



AGENDA REPORT

Meeting Date: January 29, 2008
Item Number: F-5
To: Honorable Mayor & City Council
From: Kevin Watson, Water Operations Manager
Subject: AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND MEASUREMENT CONTROL SYSTEMS, INC. FOR PURCHASE AND INSTALLATION OF THE NEPTUNE AND HEXAGRAM SOLUTIONS FOR THE REPLACEMENT OF WATER METERS USING SMART AUTOMATIC METER READING TECHNOLOGY; AND APPROVAL OF A PURCHASE ORDER IN THE AMOUNT OF \$7,679,731 TO MEASUREMENT CONTROL SYSTEMS, INC.

Attachments:

- A. Resolution
- B. Agreement
- C. Summary of Items to be Purchased and Installed in the Agreement
- D. Neptune Exclusivity Letter
- E. Water Meter Fixed-network Deployment Graph
- F. Informational Matrix Comparing Manufacturers
- G. Comparison of Last Meter Replacement Project to Proposed Meter Replacement Project
- H. Comparison of Present System to Proposed System
- I. Four Areas of Improved Efficiencies from Implementing an Automated Meter Reading (AMR) Program
- J. Scott Report

RECOMMENDATION

For the reasons set forth in this Agenda Report, the City Council hereby waives the purchasing procedures set forth in Beverly Hills Municipal Code Section 3-3-204. Staff recommends that the City Council move to approve the following:

1. Standardization of the City's water meters to Neptune meters that operate on a Hexagram Star fixed-network Automated Meter Reading (AMR) system;

2. Purchase order and sole source contract agreement with Measurement Control Systems, Inc. (MCS) for the purchase and installation of 11,088 Neptune water meters, Nicor mounting brackets, Hexagram radios, AMR hardware, associated software, training; and installation (Attachment C) in the amount not to exceed \$7,679,731
3. Appropriation to replace water meters in the amount of \$7,679,731 From: Account #32000 – Net Assets – Fund 80, To: CIP Account #35800669 – Replacement Water Meters – 85050 CIP Equipment 80% and 85040 CIP Construction 20%

INTRODUCTION

After thorough study and investigation of the water meters on the market, staff recommends purchase of the Neptune Technology Group's E-Coder¹ equipped meters with the Hexagram Star Meter Transmission Unit from MCS, Neptune Technology's sole distributor in the entire state of California (Attachment D). As such, MCS is set up to provide local customer support and employ full-time dedicated territory managers and systems specialists. They also maintain a technical service division focused on water meter testing, repair, and replacement programs. MCS is located in Santa Ana, California, and was established in 1965 as an industrial distributor of water and gas meters, pressure regulators, and related accessories. Today, MCS offers a wide variety of products and services covering all aspects of gas, electric, and liquid measurement.

Neptune and Hexagram have an exclusive strategic business arrangement in the water market and have worked together to develop an E-Coder compatible radio capable of communicating smart register information through the Hexagram fixed-network AMR system.

DISCUSSION

Pursuant to Beverly Hills Municipal Code Section 3-3-204, the City Council hereby determines that conformance with the purchasing procedures for the purchase and installation of the 11,088 Neptune water meters, Nicor mounting brackets, Hexagram radios, AMR hardware, associated software, training, and installation. (Attachment C) would be contrary to the best interests of the City of Beverly Hills and impractical in that:

- This solution has been used by major Cities and Utilities for over 10 years, including Corpus Christi, Texas; Boston, Massachusetts; and the District of Columbia, Washington, D.C.
- Hexagram dominates the market segment with a 75% market share of water fixed-network deployments (Attachment E).
- The Neptune water meter and Hexagram fixed-network system offers smart technology that can detect and notify staff whenever the water meter is tampered with, when a reverse flow occurred, or if a leak is suspected on the customer's property. This information can be captured, transmitted, and communicated to the City's database daily. No other fixed-network AMR system can communicate this information from every meter in the system.

¹ This digitally encodes the rotation of the measuring chamber providing "absolute" registration with no internal battery requirement. This is similar to an odometer in a car that indicates miles driven.

- The key distinguishing differences identified as important components of a selected system included: Company AMR experience; warranty; meter compatibility; encoder register features; encoder register resolution transmitted; leak event notification; backflow event notification; conservation monitoring and reporting tools; distribution leak detection; system ownership; data collector poser supply; Data Collection Unit mounting options; radio frequency; license; and installed customer base. The Neptune/Hexagram solution met all of these qualifications (Attachment F – Informational Matrix Comparing Manufacturers).

FISCAL IMPACT

The cost of the meter replacement project is approximately \$7.7 million. This amount includes the costs of all meters, parts, and components; meter lids; fixed-network software and hardware; project management and replacement construction; and fixed-network installation and training. There will be an annual software and hardware maintenance fee in the amount of approximately \$17,500 after the first-year which will be an ongoing operating expense. The contract with MCS will cover the purchase of all hardware, software, related equipment, and maintenance contracts. The contract to install the meters is included in the price.

In January of 2007, the City issued bonds in the amount of \$3,000,000 to replace the City's water meters. The additional funds are available in the Water Enterprise Fund, since other capital programs have been delayed. Initially, MCS quoted staff a price of \$3,000,000 to do the replacement of meters; however, they made the assumption that Beverly Hills had the typical ¾" meter in the majority of the residences. Not until after a non-disclosure agreement was signed and they were provided with more accurate information of the meters used by the City's customers did they learn of their mistake and provided staff with a more accurate and reasonable quote.

Staff expects the following benefits after the complete implementation of the meter replacement project utilizing the Neptune/Hexagram solution:

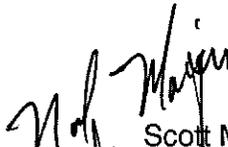
- Allows for value-added information including leak detection, tamper detection, and reverse flow detection to be captured, transmitted, and communicated to the City's database daily. No other fixed-network AMR system can communicate this information from every meter in the system. This system is also compatible with the leak detection equipment for the water distribution system
- Minimize technical failures at the meter due to waterproofing
- Enable City to go to monthly billing to improve cash flow
- Conserve water
- Offer a superior service to customers
- Reduce costs in both labor and materials attributable to meter reading; then human resources may be re-directed to maintenance of the water distribution system and water quality.
- Reduce the need for a full time meter reading vehicle thus reducing costs in manpower, fuel, and vehicle maintenance costs

- Increased revenue due to improved accuracy. According to MCS, the new meters are expected to register increased annual revenue billings of \$600K (potentially more based on inaccuracies of large meters).

See Attachment G: For a comparison of how the last project compares with the current proposed project.

See Attachment H: For a comparison of the present system to the proposed system.

See Attachment I: Four Areas of Improved Efficiencies from Implementing an AMR Program



Scott Miller
Finance Approval


 David Gustavson 

Approved By

RESOLUTION NO. 08-R-

RESOLUTION OF THE COUNCIL OF THE CITY OF BEVERLY HILLS APPROVING AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND MEASUREMENT CONTROL SYSTEMS, INC. FOR PURCHASE AND INSTALLATION OF THE NEPTUNE AND HEXAGRAM SOLUTIONS FOR THE REPLACEMENT OF WATER METERS USING SMART AUTOMATIC METER READING TECHNOLOGY AND APPROPRIATING FUNDS THEREFOR

The City Council of the City of Beverly Hills does resolve as follows:

Section 1. The City desires to purchase and install water meters with smart automatic meter reading technology ("Water Meters"). After thorough study and investigation of the water meters on the market, City has determined that the Neptune Technology Groups' E-Coder equipped meters with the Hexagram Star MTU has been utilized by other municipalities for over ten years and is the most tested product. In addition, these Water Meters are capable of communicating information to staff whenever the Water Meters are tampered with, when a reverse flow occurs, or a leak is suspected on the customer's property. Only these Water Meters can capture, transmit, and communicate from each Water Meter to the City's database daily. Further, Measurement Control Systems, Inc. ("MCS") is the sole distributor for this project in the state of California. As such, MCS can provide local customer support and employ full-time dedicated territory managers and systems specialists. They also maintain a technical service division focused on water meter testing, repair, and change-out programs. Accordingly, in order to purchase the best product with local service and which has been thoroughly tested, the City did not obtain other bids in connection with the purchase and installation of the Water Meters. The City desires to enter into an agreement with MCS to purchase and install the Water Meters.

Section 2. Pursuant to Beverly Hills Municipal Code ("Municipal Code") Section 3-3-204, the City Council hereby determines that conformance with the purchasing

procedures for the purchase and installation of the Water Meters would be contrary to the best interests of the City of Beverly Hills in that: (i) the Water Meters are the best product available on the market which can capture, transmit and communicate from every Water Meter to the City's database; (ii) the Water Meters are the most tested water meters on the market and ; (iii) MCS is the only distributor of these Water Meters in California which can provide local customer service.

Section 3. For the reasons set forth in Section 2 above, the City Council hereby waives the purchasing procedures set forth in Municipal Code Section 3-3-204.

Section 4. That certain Agreement, dated _____, and identified as Contract No. _____, a copy of which is on file in the office of the City Clerk, between the City of Beverly Hills and Measurement Control Systems, Inc. for purchase and installation of the Neptune and Hexagram solutions for the replacement of water meters using automatic meter reading technology is hereby approved.

Section 5. The Mayor is authorized and directed to execute said Agreement on behalf of the City and the City Clerk is directed to attest thereto.

Section 6. The City Manager or his designee shall administer the terms of the Agreement on behalf of the City.

Section 7. The City Clerk shall furnish a copy of said Agreement after it has been approved and fully executed by the City, along with a copy of this resolution, to: Measurement Control Systems, Inc., 1331 South Lyon Street, Santa Ana, CA 92705, Attention, Eric Tracy, Territory Manager.

Section 8. The City Clerk shall certify to the adoption of this resolution and shall cause this resolution and his certification to be entered in the Book of Resolutions of the Council of this City.

Adopted:

JIMMY DELSHAD
Mayor of the City of Beverly Hills, California

ATTEST:

BYRON POPE
City Clerk (SEAL)

APPROVED AS TO FORM:



LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:



DAVID D. GUSTAVSON
Director of Public Works & Transportation



KARL KIRKMAN
Risk Manager

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND
MEASUREMENT CONTROL SYSTEMS, INC. FOR PURCHASE
AND INSTALLATION OF THE NEPTUNE AND HEXAGRAM
SOLUTIONS FOR THE REPLACEMENT OF WATER METERS
USING AUTOMATIC METER READING TECHNOLOGY

NAME OF CONTRACTOR: Measurement Control Systems, Inc.

RESPONSIBLE PRINCIPAL
OF CONTRACTOR: Eric Tracy, Territory Manager

CONTRACTOR'S ADDRESS: 1331 S. Lyon Street
Santa Ana, California 92705

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: Kevin Watson, Water Operations
Manager

COMMENCEMENT DATE: Upon Receipt of Written Notice to Proceed

TERMINATION DATE: Upon Satisfactory Completion of Work

CONSIDERATION: Not to exceed \$7,314,030 (including
applicable sales tax) plus contingency of
\$365,701 as described in Exhibit B-1

Total not to exceed \$7,679,731

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND
MEASUREMENT CONTROL SYSTEMS, INC. FOR PURCHASE
AND INSTALLATION OF THE NEPTUNE AND HEXAGRAM
SOLUTIONS FOR THE REPLACEMENT OF WATER METERS
USING AUTOMATIC METER READING TECHNOLOGY

THIS AGREEMENT is made as by and between the City of Beverly Hills, a municipal corporation (hereinafter called "CITY"), and Measurement Control Systems, Inc., a California corporation (hereinafter called "CONTRACTOR").

RECITALS

A. CITY desires to have certain services provided (the "services") as set forth in Exhibit A, attached hereto and incorporated herein.

B. CONTRACTOR represents that it is qualified and able to perform the services.

NOW, THEREFORE, the parties agree as follows:

Section 1. CONTRACTOR's Services. CONTRACTOR shall perform the services outlined in the Scope of Services as set forth in Exhibit A to the full satisfaction of CITY. CONTRACTOR shall perform the services in a manner satisfactory to CITY and consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

Section 2. Time of Performance. CONTRACTOR shall perform the services on or by the Termination Date set forth above.

Section 3. Compensation. CITY agrees to compensate CONTRACTOR, and CONTRACTOR agrees to accept in full satisfaction for the services required by this Agreement an amount not to exceed the Consideration set forth above and more specifically detailed in Exhibit B-1, attached hereto and incorporated herein. Said Consideration shall constitute reimbursement of CONTRACTOR's fee for the services as well as the actual cost of any equipment, materials, and supplies necessary to provide the services (including all labor, materials, delivery, tax, assembly, and installation, as applicable). CITY shall pay CONTRACTOR in accordance with the schedule of payment set forth in Exhibit B-2, attached hereto and incorporated herein.

Section 4. Independent CONTRACTOR. CONTRACTOR is and shall at all times remain, as to CITY, a wholly independent CONTRACTOR. Neither CITY nor any of its agents shall have control over the conduct of CONTRACTOR or any of CONTRACTOR's employees, except as herein set forth. CONTRACTOR shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

Section 5. Responsible Principals.

(a) CONTRACTOR's Responsible Principal set forth above shall be principally responsible for CONTRACTOR's obligations under this Agreement and shall serve as principal liaison between CITY and CONTRACTOR. Designation of another Responsible Principal by CONTRACTOR shall not be made without the prior written consent of CITY.

(b) CITY's Responsible Principal shall be the City Manager or his designee set forth above who shall administer the terms of the Agreement on behalf of CITY.

Section 6. Personnel. CONTRACTOR represents that it has, or shall secure at its own expense, all personnel required to perform CONTRACTOR's services under this Agreement. CONTRACTOR may associate with or employ associates or subconsultants in the performance of its services under this Agreement with prior written approval of CITY, but at all times shall be responsible for their services.

Section 7. Interests of CONTRACTOR. CONTRACTOR affirms that it presently has no interest and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of the services contemplated by this Agreement. No person having any such interest shall be employed by or be associated with CONTRACTOR.

Section 8. Insurance.

(a) CONTRACTOR shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work by the CONTRACTOR, his agents, representatives, employees or Sub-Consultants. Insurance shall be of the type, in the amounts and subject to the provisions described below.

i. Commercial general liability coverage at least as broad as Insurance Services Office Commercial General Liability occurrence coverage ("occurrence" form CG0001, Ed. 11/88) with minimum limits of \$2,000,000 per occurrence. If the insurance includes a general aggregate limit, that limit shall apply separately to this contract or it shall be at least twice the required per occurrence limit.

ii. Business automobile liability insurance at least as broad as Insurance Services office form CA 0001 (Ed. 1/87) covering Automobile Liability, code 1 "any auto" and endorsement CA 0029 (Ed. 12/88) with minimum limits of One Million Dollars (\$1,000,000) per accident.

iii. Workers Compensation insurance as required by the State of California and employers liability insurance with minimum limits of One Million Dollars (\$1,000,000) per accident.

(b) Evidence of Coverage:

i. Prior to commencement of work under this Agreement, or within 14 days of notification of approval of Agreement, whichever is shorter, CONTRACTOR shall file certificates of insurance with original endorsements evidencing coverage in compliance with this Agreement on the CITY's standard proof of insurance form, attached hereto as Exhibit C.

ii. CONTRACTOR shall make the insurance policy(ies) required by this Agreement, including all endorsements and riders, available to the CITY for inspection at CONTRACTOR's office during regular business hours.

iii. During the term of this Agreement, CONTRACTOR shall maintain current valid proof of insurance coverage, with CITY at all times. Proof of renewals shall be filed prior to expiration of any required coverage and shall be provided on the CITY's standard proof of insurance form, Exhibit C, attached hereto and incorporated herein.

iv. Failure to submit any required evidences of insurance within the required time period shall be cause for termination or default.

v. The policy or policies required by this Agreement shall contain a clause that the insurance coverage will not be canceled or materially changed without thirty (30) days prior written notice to the CITY.

vi. In the event CONTRACTOR does not maintain current, valid evidence of insurance on file with CITY, CITY may, at its option, withhold payment of any moneys owed to CONTRACTOR, or which it subsequently owes to CONTRACTOR, until proper proof is filed.

(c) All insurance coverage shall be provided by insurers admitted in the state of California and with a rating of B+;VII or better in the most recent edition of Best's Key Rating Guide, Property-Casualty Edition.

(d) Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided or canceled and shall not be reduced in coverage or limits except after 30 days prior written notice provided to the CITY. Upon prior request of the carrier, the notice period may be reduced to 10 days in the event of non-payment of premium.

(e) CONTRACTOR's insurance and any insurance provided in compliance with Agreement, shall be primary with respect to any insurance or self-insurance programs covering the CITY, its City Council and any officer, agent or employee of CITY.

(f) Where available, the insurer shall agree to waive all rights of subrogation against the CITY, its City Council and every officer, agent and employee of CITY.

(g) Any deductibles or self-insured retentions shall be declared to and are subject to approval by CITY. At the option of the CITY, either the insurer shall reduce or eliminate the deductibles or self-insured retentions as respects the CITY, or the CONTRACTOR shall procure a bond guaranteeing payment of losses and expenses.

(h) In the event that CONTRACTOR does not provide continuous insurance coverage, the CITY shall have the right, but not the obligation, to obtain the required insurance coverage at CONTRACTOR's expense, and the CITY may deduct all such costs from moneys the CITY owes to the CONTRACTOR or from moneys which it subsequently owes to the CONTRACTOR.

(i) CONTRACTOR's Sub-Consultants shall be required to comply with the insurance requirements set forth in this Section.

(j) All insurance coverage required to be maintained pursuant to the Agreement by the CONTRACTOR or his Sub-Consultants shall name the CITY, its City Council and every officer, agent and employee of CITY as additional insureds with respect to work under this Agreement.

Section 9. Indemnification. CONTRACTOR agrees to indemnify, hold harmless and defend CITY, City Council and each member thereof, and every officer, employee and agent of CITY, from any claim, liability or financial loss (including, without limitation, attorneys fees and costs) arising from any intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONTRACTOR or any person employed by CONTRACTOR in the performance of this Agreement.

Section 10. Termination.

(a) CITY may cancel this Agreement at any time upon five (5) days written notice to CONTRACTOR. CONTRACTOR agrees to cease all work under this Agreement on or before the effective date of such notice.

(b) In the event of termination or cancellation of this Agreement by CITY, due to no fault or failure of performance by CONTRACTOR, CONTRACTOR shall be paid full compensation for all services performed by CONTRACTOR, in an amount to be determined as follows: For work done in accordance with all of the terms and provisions of this Agreement, CONTRACTOR shall be paid an amount equal to the amount of services performed prior to the effective date of termination or cancellation; provided, in no event shall the amount of money paid under the foregoing provisions of this paragraph exceed the amount which would be paid CONTRACTOR for the full performance of the services required by this Agreement.

Section 11. CITY's Responsibility. CITY shall provide CONTRACTOR with all pertinent data, documents and other requested information as is available for the proper performance of CONTRACTOR's services.

Section 12. Documents and Drawings. All data, information, drawings and software prepared for CITY and required to be furnished to CITY in connection with this Agreement shall become the property of CITY, and CITY may use all or any portion of the work submitted by CONTRACTOR pursuant to this Agreement as CITY deems appropriate.

Section 13 Confidentiality. CONSULTANT, in the course of its duties, may have access to financial, accounting, statistical, and private data of CITY. CONSULTANT covenants that all data, documents, discussion, or other information developed or received by CONSULTANT or provided for performance of this Agreement are deemed confidential and shall not be disclosed by CONSULTANT without prior written authorization by CITY. CITY shall grant such authorization if disclosure is required by law. All CITY data shall be returned to CITY upon the termination of this Agreement. CONSULTANT'S covenant under this Section shall survive the termination of this Agreement.

Section 14. Changes in Scope of Work. Any changes to the Scope of Work required by CITY must be made in writing by the City Manager or his designee, and approved in writing by CONTRACTOR.

Section 15. Notice. Any notice required to be given to CONTRACTOR shall be deemed duly and properly given upon delivery, if sent to CONTRACTOR postage prepaid to the CONTRACTOR's address set forth above or personally delivered to CONTRACTOR at such address or other address specified to CITY in writing by CONTRACTOR.

Any notice required to be given to CITY shall be deemed duly and properly given upon delivery, if sent to CITY postage prepaid to CITY's address set forth above or personally delivered to CITY at such address or other address specified to CONTRACTOR in writing by CITY.

Section 16. Successors and Assigns. CONTRACTOR shall not assign or attempt to assign any portion of this Agreement without the written approval of CITY.

Section 17. Entire Agreement. This Agreement represents the entire integrated agreement between CITY and CONTRACTOR, and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both CITY and CONTRACTOR.

Section 18. Governing Law. The interpretation and implementation of this Agreement shall be governed by the domestic law of the State of California.

Section 19. Attorney's Fees. In the event that CITY or CONTRACTOR commences any legal action or proceeding to enforce or interpret the provisions of this Agreement, the prevailing party shall be entitled to recover its costs of suit, including reasonable attorney's fees.

Section 20. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be valid under applicable law. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the _____ day of _____, 200__.

CITY OF BEVERLY HILLS
A Municipal Corporation

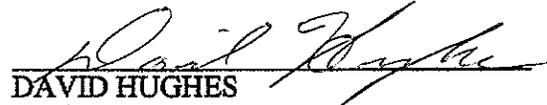
JIMMY DELSHAD
Mayor of the City of
Beverly Hills, California

ATTEST:

BYRON POPE
City Clerk

(SEAL)

CONTRACTOR: MEASUREMENT
CONTROL SYSTEMS, INC.

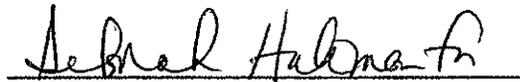


DAVID HUGHES
President and Secretary



DAVE LAJEUNESSE
Vice President of Sales

APPROVED AS TO FORM:



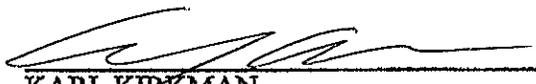
LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:

RODERICK J. WOOD
City Manager



DAVID D. GUSTAVSON
Director of Public Works & Transportation



KARL KIRKMAN
Risk Manager

EXHIBIT A
SCOPE OF WORK

Smart Meter Remote Read Project

CONTRACTOR and/or its sub-contractors, Hexagram and Utility Partners of America, shall perform the following work activities:

- Procure and install the Hexagram remote read infrastructure hardware and software*.
 - Work with CITY personnel to determine specific Data Collection Unit (DCU) site selection and to acquire appropriate FCC licenses
 - Install (18) DCU's, the NCC, and the Star NCC Software
 - Conduct training sessions on the Star NCC Software and field programming / installation training
 - Write customized billing interface programming to connect the Star NCC software to the CITY's existing accounting software
 - * Contingency funds should be included in contract consideration for a small quantity of additional DCU's.

- Procure and install Neptune smart remote read water meters and transmitters throughout the CITY's distribution system*.
 - Establish a local project management office
 - Work with CITY personnel to schedule turn-offs and meter changeouts
 - Change out and upgrade (3,192) 5/8" positive displacement meters to 3/4" positive displacement meters
 - Change out (1,390) 3/4" positive displacement meters
 - Change out (2,800) 1" positive displacement meters
 - Change out (1,935) 1 1/2" positive displacement meters
 - Change out (1,040) 2" positive displacement meters
 - Change out (143) 3" turbine meters to compound meters or high performance turbines as existing vault allows
 - Change out (76) 4" turbine meters to compound meters or high performance turbines as existing vault allows
 - Change out (12) 6" turbine meters to compound meters or high performance turbines as existing vault allows
 - Provide spools, spacers, elbows, and strainers for (231) large meters as required by existing meter vaults
 - Retrofit (500) existing fire service meters with new 5/8" meters and Hexagram Star radios
 - Retrofit (56) existing Neptune eCoder registers with radio transmitters
 - Program the new meters on site
 - Conduct tests to ensure all meters are installed correctly and that radio signal is successfully transmitted
 - Provide status reports to CITY personnel on changeout progress
 - * Contingency funds should be included in contract consideration for a small quantity of additional meters, a different mix of turbine and compound meters that need to be changed out, and meters that cannot be worked on during normal business hours.
 - ** During change out, all meters that appear to have potential issues (ie. warped flanges, rusty pipes, existing leaks, etc.) will be red-flagged and brought to the CITY's attention for repair before attempting the change out. These repairs will be done at the CITY's own expense and labor. Contract assumes that all large meters have bypass valves and can be changed out during normal weekday business hours.
 - *** Meter box lid scrap and meter scrap will be disposed of by CONTRACTOR. Scrap value will remain with CONTRACTOR. Installation costs quoted to CITY

have been offset by this expected scrap value (ie. the installation costs quoted are lower since CONTRACTOR will be keeping the expected scrap value).

- Procure and install polymer and composite meter box lids for existing meter boxes as listed below*.
 - Change out / modify (4,582) B1017 meter box lids on existing 5/8" and 3/4" meters
 - Change out / modify (2,800) B12/#37 meter box lids on existing 1" meters
 - Change out / modify (1,935) B30/#38 meter box lids on existing 1 1/2" meters
 - Change out / modify (1,040) #65 meter box lids on existing 2" meters
 - Modify (731) existing large vault lids with borehole, pipe ring, and polymer plug
 - * Contingency funds should be included in contract consideration for a small quantity of additional meter box lids and/or a different mix of meter box lid sizes.
 - ** If other meter box lid sizes currently exist in the distribution system, CONTRACTOR will attempt to replace/modify them to allow for premium radio transmission.
 - *** All standardized meter box lids replaced with new polymer/composite meter box lids shall have the CITY's name and/or logo imprinted on them as available.

Testing and Acceptance Procedures

- CONTRACTOR shall conduct testing of all elements of the system described in this Exhibit. CONTRACTOR shall work with CITY representatives to develop and implement effective system test scenarios to ensure the system is fully functional in preparation for acceptance of the system.
 - Testing Documentation. CONTRACTOR shall provide CITY with documentation noting the results of each test scenario, including documentation of any and all errors/bugs encountered, and proof that such errors/bugs have been corrected. CONTRACTOR shall also provide CITY with documentation noting that any additional adjustments and/or corrections identified during testing have been successfully completed.
 - System Acceptance: Upon successful completion of system testing, CONTRACTOR shall issue a Certificate of Completion, and shall deliver any outstanding documentation such as final "As-built" documentation, system code, etc. CITY shall issue acceptance provided that this testing is completed successfully, and that all deliverables have been provided to CITY. Such acceptance shall not be unreasonably withheld.
 - These procedures will be completed upon each billing cycle books (31 existing books) being converted to the new system and then one final overall review prior to the completion of the entire project. CITY shall withhold ten percent (10%) of each payment made to CONTRACTOR in accordance with the procedure set forth in Exhibit B-1. At the time of total system acceptance by CITY, the ten percent (10%) retention shall be released by CITY to CONTRACTOR assuming all errors are resolved and the system is fully functional.

EXHIBIT B-1

CONSIDERATION/UNIT PRICES

CONTRACTOR shall complete the Scope of Work described in Exhibit A to the full satisfaction of CITY and CITY shall compensate CONTRACTOR for the completion of such services in an amount not to exceed Seven Million Three Hundred Fourteen Thousand and Thirty Nine Dollars (\$7,314,039) based on the unit prices set forth below ("Unit Prices"). CITY shall compensate CONTRACTOR for additional unanticipated services required by CITY in writing in an amount not to exceed Three Hundred Sixty Five Thousand Seven Hundred One Dollars (\$365,701) based on the Unit Prices. In no event shall the amount paid to CONTRACTOR under this Agreement exceed Seven Million Six Hundred Seventy Nine Thousand and Seven Hundred Thirty One Dollars (\$7,679,731).

SUMMARY PRICING

Product Category	Quantity	Extended Price
New Meters with E-Coders & Star Radios	11,088	\$4,609,375
Star Radios for Retrofitting Existing Meters	56	\$8,960
Parts & Components for Large Meter Changeout	231	\$146,780
Meter Box Lids	11,088	\$466,015
Fixed-network Software & Hardware		\$132,250
Fixed-Network Installation & Training (not taxable)		\$40,225
Project management & Meter/Lid Changeout (not taxable)		\$1,467,946
Sub Total		\$6,871,551
Sales Tax @ 8.25% on Taxable Items		\$7,314,030
Contingency of 5%		\$365,701
Total		\$7,679,731

NEW METERS w/ E-CODERS & STAR RADIOS

Product Description	Part Number	Price	Quantity	Extended Price
5/8" X 3/4" T-10 e-Coder & Super Star Radio Retrofits	ED2B22RHF2SA51	\$295	500	\$147,500
3/4" SL T-10 e-Coder & Radio	ED2E22RHF2SA51	\$290	3,192	\$925,680
3/4" X 3/4" T-10 e-Coder & Radio	ED2C22RHF2SA51	\$290	1,390	\$403,100
1" T-10 e-Coder & Radio	ED2F22RHF2SA51	\$345	2,800	\$966,000
1 1/2" T-10 Oval e-Coder & Radio	ED2H11RHF2SA51	\$480	1,935	\$928,800
2" T-10 Oval e-Coder & Radio	ED2J11RHF2SA51	\$600	1,040	\$624,000
3" HP Turbine w/ eCoder, Radio, & Strainer	ET4BRHF2SA51	\$1,350	28	\$37,800
3" TruFlo Compound w/ eCoders, Radios & Strainer	EC3BRHF2SA51	\$2,490	115	\$286,350

Product Description	Part Number	Price	Quantity	Extended Price
4" HP Turbine w/ eCoder, Radio & Strainer	ET4CRHF2SA51	\$1,975	15	\$29,625
4" TruFlo Compound w/ eCoders, Radios & Strainer	EC3CRHF2SA51	\$3,220	61	\$196,420
6" HP Turbine w/ eCoder, Radio & Strainer	ET4DRHF2SA51	\$3,550	2	\$7,100
6" TruFlo Compound w/ eCoders, Radios & Strainer	EC3CRHF2SA51	\$5,700	10	\$57,000
Total			11,088	\$4,609,375

RETROFIT EXISTING METERS w/ STAR RADIOS

Product Description	Part Number	Price	Quantity	Extended Price
Super Star MTU for existing Neptune meters	12635-410	\$160	56	\$8,960
Total			56	\$8,960

PARTS & COMPONENTS FOR LARGE METER CHANGEOUT

Product Description	Part Number	Price	Quantity	Extended Price
3" & 4" Turbines Easy Install	Various	\$50	43	\$2,150
6" Turbines Easy Install	Various	\$65	2	\$130
3" & 4" T/F Compounds Medium Install	Various	\$750	176	\$132,000
6" T/F Compounds Medium Install	Various	\$1,250	10	\$12,500
Total			231	\$146,780

METER BOX LIDS & MODIFICATIONS

Product Description	Part Number	Price	Quantity	Extended Price
Radio mount bracket for existing meter box lids - small	Nicor BB 18"	\$8.00	-	\$0
Radio mount bracket for existing meter box lids - large	Nicor BB 24"	\$11.00	-	\$0
Polymer plug & collar for existing vault lid modification	Various	\$25.00	731	\$18,275
Polymer plug & collar for existing lid for 3/4" meters	#33 / 1017	\$25.00	4,582	\$114,550
Polymer Lid for 1" meters	#37 / B12	\$44.00	2,800	\$123,200
Polymer Lid for 1 1/2" meters	#38 / B30	\$58.00	1,935	\$112,230
Polymer Lid for 2" meters	#65	\$94.00	1,040	\$97,760
Total			11,088	\$466,015

FIXED-NETWORK SOFTWARE & HARDWARE

Product Description	Part Number	Price	Quantity	Extended Price
Hexagram Star Software	12758-010	\$12,500	1	\$12,500
Network Control Computer	12758-001	\$9,500	1	\$9,500
Data Collection Unit	Various	\$5,850	18	\$105,300
Star Programmer	12758-013	\$2,475	2	\$4,950
Total				\$132,250

FIXED-NETWORK INSTALLATION & TRAINING

Product Description	Part Number	Price	Quantity	Extended Price
NCC Installation	12758-030	\$2,950	1	\$2,950
DCU Installation	12758-033	\$1,575	18	\$28,350
Installer Training Class	12758-034	\$5,950	1	\$5,950
Host Software Training	12758-035	\$2,975	1	\$2,975
Total				\$40,225

PROJECT MANAGEMENT & METER/LID CHANGEOUT COST ALL-IN

Product Description	Part Number	Price	Quantity	Extended Price
Retrofit of Existing Large Meters & Neptune Meters		\$18.00	56	\$1,008
Modification of existing vault meter lid		\$59.00	731	\$43,129
Modification of existing lid for 3/4" meters		\$43.00	4,582	\$197,026
Fire Service 5/8" e-Coder, CF		\$60.00	500	\$30,000
3/4" SL & 3/4 X 3/4 e-Coder, CF		\$44.00	4,582	\$201,608
1" T-10 e-Coder, CF		\$44.00	2,800	\$123,200
1 1/2" T10 e-Coder, CF		\$225.00	1,935	\$435,375
2" T-10 Oval e-Coder, CF		\$300.00	1,040	\$312,000
3" & 4" Turbines Easy Install On-Hours		\$370.00	43	\$15,910
6" Turbines Easy Install On-Hours		\$500.00	2	\$1,000
3" & 4" T/F Compounds Medium Install On-Hours		\$565.00	176	\$99,440
6" T/F Compounds Hard Install On-Hours		\$825.00	10	\$8,250
Total				\$1,467,946

Project Management price quoted reliant upon CONTRACTOR handling and keeping the value from the scrapped meters and lids.

EXHIBIT B-2

SCHEDULE OF PAYMENT

Upon satisfactory completion of the services required by this Agreement, CONTRACTOR shall submit an itemized statement to CITY for its services performed, which shall include documentation setting forth in detail a description of the services rendered. CITY shall pay CONTRACTOR the amount of such billing less ten percent (10%) retention within thirty (30) days of receipt of same. Upon CITY's acceptance of the Scope of Work required by this Agreement as described in Exhibit A, CITY shall make the final payment to CONTRACTOR of the retention amount.



EXHIBIT C

CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED

COMPANIES AFFORDING COVERAGE

ADDRESS

A.
B.
C.

COMPANY (A. B. C.)	COVERAGE	POLICY NUMBER	EXPIRATION DATE	LIMITS		
				B.I.	P.D.	AGGREGATE
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> GENERAL LIABILITY <input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS <input type="checkbox"/> BLANKET CONTRACTUAL <input type="checkbox"/> CONTRACTOR'S PROTECTIVE <input type="checkbox"/> PERSONAL INJURY <input type="checkbox"/> EXCESS LIABILITY <input type="checkbox"/> WORKERS' COMPENSATION <input type="checkbox"/>					

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project or agreement:

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right of contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE: _____

BY: _____

Authorized Insurance Representative

TITLE: _____

AGENCY: _____

ADDRESS: _____

RM02.DOC REVISED 10/14/96.

EXHIBIT C

ATTACHMENT C
Summary of Items to be Purchased and Installed in the Agreement

NEW METERS WITH E-CODERS & STAR RADIOS

Product Description	Quantity
Fire Service Meters 5/8" x 3/4"	500
3/4" Water Meters with e-Coder & Radio	4,582
1" Water Meters with e-Coder & Radio	2,800
1 1/2" Water Meters with e-Coder & Radio	1,935
2" Water Meters with e-Coder & Radio	1,040
3" Water Meters with e-Coder, Radio & Strainer	143
4" Water Meters with e-Coder, Radio, & Strainer	76
6" Water Meters with e-Coder, Radio, & Strainer	12
Total	11,088

RETROFIT EXISTING METERS WITH STAR RADIOS

Product Description	Quantity
Super Star MTU for existing Neptune Meters	56

METER BOX LIDS & MODIFICATIONS

Product Description	Quantity
Polymer plug & collar for existing vault lid modification	731
Polymer plug & collar for existing lid for 3/4" meters	4,582
Polymer Lid for 1" meters	2,800
Polymer Lid for 1 1/2" meters	1,935
Polymer Lid for 2" meters	1,040
Total	11,088

FIXED-NETWORK SOFTWARE & HARDWARE

Product Description	Quantity
Hexagram Star Software	1
Network Control Computer	1
Data Collection Unit	18
Star Programmer	2

FIXED-NETWORK INSTALLATION & TRAINING

Product Description	Quantity
NCC Installation	1
DCU Installation	18
Installer Training Class	1
Host Software Training	1

NOTE: PROJECT MANAGEMENT AND METER & LID CHANGE-OUT INCLUDED



May 2, 2005

David Hughes
President
Measurement Control Systems, Inc.
1331 S. Lyon St.
Santa Ana, CA 92705

Dear Mr. Hughes,

Please share this letter from our corporate office with your customers and potential customers as evidence of our exclusivity agreement with Measurement Control Systems.

Measurement Control Systems, Inc is the only Authorized Neptune Distributor for sales, service, and warranty of Neptune water products in the State of California. Based on their more than twenty years of sales and support of Neptune water meters and meter reading systems in southern California, Neptune has recently elevated Measurement Control Systems, Inc., to Level One distributor status.

Neptune Technology Group can offer a higher level of service and support to the end customer through Measurement Control Systems.

Please feel free to contact me if you have any questions or concerns.

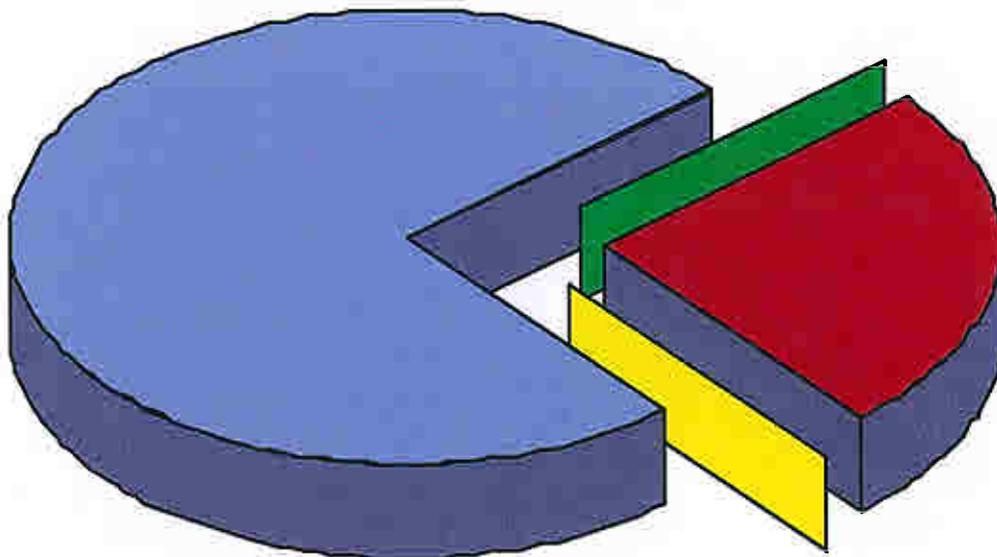
Regards,

Scott W. Elwell
National Distribution Manager- Sales
Neptune Technology Group Inc.

ATTACHMENT E
Water Meter Fixed Network Deployment Graph

There are a number of companies that manufacture fixed-network AMR systems including: Hexagram, Itron, Sensus, Cellnet, and several others. Hexagram dominates the market segment with a 75% market share of water fixed-network deployments. See ATTACHMENT G – The Scott Report for further explanation that includes who the manufacturers are in the category “other.”

Water Fixed Network Deployments



ATTACHMENT F
Informational Matrix Comparing Manufacturers

Water Utility staff has prepared the following information matrix to distinguish the key differences among the top three water fixed-network manufacturers. All information was considered during the evaluation process.

Company	Neptune / Hexagram	Itron	Sensus
Company AMR Experience	Over 10 years on same platform. 2+ million endpoints installed. Fixed Network AMR only.	Itron product for pits is < 2 years old. Less than 10,000 pit endpoints installed. Focused on handheld and mobile AMR systems. Fixed is a new area.	FlexNet has ~2 years of water meter pit experience. No significant installations in water pits. Focused on manufacturing meters, and handheld and mobile AMR systems.
Warranty	20 year published warranty. 10 years full replacement and 10 additional years pro-rated.	5 year unpublished warranty.	20 year published warranty. 10 years full replacement and 10 additional years pro-rated.
Meter Compatibility	All meter companies. Includes commercial and industrial magnetic flow and propeller meters. Special integration with Neptune eCoder meters.	Hersey, Neptune, Sensus, Metron, Badger and AMCO	Sensus and Neptune
Encoded Register Features	LCD digital display, 9 digit visual read, Current rate of flow, Leak & backflow indicators	odometer display, 6 digit visual read	odometer display, 8 digit visual read
Encoded Register Resolution Transmitted	8 digits	6 digits	8 digits
Leak Event Notification	Yes	No	No
Backflow Event Notification	Yes	No	No
Tamper / Alarm Notification	Yes	No	No
Conservation Monitoring & Reporting Tools	Yes	No	No
Distribution Leak Detection	Palmer, Permalog, Gutterman, ZoneScan, and Flow Metrics	Flow Metrics	None
System Ownership	Customer owns all system components.	Software is hosted by Itron. Customer pays \$350 per month per collector service fee. Collectors and endpoints owned by customer.	Customer owns all system components.
Data Collector Power Supply	AC or Solar	AC only	AC only
DCU Mounting Options	Pole Mount or Roof Top Mount	Pole Mount Only	Tower Mount Only
Radio Frequency	450 - 470 MHz (Narrow-band)	1427-1432 MHz DSS	900-950 MHz DSS
License	FCC part 90	FCC part 90	FCC part 90
Installed Customer Base	Washington DC, Boston Water, Corpus Christie and 100+ others	Rancho Cucamonga- CA & Global Water- AZ	Joliet, IL

ATTACHMENT G

Comparison of Last Meter Replacement Project to Proposed Replacement Meter Project

	Last Project	Proposed Project
Replace with RadioRead Meters	1,550	0
Replace with TouchRead Meters	6,900	0
Replace with Fixed Network Meters	0	11,088 (This includes the 231 large meter change-out).
Retrofit existing meters	1,100	0
Large Meter Change-out	0	231
Meter Boxes	700	?
Meter Box Lids	0	11,088
Data Collection Units	0	18
Total Meters Retrofitted	1,100	0
Total Meters Replaced	8,450	11,088
Year of Project	1995-1997	2008
Total Costs	\$2,931,498.00	\$7,679,731*

NOTE: According to the **Consumer Price Indexes (CPI)** \$1.00 in 1995 has the **same buying power as \$1.38 in 2007.**

ATTACHMENT H

Comparison of Present System to Proposed System

	Present System	Proposed System
Reading	Requires field personnel to walk and/or drive the entire service area and, depending on traffic, weather, and other variables, the collection of meter reads is a time consuming process.	Automatic - With fixed network AMR, every meter is read every day regardless of the issues stated under the City's present system, effectively eliminating the need for dedicated meter readers and their associated costs and potential liabilities.
Time requirement to read all of the customers meters.	Two months	Automatic – daily reads
Leak Detection	None	Daily with immediate notification.
Tamper Detection	None	Daily with immediate notification.
Reverse Flow Detection	None	Daily with immediate notification.
Special Reads (move-in, move-out, customer complaint, etc.)	Requires a live body to physically visit and read the meter in question.	Can be gathered with a few clicks of the mouse.
Record of consumption	Have to wait two months.	Twice per day

ATTACHMENT I

Four Areas of Improved Efficiencies from Implementing an AMR Program

Meter Reading

- Meter Reading Labor
- Meter Reading Supervision
- Related Labor Pensions & Benefits
- Vehicles
- Handheld Computers
- Equipment Maintenance
- Injuries & Damages

Accounting & Customer Service

- Call Center Labor
- Rebilling
- Estimated Billing
- Cash Flow from Moving to Monthly Billing & Collections

Revenue Protection

- Undetected Water Theft from Meter Tampering

Meter Inaccuracies

- Under Billing Because of Meter Age

Business Benefits Realized by Moving to an AMR Program:

- 1) Increased operating and maintenance efficiencies contribute to stabilization of rates
- 2) Eliminating traditional meter reading limits exposure to risk and liability
- 3) Fewer employees reduces Human Resource issues and employee turnover expense
- 4) Remote meter reading eliminated intrusion on customer's property and vastly improves customer service
- 5) Key financial ratios are vastly improved
- 6) Conservation information regarding residential leaks can be addressed

THE SCOTT REPORT: AMR Deployments in North America, 3rd Quarter 2006

The table below lists annual shipments of water AMR units by architecture. Those with no expected shipments in 2006 are grouped together in the category labeled "20 Others."

Line Item	Architecture	3Q06	2Q06	1Q06	Annual '06	Annual '05	Annual '04	Annual '03	Annual '02	Annual '01
#1	Neptune - RF	252,738	241,670	215,867	947,033	814,542	574,526	406,068	342,786	173,931
#2	Itron	239,051	208,421	205,432	870,538	975,714	1,137,918	912,358	661,891	482,950
#3	Sensus - RF	140,973	150,224	280,063	761,680	618,735	503,950	432,737	362,356	351,269
#4	Orion	161,338	133,979	150,203	594,026	443,987	209,430	74,213	572	0
#5	Master Meter - 3G	130,500	127,713	132,261	520,632	306,624	242,457	146,868	5,130	0
#6	Datamatic	77,500	268,784	0	461,712	166,391	204,313	181,293	130,830	83,470
#7	Hexagram	59,113	41,668	28,168	171,932	133,147	100,570	154,407	224,395	37,777
#8	Sensus - Fixnet	5,254	11,637	20,091	49,309	27,788	35,801	0	0	0
#9	AMCO/Elster (Trace)	4,865	7,308	10,762	30,580	55,319	111,769	164,739	173,295	247,692
#10	CellNet	11,390	5,362	2,620	25,829	181,824	109,790	73,658	45,328	41,815
#11	Neptune - Telephone	16,303	0	0	21,737	23	0	625	1,431	7,181
#12	First Point Energy	2,617	2,617	10,468	5,270	4,475	23,228	15,359	0	0
#13	TWACS	600	600	2,400	2,400	4,554	2,500	3,144	2,500	2,500
#14	Badger - Telephone	0	0	1,235	1,646	1,880	3,461	4,974	11,355	4,144
#15	Badger - Galaxy	222	444	0	888	47	0	0	0	0
#16	Reactel	100	100	100	400	400	300	0	891	500
#17	Silver Spring Ntwks	62	62	248	248	250	100	500	400	569
#18	Trilliant - Telephone	11	11	44	44	47	400	0	1,270	510
#19	Sensus - Telephone	4	0	28	42	120	740	2,761	3,874	6,242
#20	RAMAR	0	0	0	0	0	0	266,344	309,047	229,671
#21	First Point/Mozart	0	0	0	0	5,200	1,425	1,011	125	0
#22	20 Others	8,414	7,029	-541	19,871	-683	-4,785	28,665	-7,277	20,050
Totals:		1,111,055	1,207,629	1,049,579	4,491,015	3,739,025	3,241,194	2,876,949	2,286,202	1,690,271

Notes:

- Line items #1 - #6 represent walk-by/drive-by AMR and not fixed-network systems (Neptune has the #1 mobile radio).
- Line items #7 & #8 are fixed-network systems.
- Line item #7 shows that Hexagram has shipped over 800K fixed-network radios since 2001.
- Line item #8 shows that Sensus fixed network did not exist until 2004 and has only shipped ~100K fixed-network radios in total.
- Line item #20 contains the Itron v2.5 fixed-network system since not a single unit was shipped until 2007.