NBU racing to keep up with growth

Utility's investment focus centers on infrastructure

By Lindsey Carnett The Herald-Zeitung 11 hrs ago



New Braunfels Utilities CEO Ian Taylor presented the State of NBU presentation to a crowd of about 250 at the Greater New Braunfels Economic Development Foundation Tuesday afternoon.

Lindsey Carnett

NBU has launched the largest capital investment in its history, \$500 million over the next five years, as the utility deals with the area's rapid growth.

NBU Chief Executive Officer Ian Taylor broke down how the city's growth is affecting its need for infrastructure, and how NBU is striving to get ahead of the booming population in a Tuesday afternoon presentation at the quarterly Greater New Braunfels Economic Development Foundation meeting.

During the presentation titled the "State of NBU," much of what Taylor talked about was future plans for NBU and for the city of New Braunfels.

"NBU is currently undergoing what we think is the largest capital investment in our city's history over the next five years," said Tim Zipp, 2019 chair of the GNBEDF. "Somewhere in the neighborhood of \$500 million, which is an incredible investment in this community."

New Braunfels growth was the opening topic for Taylor.

"There's really (several) key things (NBU) has been affected by in the way of growth," Taylor said. "Number one is infrastructure. The rate at which we're growing, we're consuming capacity in our water, sewer and electric systems at twice the rate we normally do."

Over half of the 40-minute presentation focused on infrastructure, with Taylor hitting on how NBU is preparing to provide more water, wastewater and electric services to the area in upcoming years.

Water

Taylor started with NBU's plans for water infrastructure, which he said saw some problems over the past year, especially in the summer when demand was high.

"(The pumps) are supposed to be big enough (to) fill water towers. Well what we're experiencing right now is that those pumps are not keeping up," Taylor said.

This can cause there to be a dip in total water supply, and it is a problem if supply and demand get too close together.

This past summer, NBU had a serious scare on July 3, when it saw a 2 million gallon per day deficit. Due to several operational changes, Taylor said the issue was resolved but revealed a need for more infrastructure — and soon.

"That's when I became aware of just how severe this problem was," Taylor said.

The biggest area of concern is around Avery Park, Taylor said. NBU has long-term projects planned and short-term projects to help alleviate this area, he said. The short-term fixes are set to come online in June, Taylor said.

"Then next summer, 2020, we'll (build and install) a 30-inch pipeline," Taylor said. "This'll probably be our biggest pipeline in our time at NBU that we've built. It's going to go from I-35 all the way out to Avery Park which will be a significant fix for us."

In 2023, an additional pump station near Weltner Road is planned, Taylor said. This will be another long-term fix that will supply further relief.

While infrastructure is an issue, overall water availability is not, Taylor said.

"We've got plenty of water," Taylor said.

Taylor also touched on NBU's Aquifer Storage and Recovery (ASR) project, a water management strategy that would allow NBU to store water in the Brackish Edwards Aquifer for future use.

"If you're a water planner, you plan for a repeat of the drought of record," Taylor said. "(An ASR) allows you to take that water during times of plenty and store it underground ... it's kind of like our piggy bank underground."

The current proposed site for the ASR wells is directly by the New Braunfels Regional Airport, which is ideal because it means the land is protected and no one else will be able to tap the wells, Taylor said. "The next key step is we need changes in legislation so that we can operate this ASR project the way it needs to be operated," Taylor said. "We currently have House Bill 481 ... and just last week Senate Bill 520.

These bills would allow water to be injected into the brackish Edwards Aquifer, and are expected to pass, Taylor said.

More conservation is also on NBU's horizon as far as future water plans, Taylor said.

"Assumed in our water resources plan is that we're going to cut our water demand in which our gallons per capita per day, our GPCD, so that we're going to need 25 percent less water in 20 years," Taylor said. "It's certainly achievable."

Wastewater

Taylor said wastewater is also among the existing problems NBU is working to address while also planning ahead.

Three areas of concern exist. The Solms Lift Station to the southwest, Blieders Creek Lift Station to the northwest and North Kuehler Incerceptor stretching from the northeast to the southwest inside Loop 337.

Although sewage is built to flow mostly downhill, topography can occasionally be an issue, Taylor explained. A pump station moves wastewater up anytime it needs to get over a large hill so it can get to a treatment facility, he said.

"For those of you who know anything about sewer system design, we design those for wet weather events rather than for drought like a water system," Taylor said.

The pumps at the Solms Lift Station are getting close to capacity.

"We have new pumps planned for 2020 and we think that's going to be just fine. We don't think there's going to be any slowdown there — we just want to point that out," Taylor said.

The Blieders Creek Lift Station serves a huge population and both short-term solutions and long-term solutions are in the works right now, Taylor said.

"That entire lift station is going to be decommissioned in 2020 when the new Gruene Wastewater Plant comes ... but in the interim, we've got a lift station that's running at capacity right now, so what we're going to do is build a temporary above ground lift station basically," Taylor said.

Although the lift station in this area is fine, the piping is old and undersized, he said.

Piping for this area goes under or even through several major locations in town including Schlitterbahn, the Guadalupe and Comal Rivers, Wurstfest grounds and more, Taylor said.

"I mean can you imagine how hard it is replacing that pipe? The amount of easements we'd have to acquire? Do you know how much digging we're going to have to do and how this bridge is involved?" Taylor said.

A long-term solution is in place for the North Kuehler Interceptor, Taylor said.

A project is underway and a third of it is already designed. Plans would aim to have the project complete in 2021, he said. However, short-term solution is something NBU is still working on, he said.

"There's not a lot of easy temporary solutions on this," Taylor said. "I believe we can (find one) I hope to have an answer on that by the end of this week."

Electricity

The last topic of infrastructure for the presentation was on electricity, which Taylor said NBU is actually not facing any current problems for, but which it is still preparing for the future.

"This is the good kid," Taylor said, to chuckles from the audience. "Electric, no real

problems here, not much to talk about but I'll talk about it anyway."

Including a new substation at Weltner Road set to go online any day now, NBU currently has five slated future substations.

"The next one that will come online after that is in Veramendi," Taylor said. "Next one, if y'all are familiar with the Texas General Land office property, that'll be the next one to go. We own property already off of FM 2722, so when that is needed we've got the land that's ready to go, and then if the Vulcan Quarry happens ... we'd serve them as well."

According to the NBU presentation, the substations could go online anytime within the next five to 20 years.

Other topics Taylor touched on during the presentation included NBU's use of new technology, rates, reliability and energy portfolio.