

LINN COUNTY PLANNING & ZONING COMMISSION

MINUTES

Thursday, July 28, 2022

The Linn County Planning and Zoning Commission meeting was called to order at 6:12 p.m. by Chair, Tina DuBois. The meeting was held at the Palo Community Center, 2800 Hollenbeck Rd, Palo, IA.

QUORUM DETERMINED:

PRESENT:	Tina DuBois, Chair	2025
	Brock Grenis, Vice-Chair	2023
	Allen Wagner	2024
	Curt Eilers	2022
	Griffin Kuntz	2026
	George Maxwell	2025
	Diane Brecht	2025

ABSENT:

STAFF: Charlie Nichols, Director
Jessie Black, Recording Secretary

See attendance sheet for community sign in.

REGULAR AGENDA

JR22-0004	Rezoning – AG/CNR to RE-AG/RE-CNR	Duane Arnold Solar LLC
------------------	--	-------------------------------

Charlie Nichols presented the Staff Report.

The applicant is proposing to rezone approximately 1,131 acres from the Agricultural (AG) and Critical Natural Resource (CNR) zoning districts to Agricultural and Critical Natural Resource with a Renewable Energy Overlay (RE-AG and RE-CNR) zoning districts. The subject property is located within areas designated as AA (Agricultural Area) and CNRA (Critical Natural Resource Area) on the Linn County Rural Land Use Map. There are two separate cases running concurrently with this proposal: JR22-0004 (Duane Arnold Solar Phase I) and JR22-0005 (Duane Arnold Solar Phase II). JR22-0004 proposes the rezoning of 316 acres and the construction of a 50 MW solar generating facility. JR22-0005 proposes the rezoning of 815 acres and the construction of a 150 MW solar generating facility and a 75 MW battery energy storage system. Phase I and Phase II together comprise a proposed 200 MW utility-scale solar project with a 75 MW battery energy storage system.

The proposal must meet the standards for approval per Article IV, Section 107-69, and Article IV of the Linn County Unified Development Code (UDC), except for adequate public facilities/minimum levels of service requirements per Article IV, Section 107-69, § (1) (a). A Land Evaluation and Site Assessment (LESA) analysis is not required per Article IV, Section 107-70, § (1)(i) of the UDC. The proposal must meet the standards for approval in Article VI, Section 107-117, § (h) for utility-scale solar installations.

Staff recommends approval subject to the conditions of the staff report.

Kuntz asked about the long-term viability of the agricultural land that will be used to support the solar arrays. Nichols explained that the project would essentially “freeze” the land in time until decommissioning, when the land is intended to go back into agricultural production. Nichols said this would provide long-term benefits to the soil.

DuBois asked if the requirements that were applied to this case would transfer to Interstate Power and Light Company (Alliant) once they owned the solar farm. Nichols said yes, Alliant would operate under the same set of conditions.

Kuntz asked if Alliant has agreed to the requirements that will be imposed. Nichols said there has not been an official agreement from Alliant, but they have made a statement of intent to purchase the property and they would be bound by imposed requirements.

Brecht asked for clarification on setbacks for non-participating surrounding property owners. Nichols said there are two requirements: a base setback of 50 ft. from the property line and a 300 ft. setback from a residence. Nichols also stated that there is a separate 50 ft. setback requirement within areas with Critical Natural Resource zoning, from all delineated natural resources as defined in the Unified Development Code.

Applicant Presentation:

Kimberly Dickey, Project Director with NextEra Energy (Duane Arnold Solar & Duane Arnold Solar II), shared a PowerPoint presentation on the proposal. Topics included: design features, ownership, interested participating landowners, startup dates, economic benefits, decommissioning, etc.

Michael George, Battery Storage Engineer with NextEra Energy, summarized the scope of the battery energy storage component of the project. George emphasized that safety is NextEra’s top priority.

Kuntz asked if redundant internet connections were proposed, in order to avoid any communication loss to the Battery Energy Storage System (BESS) in the event a fiber was cut. George stated that each site controller is equipped with protections that would shut down the BESS if there are any communication timeouts.

Kuntz asked if the proposal included an on-site staff person and what safety protocol would be followed if said staff person were to get shocked. George said there are several safety precautions put in place to prevent such an event from happening. He added that there would be no staff person on site during normal operation, but there would be dedicated safety teams on site during construction. The proposal includes an emergency response plan that reflects proper teams to contact and deploy in the event of an emergency.

Kuntz asked if George anticipates a material drop in capacity when temperatures get low. George said the containers will be designed to handle ambient conditions, anywhere from -40°C to 55°C. Inside of each battery container will be an HVAC system that can be used to keep batteries warm/cold. George said the ambient conditions should not have much of an effect on efficiency.

DuBois asked George why the proposal included lithium-ion batteries, rather than lithium iron phosphate. George said lithium iron phosphate is a type of lithium-ion battery, but the chemistry is slightly different. He confirmed that lithium iron phosphate batteries would be used for this project. DuBois asked when battery selection would be definitive. George said he would need to contact their supplier, but he imagined within the next 6-8 months.

Wagner asked if there was any concern for propagation between containers. George stated that it is unlikely a container would catch fire, but said he was confident the flames would not travel from container to container during such an event.

Michael McConnell, Senior Environmental Specialist for NextEra Energy, shared a PowerPoint presentation on the environmental benefits of the project, studies completed within the project area, photos of existing conditions vs. anticipated conditions, and vegetative management plan.

Kuntz asked what environmental impacts were incurred from decommissioning of the Duane Arnold Energy Center (DAEC). Dickey stated there is a defined nuclear exclusion zone that must be avoided during the construction of this project. NextEra Energy and DAEC have weekly meetings to discuss. McConnell added that the solar panels are outside of the fenced containment zone.

Dickey shared testimonials to the work that NextEra does within the community.

Questions from Commission members:

DuBois asked if NextEra knew how many acres of land were currently being used for energy, or ethanol production. Dickey said most participating landowners who are currently growing corn are on contract for ethanol, and same with those who are farming beans for export.

Brecht asked how NextEra justifies taking such high CSR rated farm ground out of agricultural production. Dickey explained the site selection process; citing that the average CSR rating of Phase I is 45, average CSR for Phase II is 58, average for both is 52. Dickey emphasized on the cost benefits to participating landowners, especially those with lower CSR ratings.

Brecht asked if NextEra had contacted surrounding, non-participating landowners, to discuss setbacks. She wondered if any consideration would be given to a setback greater than the proposed 300 ft. Dickey insisted the actual setbacks for some non-participating landowners is higher than 300 ft. Viewshed protection was mentioned as a priority of the petitioner. Dickey stated that the vegetative screening proposal is based on the viewshed analysis, completed by NextEra. Cedar River Garden Center has partnered with NextEra to provide trees for buffering.

Eilers asked if there were plans to develop beyond Phase I & II, to meet the same energy output that Duane Arnold Nuclear Power provided. Dickey said yes, the opportunity is there, and NextEra is actively looking at developing beyond the current scope.

Dubois called for a recess. The Commission recessed from 8:11 to 8:26 p.m.

Public Comments:

Nichols summarized comments that were submitted in writing via email prior to the meeting; concerns about local wildlife & vegetation, responsiveness to potential emergencies, new BESS technology, structural integrity, property values, and presence of PFAS in solar panels. Nichols also summarized comments from supporters of the project; support based on potential reduction of CO2 emission, increased tax revenue and local jobs, the need for additional electricity generation in the region, and comprehensive nature of the application.

Steve Myres, 3372 64th Street Dr, Lot 3, Palo, spoke in opposition of the proposal, expressing concerns about the potential hazards related to the Battery Energy Storage System (BESS). Myres argued that the developers do not understand the significance of the power stored in the batteries.

Laura Myres, 3372 64th Street Dr, Lot 3, Palo, spoke in opposition to the project. Myres had concerns about the structural integrity of the solar panels, specifically relating to the panels' ability to withstand sustained high winds, like those experienced in the August 2020 derecho. Myres said insurance does not cover flying debris damage and asked that the commission recommend the panels be built to Risk Category 3, rather than Category 1 to avoid such an event.

Don White, 602 Blue Heron Ct NE, Cedar Rapids, spoke in support of the project. White emphasized the importance of reducing carbon emissions and insisted this proposal would do just that. He also stated that the project would set a precedent and trigger other states to follow suit. White urged the commission to show their support for the participating landowners by recommending approval of the case.

Kelly Merta, 4194 Quail Ridge Rd, Center Point, spoke in opposition to the proposal. Concerns stated by Merta included the effects of harmful chemicals used in the solar panels (PFAS), size of the project and inconsistencies between the proposal and the Linn County Comprehensive Plan.

Sara Alden, 4155 Alta Vista Dr, Center Point, spoke in opposition. Her main concerns had to do with potential hazards related to the BESS. Alden insisted the Linn County Code does not have proper standards in place to permit these systems.

Sallie Buelow, 3394 64th St, Palo, spoke in opposition of the project. Buelow expressed concerns about the loss of rural character. Buelow does not believe the proposal aligns with the Linn County Comprehensive Plan.

Deb Yates, 2365 Young Rd, Palo, spoke in opposition of the proposal. Yates mentioned concerns of taking agricultural land out of production and the trickle affect it would have on industrial companies in the region. Yates, as a non-participating landowner, expressed disinterest in having any kind of vegetative screening on her property.

Mike Carberry, 2029 Friendship St, Iowa City, spoke in support of the proposal. Carberry compared agricultural-type farming to solar-farming, as proposed with this project. Carberry asserted solar farming much is more lucrative than conventional agricultural production.

Chip Davis, 1811 Covington Rd, Cedar Rapids, spoke in support of the project. Davis took a trip to the Point Beach Solar Energy Center in Two Rivers, WI last summer. Davis said the aesthetics of the solar farm were not unpleasant. He insisted that concerns of taking high CSR farmland out of production is moot.

Brian Mullenbach, 4004 High Woods Rd, Center Point, shared a prepared comment from Carolyn Peterson, a Chemical Engineer, and former Environmental Consultant. Comments were in opposition of the proposal. Peterson's main concerns were about the potential hazards of battery energy storage systems. Peterson wondered if there was any kind of evacuation plan included in the proposal.

Elliott Meyer, 106 West Harrison St, Edgewood, spoke in support of the solar project. Meyer insisted the proposal would provide jobs and clean energy well into the future.

David Osterberg, 318 2nd Ave, Mt. Vernon, spoke in support of the project. Osterberg argued against previously stated concerns; insisting there will be no reduction in property values. Osterberg compared the impact to property values of the former nuclear power plant to the proposed solar project.

Doug Hanover, 308 Clinton St, Palo, spoke in opposition of the proposal. Hanover is a member of the Palo Planning & Zoning Commission, former member of Palo City Council. Hanover expressed concern for the declining interest in purchasing property in Palo, implying the loss of interest is related to the proposed solar project.

Beth Dunkel, 3801 Williams Lake Rd, Center Point, spoke in opposition. Most of Dunkel's concerns revolved around lack of emergency response. Dunkel asked for further clarification on the proposed setback requirement of 300 ft.

Swati Dandekar, 2731 28th Ave, Marion, spoke on behalf of Bright Future Iowa, in support of the proposal, stating that it would provide and support local jobs. She also spoke in support of the participating landowners.

Pam Mackey Taylor, 2200 S 31st St, Marion, spoke in support of the project. Taylor's main reasons for being supportive include: infrastructure already being in place, several participating landowners, and renewable energy lacks the risk of dangerous emissions.

Bill Gerhard, 5134 Rapid Creek Rd, Iowa City, spoke in support. In agreeance with previous comments, Gerhard stated the solar project will be helpful for the environment, and it will create a lot of jobs.

Danny Hemminger, 6219 Richwood Meadows Ln, spoke in support of the proposal. Hemminger represents Laborers Local 43 and said this project would provide several jobs during the construction phase.

Richard Pruisman, 1978 1st Ave, Palo, spoke in support of the project.

Laura Robinson, 2094 Linn Delaware Rd, Coggon, spoke in opposition to the proposal. Robinson's concerns were directed toward environmental impacts of the project, general distrust in local government and NextEra, and the decommissioning plan.

Tom Robinson, 2094 Linn Delaware Rd, Coggon, also spoke in opposition. Robinson reiterated the concerns stated by Laura Robinson.

John Fasselius, 3100 3rd St, Marion, spoke in support of the project. Fasselius supports the idea of landowners having the authority to do what they wish with their own property, to participate or not.

Junior Luensman, 4100 Woodridge Dr, Cedar Rapids, spoke in support of the proposal. Luensman said the applicant has addressed all concerns expressed by the public. In agreement with previous comments, Luensman supports landowner autonomy.

Fred Hubler, 9422 Deer Ridge Dr, Cedar Rapids, spoke in opposition. Hubler expressed concerns for the impact this project will have on consumers, arguing that increased rates are inevitable if the project is approved.

Eloise Dennis, 3693 Lewis Bottoms Rd, Shellsburg, spoke in opposition. Dennis insisted the rezoning case is an attempt to circumvent policies that have been in place for years.

Scott Roland, 2935 Cedar Ridge Dr, Cedar Rapids, spoke in support of the project. Roland stated the risk of fire is extremely low. He said that climate change is moving at a speed we cannot keep up with, which is why we need to focus on becoming more carbon neutral.

Doug Neumann, 501 1st Street, Cedar Rapids, spoke in support. Neumann represents the Economic Alliance. He stated the proposal aligns with many regional economic development goals and meets the standards for approval for rezonings. Neumann said many businesses are transitioning to renewable energy, and this is no different.

Nichols read a comment submitted via email, from John Krecik, 351 Lawndale Dr, Cedar Rapids, in support of the project, stating that the project meets all rezoning standards for approval.

Nichols read another written comment from Wayne Buelow, 4646 Yates Rd, Palo, in opposition. Buelow considers the utility-scale solar proposal a nuisance and insists it does not fit with the rural character of property. Buelow also said the project will decrease property values.

Nichols read a written comment from Tim Kadera, 883 14th St, Cedar Rapids, in opposition of the project. Kadera presumed the motivation for the project is profit, and nothing more. He also had concerns regarding the potential impact on wildlife within the project area.

Paula Robinson, 1127 Linn Delaware Rd, spoke in opposition. Robinson asked where the topsoil would be stored during the life of the project. She also wondered who would be responsible for the maintenance of said topsoil.

Nancy Patrilla, 3796 Alice Rd, Toddville, had several questions for staff and the applicant; what affect to the panels have on ambient temperature? How much money will this project save consumers in energy costs? What kind of timeline would be applied to road repairs? How big will vegetative screening be when planted? How much of the power generated from this project will be used to power Linn County residents? What kind of incentives are involved for NextEra? How could the project already meet Comprehensive Goals if it has not been started yet? Patrilla stated there are several questions that still need to be answered before the Commission can make an informed recommendation.

Denise Krejci, 4721 Lone Tree Rd, Palo, spoke in opposition to the project. Krejci expressed concerns about the proposal's impact to rural character.

Renee Potts, 3370 McGowan Blvd, Marion, spoke in support. Potts said that her family quit farming after her mother became ill, but because of this project, Potts' family will now be able to keep their land.

Steve Mason, 6547 Benton Linn Rd, Palo, spoke in opposition to the proposal. Mason wondered who would be responsible for decommissioning costs.

Staff Addresses Public Comment and Questions:

Who should Palo Fire Department contact if NextEra does not reach out to them to discuss their involvement in the project?

- Nichols said prior to construction, an emergency plan needs to be developed with the Palo Fire Department. Nichols suggested the Palo Fire Department reach out to the Linn County Emergency Management Agency to discuss emergency preparedness.

Clarify 300 ft. setback?

- Nichols said the 300 ft. setback from occupied, non-participating residences, is from a panel to the closest edge of a dwelling, not the property or fence line.

Do the panels have any effect on ambient temperature?

- Nichols said the panels should not have any effect on ambient temperature, but suggested the commission pose the same question to the applicant for confirmation.

How much will this save Linn County residents in energy costs?

- Nichols said energy cost savings are not included as a part of the original application.

How can the Comprehensive Plan goals be met if the project has not occurred yet?

- Nichols explained that all zoning cases are evaluated for conformance to the Comprehensive Plan. He said the analysis is hypothetical and performed as if the project were already operational.

What is the timeline for roads being repaired if they are damaged during construction?

- Nichols stated the timeline would coincide with current construction seasons. If the repair could not be managed during the same construction season, it would be completed the following. Nichols does not anticipate the roads be damaged to the point of being impassable.

NextEra Addresses Public Comment:

Do the panels have any effect on ambient temperature?

- Dickey confirmed Nichols' previous answer; there is no effect on ambient temperature from the solar panels. Dickey explained there may be an increase in localized temperature from the ground to the height of the solar panel, but the heat dissipates once it gets to the panel. Dickey referred to this as "heat island effect". NextEra's Environmental Specialist, Michael McConnell, stated that plantings under panels will help dissipate heat as well.

Do individual BESS units have fire suppression system?

- Michael George, Battery Storage Engineer, stated that fire suppression is handled through thermal runaway propagation prevention. Some modules do not propagate thermally, so an outside suppression system is not required. In instances where there is thermal runaway propagation, an outside suppression system is required. George stated that UL dictates requirements surrounding fire suppression.

Will the solar panels contain PFAS?

- Dickey explained that newly manufactured solar panels do not typically contain PFAS, but added that if there are any PFAS, they would be encapsulated inside the panel construction itself. Dickey stated that the exposure pathway is most important when considering hazards of PFAS, specifically ingestion. Dickey referred to several everyday products that also contain PFAS. Safety Data Sheets have already been provided to Linn County, but Dickey explained that she would be happy to offer copies to other interested parties, as well.

How would you address toxic gases in the event of a BESS fire?

- George prefaced the answer by stating that safety is NextEra's main concern. They've invested a substantial amount of time, money, and resources into the safety of their proposal, including the recommendations of expert third parties. George introduced Paul Hayes, American Fire Technologies, to the commission. Hayes said there has never been an injury to a firefighter associated with toxic chemicals. Most important issues are fire and explosion. Hayes explained

the best course of action in the event of a fire is to let it burn to keep emergency responders safe. Hayes stated that toxic chemicals can exist but will likely be burned off by the fire. Hayes said there is nothing indicating that a hazardous amount of toxic chemicals are released into the atmosphere during a fire. The minimum approach distance of 50-75 ft. is monitored during emergency events.

Would the solar panels be retrofit to meet Category 3 risk standards if code is updated to require this?

- Dickey said no, the proposal is not located in a hurricane prone area that would require Category 3 standards. The current panels are rated for Category 1, capable of handling wind loads of 99-106 mph, in accordance with Linn County Building Code requirements.

What will response requirements be in the event of a natural disaster, fire, explosion, etc.?

- Dickey explained that Interstate Power & Light Company (Alliant) and NextEra have committed to taking care of damage associated with adjacent properties and a response plan within 72 hours.
- Justin Foss, Alliant Energy, stated that Alliant would work with insurance companies to rectify any property damage reports; triage the area, confirm the safety of residents, and create a plan of action from there.

Where will disturbed topsoil be saved for the life of the project and who is responsible?

- Rafael Moren, EPC, stated that topsoil will be stored on the project site, then re-distributed at the time of decommissioning.

How large will vegetative screening trees be at the time of planting?

- Dickey explained that screening is voluntary, landowners have the choice to participate or not. Susan Opperman, Environmental Scientist and consultant for NextEra, said that Cedar River Garden Center has partnered with NextEra to source all of the trees used for on and off-site screening. The size of trees will be dependent upon what is available. Susan explained that current plan includes using 5–7-gallon saplings that are approximately 5-6 ft. tall at the time of planting. Native tree species will be used, most commonly White Pine, with an average growth rate of 24 inches per year.

How much of the power generated will benefit Linn County?

- Justin Foss, Alliant Energy, said that this power will benefit Linn County and customers in far regions of the state, as well.

What kind of incentives are involved with this proposal, county, state, federal?

- Dickey said she is not aware of any county or state incentives, but the project does qualify for federal investment tax credits. She said the tax credits transfer with ownership; therefore, Alliant will receive related incentives and transfer them to their customers.

How does the LLC work with liability? Who is responsible for decommissioning if owner goes out of business?

- Mark Lennox, NextEra, stated the LLC covers all obligations required by the project. The LLC owner must submit a bond, specifically for decommissioning. This bond is updated and reviewed annually. Lennox said the full cost of decommissioning gets covered by this bond. Dickey added that Alliant will post bond if they are the owner. Dickey and Lennox confirmed county residents will not be responsible for decommissioning costs.

Will this project decrease energy costs for Linn County residents?

- Foss explained the project will reduce what costs would have been in the future. He said there are two costs; cost of asset and cost of fuel to burn asset. This is renewable energy, which means there will no longer be a cost for fuel, only the asset.

What does the relationship between Palo Fire Department and Duane Arnold Energy Center look like historically?

- Dickey stated that Duane Arnold Energy Center has a 28E agreement in place with the Palo Fire District, making Palo the first responder in the rare event of an emergency. Dickey said this proposal will likely have a similar agreement. NextEra will provide training as needed. Dickey said there will be in-person training so that orientation can be established with equipment in front of them.

What type of fencing will be used and where?

- Dickey said the perimeter of the project will be lined with agricultural-style fencing, or hog panels. Posts will be made of steel, fencing itself could be chain link or agricultural fencing panels. The substation will have chain link topped with barb wire, as required by code. Dickey said fence panel openings will be 6" wide to allow for wildlife to safely pass through.

How many times were emergency responders called out to Duane Arnold Energy Center? How would this proposal compare to the existing agreement in place?

- Dickey stated that she is not able to answer that question but offered to look further into and provide Nichols with additional information.
- Justin Foss, Alliant, said they have strong relationships with first responders at all of their locations. Alliant provides training once or twice a year for each location. Foss explained that Alliant would work with Palo Fire Department and other surrounding fire departments to establish a relationship and maintain an emergency response plan.

Questions from the Commission:

Kuntz asked if piles would be fully extracted or cut off at ground level at the time of decommissioning? Dickey said fully extracted.

Kuntz also asked if there was some type of corn suitability rating requirement relating to primary use. Nichols stated that is no longer in effect and has not been for several years, however, it is part of the LESA scoring system. Kuntz suggested a code amendment to include consideration of a property's corn suitability rating during the review process, to avoid further discussion and conflict on this topic.

Commission Deliberation:

Brecht said she would like more information on an emergency response plan before making a recommendation.

Eilers said that an emergency response plan is not something the Commission should govern.

Grenis agreed.

Motion by Eilers to recommend approval of case JR22-0004, subject to the conditions of the staff report. Second by Wagner.

Wagner	Aye
Eilers	Aye
DuBois	Aye
Grenis	Aye
Maxwell	Nay
Brecht	Nay
Kuntz	Nay

Motion by Grenis to recommend approval of case JR22-0005, subject to the conditions of the staff report. Second by Eilers.

Eilers	Aye
DuBois	Aye
Maxwell	Nay
Kuntz	Nay
Grenis	Aye
Brecht	Nay
Wagner	Aye

OTHER BUSINESS

COMMISSION COMMENTS

Eilers suggested mentioning something to the Supervisors about potential future rezoning restrictions based on corn suitability rating.

STAFF COMMENTS

ADJOURNMENT

The meeting was adjourned at 11:28 p.m.

Respectfully submitted,

Tina Dubois, Chair

Jessie Black, Recording Secretary