Final Agency Determination
for Election Systems & Software’s iVotronic with RTAL
Voter Verified Paper Record System

In my capacity as the Chief Election Official for the State of New Jersey, and in accordance with N.J.S.A. 19:48-2, I have reviewed the Title 19 Voting Machine Examination Committee (the “Committee”) Report on the Voter Verified Paper Record System (“VVPRS”) for the Election Systems & Software (“ES&S”) iVotronic with RTAL (“iVotronic”) dated October 30, 2007 (the “Committee Report”), and make the following final determination:

I accept and adopt the Committee’s recommendation that the VVPRS for the iVotronic voting machine not be certified for use in New Jersey in its current state, and, therefore, I decline to certify the iVotronic VVPRS as of this date.

I have also determined that for the iVotronic VVPRS to be further considered for certification, modifications must be made to address the shortcomings identified in the Committee Report. Several items in the Committee Report, however, require clarification from this Office as follows:

- In item one on page three of the Committee Report, the Committee indicates that “the ultimate printed paper summary is not visible to the voter because it is printed and rolled up on the spindle too quickly for the voter to read.” To verify the “ultimate” paper record, which pursuant to N.J.S.A. 19:48-1 will, “[i]n the event of a recount of the results of an election[,] . . . be the official tally in that election”, a voter must be provided with the opportunity to review his or her paper record and to accept or reject it. If the record is rejected, the voter must be afforded the opportunity to recast the ballot up to two additional times. Finally, as this Office noted in its Final Agency Determination for Sequoia Voting Systems’ Edge VVPRS dated August 10, 2007, when a voter’s third and final voting is printed, the most effective procedure to ensure voter verification is to require the voter to take affirmative action to demonstrate verification of his or her third and final paper ballot. Performing an affirmative act allows the voter, rather than the machine, to determine how much time is necessary to verify a paper record.
In item four on page four of the Committee’s Report, the Committee states that “reel-to-reel paper ballots are allowed under State Criteria so this issue might be dealt with by use of proper procedures.” Reel-to-reel VVPRSs are permitted by the State’s Criteria for Voter-Verified Paper Record for Direct Recording Electronic Voting Machines (the “Criteria”). If a reel-to-reel VVPRS achieves certification, procedures to address paper replacement will be issued by this Office.

In the first full paragraph on page five of the Committee Report, the Committee indicates that it did not believe “Exception 8” in the New Jersey Institute of Technology’s (“NJIT”) Report to this Office on the iVotronic’s VVPRS (“NJIT Report”) “to be so serious as to not permit certification in and of [itself].” “Exception 8” states, in relevant part, that matching “the electronic ballot image records to the corresponding paper records is difficult” and that ES&S did not provide documentation of the procedures for doing this. Because the paper record can be linked to a corresponding electronic record, section IV.B.1 of the State’s Criteria is satisfied. However, to satisfy section IV.B.3.e of the Criteria, ES&S needs to provide documentation of procedures for exporting electronic ballot image records and reconciling those records with the paper records.

In the first full paragraph on page five of the Committee Report, the Committee indicates that it did not believe “Exception 10” “to be so serious as to not permit certification in and of [itself].” “Exception 10” states, in relevant part, that “[i]f the printer cable is disconnected after the voter presses the ‘VOTE’ button, the ballot is electronically recorded . . . Yet, no barcode is printed on the paper record.” Pursuant to section V.H. of the State’s Criteria, if the connection between the voting machine and the printer is broken, no votes shall be recorded.

In the first full paragraph on page five of the Committee Report, the Committee states there was a debate concerning whether the voting machine was properly used when the warning message NJIT noted in Exception 12 of its Report occurred. If ES&S modifies the iVotronic with VVPRS and returns it to NJIT for further testing, this Office would appreciate more information from NJIT and ES&S regarding “Exception 12” in the NJIT Report.

If ES&S modifies the iVotronic VVPRS to address the shortcomings noted in the Committee Report (as clarified herein), the iVotronic voting machine with VVPRS must be resubmitted for review and testing by NJIT and any other testing facility, including voting system testing laboratories accredited by the United States Election Assistance Commission (“EAC”), deemed necessary by the State.

To expedite the review and testing process, ES&S must provide to the State the following materials on or before November 26, 2007:
• A detailed, written summary of the modifications it intends to make to the iVotronic
voting machine with VVPRS to address the shortcomings noted in the Committee
Report (as clarified herein). This summary must indicate which deficiency a particular
modification addresses and whether the modification involves altering software, source
code, hardware, firmware, or any other component of the voting system or VVPRS.

• A written statement indicating whether the source code, firmware, software, hardware,
or any other component used to operate the iVotronic voting machine with VVPRS is
currently being tested by a voting system laboratory accredited by the EAC; and, if so,
whether this testing involves modifications that address the shortcomings noted in the
Committee Report (as clarified herein). If such testing is being conducted, ES&S must
indicate when it reasonably anticipates such testing to conclude. If no such testing is
being conducted, ES&S must indicate whether it intends to submit any component or
part of the iVotronic voting machine with VVPRS to testing by an EAC accredited
voting system laboratory.

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Dated: November 14, 2007