SECRETARY of STATE

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REPORT OF THE SECRETARY OF STATE

ON THE EXAMINATION AND THE EVALUATION OF THE ETP-10 VOTE TALLYING SYSTEM

(June 6, 1987)

On January 19, 1987, Election Services Division of Business Records Corporation (328 Jefferson Street South, Chicago, IL 60606) requested certification of a vote tallying system under RCW 29.33.041 and 29.34.090. The hardware and software for this system is designated by the manufacturer and marketed under the name, ETP-10. The vote tallying system consists of an IBM PC Model AT (or compatible) microcomputer, a punched-card reader, a dot matrix printer, election management software to prepare control files for a specific primary or election and vote tabulating software to count ballots and accumulate and report results.

FUNCTIONAL SYSTEM DESCRIPTION

The vote tallying unit is a stand-alone microcomputer which receives input from a card reader and a keyboard console,executes the vote tallying software, and prints results on a dot matrix printer. The card reader contains proprietary interface hardware to facilitate the transfer of data to the microcomputer.

The election management software creates, edits, and maintains for each primary or election a group of files containing information on the political jurisdictions, the election units (precincts), the offices, the candidates, the ballot measures, and the ballot layout in each precinct or portion of precinct within a county. The information in these files is utilized by the vote tallying software during the tabulation of each group of ballots and during the printing of results or canvass reports.

The vote tallying software controls and logs the execution of all steps in the tabulation process. It monitors the card reader for input, accumulates and stores precinct results, accumlates results for any group of precincts and for the entire jurisdiction for which results are being tabulated, and controls the production of all reports of electon results and system activities.

PUBLIC HEARING AND EXAMINATION

On May 14, 1987, a public hearing was held in the office of the Secretary of State to examine this electronic vote tallying system. The hearing was conducted by Donald F. Whiting, Director of Elections for the Office of the Secretary of State. The vendor of the system, Business Records Corporation, was represented by Mr. Randy Rodriguez and Ms. Laurie Mohning.

An electronic vote tallying system must meet the following requirements (as set forth in RCW 29.34.090) in order to be approved for use in this state:

1) It must correctly count votes marked on the ballot for any office or ballot proposition;

2) It must recognize and not count overvoted ballots;

3) It must accumulate individual counts for all candidates and measures on the ballot in a particular precinct;

4) It must accomodate the rotation of candidates' names;

5) It must automatically produce precinct totals in either printed, marked, or punched form;

6) It must add precinct totals and produce a cumulative total for all precincts in the jurisdiction.

Mr. Rodriguez and Ms. Mohning reviewed the components of the system and their operation and described the procedures required to prepare for and conduct a primary or election on the system. Using test information prepared by the Elections Division staff, two tests or simulations were conducted. The first test, based on the 1986 state primary election, utilized three precincts each with a different rotational pattern of candidates. The second test, based on the 1986 state general election, included a simulated "split" precinct. At the conclusion of the tests, the vendor responded to questions from the staff of the Elections Division and the public.

The vote tallying system functioned correctly during the demonstration and simulations conducted at the public hearing. In these tests, the vote tallying system correctly tabulated and reported the results by precinct. The results of these tests are a part of the record of the hearing and copies are available through the elections division.

FINDINGS OF THE SECRETARY OF STATE

Based on the staff evaluation of the ETP-10 vote tallying system, the presentation by the vendor, and the results of the tests performed during and following the public hearing on this system, the Secretary of State finds that this vote tallying system may be operated in a manner consistent with the laws governing electronic vote tallying systems. Therefore, under RCW 29.33.041, the ETP-10 vote tallying software and the associated hardware and software tested with this system are approved for use in Washington state. We recommend that this equipment be used with a device capable of suppressing current surges, voltage fluctuations, and other power line disturbances.

Certified on the fifth day of June, 1987.

RALPH MUNRO
Secretary of State