

447 Olive St.
McCandless, PA 15237

June 6, 2006

Members, County Council
436 Grant St.
Pittsburgh, PA 15219

Dear Council Members,

My name is Chad Dougherty and I am a resident of 477 Olive Street in McCandless. I have worked for the past ten years in fields involving computer networking and have been employed for the past six years as an Internet security analyst at Carnegie Mellon University's Software Engineering Institute. Thank you for this opportunity to address the council.

Despite the claims of success after the May 16th primary election, I and many of my fellow citizens continue to have concerns about the reliability and security of our elections with the advent of the county's new electronic voting machines. We continue to harbor doubts that our votes can be accurately counted using such systems, particularly as they are implemented today.

On Friday, June 2, I observed representatives from the voting machine vendor, ES&S, attempt to reconcile discrepancies in the vote totals for the 24th Legislative District race. The procedures I witnessed to accomplish this were not systematic or methodical. The process involved multi-hour telephone calls to ES&S support in Omaha, Nebraska, several iterations of manual file copying and renaming from within Microsoft Windows, and the generation and regeneration of reports from within the Unity Election Management Software until the vote totals agreed with the expected results. At various points during the day the Unity system reported more votes than were cast in the election, or less, sometimes reporting that no votes had been cast at all. The representatives were also, at times, loading and reloading the same votes from unsecured disks. These disks contained the sole record of some scanned votes, and did not appear to be write protected.

Furthermore, I observed that the systems being used to tally the votes appeared to have pcAnywhere, a popular desktop remote control software package, installed on them. The purpose of this product is to allow a remote user to manipulate a computer system over the network. It's not clear to me why ES&S chose to install this software on the Unity systems or whether it was part of the configuration specifications that were certified, but its presence is undesirable and should be considered potentially dangerous for such an environment. While a final result was obtained that pleased ES&S staffers nothing about the process inspired any confidence in me that it was reliable and reproducible or that votes were not corrupted during the process. If the poll worker misunderstanding that initially caused the discrepancy had been more widespread, I fear the results would've been disastrous.

In order to safeguard against these and other problems, I urge council to take the following actions:

- pass an ordinance guaranteeing the citizens of Allegheny County a voter-verified paper record
- appoint or hire a truly independent third party security expert with voting machine experience to thoroughly evaluate (or reevaluate) the security of the ES&S iVotronic systems if the county intends to use these systems again in November

- create a citizen's advisory panel that will review the current situation and provide specific advice and guidance to address outstanding concerns with these systems

Sincerely,

Chad Dougherty