Prepared by the North Dakota Legislative Council staff

February 2000

INVITATION TO BID - LEGISLATIVE ASSEMBLY VOTING SYSTEMS ENHANCEMENTS

Please use this invitation to submit your bid and attach supplemental pages as necessary. One copy of your bid must be submitted to the Legislative Council office by 2:00 p.m., Friday, February 25, 2000. If your bid is accepted, your bid constitutes a binding contract and includes the specifications of this invitation to bid.

BACKGROUND

The North Dakota Legislative Assembly uses two Daktronics voting systems, one in the House of Representatives and one in the Senate. Except for the number of voting stations in each chamber, the systems are identical and, for purposes of this invitation to bid, are described as a single system.

Before a vote is taken, the Chief Clerk of the House/Secretary of the Senate displays the current bill information (order of business, bill number, and committee recommendation) on the wall status displays. There are two wall displays in each chamber, located to the right and the left of the front desk area, and each display consists of a status display and a vote display. The current bill information is transmitted from the Legislative Council's computerized calendar (session agenda) system residing on either the Information Technology Department's enterprise server or a Legislative Council server. During the voting process, the system is open, and the voting system receives votes from the members' voting stations (one voting station is at each member's desk--108 in the House chamber and 54 in the Senate chamber); displays the "yea" or "nay" vote next to each member's name, arranged in alphabetical order on the two wall vote displays in the respective chamber; displays each member's vote on the Speaker of the House's or President of the Senate's minivote display, which is arranged in seating order; and calculates and displays the running totals on the wall status displays in the respective chamber and on the speaker's/president's and clerk's/secretary's totals displays. When the voting is closed, the voting system displays the final votes and totals on all displays, prints the vote, transmits the vote to the appropriate server, and stores the vote record on the primary disk. When the vote is reset, the voting system increments the sequence number and erases the displayed votes and totals in preparation for the next vote.

Except as otherwise indicated, the voting system in the House of Representatives and the voting system in the Senate each have:

- One Multiplexer/Demultiplexer Unit to receive and transmit data from all switches and indicators.
- One IBM PS/2 Model 50Z to control all data base functions, printer control, disk control, communications to and from the Information Technology Department's enterprise server or the appropriate Legislative Council server, and status display control.
- Voting stations in the House chamber (108) and in the Senate chamber (54), with "yea," "nay," "speak," and "page" switch/indicators and a telephone ring indicator.
- Two wall vote displays (each located below a wall status display), each displaying (by a backlight arrangement of fluorescent tubes behind members' names etched on manually arranged nameplates) 106 members' names in the House and 54 members' names in the Senate with green "yea" and red "nay" vote indicators beside each name.
- Two wall status displays (each located above a wall vote display), each displaying the current one out of 30 items of business, bill number under consideration, committee recommendation, and vote totals (each House status display is a 64 high by 224 wide LED (light emitting diode) matrix and each Senate status display is a 48 high by 192 wide LED matrix).
- Two Lexmark 2380 printers--one located under the clerk's/secretary's desk and one located in the page room behind the respective chamber.
- A clerk's/secretary's control console with switches to control voting, bill display, and display pronouncement text on the wall status displays. The console provides 30 wall status display options, provides quick display of 10 different types of bill numbers containing up to four letters and four digits, and provides options either to display or darken wall vote displays and wall vote totals.
- A clerk's/secretary's monitor, which shows the same information as lines 2 through 5 of the wall status displays.
- A speaker's/president's control console with voting console, bill and totals displays, and minivote display.
- A speaker's/president's monitor, which shows the same information as lines 2 through 5 of the wall status displays.

- Two page displays indicating the location of the member who requested a page.
- One set of spare modules and parts for each chamber.

In each chamber, the two page displays, member voting stations, clerk's/secretary's control console, speaker's/president's control console, left wall vote display, and right wall vote display are connected to the Multiplexer/Demultiplexer Unit. The Multiplexer/Demultiplexer Unit is in turn connected to the IBM PS/2 Model 50Z with Digiboard, which in turn is connected to the Information Technology Department's enterprise server through 3270 emulation, the two printers, and the left and right wall status displays.

GENERAL SPECIFICATIONS

Base Bid

The following items constitute the base invitation to bid:

- Replace the IBM PS/2 Model 50Z computer in the House system with an IBM minitower Model 300 GL, or equivalent, computer.
- Replace the IBM PS/2 Model 50Z computer in the Senate system with an IBM minitower Model 300 GL, or equivalent, computer.
- Provide 2 IBM minitower Model 300 GL, or equivalent, computers loaded with software required of the computer placed in each chamber, for use as backup to the two computers installed in the voting systems.
    - The operating system on each computer must be Windows 98. Each computer must be configured with the software program to control all data base functions, printer control, disk control, and communications to and from the relevant legislative information systems, as located either on the Information Technology Department's enterprise server or a Legislative Council server.
- Replace the two Lexmark 2380 printers used by the House voting system with two Hewlitt Packard LaserJet 4050N series, or equivalent, printers. General requirements: 17 pages per minute print speed.
- Replace the two Lexmark 2380 printers used by the Senate voting system with two Hewlitt Packard LaserJet 4050N series, or equivalent, printers. General requirements: 17 pages per minute print speed.
    - The two printers in each chamber are to be located in the page room behind each chamber or as otherwise directed by the Legislative Council staff. The printers and associated software must be configured to receive and print votes and to transmit the votes electronically to the desk reporter (who is located at the front desk area next to the clerk/secretary) for use in the journal entry system.
- All equipment and associated software must be installed with all appropriate connections and must be programmed with appropriate links to other voting system equipment and voting system and legislative information system software programs requiring information from and providing information to the voting system.

Alternate A - Desktop Displays

Under this alternate, replace the clerk's/secretary's and speaker's/president's displays as indicated:

- Replace the clerk's control console in the House and the secretary's control console in the Senate, as well as the associated display panels, with a 15.1-inch color LCD (liquid crystal display) screen with a touchscreen monitor and associated hardware and software that provides for electronically generated names in a floor layout, vote indications by color, vote totals, debate timers, delayed debate timers, time certain timers, and full wall status display text. The associated software must provide flexibility in displaying functions necessary for recognition of legislative procedures. The associated software must also provide for electronically generated names, context sensitive menus, Windows operator input, and access to the data base.
- Replace the speaker's control console and monitor in the House with three 15.1-inch color LCD screens and the president's control console and monitor in the Senate with two 15.1-inch color LCD screens with associated hardware and software that displays electronically generated names in a floor layout, vote indications by color, vote totals, request to speak indications, debate timers, delayed debate timers, time certain timers, and full wall status display text.
- Provide one 15.1-inch LCD screen with a touchscreen monitor and one 15.1-inch LCD screen without a touchscreen monitor for use as replacement of a screen installed at the clerk's/secretary's or speaker's/president's console.
- Replace wiring as needed under this alternate.
- All equipment and associated software must be installed with all appropriate connections and must be programmed with appropriate links to other voting system equipment and voting system and legislative information system software programs requiring information from or providing information to the voting system.

Alternate B - Chamber Wiring and Members' Voting Stations

Under this alternate, replace the voting system wiring from the members' voting stations and replace the members' voting stations as indicated:

- Replace the wiring from each member's voting station, the clerk's/secretary's control console, the speaker's/president's control console, and the left and right wall vote displays to the Multiplexer/Demultiplexer Unit.
- Replace the 108 voting stations in the House chamber and 54 voting stations in the Senate chamber with voting consoles that provide voting switches and page switches with LED indicators, telephone ring indicators, request to speak indicators, optional call to front indicators, and depending on the sound system installed in each chamber, microphone on/off controls. The current voting stations have a brass faceplate, are enclosed in wood, and measure 2¾ inches high by 5¼ inches wide by 3½ inches deep. A legislator's desktop ranges from 29½ inches to 40½ inches wide and is 22½ inches deep. A voting console must be as compact as possible to preserve a legislator's workspace.
- All equipment and associated software must be installed with all appropriate connections and must be programmed with appropriate links to other voting system equipment and voting system and legislative information system software programs requiring information from or providing information to the voting system.

Alternate B1 - Chamber Wiring and Members' Voting Stations

This alternate is identical to Alternate B except for the type of voting stations to be used:

- Replace the 108 voting stations in the House chamber and the 54 voting stations in the Senate chamber with voting consoles that provide the features under Alternate B but also allow an audio function, i.e., containing a minispeaker connected to the sound system in the chamber.

Alternate C - Wall Vote Displays

Under this alternate, the two wall vote displays in each chamber are to be replaced. Each House wall vote display measures 81½ inches high by 78½ inches wide and each Senate wall vote display measures 44¾ inches high by 78½ inches wide, outside measurements.

- Replace each wall vote display with a tricolor LED matrix display system, or its equivalent, capable of displaying at least three colors, e.g., red, green, and amber. General requirements: The wall vote displays must provide for display of the members' names in the appropriate chamber; use of multicolors to indicate presence, absence, no vote, "yea" vote, and "nay" vote; have a viewing angle of at least 140 degrees horizontal and vertical; and the entire display must be capable of refreshing within three-fourths of a second.
- Provide the cabinetry and associated wood trim to ensure an appropriate "fit" in the recessed space used by current wall displays.
- Software associated with the wall vote displays must provide for automatic loading of names, automatic highlighting on the panel of the name of the person speaking, and the capability to display text other than members' names.
- All equipment and associated software must be installed with all appropriate connections and must be programmed with appropriate links to other remaining voting system equipment and voting system and legislative information system software programs requiring information from or providing information to the voting system.

Alternate D - Camera Coverage

Under this alternate, the voting system and the sound system must be interlinked so cameras could be installed that would focus on the member speaking:

- Provide the wiring necessary to interlink the voting system and the sound system to provide for semiautomatic video coverage of the chamber.

Alternate D1 - Camera Coverage

This alternate is identical to Alternate D but includes equipment and software to complete camera coverage of the chamber:

- Provide three cameras for use in the system--one to be wall-mounted to the left of the front desk, one to be wall-mounted to the right of the front desk, and one to be mounted at the rear of the chamber.
- Provide enhanced software so that a member who desires to speak would be recognized by the presiding officer and, once recognized, one or two wall cameras mounted at the front of the chamber automatically would pan and focus on the member who has been recognized.
- Provide wiring and enhanced software so that a third camera located in the back of the chamber would cover the clerk/secretary and presiding officer when those individuals are speaking.

- All equipment and associated software must be installed with all appropriate connections and must be programmed with appropriate links to other remaining voting system equipment and voting system and legislative information system software programs requiring information from or providing information to the voting system.

GENERAL SPECIFICATION REQUIREMENTS

Under the base bid and each alternate, the bid must include installation of replacement equipment and trade-in of equipment replaced, installation of necessary software, programming necessary for the new or enhanced hardware and software to link with existing legislative information systems, as appropriate; completion of installation and adequate testing of the system for use by the Legislative Assembly by July 31, 2000, as long as the bid is accepted by March 15, 2000; recognition that installation of equipment and software affects the voting systems and any failure of the voting systems before January 1, 2002, regardless of whether failure may or may not be attributed to equipment or software installed under this bid, is the responsibility of the bidder and any failure will be remedied, within 48 hours after the Legislative Council gives notice of the failure, to the bidder at no cost to the state of North Dakota; instruction manuals on operating the system; training of staff to operate the system; and 100 percent parts and labor warranty of the equipment and associated software until at least December 31, 2001, with options to renew at various levels of support as determined necessary.

Base bid: $ _____

Alternate A: $ _____

Alternate B: $ _____

Alternate B1: $ _____

Alternate C: $ _____

Alternate D: $ _____

Alternate D1: $ _____

Bidder:
_____

Mailing address:
_____

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Signature: _____

Date: _____