Abbeville dealing with 'trauma' to electrical system

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Issue leading to some outages in parts of Abbeville

In the couple of days that followed Hurricane Laura, the city of Abbeville had power fully restored.

Nearly a week after the storm, strains began to take a toll on the city's electrical system. It is an issue that is causing some areas of the city to see outages.

"We are seeing the trauma the electrical system suffered because of a hurricane," Mayor Mark Piazza said during Tuesday night's regular City Council meeting. "The system suffered a lot of unseen damage. The hotter it gets, the more load you put on these lines. Then, all of a sudden, all these fuses and transformers start heating up.

"It can sometimes take a few days before the damage is realized."

Issues with transformers at two separate substations is at the top of the damage list.

"We have two electrical transformers that are out of commission," Piazza said. "We had one before the storm, and one during the storm. The transformer at the Bypass substation is down. Fire came out of the top of it. It cannot be repaired."

The Bypass substation had two 5,000 KVA transformers. With one of those down, the other cannot alone carry the load.

"You cannot run the entire Bypass on one," Piazza said.

During Tuesday's meeting, Piazza proposed the purchase of a 10,000 KVA transformer for the Bypass substation.

"It will double the size," Piazza said. "If we do lose the other one, we can have 10,000 on one. It will carry the load, east and west, on the Bypass."

The city council voted unanimously to purchase the transformer, at the cost of \$125,000.

Another challenge of obtaining a transformer is the uniqueness of the city's system.

"It's not the same type of voltage that LUS operates on," Piazza said. "It's not same that Crowley or New Iberia uses. Why it's like that, I don't know. It's been that way for 50 years, but that's the voltages we have in our system. To find a transformer for our type of voltage is challenging. This particular transformer is coming from South Dakota.

"That is how far we had to go to find this one."

It is on its way to Abbeville, as quickly as possible.

"They are shipping it express delivery," Piazza said Tuesday night. "We are talking about eight days. We are paying an extra \$12,000 to expedite. It was going to be four to six weeks.

"I told the guy we need it here, ASAP."

Until that transformer arrives, the risk of outages remain.

"Remaining substations must carry more load than normal, which causes stress to many areas," Piazza said. "When the Bypass transformer went out, we had to switch the load to the Rodeo Road substation. When we did that, we had the Walmart area and the (Abbeville General) hospital on that substation. That started overheating, and we had to switch the load from Rodeo to the Gertrude Substation. Gertrude is already crippled because that's where the back-up transformer is. Everything involved in the electrical system is heating up because of the hot temperatures and the excess load it has to carry.

"Until we get this new transformer at the Bypass substation, we are going to continue to have an overloaded system. We are going to continue to have outages."

Abbeville General has been operating on generator power.

"We had to ask the hospital to run generator power to take load off the Gertrude Substation," Piazza said.

Differences in the voltage means load cannot be switched among all of the city's substations. The Bypass, Rodeo and Gertrude substations have a different voltage from the Louisiana, Riviana and Felicity substations.

"We can't transfer the load because of different voltages," Piazza explained. "That's why our back-up transformer is dual voltage. It can be used at either place, but it can't be used in both places at the same time.

"It's a complex system, and I know this situation is frustrating."

Piazza said he will bring another transformer purchase for council approval at the meeting on Sept. 15. It will be for the Gertrude substation, which is currently using the back-up transformer.

"I will be coming back in two weeks to purchase another one," Piazza said. "We can't leave the spare in place, and not have a spare. They couldn't expedite two transformers."

Again, Piazza said the entire process is going as quickly as it possibly can.

"I know this is frustrating for everyone," Piazza said. "This is the situation we have. If there were any other way we could be doing this, we would be doing it. It's a delicate system, and it suffered trauma.

"It's on a Band-Aid."