

February 20, 2012
Special Meeting of the City Council
Operations Center – Assembly Room
5:45 p.m.

Present: Mayor Barbara G. Volk, Mayor Pro Tem Jeff Collis, and Council Members: Steve Caraker, Jerry Smith, and Ron Stephens

Staff Present: City Manager W. Bowman Ferguson, City Clerk Tammie Drake, Utilities Director Lee Smith, Assistant Utilities Director Dennis Frady

Call to Order: Mayor Volk called the meeting to order at 5:45 p.m. A quorum was established with all five members in attendance. Mayor Volk explained a public hearing would be held following the staff presentation and questions from the City Council. She requested speakers come to the podium during the public hearing.

Purpose: The purpose of the special meeting was: 1) To conduct a public hearing to notify the public of the City's intent to utilize an installment purchase contract under North Carolina General Statute 160A, Article 3, Section 20, for the principal amount of \$11,600,000 for the acquisition, construction and installation of an Automated Meter Reading (AMR) system under a contract with Energy Systems Group, LLC. Other topics may be discussed.

The meeting began with introduction comments by City Manager Bo Ferguson. He emphasized that verified independent data confirms Hendersonville has some of the lowest water rates in North Carolina while still being able to fund expansions and improvements to the system. Our history shows the right combination of spending and investments in technology, infrastructure and systems to ensure the outcomes that customers desire: low rates, great water, and reliable service.

Mr. Ferguson explained the technology of automated meter reading will simultaneously improve service and accuracy while reducing the City's costs and create a better product for our customers at a lower price. The cost of this investment is significant (\$11.6 million), but predicted the increased accuracy and efficiency will more than offset the cost of the project. He anticipates the project will pay for itself and save an additional \$1.2 million over 15 years. In the process, the number of staff will be reduced as well as the fleet size and miles driven and the operational cost of adding new customers will be substantially reduce. He predicted that at the end of the project the system will be running with 21 percent fewer personnel than in 1994 despite a significant increase in the size of our system.

Mr. Ferguson stated this presentation is the culmination of a year's worth of research and several public discussions. A public hearing is scheduled to fulfill the requirements of North Carolina state law when a public body desires to consider financing such a project and to receive input from the public.

Mr. Lee Smith, Utilities Director, introduced the project team including Mr. Dennis Frady, Assistant Utilities Director, and Energy Systems Group: Tony Lucear, Kim Smith, and Keith Byrom.

Agenda - How Did We Get Here? Mr. Lee Smith stated project installation began in FY ending 2010. \$551,000 was set aside to begin the 15-year project in-house. He stated during the budget process, the City Manager suggested a turnkey approach because of favorable interest rates and cost of construction. Staff complied by bringing Energy Systems Group (ESG) on board and entered into a project development agreement (PDA) to look at financial feasibility of the project. He stated the findings of the feasibility study were presented to the Council on November 3, 2011 and the Council approved proceeding with an RFP for the equipment and work force required for installation. He stated ESG has since released two RFPs for financing. He stated the scope of work has been finalized and contract documents are ready to be approved. He requested the Council review the findings and make a decision on whether or not to proceed.

Proposed Project Overview: Ms. Kim Smith addressed the Council and reviewed the information previously presented to the Council. She stated the process began in April 2011 with the PDA. She reported this was put through a competitive bid process and a full scope of work and pricing will be presented later in this meeting.

Ms. Smith explained they began by developing the network that will be utilized for communication by a completing a propagation study. This included various City-owned property and sites with towers or poles already in place with the goal of getting 100% coverage throughout the service territory. They considered the number and location of all the meters, the topography of the service territory, potential locations for communication towers and allowed height of the towers. She reviewed the following project scope:

Project Scope:

- Installation of 13 poles are needed: 12 80-foot poles, one 60-foot pole (and hoping for less)
- Installation of 13 base stations with power and communications
- Remove existing meters and install 24,975 new radio-read meters; retrofit 1,028 meters

Provide 25,494 new, lockable meter box lids

Verify proper system installation including programming to generate bills, operation, accuracy, and communication.

Benefits to the City of Hendersonville: Ms. Kim Smith reiterated the City's primary reason for the project is to improve customer service and reliability. Customers will have the ability to monitor their personal water usage. The City will have the ability to respond immediately to customer concerns. The fixed base AMR system will dramatically improve the way meters are read. Meter data will be transferred electronically to the City's billing system which eliminates errors. Significant operational savings will be achieved by reducing personnel and vehicles expenses. The system has the capability to provide notification of leaks and pipes that have burst on both the City side and customer side of the meter. This system will further enhance the City's GIS system because GIS coordinates will identify every meter location.

Ms. Smith explained because the City is installing their own towers, space will be available to co-locate other antennas, which may provide a new revenue source and/or support other City services. This system will provide critical data to assist the City with current and ongoing water conservation efforts while providing critical data that can be used for planning future water needs.

Ms. Smith stated the fixed-based AMR system technology continues to evolve and the City may decide in the future to add remote shutoff capability to the system. More features and benefits will be available in the future.

Other AMI Projects in the Region: Ms. Smith reported the following other AMI projects. Chesterfield County Rural Water Co., Inc. (SC) is serving approximately 7,000 accounts and they are exceeding their anticipated accuracy benefits. The Town of Cary's installation is 95 percent complete and will serve approximately 57,000 meters. Nashville, TN has the installation 64 percent complete and will be serving more than 210,000 accounts.

Operational Savings (Conservative Estimates): Mr. Lee Smith estimated the total costs of four meter-reader positions along with the associated costs including vehicles, maintenance costs, etc. over a 15-year period would be \$4.2 million. He estimated 560,000 vehicle miles driven would be eliminated over 15 years. Mr. Frady stated associated costs with the turnover of employees was not included although it makes an impact on the costs.

Metering Accuracy Benefit: Ms. Kim Smith reported ESG analyzed the City's existing meter system in order to project the City's potential increased revenues through a meter replacement program. They inventoried the City's existing meters and evaluated the last three years of billing data along with the rate schedules. Testing was performed on a representative sample of meters two-inches and smaller, based on population and historical information. Pre-accuracy rates for all meter sizes ranged from 86.8 to 96.8. The post-accuracy rate is estimated at 99.3 percent. She estimated the average annual increased billable usage at \$653,726 (10,255,890 over the 15-year period). There was discussion of the accuracy of the new technology meters, the warranty provided, etc. ESG is recommending the City perform large meter testing on a regular basis to ensure they maintain accuracy and revenue.

City Manager Ferguson demonstrated how the existing meters and new technology meters work and explained the accuracy rates. He stated as owners of a utility, it is important that everyone pays for the water they use.

Financial Summary: Ms. Smith reviewed a 15-year cash flow analysis for the project:

Project Funded Over 15-Year Period
 Total Project Cost = \$11,643,452 (including taxes which will be reimbursed to City)
 Year 1 Estimated Accuracy Benefit = \$680,000
 Year 1 Estimated Operational Savings = \$264,000
 Interest rate secured for Project = 2.3583%
 Year 1 Service Cost for AMR System = \$109,920 (which includes \$57,000 for Sensus hosting billing data, \$7,800 for annual data/communication fees, \$3,100 for annual electricity costs, \$2,500 for one-time customer portal hosting fee, \$7,500 annual fee for customer portal up to 5,000 accounts and \$30,000 for annual large meter testing)
 The analysis shows a positive cash flow in year seven.

There was discussion on the electrical use by the base stations, the 20-year life of the battery, and the new meters that will send readings every six hours that will help identify leaks, etc.

Project Cost Summary: Ms. Kim Smith reviewed the costs of the project:

| | |
|---------------------------------------|--------------|
| Direct Construction Costs – Materials | \$ 6,839,396 |
| Direct Construction Costs – Labor | \$ 2,704,828 |
| Indirect Construction Costs | \$ 88,750 |
| General Conditions/Administration | \$ 111,500 |
| Project Development / Engineering | \$ 336,436 |
| Total Construction Cost | \$10,080,910 |
| 10% Overhead / 5% Profit (ESG) | \$ 1,562,541 |
| Total | \$11,643,452 |
| Less Taxes | (\$ 477,498) |
| Total Project Price to City | \$11,165,954 |

Project Implementation:

Communication: Ms. Kim Smith stated ESG will provide a project manager to oversee all aspects of the installation process. She stated communication is very important. ESG has developed a public relations program that consists of new releases, letters and door hangers to communicate and educate the public in the various stages of the project. ESG will also maintain a project website to provide updates on where the project is being implemented, provide an overview and benefits of the project and answer questions.

Coordination: Ms. Kim Smith stated a full-time, on-site IT specialist will be assigned during construction to interface new meters with the billing system and manage the meter exchanges (submitting last reading of existing meters, etc.).

Implementation: Installation will be complete within 12-14 months. The project was competitively bid to prequalified contractors with a solid record of accomplishment for installing similar projects. There were at least three bids on all items throughout the project. The contractors will staff the project with in-house, highly trained project managers and will utilize local work force and company installers to complete the work. The meter change out will begin (by meter routes) once several towers are in place. Each route will be added to the network as it is completed.

The project manager will maintain a safe work environment, order equipment, hold weekly meetings, verify proper installation of all equipment, coordinate the trades, ensure the commissioning is done and provide a final closeout of the project.

Meter Demonstration and Location of Monopoles: City Manager Ferguson reviewed the technology in the new meters and provided a photo of the proposed rust-colored poles that will be installed on City-owned property and their proposed locations.

Timing Benefit/Impact on Rates: City Manager Ferguson explained interest rates are at an all-time low and the labor market and costs of materials are significantly lower now. He stated this project will not have any impact on rates from year to year but should help keep rates down in years to come. Capital projects and fixed costs do have an impact on rates and a rate increase may be needed in future years determined by CIP needs.

Questions from the Council:

Council Member Caraker asked about local work force that will be used. Mr. Lucear stated local people will be hired by the project management teams (who are from SC, TN and LA) to assist. Ms. Smith explained a qualification process was followed and their references were checked. Mr. Lucear explained one certified plumber is required with helpers. He stated local workers are usually hired to install meters.

Council Member Stephens asked if customers will see any difference in their water bill. Mr. Ferguson explained they will not see an increase in terms of rates but the customer could see an increase if they have a meter that is drastically under-reading. There was discussion on the average accuracy rates for meters. In the past, many meters were reading zero. Mr. Frady stated currently there is no way of knowing if a customer has turned their water back on when it has been cut off for specific reasons. With the new meters, the City will receive notifications that water is being used so the situation can be dealt with.

Mayor Volk asked if there will be future capability for service shutoff. Ms. Smith stated yes, the technology may be added in the future. Mr. Ferguson stated the functionality would not be practical for all customers but will be helpful for those who frequently need to turn their water meters off. The valve will be put inside the meter. With the new meters, the shut-off valve will be on the service side. Mr. Frady explained the new technology will be able to read to the gallon and will have a leak alarm. The leak alarm reports will be done daily.

Council Member Smith asked what type of natural disaster could shut the system down. Ms. Smith explained in an event such as a catastrophic tornado, the system may be converted to a drive-by system (a unit could be put in a truck to drive around and collect data). Mr. Lee Smith explained most locations will have a backup power supply. Mr. Ferguson explained the poles are rated for well-above hurricane force winds. Mr. Frady explained because Sensus will host the data, it would be available through them.

The Council also discussed the attrition rate for employees and the plan to hold open vacant positions for the meter-reading positions that would be eliminated.

Mayor Volk asked how notification of leaks on the customer side would be done. Mr. Frady explained there is technology that may be added in the future whereby listening devices may be added to identify the area of the leak. City Manager Ferguson stated the City will have more hard data about where water is going, when it is being used, etc. which will help identify large leaks. He stated this data would also help with conservation efforts in the future.

Council Member Stephens asked how the placement of poles is determined. Mr. Lucear explained placement is determined by the topography.

Mayor Volk opened the public hearing at 7:07 p.m. in accordance with North Carolina General Statutes by notice published in the Times News. The following addressed the Council:

Larry Rogers, speaking on behalf of the Partners for Economic Progress, thanked the Council for trying to improve the efficiency of the water system. He stated the revenue expected (\$680,000 the first year) means the water customers will be paying that. He asked if the water would be turned off if the battery in the unit dies. Mr. Lee Smith stated no, a signal will be sent for alert before the batteries dies but it will not turn the water off. Mr. Rogers stated the City Council has the monopoly and the business community is the customer. He asked the Council to take a good, long look at the proposal and ask all questions. He stated some of the businesses were hurt badly during the drought situation and he does not want that to happen again or have any surprises. He stated the businesses price their services according to utility costs and other costs. He asked the Council to look at it carefully because business life depends on it.

Jim Barnett, private property owner, asked if private property owners will have access to a cutoff for vacation, etc. Mr. Frady responded customers have never had legal access to the cutoffs as it is prohibited by City ordinance. He explained beginning several years ago with new installations, a cutoff was installed outside the meter box that is available to the customer but the older meters do not have it. He stated some plumbers bury it and it is not accessible to the customer. He stated staff is willing to turn the water off free of charge to allow the customer's plumber to install a separate cutoff. He stated with the new system, the water will not run for days. If the customer cannot be reached in the event of a leak, the water will be turned off. Mr. Barnett stated he is skeptical of data because in actuality it is not always accurate. He stated \$11 million is a lot of money and asked Council to use good judgment in making the decision.

Ken Gordon, Norm's Minit Mart, stated the \$20,000/year for current meter replacement is a surprisingly low figure, which may contribute to the accuracy issue. He asked what the cost benefit analysis would be if meters were replaced on a set schedule versus the new infrastructure and electronic monitoring. He stated it may be a quicker payback for a lot less initial investment with no bond and paid for out of operating costs. Mr. Lee Smith responded whether meters are replaced at one time versus replacing a percentage, it would still be paid for over the years. City Manager Ferguson commented the City would not see all the captured savings unless the meters are replaced at once. He stated much of the accuracy benefit is in the meters. He stated the customer benefit would be lost without the new technology. Mr. Gordon stated even with favorable interest rates, labor costs, etc. it will be almost 11 years before there is a return and the meters may have to be replaced then.

City Manager Ferguson commented on what happens after 15 years. He stated the operations savings will be realized beyond year 15 and the City will then have to make a plan for the years after the warranty expires. The five-year window will provide a good planning period to start a replacement program. He stated he is comfortable with the 20-year warranty. He stated the technology is coming from one of the leaders in the industry. Mayor Volk commented this project started out by replacing a certain number of meters every year but installing all the meters at once will save money in the long run.

Being no further questions or comments, the public hearing was closed at 7:20 p.m.

Discussion from the Council: Council Member Caraker commented the customers with inaccurate meters have been receiving a gift from the City. He stated this is one of the things Council is elected to do and should be planning for the next 15-20 years. He stated this project dovetails with the City's conservation efforts. He stated he understands it is very expensive but there will be an immediate benefit system-wide. He expressed appreciation for the hard work and research that went into this. He stated technology will continue to improve. He stated it is an excellent opportunity and idea. He stated this is more important than refurbishing Main Street because it has an individual benefit for all customers.

Council Member Stephens asked when the project will begin if approved. Ms. Kim Smith stated the financing has to be approved by the Local Government Commission and work may begin after the contract is signed. ESG plans to begin work in the April to May time frame with completion planned for July 2013.

Mayor Pro Tem Collis commented the City still has one of the lowest water rates in the State. He stated the City has also received some criticism for not charging enough to encourage conservation. He stated this project is financially responsible.

Council Member Smith commented people like to criticize the government for inefficiency and this project battles that. He stated the City will be selling water indefinitely and should be efficient as possible as this system improves that dramatically. He stated the City is supposed to have meters that work and the new technology will show leaks, etc. that cannot be done with the current meters. He stated when this project goes online it will reveal even small leaks. He stated this project provides increased efficiency and is what City should be doing.

Council Member Caraker stated he serves on the French Broad River task force and the thrust of discussions has been turning over regional control to Raleigh. He stated this approving this project would send a message to Raleigh that the City is responsible, forward thinking and progressive.

Mayor Volk comments she read about automated reading and was pleased when the City began looking at it even if it was phased in. She commented the Council has been discussing this for more than year and has heard this information before. She stated the Council has had more than a year to become acquainted with the project. She stated even though Council had not seen the final numbers they had previewed it in November. She stated even if Council does not have a great deal of discussion about it at this meeting, it is not because Council has not heard about it or thought about it a long time. She stated this is the direction the City needs to go for the long term.

Council Member Stephens stated he is hoping for good press on this and asked if there will be information for the customers in their water bill. City Manager Ferguson stated yes, after Local Government Commission approval and he is excited to tell customers about it.

Council Member Smith moved to authorize the city manager to execute the contract between the City and ESG, allowing ESG to proceed with the implementation and financing phase of the project, as presented and recommended by staff. A unanimous vote of the Council followed. Motion carried.

Council Member Smith moved to authorize City staff to submit a completed financing application associated with the Project to the North Carolina Local Government Commission for their review and approval, as presented and recommended by staff. A unanimous vote of the Council followed. Motion carried.

Resolution #12-0203

RESOLUTION AUTHORIZING THE FILING OF AN APPLICATION FOR APPROVAL OF A FINANCING AGREEMENT AUTHORIZED BY NORTH CAROLINA GENERAL STATUTE 160A-20

WHEREAS, the City Council of the City of Hendersonville, North Carolina, desires to install an automated water metering system to better serve the citizens and customers of Hendersonville; and

WHEREAS, the City of Hendersonville desires to finance the Project by use of an installment contract authorized under North Carolina General Statute 160A, Article 3, Section 20; and

WHEREAS, findings of fact by this governing body must be presented to enable the North Carolina Local Government Commission to make its findings of fact set forth in North Carolina General Statute 159, Article 8, Section 151 prior to the approval of the proposed contract.

NOW, THEREFORE, BE IT RESOLVED, that the Council of the City of Hendersonville, North Carolina, does hereby submit the following findings of fact as requested by the North Carolina Local Government Commission to supplement the application for approval of the installment purchase agreement:

SECTION 1: The City Council considers that an installment purchase agreement in the amount of \$11,643,452 is adequate to complete the above project and is not excessive for the proposed purpose based upon the contract awarded to Chase Equipment Finance for said project; and

SECTION 2: The City Council of the City of Hendersonville is confident that debt management policies have been carried out in strict compliance with the law based upon audit reports and the City's cash management policies; and

SECTION 3: The City Council is confident that the budgetary and fiscal management policies have been carried out in compliance with the law based upon past audit reports; and

SECTION 4: The City Council does not foresee the need to increase water rates in order to cover the increased debt service requirements of this project, however the Council will raise rates if it is found to be necessary; and

SECTION 5: The City Council of the City of Hendersonville hereby designates the City Manager as representative of the City to file the application for approval of the installment purchase agreement with the North Carolina Local Government Commission; and

SECTION 6: The City of Hendersonville is not in default in any of its debt obligations.

SECTION 7: The City Attorney for the City of Hendersonville has rendered an opinion that the proposed project is authorized by law and is a purpose for which public funds may be expended pursuant to the Constitution and laws of North Carolina.

SECTION 8: The City Council has determined that the installment purchase agreement will be less expensive than the issuance of general obligation bonds for the above project.

SECTION 9: That the City Manager is hereby authorized to request proposals from banks and financial institutions for the proposed financing of said automated water metering system.

ADOPTED by the City Council of the City of Hendersonville, North Carolina, on this 20th day of February 2012.

/s/Barbara G. Volk, Mayor

ATTEST: /s/Tammie K. Drake, City Clerk

Council Member Smith moved to authorize the city manager and the finance director to execute a contract between the City and Chase Equipment Finance for financing the Project for a period of 15-years with an estimated loan amount of \$11,643,452 at an interest rate of 2.3583% (Option B), contingent upon Local Government Commission approval, as presented and recommended by staff. A unanimous vote of the Council followed. Motion carried.

Resolution #12-0204

RESOLUTION APPROVING FINANCING TERMS FOR INSTALLATION OF AN AUTOMATED METERING SYSTEM

WHEREAS, The City of Hendersonville ("City") has previously determined to undertake a project for installation of an automated water metering system, and the Finance Officer has now presented a proposal for the financing of said project.

BE IT THEREFORE RESOLVED, as follows:

1. The City hereby determines to finance the project through Chase Equipment Finance in accordance with the proposal dated February 14, 2012. The amount financed shall not exceed \$11,643,452.00, the annual interest rate (in the absence of default or change in tax status) shall not exceed 2.3583%, and the financing term shall not exceed fifteen years from closing.
2. All financing contracts and all related documents for the closing of the financing (the "Financing Documents") shall be consistent with the foregoing terms. All officers and employees of the City are hereby authorized and directed to execute and deliver any Financing Documents, and to take all such further action as they may consider necessary or desirable, to carry out the financing of the Project as contemplated by the proposal and this resolution. The Financing Documents shall include a Financing Agreement and Deed of Trust and an Escrow Agreement as Chase Equipment Finance may request.
3. The Finance Officer is hereby authorized and directed to hold executed copies of the Financing Documents until the conditions for the delivery of the Financing Documents have been completed to such officer's satisfaction. The Finance Officer is authorized to approve changes to any Financing Documents previously signed by City officers or employees, provided that such changes shall not substantially alter the intent of such documents or certificates from the intent expressed in the forms executed by such officers. The Financing Documents shall be in such final forms as the Finance Officer shall approve, with the Finance Officer's release of any Financing Document for delivery constituting conclusive evidence of such officer's final approval of the Document's final form.
4. The City shall not take or omit to take any action the taking or omission of which shall cause its interest payments on this financing to be includable in the gross income for federal income tax purposes of the registered owners of the interest payment obligations. The City hereby designates its obligations to make principal and interest payments under the Financing Documents as "qualified tax- exempt obligations" for the purpose of Internal Revenue Code Section 265(b)(3).
5. All prior actions of City officers in furtherance of the purposes of this resolution are hereby ratified, approved and confirmed. All other resolutions (or parts thereof) in conflict with this resolution are hereby repealed, to the extent of the conflict. This resolution shall take effect immediately.

Adopted this 20th day of February 2012.

/s/Barbara G. Volk, Mayor

Attest: /s/Tammie K. Drake, City Clerk

Closed Session: At 7:30 p.m., Council Member Caraker moved Council to enter a closed session to discuss matters relating to the location or expansion of industries or other businesses in the area served by this body as provided under NCGS §143-318.11(a)(4). A unanimous vote of the Council followed. Motion carried.

The Council discussed matters relating to the location of an industry or other business in the area.

The Council exited the closed session at 8:35 p.m. upon motion of Council Member Caraker. No action was taken.

Adjourn: The meeting adjourned at 8:35 p.m. upon unanimous consent of the Council.

Barbara G. Volk, Mayor Volk

Tammie K. Drake, City Clerk