

PUBLIC WORKS COMMISSION  
MEETING OF WEDNESDAY, OCTOBER 12, 2016  
8:30 A.M.

Present: Evelyn O. Shaw, Chairman  
Wade R. Fowler, Jr., Vice Chairman  
D. Ralph Huff, Secretary  
Darsweil L. Rogers, Treasurer

Others Present: David Trego, CEO/General Manager  
Karen McDonald, City Attorney  
Jay Reinstein, Assistant City Manager  
Nat Robertson, Mayor  
Media  
PWC Staff

Absent: Jim Arp, City Council Liaison  
Kenneth Edge, County Liaison  
John Ellis, Hope Mills Liaison

CALL TO ORDER

Chairman Rogers called the meeting of Wednesday, October 12, 2016, to order.

*Election of Officers for Fiscal Year 2016-2017:*

Commissioner Wade Fowler submitted the following slate of officers for FY2016-2017.

- Chairman – Evelyn O. Shaw
- Vice Chairman – Wade Fowler
- D. Ralph Huff – Secretary
- Darsweil L. Rogers – Treasurer

Commissioner Huff seconded the motion and it was unanimously approved.

Commissioner Rogers congratulated Commissioner Shaw for being elected Chairman of the Public Works Commission.

APPROVAL OF AGENDA

Commissioner Rogers motioned to remove Item VII, New Commissioner Orientation, from the agenda and reschedule it for the next Commission Meeting. Motion was seconded by Commissioner Fowler and unanimously approved.

Upon motion by Commissioner Rogers and seconded by Commissioner Fowler, the amended agenda was unanimously approved.

CONSENT ITEMS

Upon motion by Commissioner Fowler and seconded by Commissioner Rogers, Consent Items were unanimously approved.

- A. Approve minutes of meeting of September 28, 2016
- B. Adopt PWC Resolution No. PWC2016.11 to declare personal property described as one (1) 2006 Ford F450 4x4 Super Duty Truck with Service Body, VIN #1FDXW47P26EA19969, as surplus and authorize its sale by public auction.
- C. Approve bid recommendation to award contract for North Fayetteville Water System Improvements, Contract 1 - 400,000 Gallon Elevated Tank and Booster Pump Station to T.A. Loving Company of Goldsboro, NC, lowest responsive, responsible bidder, in the total amount of \$3,667,250.00 and forward to City Council for approval.

The North Fayetteville Water System Improvements Project is budgeted in FY17 CIP WS 8 - \$3,906,000.

Bids were received on September 27, 2016 as follows:

<u>BIDDERS</u>	<u>TOTAL COST</u>
T.A. Loving Company, Goldsboro, NC	\$3,667,250.00
A.C. Schultes of Carolina, Inc., Wallace, NC	\$3,771,496.00
Sanford Contractors, Sanford, NC	\$4,494,253.00
Sandhills Contractors, Inc., Sanford, NC	\$5,237,211.00

COMMENTS: Plans and specifications were requested by four (4) prime contractors with four (4) contractors responding. The lowest responsive, responsible bidder is recommended.

## CLOUD COMPUTING

*Presented by: Susan Fritzen, Chief Corporate Services Officer  
Paul Rao, Director of Information Systems*

Susan Fritzen, Chief Corporate Services Officer, reminded the Commission of the Cyber-Security Presentation done back in January 2016 wherein the topic of Cloud Computing came up. During that time, she stated she had informed the Commission that she would follow-up with detailed information on Cloud Computing, what the Information Systems Department is doing, and to additionally gain consensus from the Commission as to whether the department is following the path the Commission would agree with.

Ms. Fritzen introduced Paul Rao, Director of Information Systems, to further explain Cloud Computing. Mr. Rao began by explaining that Cloud Computing is where all the physical hardware and software are not located on-site, but is instead hosted externally by another company and provided to the user as a service, via the internet.

Mr. Rao highlighted PWC's current environment from an applications perspective. He emphasized the major applications that we use to operate: EBS, Financial Systems, HR Systems, Procurement, Stores/Materials, and Customer Care & Billing. He stated all of these applications are hosted locally (in-house) in the Data Center. He added, as a side note and for those who have not seen the Data Center, that he would be happy to provide tours of the facility.

Mr. Rao stated that the current Cloud Services at PWC are very minimal. At present, we use the Cloud Services in three ways:

- PWC External Website ([www.faypwc.com](http://www.faypwc.com))
- PWC Intranet (for employees) - will be hosted on the cloud by 1Q 2017
- Some GIS (Geographical Information System) Mapping services

Mr. Rao explained to the Commission how the Cloud Services work. He stated that the Cloud is managed by a vendor where there is hardware, software, and other types of equipment. You may access the cloud through phone, browser, etc. which are all dependent upon the internet being up and running in order to be used.

Based on research, Mr. Rao detailed the key drivers for moving into the direction of the Cloud:

- Simplifies IT/IS architecture and management. If we do not have to manage so many applications, it would allow the IS group to focus on more critical applications, while the external vendor manages the others.
- Increases availability by having multiple data centers with multiple back-up. This is essential during disaster recovery.
- Reduces IT complexity
- Reduces IT cost
- Increases efficiency/productivity
- Improves support/service

Mr. Rao gave the most common reasons companies choose the Cloud Services:

- Web Hosting
- Productivity Solutions
- Email Hosting
- Content Filtering
- Back/Recovery
- Infrastructure
- Industry-specific Applications
- Business Support
- Application Support

Mr. Rao stated that there are 3 models for Cloud computing;

- Software as a Service (SaaS) – Cloud vendor manages everything.
- Platform as a Service (PaaS) – Cloud vendor manages Middleware, Network & hardware
- Infrastructure as a Service (IaaS) – Cloud vendor manages only Network & Hardware

Mr. Rao added that the model PWC would evaluate that is most applicable to PWC is Software as a Service (SaaS).

When utilities were surveyed, Mr. Rao stated there were several drivers for potentially moving to the Cloud:

- Consumer - 78% of utility customers own a smart phone which is a future channel on how they may want to interact with PWC; the cloud-base environment is more compatible for that.
- Digital – Demand response - integrated with today’s technologies
- Environmental – Eco-Friendly
- Data informational – allow for faster informed decisions.
- Regulatory – higher demand for Accounting practice & security.

From a PWC evaluation point of view, Mr. Rao spoke about what makes a good candidate for Cloud. He gave examples of different criteria to be evaluated case by case:

- Loosely Coupled – a self-standing application that is not tied into other applications/processes within the utility. Ex: Financial Planning & Budgeting, Fleet Management, and Office 365
- Non-sensitive data – No privacy concerns
- Non mission critical – PWC website and PWC intranet. Mr. Rao pointed out that “mission critical” applications, such as EBS, CC&B, and Smart Meter System, would not be something we would consider moving to the Cloud.
- Geographically dispersed users

- Predictable or Seasonal use – application is used sporadically during the year.

Mr. Rao summarized/listed the advantages and risks of the Cloud solutions for PWC Information System as follows:

### **Advantages**

- Applications - patch & upgrade can be rolled out faster
- Disaster Recovery – Fail Safe Point/have redundancy to rest with the cloud provider.
- Cost effectiveness – Over cost will be less expensive
- Hardware – Significant cost reduction for data center footprint
- Database – Scalability and consolidation of DBMS
- Scalability – increasing capacity during peak times and reducing capacity during normal hours

### **Risks**

- New Security Standards – required to meet new technology risks; dependent on the security of the vendor.
- Service level Agreement (SLA) – a contract between service provider and the end user that defines the level of service expected (Ex. 98% “UP” time)
- Limited Control – Dependent on the vendor and internet connectivity. PWC’s primary internet provider is Century Link & secondary is Time Warner Cable; thus, if we lose connectivity with one vendor, we can use the other as a backup.

Mr. Rao proposed the next steps to the Commission. He recommended that the Hyperion Planning & Budgeting be the first major application for consideration for the Cloud because it does meet a few important criteria for PWC. It is loosely coupled, it is predictable/seasonal use, it will potentially reduce cost with minimal risk, and it allows PWC to benchmark which applications to consider in the future for cloud migration. He added that the user will not see much difference with the cloud.

Mr. Rao recommended doing a Cloud Proof of Concept to validate in principle its potential of being used. In addition, Mr. Rao stated that we would need to look at the disaster recovery in the cloud by researching vendor solutions and cost; currently being evaluated. He added that we will need to determine which applications in our footprint make best sense and that cloud computing will be an integral part of the Strategic Roadmap we are developing for the next 3-5 years..

Mr. Rao opened the floor for questions and to get a consensus from the Commission as to whether this is a good direction for PWC.

For clarification, David Trego, CEO/General Manager, inquired if the disaster recovery from the previous presentation made to the Commission would replace the local/regional backup site or if this was just another option. Mr. Rao responded that it could be another option or in addition to; i.e. primary, secondary, and tertiary.

*Commissioner Comment:*

*Before further comments/questions, Commissioner Shaw thanked Mr. Rao and requested a moment to acknowledge the presence of Mayor Nat Robertson.*

Commissioner Fowler expressed a concern with the redundancies of using external vendors. His main concern, though, is with internet connectivity and how much of a risk or impact it would be. Regarding the redundancies of external vendors, Mr. Rao responded that the vendors use much more sophisticated schemes where they do not need physical hardware to run our applications; it is done virtually. On the internet, Mr. Rao stated we would have backup internet as part of our strategy.

Commissioner Huff inquired if all of PWC's hardware were fully depreciated. Mr. Rao responded yes, with the exception of equipment purchased within the last two years.

Commissioner Rogers requested clearness on the model of cloud computing for PWC, if it is SaaS (Software as a Service) or nothing vs. migration? Mr. Rao explained that it is indeed SaaS or nothing but, using Hyperion as an example, he stated that it would be Hyperion to the cloud as SaaS, that means taking it from of our hardware and going to the vendor to supply it completely as software as a service.

Commissioner Rogers highlighted the "mission critical" nature of this in relationship to our commitment to the City. Mr. Rao replied that he is very skeptical that any mission critical applications would ever be moved to the cloud.

Commissioner Shaw asked about the "little or no" changes to the end-user. Mr. Rao replied that the general look and feel would be the same but with a few enhancements. The only training, if any, would be with the user learning how to use those enhancements.

Commissioner Shaw thanked Mr. Rao for the presentation. Additionally, Commissioner Fowler commented that Ms. Fritzen "hired the right guy".

## GENERAL MANAGER REPORT

In lieu of the General Manager's report, Mr. Trego stated he would like for all departments to give an update on the storm recovery efforts.

First, he commended and expressed how proud he is of all divisions and employees on their professionalism and how they reacted to the storm. All divisions were available and on-hand and many employees came in on their own to offer help, even when they did not know what was going on in their own homes. He further commented that this act of kindness is the essence of being a "Hometown Utility". He added that we have also had many customers to call in to provide us with helpful information, including the Mayor who reported a water leak.

Mr. Trego stated that an event such as this is an opportunity for us to use as a learning experience. We will have a series of meetings to do a "lessons learned", starting from the

department level and working our way up, so that we may better improve our services to our customers.

*ELECTRIC SYSTEMS:*

Mr. Trego acknowledged that Reggie Wallace, Electric Systems Chief Operating Officer, was not present, so he would report on his behalf.

At peak, Mr. Trego stated we had almost 40,000 customers without service. As of the morning of the Commission meeting, the number was down to 500. This included customers that we may not be able to restore services for a while due to roads being impassable and/or there being damage in the homes, which will require an electrical inspection, etc.

Mr. Trego stated we have been able to use the new metering system which allows us to isolate the neighborhoods that are out and ping the meters to determine if we have communication with those meters. If we have communications, that means there is power to the meter. Using this system to our advantage has really helped in our restoration efforts.

Mr. Trego acknowledged and thanked the Fayetteville Observer for their help in communicating updates to our customers on important information regarding power in their neighborhood. He added that we have also used our mutual aid agreement with Electricities of NC, obtaining assistance from eleven Line Workers from other municipalities, such as Wilson, NC, to help with the restoration efforts.

Even after all power is restored, there will still be some facilities that need repairing so repairs will be going on for some time to get that done. Our goal is to have every customer's power back on.

Commissioner Fowler asked if during the repairs, will customers' experience any short-term outage and would we need to let them know what is happening? Mr. Trego replied that if we have to go into an area for repair, we would use our normal notifications to communicate this information to the customer.

*WATER RESOURCES:*

Mick Noland, Water Resources Chief Operating Officer, gave an update for each department.

Water Resources Construction has been flushing water mains to remove air and discoloration. They have set up temporary water bypass for residents who do not have road washout and have also cleared debris hung on the 48" outfall at the Hope Mills Dam. The Construction crew has vacor trucks assisting lift stations with high flows; bypass pumps and lines are set up at two lift stations to help control flow. Mr. Noland stated the Construction crew are currently evaluating and responding to call of leaks and breaks. They are still finding issues on the water and sewer systems through routine inspections and calls from customers.

At the Water Treatment Plants, all the tanks are full and operating normally. The demand on the high pressure side is about 25% above where it should be, but certainly manageable.

Mr. Noland also stated at the Wastewater Plants, both Plants peaked out at 60 million a gallon per day flow rates; usually it is approximately 13-14 million. Both Plants were “washed out” which means there was more water coming in than the facilities could handle. All the bio-solids were washed out. The Cape Fear River was higher than where the water is supposed to flow out of the Water Treatment Plant, so water backed up into the Plant and overflowed at the clarifier, which has never happened before. Cape Fear River has gone down and we are now reseeded Cross Creek with sludge from Raleigh’s Neuse River; will try to reseed the Rockfish Facility with sludge in the digester later in the week. If that does not work, then we will use sludge from another facility. Lime has been applied to areas on the plant sites that were affected by overflows.

Along the lines of the Water System, Mr. Noland reported that staff has done flushing to get air, discoloration and added extra disinfectant at the Treatment Plants. We have started to get bacteriological samples and expect results later in the day; at which point, we can lift the boil water advisory. He stated even after the boil water advisory is lifted, we may still recommend going to voluntary conservation. Mr. Trego added that we may do that in conjunction with getting the results on the boil water advisory.

Water Resource Engineering has provided assistance to Construction, as well as the Plants.

Mr. Noland stated that the Commission and PWC should be commended for fixing the spillway at Glenville. The spillway performed exactly as designed and did not have any issues during the storm. Additionally, Mr. Trego commented that we took preventative measures prior to the storm, by taking water out of the Glenville Plant to lower the level, thus taking every action possible to give ourselves that extra buffer at Glenville Lake.

Staff responded to questions and comments from Commissioners and Mayor Robertson.

### *CUSTOMER PROGRAMS*

Mark Brown, Senior Customer Programs Officer, thanked Water Resources, Electric Systems, and Jay Reinstein, Assistant City Manager, for working with our key accounts. All of them are back in normal operations.

Mr. Brown stated that the Field Services group set up a hot line with the City so that our Field Service Reps could be dispatched to the field, whenever the City needed to know if down lines were PWC lines, electric or non-electric; lines were marked with color-coded tape as a way of flagging them appropriately. This helped the City with their clean-up efforts. Mr. Brown stated that he will follow-up with Mr. Reinstein once the Field Services group is at a point in the PWC’s recovery efforts that they can dedicate a special team to help with the City’s clean-up efforts.

## *CORPORATE SERVICES*

From the Facilities standpoint, Susan Fritzen, Chief Corporate Services Officer, stated that there was a substantial amount of water at the main campus. The Electric Meter area had approximately 12 inches of water. The staff has been relocated and a contractor has been onsite to assess damages and has begun working on restoration. Ms. Fritzen further stated that we had some furniture and computers at a loss from the water. She also reported that there were some minor leaks on the 4<sup>th</sup> floor of the Operations Center.

Ms. Fritzen stated that there was a large amount of meters, both CNI and Residential meters, that were in the Meter Shop building. They have all been relocated to the Warehouse. Some of them were still in boxes that were good but others appeared wet so they will need to be tested to ensure everything is working. The rest of the meters that are part of the Connect Program were located off-site at a bonded warehouse and appear to be good.

From Fleet Facility, Ms. Fritzen stated there are fourteen vehicles still being worked on to determine if they will be considered a loss or not. As for the City, there are 42 vehicles that are still being assessed, most of which are police cars.

To somewhat put things into perspective, Mr. Trego stated that PWC's main facility was like an island, completely surrounded by water. The water was coming in extremely fast and staff had to use a boat to get to vehicles. In front of the building, the water was coming up from the storm drain, like a fountain. He also stated that some of the employees lost their personal vehicles.

Mayor Robertson inquired if the number of City vehicles damaged were all located on the PWC campus. Ms. Fritzen stated that the 42 count is city-wide and included street maintenance vehicles. She informed the Mayor that each day the list will be updated. Discussion ensued.

## *FINANCE*

Dwight Miller, Chief Financial Officer, stated that in anticipation of the storm and just in case we had a FEMA event, the Finance Department captured expenses to file for reimbursement with FEMA. He stated that we filed a declaration for public assistance for utilities. There will be a FEMA kick-off meeting very soon. Internally, there are forms available for staff to complete to ensure that we capture the necessary information regarding this FEMA event and the reimbursement that can be received from them.

Mr. Miller stated his office has been in touch with the insurance companies to put them on notice of the possible claims. That will be coordinated with FEMA and the insurance companies. Mr. Miller stated that they have not had any reports of large transformer losses that would reach the insurance level at this point; however, they have noted some damage in case there is a failure further down the road.

Mr. Miller stated there were poles that floated in the yard on top of cars that were already under water. We have notices from employees whose vehicles were damaged and they can file this damage directly with FEMA. Typically, FEMA would reimburse up to \$600 for minor damage and up to \$9600 for replacement.

Regarding Customer Service, employees were on hand to receive calls on Saturday morning, during the storm and throughout the weekend. By Monday, the call center reps answered over 3,000 (normally 2,000). The number of calls has dropped back to normal.

Mr. Miller mentioned that the Post Office on Green Street was flooded which has affected mail delivery to PWC. Discussion ensued.

Mr. Miller distributed a copy of the Customer's Force Majeure Policy to Commissioners and Staff. The document outlined PWC's stance when a customer's premise is destroyed by fire, natural disaster, or other unforeseeable circumstance beyond the customer's control. The customer must notify PWC within thirty (30) days of the cessation of service and advise of their intent to resume service following repair/restoration of the premise.

Mr. Miller recommended that we work with customers affected by the storm, on a case by case basis. Discussion ensued regarding what options would be offered to the customers affected.

Mr. Miller and Mr. Trego responded to questions/comments from the Commission.

*Commissioners' Comments:*

*Commissioner Shaw commended the entire staff for the extraordinary job that was done and added that the Commission is grateful that they have not heard of any injuries during this period, which is phenomenal.*

*Commissioner Fowler stated it is important for everyone to understand that during the time of the storm and while customers were calling to inquire about their service, we had crews in the field repairing and trying to get those services back on and at the same time, not knowing what's going on in their own homes.*

Mayor Robertson thanked the staff for all they have done.

In summary, Mr. Trego reminded staff that we are waiting for the water testing results to be able to lift the boil water advisory. He added that he would let the media know once the results are in.

Staff responded to questions/comments from the Commission.

Mr. Miller requested a moment to commend and thank the Communications & Community Relations (CCR) Department for their effort in ensuring that information got to the customers through social media. Carolyn Hinson, Communications & Community Relations Officer, stated they had almost 10,000 "Likes" on the PWC Facebook page. They reached

over 750,000 people with posts and engaged with over 228,000 users. Ms. Hinson added that there was a lot of activity. Regarding the boil water advisory, Ms. Hinson also stated that the CCR department did a call-out to customers and reached approximately 60,000 customers.

Commissioner Shaw thanked Mr. Miller for recognizing Ms. Hinson and her team and added her thanks, as well, for their part in making sure our customers were getting the correct information and updates.

#### REPORTS AND INFORMATION

Commission acknowledges receipt of the following Reports and Information.

- Monthly Cash Flow Report for September 2016
- Recap of Uncollectible Accounts
- Investment Report for September 2016
- Monthly Incident Summary for September 2016
- Personnel Report for September 2016
- Position Vacancies

#### ADJOURNMENT

There being no further business, upon motion by Commissioner Fowler and seconded by Commissioner Rogers and unanimously approved, the meeting was adjourned at 10:20 a.m.