



IWA PIPELINE



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LIGHTS OUT TIME



As anyone who spends much time on the Islands knows, power outages are not uncommon. There are probably some good and valid reasons for this situation, including the fact that we are at the end of the proverbial road, electrically speaking. Our island location means that our power supply system is not looped or fed from two directions. It is basically a one way system, and when that one way has a problem, it's "lights out time."

At Island Water, we are well aware of the problem. Power outages create a variety of problems for our operations. Both our reverse osmosis treatment plant and our distribution pumping systems normally operate on electric power supplied by Lee Electric Co-op. But have you ever noticed that you still have water when you turn on your faucet during a power failure? That happens as a result of several steps we have taken (and money we have spent) over the years to make our water supply more reliable than our power supply.

One component of our power outage facilities is actually the 5 water storage tanks scattered around the Islands. These tanks hold a total of 15 million gallons of water, equal to about 4 or 5 day's

supply. This capacity is well in excess of that provided by most water utilities, which frequently have one day's storage or less. We provided this storage primarily to assure us of at least a limited supply after a hurricane strikes our Islands. However, the tanks also allow us to ride-out a short power failure without worrying about our treatment plant. We just pump water from storage, until power is restored and the treatment plant can be brought back on line.

Of course the pumps also normally operate on electric power, so they require another component of our power outage facilities. We have standby pumps that are driven by propane-fueled V-8 engines at all pumping locations. These pumps automatically start when water pressure falls below a predetermined level, thereby avoiding any significant loss of pressure. Of course the controls that make this happen are also electric-powered, so we have to provide batteries (an uninterruptible power supply) so that they can do their job and start the pumps. The batteries are kept charged by the pump engines themselves, so that the whole system can operate totally independent of outside electric power.

The final component of our power outage facilities is generators. We have three of them. One operates critical components of our office facilities, primarily for long term outages, like after a hurricane. This generator, which is propane engine-powered, would enable us to continue critical operations without outside power. The other two generators are both located at the reverse osmosis treatment plant. The smaller one is again propane engine-powered and supplies power to critical plant facilities such as alarms and lights during short term power outages, when the treatment plant can be left off and water is pumped from storage, as mentioned above. The second generator

is a very large one, at 1.2 million watts, and is diesel engine-powered. It is capable of operating the entire treatment plant and producing water. It is obviously only intended for prolonged power outages such as after a hurricane.

The whole system is very effective, and it works very well. For that, we can all thank our electricians, John Leiter and Don DuBrasky, for designing and installing all of these facilities. Think of them the next time you turn on your faucet for a drink of water during a power failure!

MEET JANET KRISMAN



Janet Krisman, has been our Accounting Coordinator for the last eleven years. She handles our payroll and employee-benefit accounting functions, tax reporting, payment recording, bank account reconciliation, and anything else we ask her to do, including answering the telephone.

Jan has two children, Carey, who lives in Fort Myers and Mike, who is in the Navy. She also has four grandchildren. Jan herself lives in Fort Myers with her other two children, Max the cat and Montana the dog, through whom she says she single-handedly keeps South Trail Animal Hospital solvent.

Jan says she likes working at IWA because she feels like she comes to work to spend the day with her family. At home she enjoys hiking, camping, sewing, cooking, gardening, shopping/spending money and roller-blading (until she recently had to help keep a local orthopedic surgeon solvent).

Jan says the words she lives by are, "Smile, and find something to laugh about each day." She also mentioned as a second choice, "Never ask a

person's age," and since she wasn't smiling as she said that, we declined to include her age in this article.

STANDING ROOM ONLY

At our Annual Meeting on April 13th, we were VERY glad to see a better than normal attendance, with very few empty seats. Everyone enjoyed the traditional coffee and donuts before the meeting, and some accepted our offer of plant, landscaping and office tours afterwards.

President Robert Wigley presided over his last Annual meeting this year, after serving the maximum of six years on the Board of Directors, the last three as President. He thanked the Membership for the opportunity to be of service and reviewed changes at IWA over the last six years, including:

- Installation of 11 miles of water mains.
- Construction of our new office complex.
- Installation of a 1.2 megawatt emergency generator.
- Avoidance of any rate increases since 1993, with a decrease in 1994.

Vice President/Treasurer Harley Derleth reported that IWA's financial position remains strong and stable, and is in fact improving every day, with total reserves of \$2.6 million, up \$600,000 in the last year. He also reiterated IWA's continuing concern with local environmental issues. We have spent around \$450,000 since 1988 to enhance our environment in a variety of ways.

General Manager Roger Blind reported that 1997 had been another good year for IWA's operations. Water production was almost equal to that in 1996, and total revenue was up 2.2%. IWA completed 35 capital projects in 1997, costing just over \$1.5 million. He further reported that the use of new, cost-effective technologies is one of the main reasons IWA has been able to avoid rate increases. Computers have been employed throughout IWA's operations to improve employee productivity in many ways. Improved reverse osmosis membranes have allowed us to reduce our electricity consumption. New water meters measure consumption more accurately and reduce the amount of water that is unmeasured and hence unbilled.

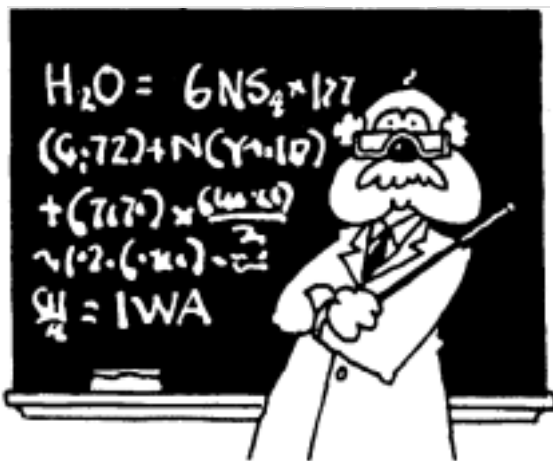
After the reports were complete, member

raised a number of questions on a variety of topics, ranging from how much fuel we keep for our emergency generator (enough for about a week), to how much IWA water is being used to water the Sanctuary golf course (none, they use well water).

President Wigley honored members of the past Teller's Committee by presenting them with plaques recognizing their many years of loyal service.

Harley R. Derleth was re-elected to a third and final two-year term on the Board, and Richard A. Calabrese was elected to his first term. At a special meeting of the Board of Directors following the Annual Meeting, officers for the next year were elected as follows: President, Timothy A. Gardner; Vice Presidents, Paul R. Storves and Richard A. Calabrese, Vice President/Secretary, Paul E. Garvey; Vice President/Treasurer, Harley R. Derleth.

QUIZ



1. Who's doing all that digging and installing pipe all over Sanibel?

A. Island Water B. The City C. Both A & B

2. How many gallons of diesel fuel does IWA keep in storage for our emergency generator?

A. 250 B. 1,078 C. 5,547 D. 8,000

3. When water meters fail or become worn, how do they read?

A. High B. Low C. Accurately

4. What kind of grass seed did IWA use along Periwinkle Way to make it look so lush?

A. St. Augustine B. Fescue C. Rye D. Bluegrass E. A secret blend

PIGS SPOTTED ON PERIWINKLE

No, not actually pigs of the pork belly variety. IWA used foam rubber cylinders, known as pigs, to help in cleaning the new water main on Periwinkle Way.

As everyone has no doubt joyfully noticed, IWA's water main construction on Periwinkle Way is finally complete. It was a difficult job, involving work in a very congested area, both from the standpoint of traffic and vegetation. We managed to stay out of the way of traffic for the most part, and we tunneled under 29 trees to avoid damaging their root structure. However, once the pipe was installed, although it may have looked like we were finished, there were actually many steps left to be accomplished, one involving the pigs.

Once the pipe was installed, we had to clean it to remove construction debris, including a lot of sand and shell. The normal way of doing this is to just flush the pipe with water. However, with large diameter (12") pipes such as this one, it would take a large volume of water (over 3,000 gallons per minute!) and cause a flood at the outlet end, in the middle of the Casa Ybel/Periwinkle intersection. By inserting tight-fitting foam rubber pigs into the pipe, we were able to reduce the water volume and let the pigs act as swabs on the pipe walls, wiping them clean. After the pigging operation was complete, we did do a full-bore flush for a brief period late one night to ensure maximum cleanliness.

After the pipe was clean, we then applied pressure to it and checked for leaks. Basically, pressure was applied and locked-in. We then watched to be sure the pressure didn't fall, indicating a leak. Thankfully it passed this test the first time ... a testament to our contractor, Cabana Construction. Next, we added a healthy dose of Chlorine to the pipe and let it set for 24 hours, after which the Lee County Health Department took samples and conducted bacteriological testing. Again all samples passed the first time, indicating that our flushing and chlorination efforts had been successful.

At this point, we were permitted to place the pipe in service, and we connected it to our system at both ends. However, we had not yet switched any of our customer's service connections to the new main. Everyone was still receiving their water from the old pipe. Therefore, the next step was to dig up both the old and new pipes at each customer's service and switch them over to the new

pipe. At that point, we were able to abandon the old pipe in place.

As the final step, we had our contractor check the pipe route to remove any remaining construction debris and touch up any landscaping, driveways, etc. At this point, we were **FINALLY** finished. Whew!!!!

A LITTLE PAINT GOES A LONG WAY

With the exception of a couple of special cases, we have successfully finished the second phase of our backflow prevention program. Members building new construction have been required to install backflow prevention devices for the last several years. Commercial members installed the devices by last year. All multi-family members (condos) and single family residences with a known hazard (e.g.: a private well) installed the devices by early this year. We really appreciate the cooperation of all involved members! We realize the program represented an unexpected expense to those involved, but it was necessary both to comply with State regulations and to prevent contamination of our water system.

While these devices are necessary for the reasons mentioned above, it is an indisputable fact that they have not added to the beauty of our environment. Bluntly speaking, they are ugly! We have suggested before that a coat of green or flat black paint makes them look a whole lot less offensive, allowing them to blend in somewhat with their surroundings.

Besides improving the appearance of the devices, there is another very important reason to paint the devices. The piping to and from the de-

vices is PVC (plastic), which is a very good piping material in Florida. We use it for nearly all of our water mains. However, there is one problem with plastic pipe. When it is exposed to sunlight, it gets brittle and eventually cracks, causing a leak. Since our water mains are buried, the problem doesn't bother them. The piping around the backflow devices is another story. If it isn't painted or otherwise shielded from sunlight, we are afraid that our members are going to experience a lot of expensive (and messy!) water leaks in the not too distant future. So let's get out those paint brushes and beautify our Islands, while also preventing a future problem for ourselves at the same time!

ANSWERS TO QUIZ

1. C. The City is installing new sewers in many neighborhoods. IWA is trying to stay ahead of them in moving our water mains. We are also installing some new pipes for other reasons.
2. D. The diesel tank holds 8,000 gallons, which should last at least 5 days, since the generator uses around 70 gallons per hour at full load.
3. B. They read low 100% of the time (costing members less and resulting in lost revenue for IWA).
4. C. We used Rye grass, which germinates quickly to prevent erosion, but doesn't handle summer heat well. We used this type because of the upcoming City road project which will disturb the same areas again.

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