

9 March, 2018

**Further comments for March 2, 2018 Colorado Secretary of State Election Rulemaking Hearing, particularly with regard to standardization of names and labels for auditing of the 2018 elections**

**From: Verified Voting volunteer John McCarthy <john@verifiedvoting.org>**

**Re: Amendments to Code of Colorado Regulations (CCR) 1505-1, Rule 25 Post-election audit**

Once again I want to express my appreciation for being able to work with state and local election officials to develop rules for auditing Colorado elections.

From the very start of that collaboration, Verified Voting and my other colleagues have urged Colorado to require counties to use standard labels and names in order facilitate merging data from election contests that span multiple counties. We therefore were surprised and disappointed to see that successive draft rules have not included a requirement for counties to use standard labels and names – at least for all contests that span multiple counties.

We were even more surprised to see that Colorado's RFP for RLA Software Phase II included a requirement to translate non-standard names and labels. I have appended a copy of Neal McBurnett's plea to drop that requirement for the "Minimum Viable Product". I strongly support that plea. As Neal notes, it is "far more cost-effective to establish standard names up-front and either require that they be used in CVRs, or define and provide a standard mapping of contest and choice names as a separate input for the RLA Tool. Given a well-defined mapping input file, it would be easy to read it in before reading in the CVRs and follow the mappings indicated."

As Neal also points out, "In the past CDOS has provided a mapping for those situations in which the contest names and choice names for a single contest differ in the CVRs provided by different counties, thus establishing a "standardized name" which should also match the name used in the Election Night Reporting (ENR) system."

Both Neal and I have participated in development of standard data formats, including standards for labels and names, under the auspices of IEEE and then the more recent NIST-EAC VVSG standards groups. All of those groups foresee states and counties needing to use those standards for everything from ballot definition to election night reporting and post-election auditing.

I hope those most local election officials recognize the need for standardizing contest labels and candidate names, especially for multi-county contests. So I can't imagine they would strongly oppose such a requirement.

I hope you will add a rule that counties use standard contest labels and candidate names from CDOS, and drop the requirement to translate non-standard names and labels from the "Minimum Viable Product" in the RLA Software Phase II.

I regret that time did not permit me to get other signatories for this note, but I think you realize that most if not all election integrity advocates (including a number of election officials) agree with the main points outlined about.

Thanks again for considering our many comments during the development of this new regime for risk-limiting audits.

##### extract from Neal McBurnett inquiries about RPF for RLA Software Phase II #####

Inquiry 3:

Exhibit A pg. 4 > In addition, the system must be able to accurately identify and match each county's variation of the contest name with the standardized name of the contest in the system. The state audit administrator will need a screen from which to map any unidentified column(s) to the contest(s).

pg. 9 > This may require the software to identify and associate contest or candidate names that are not exactly identical in every county's CVR (e.g., "Secretary of State" vs. "State Secretary"). When the software is unable to correctly correlate a CVR contest header with a known contest, the state administrator must have the ability to map the statewide and multi-jurisdictional contests from the state administrator pages.

pg. 9 > The software should display the applicable voting choices when the state audit administrator uses a mouse to "hover" over the ballot contest name when selecting audited contests

How will these "standardized names" be provided?

In the past CDOS has provided a mapping for those situations in which the contest names and choice names for a single contest differ in the CVRs provided by different counties, thus establishing a "standardized name" which should also match the name used in the Election Night Reporting (ENR) system.

A variety of good general-purpose tools already exist suitable for comparing names and establishing this sort of standardized naming for contests and choices. All of the data needed is available at the time of the Logic and Accuracy Tests.

Writing custom software and designing associated user interfaces to aid in this kind of fuzzy name matching across different systems would add significantly to the cost and complexity of the development work.

We expect it would be far more cost-effective to establish standard names up-front and either require that they be used in CVRs, or define and provide a standard mapping of contest and choice names as a separate input for the RLA Tool. Given a well-defined mapping input file, it would be easy to read it in before reading in the CVRs and follow the mappings indicated.

Can the requirement for custom name-mapping software be dropped from the "Minimum Viable Product"?