Logan County Commissioners Work Session
October 21, 2025

Present: Mike Brownell, Jim Santomaso, Jim Yahn, Alan Samber, Mike Burri, Rick Cullip, Rob Quint, Debbie Unrein, Trae Miller, Ashley Munez, Karen Thornton, Madison Wrobley, David Weeks, Greg Brophy, Spencer Morrison, Leo Gorgens, Chris Hans, Logan Bell, Callie Jones, and Jennifer Crow.

Chairman Brownell called the meeting to order at 9:00 a.m.

APPROVE MINUTES FROM PREVIOUS SESSION - Commissioner Santomaso moved to approve the minutes of the October 14, 2025 Work Session. Commissioner Yahn seconded, and the motion carried 3-0.

REVISIONS TO THE WORK SESSION AGENDA – There were no revisions.

REVIEW OF BUSINESS MEETING AGENGA – There were no revisions.

PHILLIPS COUNTY VETERAN'S SERVICE OFFICER IGA – Alan Samber reported that Phillips County would like to maintain the status quo on the Veteran's Service Officer IGA for the time being. They are not ready to bring Sedgwick County into the agreement at this time.

DOLA WEBSITE AFFORDABLE HOUSING TOOL - Alan Samber looked at the DOLA website and used the affordable housing tool. The number of affordable housing units is pretty consistent throughout all of the northeast counties in the unincorporated areas. Our numbers match all of Sedgwick, Phillips and Yuma Counties. The calculator on their website indicates that every three-year cycle we would be adding 34 additional units. Our commitment would be twelve affordable housing units. That doesn't mean they have to be constructed and finished next year. They just have to have the building permits issued next year. The year 2026 will be the third and final year of the cycle, so the commitment is twelve affordable housing units that must have building permits issued. Based on Jared Davis's presentation, they plan to exceed that easily with the Cottonwoods Development. If for some reason, the commitment is not met, then we're not eligible for funding in the first year of the next three-year cycle. The County won't be penalized in any way. If the Board is okay with those numbers, Alan will finish commitment online. Commissioner Brownell will let Jared Davis know that Alan is working on the commitment. Davis needs to apply right away after Alan Samber finishes the commitment as the money goes quickly.

There was some discussion about whether duplex units were planned. Alan Samber will contact Davis to verify that there are no duplex units planned. Most jurisdictions have made commitments; there are not a lot of jurisdictions that have not done them.

BRIDGE GRANT UPDATE – Commissioner Yahn and Mike Burri met with Wayne Howard concerning the bridge grants. They went through several levels of narrowing down the bridges that are most critical in the area and narrowed the list down to six bridges. These are ranked the worst in the county. The smaller bridges don't make sense to go after funding because when you apply to CDOT for design build, it raises the cost of the bridge quite a bit.

Two of the bridges are near Fleming. Mike Burri took some pictures of those on County Road 91. They are in the lower range. The bridge on CR 26, the piers are starting to split. The bridge on CR 59, either needs to be closed or fixed. That bridge entrance is sharp; there are no railings, and heavy trucks go over it when they're hauling wheat. That bridge would have to be made longer to get it straightened out. That bridge was the one that was picked as the primary bridge for the grant application.

What they're going to do is look at county roads 26 and 59, develop a design and determine the costs and then see if it makes sense to go after grants on those two. A grant application can be submitted just for the design process, or for the entire process. Howard will break out what the design process will cost and what the estimated cost to build the bridge is. The county has to have money available in the budget for a match. If costs are too much, then the application will be submitted for the design and not construction costs. If the Board thinks that the bridge on CR 91 might be a better prospect than the bridge on CR 26, then we'll shift and have them look at those. The weight restrictions on these bridges are being exceeded by farmers all of the time. When you walk around underneath the bridges, everything seems to be structurally sound. They are probably rating the bridges by how they were built. Most of the time the bridges cross fairly large draws, and they are dry most of the time, but they do handle a lot of water. The Board agreed to have Wayne Howard determine what the costs would be for these bridges and determine the best bridges to submit grants applications on.

The meeting recessed at 9:22 a.m. and reconvened at 10:10 a.m.

BATTERY ENERGY STORAGE SYSTEMS - Leo Gorgens, Developer with NextEra Energy Resources introduced the members of the Next Era Energy Team: Chris Haas, Developer; Spencer Morrison, Environmental; David Weeks, Engineering Team; Ashley Munez, Fire Safety Team and Karen Thornton introduced herself on the Battery Storage Integration Team.

Mr. Gorgens presented a map of NextEra Energy Resources Battery Energy Storage Systems (BESS) across the country. There are over 50 BESS operating across the U.S. and Canada. They have been developing the projects over 10 years and have developed over 1/5 of all of the battery sites in the U.S. Batteries serve a number of helpful functions. They help stabilize the grid and make it more efficient. The biggest one and the one that we are most familiar with is that they can soak up excess energy on the grid when there's an abundance of energy and then discharge it onto the grid when there is a need for energy.

An example is the wind turbines, when it's blowing an there is an excess of wind energy. Being able to store some of the energy and discharge it later when it isn't blowing as hard is extremely helpful for wind projects. Colorado gets most of its power from coal and gas. If you think about coal and gas plants, especially coal, they like to stay running. It's very inefficient to ramp down and then ramp up the plant again. They want to keep power production pretty steady throughout the day. Electric demand fluctuates a lot throughout the day. There is a big spike in energy demand at 5-6 p.m., which then kind of falls off. The demand curve is fluctuating. Batteries can help there too, absorbing excess energy in high production periods and discharging it when the grid needs it there.

Another example is how solar works. With solar, you have the most solar energy produced at noon, but the energy demand is not that high at noon, when energy demand picks up around 5-6 p.m., that's when the sun is setting, when you're losing solar energy. Batteries can help to absorb all of the excess energy in the middle of the day, when it's not needed, and then discharge it for four hours from 5-9 p.m. when it’s needed the most. The most important thing that batteries can do on the grid is a resource balancing act.

The alternative, if you didn't have batteries, would be building excess generation and far more transmission lines to move power around, and all of that extra infrastructure comes at a cost. In the long run, batteries help run the grid more efficiently. Another benefit the batteries perform is in terms of the reliability. If you think about having a short outage for whatever reason, if you have a huge store of energy locally on your grid in the form of one of these batteries, you're able to ride through the outage. It provides a great deal of reliability to the grid, especially locally.

There are other benefits to batteries, some get more technical. So just on a high level, you know, some other

functions that they serve would be, for example, helping balance the grid. The demand for energy and supply always has to be in perfect balance. For example, if a large gas plant has an accident and trips offline, all of a sudden, the supply of electricity drops off drastically. The batteries can jump in and within seconds, match that energy and replace it to keep the grid very stable. In the long run, it increases reliability and efficiency.

There are benefits to the community such as local job creation during construction and operations, annual tax revenues might mean millions in tax revenue for counties, and landowner payments. The developer will often support local charity programs, schools, roads and community services.

Commissioner Yahn spoke on the need for another fire station for the county. He asked if that would be something that the developer has helped out with in other areas. Karen Thornton said that they do engage with the local fire departments and ensure that they have adequate training. Commissioner Yahn stated that there is a rural fire department that is looking for a fire station that is looking for a match to the current fire station in Sterling. Commissioner Brownell explained that there are four volunteer departments in the county and one full- time department in Sterling, which also provides all of our emergency medical support. The county funds EMS portion. Gorgen added that they have contributed funds for matching grants for volunteer fire departments for equipment needs, etc.

Karen Thornton described more about the battery storage system and what it looks like. Depending on the technology used, approximately 15 small cell modules are stacked within racks. About 15 modules go into the racks and about six racks are housed in each container. The design allows safe maintenance without entering the containers. Advanced thermal management systems maintain optimal temperature, voltage and frequency. Water is not used to cool the batteries, usually it is an HVAC system. If there is an increase in temperature, the onsite monitoring system will shut it down. Multiple safety systems include fire detection and automatic shutdown. The Energy management systems manage charging, discharging and system safety.

Ms. Thornton explained how the batteries fit into the grid system. They are connected to a full converter that converts from direct current to alternating current. The grid system uses alternating current. The inverters are then connected to the step-up transformers. These step up the voltage from the voltage of the site, the voltage of the grid system, depending on where they are in the grid system, there can be different voltages.

The battery storage systems have a smaller footprint than a solar or wind farm, usually using about 10 acres for every 800 megawatts for the system. Usually, the site is placed near substations that are already in place. Each one of the containers can provide energy for about 770 homes for four hours each day. The site will have fencing around it, and it will be gated so the site can only be accessed by authorized personnel. The battery storage systems are going to be built behind existing wind or solar sites and would share a lot of the existing infrastructure.

All codes and standards are adhered to, including the National Fire Protection Association 855, which is a specific requirement for battery storage systems. There is also UL 1973 and UL 9540A that all of the manufacturers go through. All manufacturers are required to have these certifications to make sure that they have the safest infrastructure on the property. UL 9540A is basically a thermal propagation test. It ensures that if there's an incident in one of the cells, it won't go from one cell to the next cell, or module to module.

Commissioner Yahn asked where most of the components are manufactured. Ms. Thornton said that it varies. There is a global supply chain. NextEra is always looking at what is the safest and the best technology for the period of time. There are a lot of domestic resource batteries that are in the pipeline. NextEra has a good relationship with all of their manufacturers. If something is happening in one country, they can switch to another country. Commissioner Yahn pointed out that there are missile sites in areas of Logan County, and the Air Force gets nervous about where these components are built. Ms. Thornton explained that they put the

batteries through cyber security testing.

Mr. Gorgens noted that a 100-megawatt battery project was just installed in Colorado Springs 10 miles from Peterson's Air Force Base and Fort Carson and also there are batteries physically on military installations on the east coast. They cleared the concern with the utility which in Colorado Springs is Colorado Springs Utility and he mentioned it because of the potential perceived security threats.

There is a 24/7 control center based in Florida that monitors every site. If something goes wrong, they will dispatch local technicians, or local first responders. Ashley Munez discussed training that is provided to local first responders. With the process, there will be lots of interaction with the fire departments. They will build an emergency action plan, provide hazard mitigation analysis and make sure that the fire department understands what their role is if there is ever an incident. In this case, maintaining a safe perimeter and ensuring that the fire doesn't turn into a brush fire, as the containers will deal with whatever the issue by themselves and self-terminate the fire.

Commissioner Santomaso asked what does happen if a fire occurs. Ms. Munez answered that the battery management system would isolate the container. The UL 9540 alpha test is a test that's set up. It's what is called the thermal runaway. It's a large-scale fire test. The containers are spaced at the site where a cell is forced to go into its worst-case scenario. With that, we see what the response is without any interaction. Relying on just the spacing and how the container manages, the fire will not propagate to additional containers. The container will self-terminate the fire. You don't need to spray water on the additional container. We don't want you to spray water, unless, for some reason, there was an incident where a spark got into a brush fire. Batteries are designed that they don't really have light weight embers that are associated with the fire. First responders are to ensure a safe perimeter. The NextEra O and M crew will be there with the first responders and will have correct PPE to be able to engage the container and make sure it's safe.

Explosion hazards are very real thing. NFPA 68 and 69 are also part of the Fire Code standards. They're part of the NFPA 855 that is deflagration control. They have to move air through the container to ensure that there is a 25% lower explosive limit for the container itself. That's done with HVAC, which has a 26-hour battery that is part of the system itself, or they have the deflagration panels on the top which are designed to deflect up and outwards at a rate lower than the doors would. If there was a person doing maintenance or a first responder or anything standing outside, that energy would be forced up and outwards and not towards the people. The likelihood of a spark sparking a prairie fire is relatively low, there are no ash creating components. With current technologies, after a fire incident, 97% of the metals in a battery can be recycled. After 30 years, as the life of the project progresses, they hope that this number continues to get better.

Mr. Gorgens recapped the discussion with the benefits of the battery storage systems provided for the local grid and for the local community that hosts the project. There are a lot of safety standards and codes within the industry that continue to evolve over time and continue to get better that ensure that these systems are safe. NextEra has provided Logan County with a draft ordinance which was drafted by using several other county ordinances and regulations from counties that they have worked with. They also tried to adapt them to Logan County's particular line code. Several of those counties are within Colorado. It was done with the intention that this might be a good starting point for Logan County.

Commissioner Yahn asked how many jobs the facility might bring to the area. Gorgens said in the long term it will be one or two due to the automated systems. During construction the number of jobs is significant.

Commissioner Santomaso asked if Gorgens has been in personal contact with the military on this project. Gorgens answered that he has not.

Commissioner Brownell asked what size the battery storage project would be. Gorgens said that the battery storage projects pair really well with wind and solar projects, however there are stand-alone battery storage projects.

Gorgens offered interested stakeholders, the Planning Commission, Commissioners, etc., the opportunity to come see one of their sites. They have an operating site in Colorado Springs, near Falcon, or they have two operating sites in Pueblo County. Former Yuma County Commissioner Trent Bushner and several Yuma County Planning Commission members went down for a tour last summer prior to their hearing, to see it, hear it, and look at the setting and ask questions. They have an approved battery storage facility permit in Cheyenne County and offered those Commissioners and Planning Commission and staff the opportunity to go see that facility. Applications are also pending in Kit Carson and Morgan Counties, so the offer would stand for those Commissioners to see the battery storage facilities.

Commissioner Yahn asked if they had any idea what tax revenues and benefits are allowed by the State for the county. Gorgens stated that the facilities are State assessed properties. The State works with the County Assessor to provide the property tax value. NextEra completes a worksheet for the State, but they also work with the county staff to confirm what the values are. The State takes their cut and then the rest gets passed to the county. It is similar to wind and solar. NextEra permitted a 200-megawatt twenty-five-year life project in Yuma County. Annual taxes came out to around $700,000-$800,000 a year.

Commissioner Yahn asked if the power from the battery storage facility is being used almost all of the time or is it something that just sits there full. It is typically one cycle a day, it charges during the day and discharges at night, based on whatever the update crew's needs are that day.

The Board thanked the NextEra Energy team for their presentation.

There being no further business to come before the Board, the meeting adjourned at 10:55 a.m.