a live ballot under adjudication review. The adjudicator then picked up two under vote counts and a marking that was not clear. A blank ballot which did contain a yellow marking was picked up, but the yellow marking on it was not visible on-screen, and the voter intent was determined for a contest to be shown as voted. Dr. Helm asked whether a highlighter could be seen electronically. Ms. Dos Santos clarified that all that would be seen would be a blank ballot, and the physical ballot would need to be found to find a highlighter marking. Chairman Petty described adjudication procedure, stating that with the adjudicator in place, a ballot review board would go back to the physical ballot to determine what issues the system noted for review, instead of using the physical ballot duplication process, the vote would be reviewed and noted electronically for voter intent and then cast.

The original adjudicated results were shown to be correctly cast for the test, and the primary election was tabulated successfully.

The committee took a break at 12:18 p.m. to continue testing after lunch.

The committee returned and continued with the general election test at 1:00 p.m.

Mr. Silverman questioned why the federal only ballot was presented as nonpartisan. Chairman Petty clarified that the ballot was for the general election, and was presented as nonpartisan in the current ES&S format. Mr. Silverman asked whether he could continue with the tabulator when it presented the screen for ballot review. Dr. Helm stated that he could, even though the message prompt was asking him if he wanted to review his choices by re-inserting his ballot card. He continued with the test.

Mr. Clark said that all of the votes cast are on memory sticks which will be uploaded to the results station on the laptop, in answer to Dr. Helm's inquiry regarding connectivity concerns.

The optical scan test was concluded and the results were shown to have tabulated accurately.

The ballots were then run through the adjudication function. Chairman Petty stated that there was a ballot inserted out of six ballots and one of them was from a different election, and she wanted to know why it was accepted. Ms. Thernes said that the ballot layout was the same, along with the same contests and race positions, which is why it would not have been caught by the adjudicator.

Dr. Helm wanted clarification as to what the difference would be between the previous occasions when the equipment was before the committee and caught different ballots from other elections, and during this time, when a ballot was from a different election not like those being tested, and was not captured by the adjudicator. The committee was curious to know more about this. Ms. Thernes stated she would need to contact ES&S staff for further input.

Ms. Thernes stated that the series of boxes represent ballot type, sequence, and split. The equipment did what it was supposed to, she continued. She went on to say that the ballot could be rejected by votes and changed later, in answer to Mr. Silverman's question. Chairman Petty asked why the election is not programmed into the ballot detection. Mr. Clark said that ballot batching totals could be caught in adjudication also. Dr. Helm asked how the data is input from the software. Ms. Thernes said that software modules are generated by the user. Chairman Petty noted that the election is not what would cause a ballot to be put aside. Dr. Helm said that spare bits could be programmed easily for this, but that hard limits programming would make any additional changes and options for detection by the adjudication function more complicated.

Chairman Petty stated that ballot inclusion or exclusion happens much more often than the ES&S staff might guess, and that this was her concern, stating that either the machine would need to reject a ballot due to it being the wrong election. She clarified this for the committee, and SamBo Dul, State Election Director, Secretary of State's Office, who shared their concerns.

Ms. Thernes continued, noting adjudication functionality and filtering for ballot review. Dr. Helm asked to see the over-votes shown on screen from the filter screen, asking whether the filters can be set for over-votes specifically. He wanted to be sure that the over vote would not be counted towards either candidate, and ES&S staff clarified that the over-vote would just be counted as such. Ms. Thernes asked how many voter intent ballots were used for the general election test, and Ms. Gina Swoboda, Elections Lobbying Specialist, Secretary of State's Office, stated five were used. Ms. Swoboda said that this was done on the machine, but only done in one batch. Those done on the 450 were in bulks of five, Ms. Dos Santos said. Chairman Petty asked

whether write-ins can be added following candidate certification, and whether this changes any of the election system formatting. Ms. Thernes confirmed that it would not. Contest can be changed at any time by the administrator, she noted. Mr. Clark clarified that unofficial candidates could be sorted in a separate box for election results reporting purposes. Ms. Dos Santos said that the .txt results file could be uploaded to the state, which could be separate from the current ASCII file the Secretary of State's Office receives.

The general election portion of the test was concluded and the results were shown to have tabulated correctly.

## **VII. Discussion & Recommendations Regarding the Certification of the ES&S EVS**

### **6.0.2.1 Voting System**

Mr. Silverman motioned that the committee go into executive session. Dr. Helm seconded the motion, and the motion was carried unanimously.

The committee adjourned from regular session into executive session at 3:00 p.m.

The committee reconvened from executive session into regular session at 3:28 p.m.

Chairman Petty questioned whether the upgrade to the ExpressVote is currently compatible to what counties are currently using. Mr. Pearson said that everything is certified as a suite, and the software would not be compatible with current equipment. Mr. Clark said that this was the goal, in order to bring everybody up to date with the current software suite.

Mr. Silverman said he did not have any exact answers at the moment, but stated he was concerned about the Secretary of State's Elections Procedures Manual on page 108 and the ability of the system, specifically the requirement that the systems be able to reject ballot styles coded to previous elections. If he's not mistaken, it looks like the system did not reject a ballot style from a previous election during their testing at this meeting, he went on. Mr. Pearson said that this was not true, and that it kicked it out due to old votes, and over-votes. Mr. Silverman said that there were scenarios where votes would be tabulated if there was an extra ballot cast. Chairman Petty inquired if the ballot could be rejected because it was an improper ballot style coded to a previous election, stating she was concerned that had the equipment not been configured to kick out over-votes, it would have been counted. Ms. Does Santos said that sorting functionality is turned on all the time, except for an election day ballot. They are turned on for all mail election ballots, she continued. Mr. Silverman asked what the process would be for ballot style rejections dated from previous elections. Mr. Pearson said that if you are in a precinct, ballots from a previous election should not be available from a previous election. For vote by mail elections, county responsibility would need to be taken into consideration, for ballot

inspection and verification, as is included in ES&S company best practices. Every row and column is accounted for on a ballot in their system, he went on. Chairman Petty said that the Secretary of State's Elections Procedures Manual states that ballot styles from previous elections need to be rejected. Ms. Thernes said that sequence code for the general election ballot and type code could be specific to the ballot. She went on to say that a ballot setting such as a type code could be inserted for automatic rejection. Dr. Helm asked how many type codes could be supported. She stated she would probably not recommend not having a type code for every election, since it would become laborious, since there could be ballot sets that would not be used. Chairman Petty asked what a ballot set as defined would be, and whether it would be similar to ballot styles. Ms. Dos Santos said that the 600 styles are still present, and that this would not interfere with the styles. Chairman Petty said that she would like to see the ballot with her election date error which occurred during this test be properly rejected.

Dr. Helm asked whether one piece of equipment could be programmed specifically to not tabulate something. ES&S staff confirmed that the equipment was exactly the same, except that tabulation could be turned on and off in one device and not in another.

Mr. Silverman said that state statute indicates that a voter shall receive a copy of their ballot, and that a voter would not have a choice in that matter, referencing A.R.S. § 16-446. Mr. Clark said that he is not selling the specific device as a tabulator. Chairman Petty asked if the kiosk was not being purchased as a tabulator, wanting to know why it would be purchased at all. Mr. Clark said that one machine is not being sold any longer in the state, and noted that one piece of equipment is not being set up as a tabulator. Mr. Silverman said that the current state statute puts the committee in a rock and a hard place.

Chairman Petty stated that her concern was that the previous certification of equipment was conditional, and that if ballot rejection was not doable, the equipment would need to be de-certified.

Mr. Pearson asked whether a condition could not be put in place for county inspection of ballots. Chairman Petty said that the Elections Procedures Manual said that the "system" would reject a ballot. Mr. Pearson said that there has to be a level of responsibility to take place in this situation. Mr. Joseph LaRue, Assistant Attorney General, Attorney General's Office, said that the way that Arizona state statutes operate is not always as clear and concise. He went on to say that the task of updating the Elections Procedures Manual is not a guaranteed outcome, since the Secretary does need to consult with the counties, and it also has to be approved by the Attorney General and the Governor.

Ms. Thernes proposed a solution, stating she created a whole new ballot set with a total of three. Anything that is not type three will be rejected, which refers to anything that is not a part of that

set. Mr. Pearson asked if Ms. Thernes could walk through the process, since this is not their first time today when ballot style rejection has come up. She continued, noting that in the ballot sets and ballot style sections, a new ballot set was added, for a new test ballot. She went on to explain the capture module, which defines everything that is going to appear in an election. Once all of the information is placed in election ware, ballot sets can be created, she continued, after Mr. Pearson asked her to explain further. Ms. Dos Santos said that the ballot sets are duplicated, but only the second set can and will be used for this test of functionality. In the paper ballot section, the code and split numbers are sequenced here. From this page, the ballot set can be generated to a paper ballot. Ms. Thernes went on to say that users could go back into the system, delete previous sets, so that the media cards only contain current sets. In theory, she went on to say that any ballot scanning done from here on out could be rejected based on the ballot set. The ballots would then be rejected entirely due to invalid ballot IDs. Ms. Thernes said that the 450s and 850s share the same code, so this procedure could be applied to those systems as well.

Chairman Petty asked how many counties ES&S codes for. Ms. Dos Santos said there are currently nine counties. Coding procedure would need to be done, and they could train their counties, she went on, in answer to the Chair's concerns regarding implementation.

Chairman Petty motioned for the committee to go into executive session. Mr. Silverman seconded the motion, and the motioned was carried unanimously.

The committee adjourned from regular session into executive session at 4:05 p.m.

The committee reconvened from executive session into regular session at 4:10 p.m.

Chairman Petty asked whether the committee felt confident in the set programming they had seen, or whether they wanted to see a fully coded election to show that the equipment complied with state statute.

Dr. Helm said that from a technical perspective, it does show that the functionality is present, in answer to Mr. Silverman's concerns regarding the technical requirement fulfillments of the suite being presented before the committee. He thought that this was a minor technical aspect with no bearing on the outcome of technical process results. Mr. Silverman stated he would be comfortable voting on this without additional election coding. He said that there should be an easier way to implement technical changes to state specification, and encouraged the vendor to keep this in mind in the future. Ms. Dos Santos said that best practices would be shared with the counties who program their own elections.

Chairman Petty said that the on-screen adjudication is the way of the future, and while she does not think the statute currently provides for it, she might predict seeing a legislative modification potentially coming in the future that could.

Mr. Silverman said he needs to be assured that a voter can be presented with their paper ballot every time they vote on this equipment. Mr. Pearson said that the ExpressVote would not be used as a tabulator.

Chairman Petty moved that the committee recommend that the application for certification of the ES&S EVS 6.0.2.1 Voting System suite be approved, with the exception that the ExpressVote shall not be set to tabulation mode, along with the additional condition that the Secretary of State's Elections Procedures Manual update include adjudication processes for over-vote functionality. Mr. Silverman seconded the motion, and the motioned was carried unanimously.

#### **VIII. Summary of Current Events by Chair Janine Petty**

Chairman Petty said she would take responsibility for the engineering change orders to a prior ES&S equipment item, which did not make it on the agenda, which will require a future committee meeting for approval. She did not see this as a major issue, noting it could be likely approved very quickly, and that the vendor could appear telephonically at that meeting.

The Secretary of State's Office is also working on an update to the Elections Procedures Manual, she added, and invited the committee members to provide their input when a draft becomes available.

#### **IX. Discussion of Upcoming Meetings**

No discussion was heard.

#### **X. Adjournment**

Chairman Petty motioned to adjourn. Mr. Silverman seconded the motion, and the motioned was carried unanimously.

The meeting was adjourned at 4:21 p.m.