SECRETARY of STATE

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REPORT OF THE SECRETARY OF STATE

ON THE EXAMINATION AND EVALUATION OF AN ELECTRONIC VOTE TALLYING SYSTEM

(June 9, 1986)

On October 18, 1985, Sequoia Pacific Systems Corporation (400 Second Street, San Francisco, CA 94107) requested certification of a vote tallying system under RCW 29.33.041 and 29.34.090. The hardware and software for this system is marketed under the name, Datavote MP 286.

The vote tallying system consists of a microcomputer with a monitor, up to four card readers, a printer, and ballot tabulation software. The minimum configuration of the system requires a 16-bit, IBM-compatible computer (80286 processor) with 512K of random access memory, two diskette drives, and one hard disk drive. The card reader is a Documation M1000 or equivalent with a serial interface. A variety of printers with parallel interfaces may be used in the system.

The software creates and maintains a file of control information on the arrangement of precincts and political jurisdictions within a county and a file of control data on the offices and candidates which appear on the ballot at a particular election. These control files are accessed during the tabulation to verify the ballot format for each precinct as it is being processed and to print precinct and summary reports. The software stores the results of each precinct on diskette as it is processed and produces an audit log of all operations during the tabulation.

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 a count of a specific number of ballots tallied for a precinct;

4. It must accommodate 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.

On November 22, 1985, 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, Sequoia Pacific Systems Corporation was represented by Mr. James Gilchrist and Mr. Thomas R. Ryder. Also present at the public hearing was John Pearson, Coordinator of Election Administration for the office of the Secretary of State.

Mr. Gilchrist reviewed the components of the system and their operation, giving a step-by-step account of 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 1984 state primary, utilized three precincts, each with a different rotation. The second test, which was based on the 1984 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.

The vote tallying software functioned correctly during the demonstration and simulations conducted at the public hearing. The card reader was not tested with the 228, 235, or 312 position ballot cards. All simulations and tests were conducted with the 76 position (Datavote) card format. In each test, the vote tallying system correctly tabulated the test ballots and reported the results by precinct. Results of these tests are appended to the record of the hearing and copies are available through the elections division.

FINDINGS OF THE SECRETARY OF STATE

Upon a review of the staff evaluation of the Datavote MP 286 vote tallying system, the presentation by the vendor, and the results of the tests performed during the public hearing on this system, the office of the Secretary of State finds that this vote tallying system satisfies the requirements of RCW 29.34.090. Therefore, under the provisions of RCW 29.33.041, the Datavote MP 286, and its associated software, is approved for use in Washington state with the 38, 52, and 76 position ballot cards. We recommend that this equipment be used with a device capable of suppressing current surges, voltage fluctuations, and other power line disturbances.

Certified on this ninth day of June, 1986.

RALPH MUNRO
Secretary of State