

**MBE / WBE:** This contract was awarded in compliance with Chapter 2-9 of the City Code (Minority-Owned and Women-Owned Business Enterprise Procurement Program). No subcontracting opportunities were identified; therefore, no goals were established for this solicitation.

As a result, AE must modify the SCADA-EMS to implement these new requirements. The SCADA-EMS changes would occur through three separate upgrades Program Development System (PDS), Network Manager, and Redundant Array of Independent Disks (RAID/Memory/Disk).



**Purchasing Contract  
CITY OF AUSTIN  
RECOMMENDATION FOR COUNCIL ACTION**

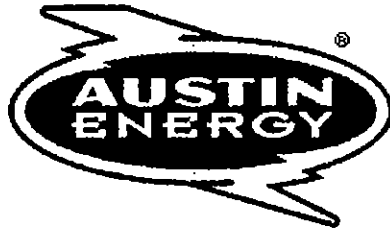
**AGENDA ITEM NO.: 22  
AGENDA DATE: Thu 08/05/2004  
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Industry-identified security deficiencies are addressed in the Network Manager upgrade along with the ERCOT requirement for CTM (Common Information Model) functionality. Drivers for the PDS and RAID/Memory upgrades are to:

- Reduce system "down time" associated with electric model changes and their final application to the real-time production system by adding processing capacity required to satisfy new North American Electric Reliability Council (NERC) quality control requirements; must validate the correctness of changes to SCADA-EMS on a quality system (PDS) before commitment of changes to the real-time production system.
- Satisfy new ERCOT requirements for telemetry enhancements.
- Allows for listening mode telemetry to the Quality System in support of Advanced Application real-time data requirements (NERC requirement).
- Support increased number of data points and users required for expanding AE system and evolving communications and system control technologies.
- Minimize hardware failures (especially disk failures)

ABB will also provide system support for these upgrades, which will include:

- Changing System Master Parameters that drive the system sizing (# of points and # of users). Once sizing parameters are changed, a complete new database and system build are required. ABB will be responsible for verifying that the system and database will still build and load successfully on the new computer hardware.
- The ability to 'listen' to all telemetry involves adding channel processors as well as separate RDAS and ICCP servers. ABB will verify that the larger database can be downloaded to the new servers, that the database correctly maps the new channel processors, and that the new channel processors can successfully scan RTUs.
- The maintenance agreement with ABB includes both hardware and software. It is sometimes very difficult to determine the source of a problem. As a single source responsible for maintenance of software and hardware – ABB will be responsible for resolving it and for timely problem resolution due to the criticality of SCADA-EMS 24x7 operation.



## MEMORANDUM

**TO:** Mayor and Council Members  
Toby Hammett Futrell, City Manager

**FROM:** Juan Garza, General Manager  
Austin Energy

**DATE:** July 22, 2004

**SUBJECT:** Ratification of Contract Modification with ABB for SCADA-EMS

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### **BACKGROUND:**

Austin Energy's recently implemented Supervisory Control and Data Acquisition – Energy Management System (SCADA-EMS) provides the core of our electric operations and market participation. SCADA-EMS is the "Air Traffic Control System" of the electric utility industry. The 24x7 operation of the electric grid, grid reliability and security, lowest cost electric system operations and the safety of personnel are dependent on SCADA-EMS, which monitors and controls our power plant generation, transmission and substations. Our system cannot run without SCADA-EMS.

As a result of the East Coast blackout that occurred in August 2003, NERC (North American Electric Reliability Council) and ERCOT (Electric Reliability Council of Texas) began an analysis of the SCADA-EMS systems and processes used for the management of the electric grid. Accordingly, NERC and ERCOT issued revised and enhanced requirements for all SCADA-EMS systems on the grid, and are expecting power providers to upgrade their systems as quickly as possible. Thus, Austin Energy must alter our SCADA-EMS system as rapidly and efficiently we can.

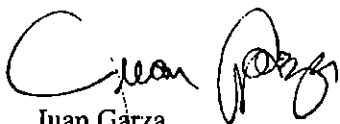
AE's SCADA-EMS system contains proprietary equipment available only from ABB Network Management. Currently, the utility has a contract with ABB Network Management that would allow for modification, and allow us to immediately begin altering our system to meet the NERC/ERCOT requirements. By modifying our current

contract, Austin Energy can avoid the delay associated with creating a new, sole-source contract. The SCADA-EMS changes would occur through three separate upgrades with a total contract modification cost of \$1,001,000. Funding is available in AE's capital budget to support this action.

**RESOLUTION:**

I have authorized AE to modify an existing contract on an expedited basis with ABB Network Management, to perform the designated modifications to our ABB RANGER SCADA-EMS. A formal request for a contract award will be brought to Council on August 8, 2004. This is in accordance with the critical business need provision of the AE Purchasing Procedures adopted by the City Council on March 30, 2000.

Please let me know if you have any questions. I can be reached at 322-6002.

A handwritten signature in black ink, appearing to read 'Juan Garza', with a stylized flourish at the end.

Juan Garza  
General Manager  
Austin Energy

cc: Diana Granger, Purchasing Officer  
Cheryl Mele, Sr. VP Electric Service Delivery

**CIP BUDGET**  
**Fiscal Note**

**DATE OF COUNCIL CONSIDERATION:**

8/5/2004

**WHERE ON AGENDA:**

Resolution

**DEPARTMENT:**

Electric Utility Department

**SUBJECT:** Ratify Amendment No. 1 to the contract with ABB, Inc, Sugar Land, TX for costs incurred for enhancement to the SCADA-EMS system in an amount not to exceed \$1,001,000 for a revised total contract amount not to exceed \$9,082,418.

**FINANCIAL INFORMATION:**

Parent Project Name:       **Support Services**  
Project Authorization:       2003-2004 Amended Capital Budget

Current Appropriation	\$ 58,812,222.00	
Unencumbered Balance		\$ 23,407,336.22
Amount of This Action		<u>(1,001,000.00)</u>
Remaining Balance		<u>\$ 22,406,336.22</u>

**Use of Remaining Balance:**

Remaining funds will be used for design, construction, equipment, and material acquisition to complete the project.

**Use of Any Remaining Funds After Completion of Project:**

No remaining funds anticipated at this time.

Director, Planning & Budget

Signature: 

Date: 8/15/04