



WOODBURY COUNTY ZONING COMMISSION

Monday, November 27, 2023 at 5:00 PM

The Zoning Commission will hold a public meeting on **Monday, November 27, 2023 at 5:00 PM** in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. Please use the 7th St. entrance. Public access to the conversation of the meeting will also be made available during the meeting by telephone. Persons wanting to participate in the public meeting and public hearings on the agenda may attend in person or call: **(712) 454-1133** and enter the **Conference ID: 638 086 537#** during the meeting to listen or comment. It is recommended to attend in person as there is the possibility for technical difficulties with phone and computer systems.

AGENDA	
1	CALL TO ORDER
2	ROLL CALL
3	PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA
4	APPROVAL OF MINUTES: 10/23/23
5	ITEM(S) OF BUSINESS
»	PUBLIC HEARING: SOLAR ENERGY - UTILITY-SCALE SOLAR SYSTEMS – CONSIDERATION OF SOLAR ORDINANCES FOR RECOMMENDATION(S) TO THE BOARD OF SUPERVISORS - SUMMARY OF PROPOSED UTILITY-SCALE SOLAR ENERGY SYSTEMS ZONING ORDINANCE AMENDMENT: A proposal to amend the Woodbury County Zoning Ordinance to include provisions for the permitting of utility-scale solar energy systems in the unincorporated areas of Woodbury County in the General Industrial (GI), Limited Industrial (LI), and Agricultural Preservation (AP) Zoning Districts. In addition, the concept of a utility-scale energy systems overlay district will be considered. The proposed regulations provide uniform and comprehensive standards for the installation and use of Utility-Scale Solar Energy Systems (US-SES) including and not limited to agrisolar and community solar systems. US-SES may include, solar panels, solar support structure, inverter/transformers, energy storage technologies, wiring, and other equipment necessary for the generation, storage and delivery of electricity. The intent of these regulations is to protect the public health, safety, and community welfare while allowing development of utility-scale solar energy resources for utility, commercial, and industrial purposes.
6	PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA
7	COMMISSIONER COMMENT OR INQUIRY
8	STAFF UPDATE
9	ADJOURN

Minutes - Woodbury County Zoning Commission Meeting – October 23, 2023

The Zoning Commission (ZC) meeting convened on Monday, 23rd of September, at 5:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. The meeting was also made available via teleconference.

ZC Members Present: Chris Zellmer Zant, Corey Meister, Jeff O'Tool, Barb Parker
County Staff Present: Dan Priestley, Dawn Norton
Public Present: Leo Jochum, Bev Jochum, Dan Bittinger, Ann Johnston, Daniel Segura, Elizabeth Widman, Emily Segura, Bob Fritzmeier, Roger & Gwen Burnett, Elizabeth Cindy Haase, Russell Petersen, Hope Lynam
Telephone: Chad Swanger

For specific content of this meeting, refer to the recorded video on the Woodbury County Zoning Commission YouTube channel: <https://www.youtube.com/watch?v=qNpK3atf1k0>

Call to Order

Chair Chris Zant formally called the meeting to order at 5:08 PM. Tom Bride was absent.

Public Comment on Matters Not on the Agenda

None

Approval of Previous Meeting Minutes – September 25, 2023 and October 16, 2023

O'Tool motioned. Second: Meister. Motion carried: 4-0.

Public Hearing: Back Acre Estates, Second Filing, Minor Subdivision Proposal on Parcel #884702200009

Priestley read the preliminary report and staff recommendation into the record. Chad Swanger, Trustee Terry V. Swanger Trust has filed for a one (1) lot minor subdivision on the property identified as Parcel #884702200009. This subdivision is being completed to separate the house location from the abutting ground. This proposal has been properly noticed in the Sioux City Journal legal section on October 10, 2023. The neighbors within 1000 FT have been duly notified via an October 6, 2023 letter about the October 23, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. This property is located in the Agricultural Preservation (AP) Zoning District and is NOT located in the Special Flood Hazard Area (SFHA). The City of Sioux City have accepted and approved the file plat with the approval of Sioux City council resolution No. 2023-0962. Staff recommends that a pavement agreement be signed with Woodbury County as a condition of approval of this final plat. Based on the information received and requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Owner has signed a pavement agreement which will be recorded with the final plat. O'Tool motioned to close public hearing. Second: Meister. Motion carried: 4-0. Motion to recommend acceptance and approval to Board of Supervisors by Meister. Second: Parker. Carried: 4-0. Item will be presented to the Board of Supervisors on October 31, 2023.

Public Hearing: Grays First Addition, Minor Subdivision Proposal on Parcel #884209200009

Priestley read the preliminary report and staff recommendation into the record. Marlis A. Gray, has filed for a one (1) lot minor subdivision on the property identified as Parcel #884209200009. This subdivision is being completed to separate the house location from the abutting ground. This proposal has been properly noticed in the Sioux City Journal legal section on October 10, 2023. The neighbors within 1000 FT have been duly notified via a October 6, 2023 letter about the October 23, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. However, there is a rounding error on the plat that must be corrected prior to recording. Priestley confirmed that the rounding error has been corrected and shared with the County Engineer who concurred. This property is located in the Agricultural Preservation (AP) Zoning District and is NOT located in the special Flood Hazard Area (SFHA). Exterritorial review is not required by a city as the property is further than two (2) miles from the closest incorporated jurisdiction. Based on the information received and the requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Motion to close public hearing: Meister. Second: O'Tool. Carried: 4-0. Parker inquired about a pavement agreement. Priestley indicated that pavement agreements are required when referenced/requested by the County Engineer. Zant asked about the well and septic location and Priestley indicated that the well and septic were on the lot. Motion to recommend acceptance and approval to the Board of Supervisors by Meister. Second: Parker. Carried: 4-0.

Public Hearing: Solar Energy – Utility-Scale Solar Systems – Consideration of Solar Ordinances for Recommendations(s) to the Board of Supervisors

Priestley summarized the purpose of the public hearing. The Woodbury County Zoning Commission has been directed by the Board of Supervisors on August 8, 2023 to establish/examine a new ordinance as it relates to utility-scale solar systems. The purpose of the public hearing is to receive comments and put together a proposal as a possible ordinance or amendments for

solar energy systems not limited to utility-scale systems, agrisolar or agrivoltaics, and community solar systems, together with the Commission addressing the permitting process for such systems in industrial and/or agricultural areas. The Zoning Commission held their first public hearing at the Moville Area Community Center on September 11, 2023. The second was held in the basement of the Woodbury County Courthouse on September 25, 2023. Both public hearings included constituents who offered comments both in support and opposition to the expansion of utility-scale solar in the Agricultural Preservation (AP) Zoning District. Audio of meetings may be accessed for review by visiting the Woodbury County Zoning Commission "Committee" page on the Woodbury County website at: www.woodburycountyiowa.gov. The Zoning Commission conducted a work session on October 16, 2023 to discuss the considerations for an ordinance. The audio for this meeting may be obtained by using the following link: <https://www.youtube.com/watch?v=1JAj6Xh3cSU> or <https://tinyurl.com/Zoning101623>

Emily Segura (Sioux City) addressed the ZC about the impact of utility-scale solar on area farmland. She discussed the importance of taking care of the land and questioned the disposal and the economics of sending the panels to the dump. Segura recommended for the ZC to read the article "The Dark Side of Solar Power" by Atalay Atas, Serasu Duran, and Luk N. Van Wassenhove from the Harvard Business Review which discusses a number of topics including the high cost of solar trash and disposal. She offered concerns about the emittance of toxic waste from the decommissioned panels.

Ann Johnston (Salix) addressed the ZC with concerns about slave labor groups in foreign countries such as the Uyghurs in China who are part of the supply chains that make up 95% of the solar panels worldwide. She referenced that much emphasis has been placed on Scott and Linn Counties but not enough on the western counties in Iowa. Johnston indicated that Sioux County is under a moratorium from solar renewables.

Elizabeth Widman (Sergeant Bluff) addressed the ZC indicating that two of the Board of Supervisors voted against putting solar on ag protected land. She asserted this is not a mandate from the board to ensure solar encroaches on ag land. Putting solar on ag land fundamentally changes the ag protected areas and should only be put in industrial zones. MidAmerica's largest Iowa project is 800 acres but they stated they do not have immediate plans to locate solar in Woodbury County. Widman indicated that the farming between solar panels is experimental and not done in America. MidAmerica stated that cattle grazing underneath solar panels would not work because they would rub against the panels and knock them down. Grass planted underneath would not help wildlife because fences need to be around these areas to protect the public. Widman questioned Daniel Priestley's comment at the previous work session that if applicants were to apply to the county to establish utility-solar they would have to be forthright in the application. However, at the public meetings it has not been mentioned that the pro-solar speakers have already signed contracts with an outside company, and we should be told who the company is. If you add up the acres in the plat book owned by these individuals in my area, it comes out to 2,600 acres or 4 square miles in comparison to the City of Sergeant Bluff which is only 2.11 square miles. All the remaining cities in Woodbury are less than one square mile. Four square miles is about the size of 1,936 football fields. Widman indicated that contracts are for 30 years. If these are the same, she will be 97 years old before the possibility of decommissioning them back to solar and her family will grow up to not see agriculture land. Widman asserted that utility-solar is not agriculture. Widman referenced a 3,000 acre solar project near Rock Branch that will be near her ground. She stated that agricultural preservation is meant to preserve agriculture. Widman asserted these utility-scale solar facilities belong on industrial land.

Elizabeth Cindy Haase (Salix) addressed the ZC offering concerns about the radiation caused by solar panels. She indicated that the electronic magnetic sensitivity causing, headaches, dizziness, nausea, cancer risk has been reported by people who reside close to solar systems.

Motion to close public hearing: Parker. Second: O'Tool. Carried: 4-0.

Zant commented there have been great comments from both sides, wants verification on some facts, Commission will work on collecting and reviewing more information. O'Tool appreciates feedback, good to hear all sides.

No Public Comment on Matters Not on the Agenda

Commissioner Comment of Inquiry

Due to harvest, O'Tool suggested waiting until regular November 27th meeting instead of scheduling a work session, all present commissioners agreed.

Staff Update

Priestley noted subdivisions recommended tonight will be presented to the Board of Supervisors on Oct 31, 2023. Woodbury County Community and Economic Development will be hosting the COZO conference in May of 2024.

Adjourn

Motion to adjourn: Meister. Second: O'Tool. Carried: 4-0.

**STAFF PRELIMINARY REPORT ON CONSIDERATIONS FOR THE PERMITTING OF
UTILITY-SCALE SOLAR ENERGY SYSTEMS
IN UNINCORPORATED WOODBURY COUNTY, IOWA**

November 21, 2023

**STAFF
PLANNING & ZONING
Woodbury County Community & Economic Development**

CONTENTS

Meeting History of the Woodbury County Zoning Commission.....3

Summary of the Debate.....4

Introduction.....5

Public Hearing #1 (Merville) – September 11, 2023.....6

Public Hearing #2 (Woodbury County Courthouse) – September 25, 2023.....13

Public Hearing #3 (Woodbury County Courthouse) – October 23, 2023.....18

Work Session (Woodbury County Courthouse) – October 16, 2023.....20

Staff Analysis.....24

Summary of Proposals.....27

Draft Utility-Solar CUP

Draft Utility-Solar Overlay District

Development Plan Process

Rough Drafts.....29

Utility-Scale Solar Energy Systems.....30

Utility-Scale Solar Energy Systems Overlay District.....50

Comprehensive Plan Adoption Process and Current Outlook.....69

Summary and Conclusion.....71

References.....72

Appendix.....73

Direction from the Board of Supervisors – August 8, 2023.....73

Direction from the Board of Supervisors – September 26, 2023.....75

Concept 1 – Summary (Utility-Scale Solar CUP for GI).....77

Concept 2 – Summary (Utility-Scale Solar Overlay District).....78

Concept 3 – Summary (Comprehensive Plan).....79

Zoning Commission Minutes.....80

September 11, 2023 (Public Hearing).....80

September 25, 2023 (Public Hearing).....83

October 16, 2023 (Work Session).....92

October 23, 2023 (Public Hearing) – Draft.....96

MEETING HISTORY OF THE WOODBURY COUNTY ZONING COMMISSION

The following table summarizes the Zoning Commission’s interactions as they work to form a recommendation to the Board of Supervisors for the permitting of utility-scale solar energy systems in the unincorporated areas of Woodbury County. The table includes online hyperlinks (links) to the meeting agendas with backup information including public comments up to that point. Additionally, links to the approved meeting minutes as well as audio is provided. The subsequent pages also include comments made by the public at the hearings. The information provided is not intended to be a full or perfect transcript but to provide context of the debate. Links are also provided to the audio comments from each member of the public who chose to speak.

Date	Meeting Type / Action	Meeting Information	Meeting Attendance	Public Input
September 11, 2023	Public Hearing / Zoning Commission (Merville)	<p>Agenda Packet: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-09-11_packet_zoning_commission_34199.pdf</p> <p>Comments: Written comments included within agenda packet.</p> <p>Minutes: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-09-11_minutes_zoning_commission_2192.pdf</p> <p>Audio: https://www.youtube.com/watch?v=XZQa-5kNgcQ</p>	31+	14 <ul style="list-style-type: none"> • Greg Jochum • Brad Jochum • Tom Jochum • Eric Nelson • Ron Wood • Elizabeth Widman • Bob Fritzmeier • Leo Jochum • Kim Alexander • Will Dougherty • Ann Johnston • Wally Kuntz • Supervisor Taylor • Will Dougherty
September 25, 2023	Public Hearing / Zoning Commission	<p>Agenda Packet: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-09-25_packet_zoning_commission_66298.pdf</p> <p>Comments: Written comments included within agenda packet.</p> <p>Minutes: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-09-25_minutes_zoning_commission_9753.pdf</p> <p>Audio: https://www.youtube.com/watch?v=LJ-k9MCD8_8</p>	25+	12 <ul style="list-style-type: none"> • Matt Countryman • Deb Harpenau • Wally Wagner • Jerrod Ulery • Kevin Alons • Rebecca Moerer • Jesus Cendejas • Elizabeth Widman • Leo Jochum • Ann Johnston • Will Dougherty • Daniel Segura
October 16, 2023	Work Session / Zoning Commission	<p>Agenda Packet: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-10-16_agenda_zoning_commission_2395.pdf</p> <p>Comments: Written comments included within agenda packet.</p> <p>Minutes: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-10-16_minutes_zoning_commission_3421.pdf</p> <p>Audio: https://www.youtube.com/watch?v=LJAj6Xh3cSU</p>	15+	3 <ul style="list-style-type: none"> • Will Dougherty • Leo Jochum • Doyle Turner
October 23, 2023	Public Hearing / Zoning Commission	<p>Agenda Packet: https://www.woodburycountyiowa.gov/files/committees/meetings/2023-10-23_packet_zoning_commission_6882.pdf</p> <p>Comments: Written comments included within agenda packet.</p> <p>Minutes: See Draft Minutes in this month’s packet.</p> <p>Audio: https://www.youtube.com/watch?v=qNpK3atf1k0&t=3s</p>	14+	4 <ul style="list-style-type: none"> • Elizabeth Segura • Ann Johnston • Elizabeth Widman • Elizabeth Cindy Haase

SUMMARY OF THE DEBATE

The question in this report is whether utility-scale solar energy systems are appropriate or not in the Agricultural Preservation (AP) Zoning District. To determine compatibility with AP, the Zoning Commission has been tasked to consider the following by the Board of Supervisors on August 8, 2023:

- A conditional use permit for AP “C” with Planning and Zoning and Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/sol, and other factors when approving permit.
- A slope of no more than 5% in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- A maximum height of no more than 20’ for panel structures.
- Of all AP, no more than 49% can be in such a project. In short, 51% must be for agricultural production or no longer considered “AP.”
- Utility solar can be no more than 2% of all AP “agricultural preservation,” preserving 98% of AP. This equates to approximately 8,540 acres of the 427,000 acres of ag land, ag land constituting 75% of the 570,000 total acres in Woodbury County.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A requirement (or at least strong consideration) that the utility-scale solar project either be on a landowner’s property or that the owner of the land be a resident of Woodbury County.

Subsequently, the Supervisors revised their direction to include the following on September 26, 2023:

- A conditional use permit for AP "C" with Planning and Zoning and the Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- A slope of no more than 5% ONLY for fixed arrays (most technology is now movable arrays) in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- No more than 1% of industrial land conversion every 4 years for reclassification, roughly 5,700 acres.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A decommissioning plan from solar companies reviewed by P&Z/BOA subject to approval by the Woodbury County Board of Supervisors.

Since receipt of direction from the Board of Supervisors, the Commission has conducted three public hearings and one work session to work toward a recommendation. The Commission has been mindful of the harvest season and plans to continue to collect information as potential ordinance options are shaped to address whether AP land is appropriate or not for utility-scale solar systems.

INTRODUCTION

As of November 20, 2023, three public hearings and one work session (October 16, 2023) have been held to learn whether utility-scale solar energy systems are appropriate or not in the Agricultural Preservation (AP) Zoning District.

The first public hearing was conducted at the Merville Area Community Center on September 11, 2023. There were over 31 members of the public present and 14 who offered comments. Three categories emerged from the hearing including those who were favorable, those who were opposed or not supportive, and those who were indifferent or undecided about the expansion of solar into ag land. There appears to be about seven (7) who spoke favorably, four (4) who were opposed or not supportive, and one who indicated to be undecided but interested in assessment.

A second public hearing was conducted in the basement of the Woodbury County Courthouse on September 25, 2023. There were over 25 members of the public present and 12 who offered comments. Again, the same categories emerged as those who are favorable in comparison to those who oppose or not supportive of the expansion of solar-utility scale energy systems on ag land. There were six (6) who spoke favorably while six (6) spoke in opposition.

The third public hearing was conducted in the basement of the Woodbury County Courthouse on October 23, 2023. There were over 14 members of the public present and four (4) who offered public comments. There were four (4) four who spoke in opposition.

The themes gleaned from the meetings cover a host of issues. Those who spoke in favor of the expansion of utility-scale solar discussed co-existence within the neighborhoods. Comments included techniques that could be used to mitigate any potential adverse impacts. It was suggested to develop an ordinance that establishes specific requirements and agreements so that the expectations would be clear. Those in favor offered concerns about the Corn Suitability Rating 2 (CSR) as a requirement due to the rainfall factor. Additionally, concerns were made about out of county ownership, solar as the future as part of climate change initiatives, and the potential phasing out of the area coal power plants. Furthermore, comments were made claiming that solar will positively benefit the soils, wildlife, add value to the county, and are important for the economic future.

Those who spoke in opposition referenced the purpose of preserving agricultural land in the Agricultural Preservation (AP) Zoning District. Comments included questions/statements about whether solar is an agricultural activity? It was asserted that solar is an industrial activity and should be placed on industrial or commercial land. Concerns were made about the solar industry being subsidized and the timeframe to which the panels would no longer function, thus generating concerns of disposal as well as questioning recyclability. Weather conditions were referenced as a detriment for the panels. Those opposed discussed the stewardship of land and questioned the short-term vs. long terms benefits and questioned how a conditional use or overlay would actually work. Concerns were also brought forth about the manufacturing of solar panels in foreign countries including alleged adverse working conditions for the workers. This debate has also included references to Constitutional rights and the use of the zoning districts to classify land.

It is important to point out that the Woodbury County Zoning Ordinance presently has provisions for conditional use permit applications for utility-scale solar energy systems in the General Industrial (GI) Zoning District. This debate is not about establishing solar provisions for the first time, it is about whether or not the Agricultural Preservation (AP) Zoning District is an appropriate zone or not for utility-scale solar. As this is an intricate discussion about the future landscape of Woodbury County with numerous variables for consideration, the comments from the public have been included in the subsequent pages of the report organized by each hearing date.

PUBLIC HEARING #1 (MOVILLE) – SEPTEMBER 11, 2023

On **September 11, 2023**, the Commission conducted the first public hearing at the Moville Area Community Center. Fourteen members of the public addressed the Commission on a range of issues in support and opposition to utility-scale solar on AG land. Below includes links to the audio and summaries and/or direct quote adaptations of the information shared by the public. The following is not intended to be a perfect transcript but is offered to provide context of the debate. The audio can be accessed on YouTube using the following direct link:

<https://www.youtube.com/watch?v=XZQa-5kNgcQ>

The list of Zoning Commission meetings inclusive of the agendas, packets with backup materials, minutes, and videos (Audio) may be accessed at: https://www.woodburycountyiowa.gov/committees/zoning_commission/

Greg Jochum (Salix) (47:43 to 51:28) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=2863>

- Using CSR2 as a scenario, in 2013, the State of Iowa went from Iowa State University, went from CSR1 which is Corn Suitability Rating, went from one to a two. I have a few farms that the corn suitability rating was a 47 which means on a scale that means 1 is bad 100 is good. So, it's below average. After they changed to CSR2, miraculously my farm went to an 81 CSR2, it doubled the value pretty much. Same ground.
- Looking at possibly, if you would consider the CSR1 values rather than the CSR2 values because in Iowa State University's information, the major difference between the CSR1 and the CSR2 is the CSR1 included a rainfall correction factor whereas the CSR2 does not and it will without a climate adjustment, the CSR2 values will have an upward bias in counties located in northwest Iowa that comes right from Iowa State's information.
- So I have you know family-owned land that I have maps of and they all went from mid 40s upper 40s from up to 65 to 82, 83 just from the CSR1 to CSR2 and if looking at future development of land you're looking at excluding anything over 65 and a half or 75 and a half.
- The Board of Supervisors just approved a new interchange south of Sergeant Bluff and that farm that they are going to be putting it on is a 74 and a half CSR2.
- The other one I want to bring up also is the 20 foot height for agrivoltaics or ag solar. If looking at running equipment underneath the solar panels the one that MidAmerican does it tilts flat and you know follows the sun so if you're limited it to 20 foot at the height of it so the panels are 10 foot that means the tilt is only at 10 foot height you know and if we were to farm underneath it whereas grass or hay or pasture or having cows pasture underneath there they want that a little bit higher than just you know the 20 feet so those are some information for you to know. **Zellmer Zant:** Do you know what that height would be? **Jochum:** I don't know what that height would be all depends I mean if they're going to they've take about like Iowa State has a farm right now that they got money for if they're putting 30 or 40 acres in right but it all depends on if they're if you growing vegetables you know if its manual labor to pick the vegetables it doesn't have to be that high but you know if they're using mechanical stuff it'll have to be higher there's a lot of studies out in Pennsylvania, New York.

Brad Jochum (Plymouth County) (51:44 to 53:22) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3104>

- Live in LeMars, Iowa. I grew up in Woodbury County though I moved to Plymouth County to be close to my clients. I own land in Woodbury County with my brothers and sister uh and my brother Greg that for me um if I wanted to have a solar facility owning it with them uh I think I should be able to um we have an undivided interest in the land so no one individual is designated as the owner of that uh would complicate things as far as ownership goes if I wanted to be involved with this uh solar utility solar project it would not be fair to them also a solar project on their land. I'm also an owner in that farm. Uh taking a step further if my parents had a revocable trust set up and I would become an owner of the property after their death which is already in the solar project would I have to sell my ownership because I'm not allowed to be an

absentee owner of that uh this is a complicated issue? I have faith in the zoning board to sort this out uh utility solar would be a positive alternative for Woodbury County for electrical generation.

Tom Jochum (53:42 to 55:59) (Sergeant Bluff) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3222>

- I support solar. Its clean energy. Renewable energy has been a big factor for electric grades in Iowa. The average cost is lower than most of the country. It has become more reliable and efficient the last few years. Port Neal North commissioned in 1974 was a coal fire plant retired in 2016. That time they had a lot of employees and after the shutdown they lost many of their employees. They lost several contractors that continuously worked on that site for Neal South as a coal fire plant was commissioned in 79 and is currently still operating. As the movement towards clean energy in recent Iowa Supreme Court ruling there is growing pressure on MidAmerican Energy to close or convert Port Neal South. MidAmerican is a leader in renewable energy. Now is the time for solar to step in and fill that gap. Existing equipment transmission lines that are already in place solar energy will be able to save some of those high paying jobs and bring in electricity generation additionally solar energy will be a great source of income for Woodbury County. Construction process creates jobs. More importantly the land used for solar energy will pay a generating tax based on kilowatt hours. According to the county Board of Supervisors' calculations tax generated by solar will be 5.3x higher than current agricultural land tax. A tax revenue will be by the county will be increased 5.3x as needed all this additional revenue will be available for the county to use where needed. I believe Woodbury County should take this opportunity.

Eric Nelson (Moville) (56:24 to 57:44) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3384>

- I would like to encourage you folks to um earnestly seek out all the information you can from all sides. I found it ironic that we started off this meeting with a discussion about wanting to just build one home on um AP and it's not easy just to do that and yet we're talking about building uh commercial solar and this solar is not agricultural. It's commercial. I mean any of the electricity that can be generated on what's called agricultural can be converted into electricity used anywhere um, so I think we need you to be really careful on converting AG land. If you want to have um solar, I think it needs to be on commercial property because that's really a commercial entity um and I think that your very first activity today um and how steep of a hill it is to climb to just build a house on AP ground um I think that kind of answers the whole question for me hopefully for you too.

Ron Wood (Salix) (57:57 to 59:24) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3477>

- I support solar in the fact that I worry about the Siouxland area trying to grow in comparison to Omaha and Sioux Falls on a regular basis and can't seem to get the most. (In audible). I was just talking about comparing ourselves to Omaha and Sioux Falls and the need for power generation and I kind of feel like if uh the two coal fired plants that are in existence now no longer produce energy where does it come from and how do we get the growth that we want in the Siouxland area to stimulate our economy we have to bring in more power from other areas we just more relying on other areas to sustain what we're trying to accomplish here in addition to that I think a lot of this new commercial a little research of commercial solar is very low to the ground and companies are very eager to appease neighbors with barriers, tress vs. whatever so I just encourage you to consider those facts.

Elizabeth Widman (Sergeant Bluff) (59:59 to 1:04:46) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3599>

- Resides in rural Sergeant Bluff. Landowner.
- Children are fifth generation Woodbury County farmers.
- Never knew father-in-law who passed of Lou Gehrig disease before met husband.
- Husband always said his father taught him and his brothers and sisters to take care of the land
- Your farmland should be better when your done with it than when you started.
- Husband taught this to our children.
- What I could find there would be 1,500 solar panels per acre.
- Over 8,000 acres of solar panels have been mentioned in Woodbury County.

- I've heard by where I live, they want to put 2,600 solar farm there.
- You're looking at around four square miles of solar panels and from what I can tell on average solar panels only last about 10 years.
- They also have hail storms that can destroy solar panels.
- Once they are done, they are not recyclable. They contain toxic chemicals that can go into the ground.
- They are going to fill the landfills. Sometimes they just leave them above ground and set them in piles which is an eyesore.
- It had been mentioned at the Board of Supervisors meeting about the Constitution and property owner rights. It has been mentioned here tonight that you have a right to make money off your property. I believe in the Constitution. I believe in property rights but this county has an ag preservation designation and the purpose of that is to preserve ag land and the farmers have been free to use the land for farming and to make as much money as they can and many have done quite well on this system.
- However, the Constitution and property rights does not give permission to change the rights of a whole county by putting a conditional use on it to allow a few individuals to make a lot of money on industrial solar energy projects on farmland.
- The rest of the county will not really benefit from this change it leaves us open to having to go through a process if somebody wants to be an industrial solar system by us we're going to have to go and say hey I don't really like this.
- We shouldn't have to live on our properties being worried about being subjected to that. I believe putting a C on the land would open us landowners to having eyesores by our property. I'm sorry if you think looking at acres of solar panels is beautiful, but I live out in the county because I love to see the landscape there, I love to see the crops to see the sky to see it all. Even if you put these things down low If I look out my window, I'm going to see acres of solar panel that's not going to be ag land.
- I've also read there is possible health effects. The solar panels put off a hum. If you live out in the country its quiet. It can cause migraine headaches.
- I believe these industrial solar products belong industrial land. Not on ag land.
- The change will affect the whole county and will benefit a few and it belongs on industrial zoned land.

Bob Fritzmeier (Sioux City) (1:04:53 to 1:07:00) - <https://youtu.be/XZQa-5kNgcQ?feature=shared&t=3893>

- Commend Zoning Commission for seeking a balanced view on this.
- MidAmerican Energy has put in a solar installation on their property. This installation has helped the soil actually. An installation like this does help the soil. It's not an agricultural use for some years. Grass is going to grow there. The soil loosens. The soil rejuvenates. I commend MidAmerican Energy for what they've done and bring about some transition from the fossil fuels to the renewable energies.
- Besides those positive effects, those solar installations have a 60 foot distance that has to exist between the outer fence and the first solar panels, and that area can be put into grasses and will foster pheasants and quail and help the hunting prospects in Woodbury County.
- This would be a positive step to continue with your conditional use and with the needed aspects scrutinizing the needs that each applicant would have for the solar installation.

Leo Jochum (Salix) (1:07:12 to 1:10:42) - <https://youtu.be/XZQa-5kNgcQ?si=K7rB1XziF7cvPxEH&t=4032>

- According to independent researchers, Iowa residents enjoy a lower residential rate than most people in the United States with an average rate here of 13.12 cents per kilowatt hour versus 15.72 cents per kilowatt hour nationally this for Iowans represents an annual monthly rate of \$16.32 versus a national rate of \$147.64 or a savings of amount \$370 per year for every household.
- Renewable energy in Iowa is the main factor for these lower rates utility solar has advanced its technology in recent years to become the least cost provider for electricity with that some people have concerns about the landscape around such a facility I can see their concern. That's one concern I'd like to address tonight.
- When a residence is next to a solar facility, a vegetative screening is provided by using evergreen trees, shad trees, shrubs, and a diversity of plant species to preserve the aesthetics of the surroundings vegetative screening is allowed up to 20 feet in height which is about six feet higher than the solar panels each

neighbor is contacted by the solar company for their input regarding where to place the screening what type of plants to use and the length of such screening that goes in front or across their acreage.

- Vegetative screening for neighbors should be included in the conditional use permit.
- Another emotional issue is using farmland for solar. The example used as 51% should be dedicated to ag use. This could be in the form of grazing livestock, raising crops that are not tall.
- A lot of research is ongoing with agrivoltaics, but more research must be done before this is an acceptable practice.
- Fencing needs to be in place for unauthorized entrance or any time of vandalism. However, fence lines or stranded acres there will be some stranded acres in the middle where there already existing easements, could be used for beekeeping for specialty crops because they would be outside of the restricted zone.
- The idea of capping acres at 2% or 8,540 acres on agricultural preservation, that's okay. That is actually more restrictive for the county than it is for utility solar. 8,540 acres has the ability to produce 1,420 megawatts of electricity when Neal North and South were in production together, they produced 1,340 megawatts which is less than the amount that 8,540 acres would produce.
- At the present time, the infrastructure is not here to accommodate 1,420 acres of solar. Utility solar is safe, quiet, and does not pollute the soil and is a great revenue source for the county. I support placing utility solar as a conditional use.

Kim Alexander (Smithland) (1:11:03 to 1:13:17) - <https://youtu.be/XZQa-5kNgcQ?si=6wwYGVVw1sc4Q0cp&t=4263>

- From Smithland. Farm in the area. Appreciate the Commission and the Jochum's speaking their peace.
- Seems to me this is about the money. Making money and getting money.
- Ironic to take the most efficient and least expensive solar collector in creation which is green grass, corn, and soybeans and you're going to cover it with concrete or asphalt or whatever and put up these solar panels that's the height of irony. The days of unlimited use of our land, we can use it however we want and to foey with anybody that tells us different goes or gone when we live in a community, we have to consider what the community has to say about that use of the land and so those days are gone, and I appreciate the commission having this meeting tonight.
- Again, it's all about the money. More tax revenue baloney. The county gets enough tax revenue. I'm not going to put in something to generate more tax revenue. The question is how much money is enough and if you're not making enough on your ground that you have then get rid of half of it and do a better job with what you've got instead of putting asphalt on it and putting in solar panels. Again, there's more to life than just making money.
- As Mrs. Widman said treating a piece of land improving it so that it's better than when you got it that you leave it better than when you got it. It's not about the money it's about caring for the land, it's about caring for the land it's about planting renewable crops instead of renewal industrial solar.

Will Dougherty (Urbandale) (1:13:39 to 1:16:55) - <https://youtu.be/XZQa-5kNgcQ?si=Qgt8OF3ZIjj0gHBn&t=4421>

- From MidAmerican Energy.
- Referenced the Commission's consideration of neighbor, height, CSR ratings.
- Looking at how to carve and dice the situation for Woodbury County as a community in general.
- The CSR maps that you have in front of you right is one of many kind of layers on top of layers when you look at it from a zoning perspective similar to a lot of renewable projects that are install. The state we've done six solar projects today we have 38 wind farms across the state. Yes, the county has a large dictation as to where the solar projects can go in their own respective county there's a lot of other considerations that come into play when you're going through the development process for a solar project. Dan mentioned the FAA. There's consultation with them, the DOE, the DOJ as well for the sighting of these facilities whether or not you have anti-glare films put on the front of the solar projects or the panels themselves. There's consultation with the Iowa DNR. There's consultation with the fish and wildlife service as well. Like you said Dan, Neal solar project that we have down by Port Neal right now there was a lot of communication between ourselves and the county to kind of sort some questions. I know there's like a pipeline crossing question that came into play. We submitted for you known grading permits, secondary roads and

everything like that and so these are all questions that I think the county just needs to take into consideration when drafting the ordinance or any zoning regulations around potentially solar for ag use.

- You know a lot of questions that have come up tonight have been you know regarding about the land usage and returning it back better than you found it a lot of counties throughout the state, they do have mechanisms in place such as decommissioning agreements with the county in which a developer has to enter into. There a lot of other mechanisms that you can look like they help protect the agricultural use and the long-term viability of that land uses as well as so there's a lot of different things you can kind of tweak and play with to see how it fits your community's use and see how you want the solar project to transition you know beyond the 30, 40 year years of life back to ag or potentially into a secondary solar project or something else entirely so you would mention a lot of the resources that have been sent over from some of the other entities in the state that advocate for balance policy outcomes.
- I'm familiar with a lot of those resources. If you have any questions, please feel free to reach out and as always, I've done this at a Board of Supervisors meeting but if anybody and this means anybody wants to come to our Neal solar project, please let me know. I'll leave my information with the board and they can put it in the packet material but the Neal project is down by Port Neal and would love to show everybody around.

Ann Johnston (Salix) (1:17:38 to 1:18:26) - <https://youtu.be/XZQa-5kNgcQ?si=BzSVyF0F0dImCUje&t=4657>

- I would consider these solar panels an eyesore. And I like Elizabeth like to see the corn and beans. We have two Fox dens that are across the road from us. Every summer, the mother sits back and lets the two babies come over and eat mulberries from our trees. Where are they going to live with these solar panels here over there?
- I like the farm. This belongs in an industrial setting. Not out in the country where people live for peace and quiet.

Wally Kuntz (Moville) (1:18:48 to 1:21:05) - https://youtu.be/XZQa-5kNgcQ?si=P0CRduozXpG_ajrQ&t=4728

- Not for or against the project. Was here for another reason. The question I have is about the taxes to the county when the solar goes up. Obviously, MidAmerican is a commercial entity. Do we get to reap the benefits of square foot commercial taxes on that then or how's that work. I guess that the assessor. I don't know how that works to be honest with you does anybody else?

Supervisor Jeremy Taylor (1:19:20 to 1:21:05) - <https://youtu.be/XZQa-5kNgcQ?si=cZSv6H8-M1XSsEF5&t=4760>

- o One of the questions that we asked our assessor was if zoning matters materially to the county based on the zoning designation in regards to taxation. The answer is no whether the solar project was in ag preservation or whether it was an industrial. It's taxed on a generation usage so it's immaterial whether the zoning designation ultimately is.
- o So one of the things we asked July Conoly, our assessor to do is to run 2,500 acres in ag and just to do it on a general survey of ag land an re-yeild about \$94,000 on 100 megawatt project that's approximately 2,500 acres, it would yeild about \$504,000 that is not a way of saying this is for or against so I don't want that to be implied these are just dollars that we asked her to run on a comparison basis and if I could just add one more thing from a County Board of Supervisors perspective, my goal here tonight isn't to push one way or another but just to have the ratio of I have two ears and one mouth and try to use them in that proportion and to sit and listen and then take back the information that I'm hearing tonight and take that back to our Board of Supervisors so just want to commend planning and zoning and the director in terms of holding this public hearing.

Commissioner Bride (1:21:27) - <https://youtu.be/XZQa-5kNgcQ?si=cZSv6H8-M1XSsEF5&t=4887>

- Question for Will Dougherty regarding the footprint of the largest solar site currently in the State of Iowa.
- **Will Dougherty**

- Are you referring to our Holiday Creek project?

Bride: What's the acres involved in that?

- **Dougherty:** the largest one we have is the Holiday Creek project. That's kind of northwest of Fort Dodge I believe encumbered by the solar project itself it's roughly a little under right around 800 acres that's for a 100 megawatt project and that kind of goes with the rule of thumb approximately and a lot of topography can play into it along with you know setbacks set forth by the county zoning as well as for how you can kind of optimize use of land but the general rule of thumb about 8 acres per megawatt per solar project.
- **Bride:** Another quick question before you sit down. To date, has there ever been a request to the Iowa Utilities Board to grant eminent domain for any commercial energy project?
- **Dougherty:** For a commercial energy project? So, I'm not 100% familiar with. **Bride:** What about solar then?
- **Dougherty:** Solar I'm not familiar. I mean we have had to go in for like sites certificates basically there's certain thresholds that for generation basis you have to go into the IUB but it's not for an eminent domain case, it's basically just site certificate basically authorizing you as a public utility to utilize that area. It's somewhat similar to kind of the process the county holds their public hearings. There are interveners involved and stuff like that for a lot of our smaller scale. So, if it's not going to the transmission grid, it's going to the distribution system that did not go through the IUB process but to your original question of have any of them been put in place through eminent domain and have we taken landform someone in order to facilitate project answers no.

Kevin Alexander (Smithland) (1:23:45 to 1:27:30)

- Sir before you sit down can I ask a question?
- Since the big problem with photovoltaic and generation is storage of the power. What you do, so say you got this megawatt photovoltaic solar utility. Where's that power going or and with the wind generators, I noticed a lot of times, when I head to Schleswig and Smithland a lot of times though things are shut down. I assume they have more power than they need so what about the whole storage thing on this generation, I guess.
- **Dougherty:** I don't know if we're addressing storage along with the solar but I mean it's so basically it's as you alluded to it's not an on-demand energy source and so the wind turbine and solar panels similar you know they run when that resource is available so the way that it's kind of operated and it kind of depends largely upon whether it's a distribution scale solar system a transmission scale solar system but you know kind of under the same lines from the physics perspective that energy goes to where it's first basically it gets put onto the grid distribution or transmission goes where it's need first whether that be the next house down the line or 20 miles down the line doesn't matter and then basically jumps off to that nearest load center that's on that system there so from the energy storage perspective I guess I'm not sure what the question really was. **Alexander:** Well, the point of the question is the functionality and the utility of these solar farms that you want to put in if they're going to sit idle half the time like those big electric fans over by Schleswig are whenever I drive over to Denison then what's the point? Same way with these photovoltaic panels, if they're going to, do they switch them off when they have all the power they need or do they just keep shifting it around?
- **Dougherty:** So, I think it's important to kind of take a step back and look at it from the perspective of an above all approach. Obviously here in Woodbury County we have Port Neal down south of Sioux City. That's an on demand coal fire facility and we have five of those throughout the State of Iowa and we have one natural gas facility in the Des Moines area. And so we've transitioned to a point here where renewables have started to act more as like a base load generation traditionally that was more like your fossil assets or your nuclear assets so yes they are you know vulnerable to when the sun is shining or when the wind is blow but that doesn't mean there's not value in them it's above all approach there's a lot of discussion earlier about the rates that within the State of Iowa are lower than the national average that's largely a portion at least for MidAmerican our rates are fifth lowest in the nation for investor own utilities

and we have the second and third lowest as well in South Dakota and Illinois but that's largely contributed to the zero cost resource of actually running these facilities from a fuel standpoint as opposed to the fossil generation standpoints. I'm not saying that fossil is bad but we still run those facilities they're needed every single day for that times when the sun isn't shining wind is blowing but they are additive in nature and they're complimentary in nature and so even though they might be not working one day or curtailed one day or there might not be enough winter sun one day doesn't mean they're invaluable resources. They're just different resource types guess this is kind of getting off track discussion but hopefully that helps a little bit guess.

PUBLIC HEARING #2 (WOODBURY COUNTY COURTHOUSE) – SEPTEMBER 25, 2023

On **September 25, 2023**, the Commission conducted a second public hearing at the Courthouse. There were 25 members of the public at the meeting including one on the phone. Twelve addressed the Commission and provided the subsequent information. Below includes links to the audio and summaries and/or direct quote adaptations of the information shared by the public. The following is not intended to be a perfect transcript but is offered to provide context of the debate. The audio can be accessed on YouTube using the following direct link:

https://www.youtube.com/watch?v=LJ-k9MCD8_8

The list of Zoning Commission meetings inclusive of the agendas, packets with backup materials, minutes, and videos (Audio) may be accessed at: https://www.woodburycountyiowa.gov/committees/zoning_commission/

Matt Countryman (23:22 to 23:51) - https://youtu.be/LJ-k9MCD8_8?si=AOMcmUF7nK4buE1W&t=1401

- **Renewable Energy Equity Partners**
- Mitigation plans and agricultural restoration plans set a good pathway forward when applicants are seeking a conditional use permit with an overlay district, something that can be incorporated into a development application regarding utility scale solar energy parks.

Deb Harpenau (Salix) (23:13 to 25:27) – https://youtu.be/LJ-k9MCD8_8?si=UY7uYtXUwe2Uygv&t=1453

- Throughout our daily lives, we see change. Usually, it's gradual and it's not even noticeable, so it's just accepted or even expected.
- For the last decade or more people started addressing climate change and as a result started researching alternative energy source one of which is solar and again this change in fact is a sudden change. I understand for some this can be scary, but we find solutions we should listen to the facts such as native grasses will be planted under the panels this land used to be all native grasses before it was broken up for agriculture.
- These native grasses will be home to many species of wildlife while the grasses rejuvenate the soil through its roots and water absorption and retention. There has been rumors that Neal 3 and 4 will scale back or possible shut down in the future. If that would happen, I think utility solar would be a clean nontoxic and economical source of electrical generation.

Wally Wagner (Salix) (23:43 to 28:54) - https://youtu.be/LJ-k9MCD8_8?si=UKjnw3mKn5lgCPdY&t=1543

- Back 87 years ago, my grandfather bought a farm on the river which is located just north of Neal South and then later on another parcel to the east now my folks bought a parcel that actually adjoins Neil South to the east and you know we were there before Neil South was so Deb just talked about progress or change. I don't think there's anybody in this room that saw more change in their neck of the woods than we did.
- I was a teenager when that all started happening besides the fact that the Corp of Engineers completely rerouted the reiver we had landed to join the river and then after that our hunting and fishing ground was you know changed completely so anyway, we're talking about change we're really talking about progress.
- So, I have parcels east of Salix. I have parcels west of Salix. Grew up out there and I have a parcel south of the airport in the General Industrial zone and we have had at least 8 probably 10 different companies contact us for options on these parcels all over okay in all three of the areas so with the present interest in renewable energy it's my conclusion that it's coming to our area okay and the Salix area is primed for solar electrical generation due to the proximity to the Neal complex and the electrical grid that is there okay. So, to me it's like we're either going to accommodate it or we could put our heads down and but at it but it's probably not going to work okay as my mom would say we could be bullheaded about it okay, so the conclusion is like it was 50 years ago electrical generation is important okay. We're talking about millions of people being served with electricity now at present it's with renewable energy so to me lower production land which I have some that okay would be an appropriate consideration for you all and also the lower residential density. Okay so now going back to the CSR1, CSR2s, you guys heard about that last session the CSR2s are not accurate for what I refer to as gumbo. Okay poorly drained high clay density soils okay

and so it's like they went two to one, so I don't know that is a really accurate consideration for you guys to think about in the future okay.

Jerrod Ulery (Ulery Energy) (29:21 to 30:01) - https://youtu.be/LJ-k9MCD8_8?si=zKyflbma0P1pphSB&t=1761

- I am the owner of UR Energy. I was present here I think about three months ago submitting a special use permit for a data center, so my company builds data centers all over Iowa. We have about 250 megawatts in our pipeline currently and one of our five megawatt projects is in the vicinity of these solar projects and wind projects that are going on so we support it. I'm here to support it. I'm not a local resident. I'm in LaGrande, Iowa but we have many sites in this area and we plan on developing those sites as well so I plan on seeing you guys many more times so thanks for having me.

Kevin Alons (Salix) (30:14 to 32:55) - https://youtu.be/LJ-k9MCD8_8?si=jIDZGUvtNarMvE7D&t=1814

- I've heard the talk about progress and a lot about renewable energies. I'd just like to first just challenge the assertion that the use of solar on agricultural land in Iowa meets the definition of agricultural preservation right. It's not an agricultural use and I think that's it's kind of a stretch. It is quite a stretch to call it an accommodation that this is something that's compatible with agriculture. It's obviously going to supply agriculture and you can argue whether it can be put back at a later time but that's really a secondary issue.
- Obviously solar is being considered along with some of the other renewable energies because they are being heavily subsidized as I think everybody here recognizes. We would not be having this discussion if there wasn't a significant federal subsidy for this process. I'm not sure that first off, I think everybody also recognizes that those subsidies are being paid for with debt. Not with revenue and they certainly aren't going to pay for themselves so the energy being produced is not a sustainable process even though that's the way we tend to describe it. I know that there is consideration and this may be outside of the purview specifically for this discussion about how much revenue might be increased for either the individuals who the landowner but more specifically for the county but I really wonder what the net effect will be for the county for how much revenue comes into the local area how much revenue is generated and how much is lost because of the changes how money is spent in the county because I'm sure most of these entities. I would assume that the entities that are going to bring this into the county are not local so their considerations really for any of those things is about chasing short-term profit coming from federal subsidy so I probably will run out of time but I mean just as a fundamental, solar is a very inefficient way of producing power and it's hard to imagine that it could ever produce anywhere close to the amount of money that is being promised again through subsidies so I feel like that is a short-term bet, something that is certainly not assured long term and I really question how long into a 40-year contract that apparently they're discussion they could actually be relied upon. So, I live down in Salix at least I live in the area and I'm not sure they would but we're talking about large projects that could have a very large impact on property values so just some things that I would like to see considered.

Rebecca Moerer (Sioux City) (33:17 to 35:06) - https://youtu.be/LJ-k9MCD8_8?si=ASj3wSjW2Qjm1drS&t=1997

- I live in Sioux City. First of all, I feel that people should think about this a little bit more. I believe solar farms are misnomer totally because energy is not an ag product. The definition of farm is an area of land and buildings used for growing crops and raising animals at the last meeting the proponents of these solar zones talked about planting grasses and trees to increase the land value and protect wildlife but they were presented as ideas and not requirements. So, I guess that would be one of my main concerns also are their fees if these solar panels break down who pays for those who checks on them to see the maintenance is maintained and what happened to those and whose cost is it after they don't function anymore. We still have unsightly satellite dishes around the county to. They talked also about taxes generated would they be staying in Woodbury County from these solar areas? I do feel that there's plenty of unused commercial properties where these could be implemented to benefit a larger number of people or the units could be directly connected to use to produce energy that they claim there's so much of directly to an item that needs that energy instead of taking up crop land or animal land and I do feel that these do disrupt wildlife areas so I am against this.

Jesus Cendejas (Salix) (35:17 to 38:32) - https://youtu.be/LJ-k9MCD8_8?si=35eSEuc4uS08hIIF&t=2117

- Thank you for this opportunity and we believe God has appointed all of you guys in this position and we pray that you make good decisions and everything that you're involved in apart from our United States Constitution which I am grateful for the Bible is the first to call the right of owning and being able to use private property. The latter informed the authors of our Constitution and is evidence in the language they're in two of the Ten Commandments say thou shall not steal and thou shall not covet these implying and tell the right to work hard and the right to owner possess including the right of private property part of the issue with the situation is not simply the thought or idea that a person should be able to deal with their property as they please but rather is it is that in this liberty and reality one is still responsible for the stewardship of the land that God ultimately owns and the neighbor that lives beyond one's boundary as an example Exodus 21, 20-29 says if an ox gores a man or woman to death then the ox shall surely be stoned and its flesh shall not be eaten but the owner of the ox shall be acquitted but if the ox tended to thrust with his horn in times past and has been made known to his owner and he has not kept it confined so that it has killed a man or a woman, the ox shall be stoned and its owner also shall be put to death as you may see God's law informs us that the way we manage our private property matters in more than just our personal benefit it also matters as how it affects others quite weighty and this is just one example there are many angles we can take and should consider you guys ourselves here are a few subsidies, all this money is given for this where does it come from and who's going to pay for it and maybe even who actually owns this land depletion we don't have more farmland than what we possess now there's containment effects jobs and economy outside entities are paid for this project and other non-Iowa residents hired will benefit most apart from maybe only a few local hired individuals in the long run this is historically the case neighbors, those who have invested in living in the area have the right to expect present zoning to be honored so that their own investments are not diminished due to change. In closing Dr. Gordon Wilson, Senior Fellow of National History of the New St. Andrews College in response to this complex issue set states its true once operational wind energy cuts emissions by running on 100 renewable resource but it is that the whole story? Wind turbines and solar panels along with the batteries required to store the energy have a high monetary environmental production cost. These upfront costs may balance out over time with low operating costs but for now the power that the wind and solar farms provide is more expensive than the traditional power this costs demands government subsidies that are likely to greater than the reduced energy cost of the wind and solar farms. Additionally, wind and solar farms require vast areas of land that can change the natural aesthetics and landscape and interfere with wildlife habitats, bats and bird are often killed by the rotating blades or the concentrated beams of light and the termite vibrations produce sound pollution with complex environmental topics such as alternative energy we must carefully consider the impact on our neighbors and God's creation as we make his dominion decisions.

Elizabeth Widman (Sergeant Bluff) (38:58 to 42:23) - https://youtu.be/LJ-k9MCD8_8?feature=shared&t=2338

- I'm a landowner in Woodbury County and my sons are fifth generation Woodbury County farms and um but I would just like to address there seems to be a misconception about constitutional rights and property rights and that you cannot restrict a property owner from doing anything they want to on their property and if the situation was reversed and incorporated city land had a C put on it to allow ag activities in the city um so that someone could put a hog building on their property in tow if they had enough property to do it and someone else maybe want a couple cows and a flock of chickens in there um you know and say will the neighbors just have to put up with the flies and the noise and the smell uh no one would be in favor of that so I don't think it's right to come out to ag protected properties and say um you know we're going to put a C on here and you just have to put up with when they put up these solar facilities is not ag land and it is not um it is not the life out in the country that people want out there um it can if you put these up it can lower property values you have noise from these solar panels there's glare, there's lots of beautiful viewage um there's harm to wildlife and birds um there's um 12,860,000 solar panels that will be not good in 10 years or less if you have hail storms. We're going to have to do something with those they're going to be in our county and um we could possibly have a change in administration here with elections coming up and there might not these solar panels might not be so subsidized um I read somewhere environmentalists are

actually asking in some areas to quit putting up so many solar panels because it kills the birds um the extreme heat from the reflective material can instantly incinerate them it changes the migratory patterns especially down by Salix you know you have birds come through on my property I have a pond we have um the geese come through and um the biggest treasure in Woodbury County is our people that live out in the county. My children have been involved with 4-H we go to the fair you know if you put these solar facilities in their people are not going to view this as the beautiful ag land that they've lived in these are industrial. They're not they're not solar. Is that my time and uh so thank you for listening your consideration and I just ask you to you know preserve this for the people that love the land and want to live out in the country.

Leo Jochum (Salix) (42:34 to 45:15) - https://youtu.be/LJ-k9MCD8_8?feature=shared&t=2554

- Good afternoon, thanks for all the work you people have done, Leo Jochum, Salix, Iowa. About 10 days ago, my wife and I took off and went to Indiana to see relatives at the quad cities, we go off the interstate, took the back roads through Illinois, those county roads are all blacktop but they're very narrow as we were enjoying the landscape, we came upon a utility solar facility actually when we saw that we were only about a quarter of a mile away that's when we noticed it, we went along it for about a mile and then we pull over and stopped as we got out of the car pheasants flew out of the pollinator area out of those grasses that were inside the perimeter fence, we took some time just looking around and listening there wasn't any electrical hum like you hear in electrical lines. There was no sound of motors but what we did hear was crickets. We could hear the crickets chirping the grasses under the panels were very green. They were probably mowed within the last couple of weeks. The pollinators between the panels and the fences. They were green and flowering as we drove away, we noticed some acreages a few across the road use the vegetative covers that's always supplied free of charge by the solar companies. There are a couple of acreages on the same side of the facility that had a windbreak that was probably in place before the solar facility was built. We were impressed with how professional everything looked. There wasn't any machinery parked outside. We did not see any trash. We didn't see any piles of used panels anywhere actually I wasn't surprise to see how neat everything looked. The other facilities that I have been at looked just as good. If utility solar is allowed in Woodbury County I would employ the same practice today that I used in the mid-1970s. In 1974, we built a house, a new house on our farm. In 1978, I expanded my hog operation by building a confinement facility. The concerns of the neighbors were satisfied when I built it approximately 400 feet from my house. If utility solar becomes a reality, I would allow panels 360 degrees around my house. If the pipeline easement allows it.

Ann Johnston (Salix) (46:33 to 47:17) - https://youtu.be/LJ-k9MCD8_8?feature=shared&t=2793

- I live in Salix out in the country. I thought the only mortal sin anymore was not recycling. Leaving a bigger footprint. I understand these solar panels are not recyclable so what are we leaving for our kids and our grandkids? My second point is parts of these solar panels are made by the Uyghurs, slave labor in communist China. The women and the children are physically and sexually abused. I don't want any part of that.

Will Dougherty (MidAmerican Energy) (47:34 to 50:56) - https://youtu.be/LJ-k9MCD8_8?feature=shared&t=2854

- If I may um sorry, I was going to wait to chime in, but this is Will Dougherty with MidAmerican Energy. Is it okay if I give a quick comment. **Zellmer-Zant:** Yes.
- Okay, yeah, so I guess there's a lot of good comments. I think overall from the meeting um a lot to kind of unpack but I'll just kind of keep it short and simple um you know our position on it from the zoning perspective is um you know there's a lot of good ways that um a lot of these concerns can potentially be mitigated and I think through a permit process and a public hearing process any constituents that you know live an adjacent proposed project would be able to have their case heard and the conditional use can directly reflect any of those concerns for mitigation side of things but kind of in line with what we're discussing last week that the land use for ag lands and potential for solar to be placed on them I think having a thorough decommissioning plan in place um that's something that's required throughout a lot of

counties throughout the state something that gets reviewed and approved by both the counties and the proposed solar developers so that's a mechanism that the county can try to utilize to mitigate any future impacts to the ag land and restore the property back to its original use after the decommissioning of the project. Additionally, um you can look at things such as visual screening or shielding from projects a lot of times these projects if they are located in ag properties they're surrounded by adjacent ag parcels as well um having buffers you know whether that be a setback from road right of ways or from fence lines allows for those visual screenings to take place once the vegetation is established so having a plan on the front end of a project that a developer or a project owner must enter into a county is a good way to try to mitigate that as well establishes vegetative growth plans seeding mixes stuff like that kind of lays out on the front and the expectations from the county side of things um for the maintenance of it and the growth of it long term for the project overall I think for the general comments we've received on solar it is an above all approach for MidAmerican's point of view. I think someone pointed out earlier you know. Neal is located down in Salix area. Someone else had pointed out that you know they didn't believe that solar was a viable option um as we look toward transitioning uh from a more carbon intensive resource to more diverse resources it is an all of the above approach there is no one-size fits all. There is no silver bullet um it can't all be wind; it can't all be solar. So having the resource available to help hedge and mitigate any potential fluctuations and market prices whether it be from natural gas or coal um or material costs from winter solar having all those resources available is in best interest of not only the utility customers but also the state in general having more balance portfolio and really starting to um kind of hedge your resources so that you don't become too heavy or too reliant on one so that being said um I'm always open for questions or comments um we can always try to get a tour for anybody down at Neal solar as well.

Daniel Segura (Sioux City) (1:38:44 to 1:41:43) - https://youtu.be/LJ-k9MCD8_8?feature=shared&t=5904

- Hy my name is Daniel Segura. I live in Sioux City uh I have family and have friends that have uh have property in sort of the subject areas um in this county um I just wanted to uh make a comment about this discussion about uh overlay and uh pairing that with the conditional use permit or maybe a variance or something of that nature I don't see how this necessarily addresses the concerns of those that are as we would say against the motion to institute uh promoting these solar panels um one thing I'm seeing is uh we already have um just by virtue of the statutes and ordinances in this Country uh a method to do something like that and that's the regular conditional use permit uh a way of applying and getting a variance that sort of thing what it seems like is uh this overlay might just be more of a sort of like a soft approval of these uh category of solar panels uh solar energy uh what have you and then it kind of sort of boosts it into being approved once it gets kicked down to the next so I don't see it as an extra protection for you know to uh basically give those that are uh opposed to this motion uh sort of like oh this is going to help the process like an extra check it doesn't seem to be that way one thing that I want to mention just about the conditional use permits those we can't take those away those are always permitted you know that will someone can't always apply for a conditional use permit or a variance and uh it seems uh that those would be a good way to if someone had a specific um and sort of a unique need for solar panels on their property or solar energy one clear example would be something like a medical clinic that's kind of out in the country and they need backup power and um you know I don't think anyone would uh be opposed to considering okay this is a special um this is a special example a special scenario where a conditional use permit or a variance it would seem reasonable that these people have a particular need for something that's unusual but the concerns that most people are having those that are wanting to retain the farming jurisdiction and the zoning of farming is that uh the if we open the door to everyone getting something then people will continue to get it um it we wouldn't say that we could allow variances and conditional use permits for every person for example like we've heard that wanted to farm in the city we would say well only if you had a specific need for that if there was something out of the ordinary um so that's would I would I just add to the comments to some of this talk of overlay and conditional use permits.

PUBLIC HEARING #3 (WOODBURY COUNTY COURTHOUSE) – OCTOBER 23, 2023

On **October 23, 2023**, the Commission conducted a third public hearing at the Courthouse. There were fourteen members at the meeting including one on the phone. Four addressed the Commission and provided the subsequent information. Below includes links to the audio and summaries and/or direct quote adaptations of the information shared by the public. The following is not intended to be a perfect transcript but is offered to provide context of the debate. The audio can be accessed on YouTube using the following direct link:

<https://www.youtube.com/watch?v=qNpK3atf1k0&t=3s>

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Emily Segura (Sioux City) (14:45 to 18:24) - <https://youtu.be/qNpK3atf1k0?si=CGm38fZqAo5uwVj2&t=885>

I'm from Sioux City. I'm a native of Woodbury County here and I love our county. I think we have so much to offer um new people coming here and just the farmland um I grew up on the farm and I definitely love the land. It's very important to me that we take care of it so that's why I'm here today to just bring forth a few concerns that I might have about this that I think maybe aren't being considered at this time. So, like I said, I'm from this county I have been coming for the past several weeks just listening to what's been going on um, and I think something that's maybe kind of failed um to be recognized is that these maybe are not as green friendly as we'd like to think. An article that I'm going to reference I'm only going to talk about one here um there's many more that I could bring forward if needed but the one we're going to talk about is from the Harvard Business Review. It's titled the "Dark Side of Solar Power" um in this article it is talking about how prior to putting up a solar farm you'd need a correct way to get rid of when these solar panels go bad so in the article it's talking about the waste that is coming from these solar farms because they go in our minds we think okay they're going to last us like 30 years or something well that's not actually what happens generally if we have like a hail storm that comes through it's going to take it out or um something of that nature or also another factor that it talks about is um that there is more efficient solar panels coming up so the ones that we have now in 10 years we're going to have more efficient solar panels so when we're going to we're going to just change it so what are we going to do with the solar panels that are already in place they're going to get they're going to go to the dump because it is cheaper to send them just to the dump we don't have another way to do it that's what's going to happen and when they go to the dump which our dumps like this is going to be full of solar panels when they go there they also would emit toxic waste which there are metals that are in these and also glass products so we don't have a place to go with these solar panels once they go back so um in conclusion I would recommend that you check out the "Dark Side of Solar Power" from the Harvard Business Review. It's just a good insight into another viewpoint that possibly we're not thinking about that these things are not really helping us out in the long term because we're making our children take care of the mistakes that we did. – Referenced Article: "The Dark Side of Solar Power" by Atalay Atasu, Serasu Duran, and Luk N. Van Wassenhove. Harvard Business Review. - <https://hbr.org/2021/06/the-dark-side-of-solar-power>

Ann Johnston (Salix) (18:50 to 20:28) - <https://youtu.be/qNpK3atf1k0?si=CKeu0LvAPe5KTSfF&t=1130>

I have some additional information about the Uyghurs, the slave labor group in communist China that makes parts of the solar panels not only do they make parts for the solar panels, they make the whole solar panels and yes there's still a slave labor group the women and children are physically and sexually abused and that's who makes 97% of the solar panels that come to the United States. My second point is I've heard a lot about Linn County and Scott County but I haven't heard anything about any counties over here on the western side of the state so I made several phone calls and Sioux County has a big moratorium on any of this energy stuff that's going on the other counties um are not going with solar or wind power um in fact um they know very little about it so if it is so desired here in Woodbury County um it's not desired in surrounding counties.

Elizabeth Widman (Sergeant Bluff) (21:00 to 24:22) - <https://youtu.be/qNpK3atf1k0?si=OQ4pZ36Ye01GgmNK&t=1260>

I live in rural Sergeant Bluff and I'm a landowner and my sons again are fifth generation Woodbury County farmers. I've going to all the solar meetings two of the Board of Supervisors voted against putting solar on ag

protected land so this is not a mandate from the board to ensure solar encroaches on ag land. Putting utility solar on ag protected land fundamentally changes the ag protected area and should only be put in industrial zones. MidAmerica's largest Iowa project is 800 acres but they stated they did not have immediate plans to locate solar in Woodbury County. The photo of Europe of farming between solar panels is experimental and not done in America. MidAmerica stated that cattle grazing underneath solar would not work because they would rub against the solar panels and knock them down. Grass planted underneath would not help wildlife because it was stated that fences need to be around these solar areas to protect the public at the last meeting Dan Priestley said that when utility solar is allowed in a preservation land companies would have to be forthright in their application however at these public meetings it has not been mentioned that the pro solar speakers have already signed contracts with an outside company and we should be told who this company is if you add up the acres of land in the plat book owned by these individuals in my area it comes to roughly 2,600 acres or around four square miles to get an idea of that magnitude um think of this the area of the city of Sergeant Bluff is only 2.11 square miles all of the rest of the cities in Woodbury County are less than one square mile four square miles is about the size of 1,936 football fields. MidAmerica said that their solar contracts are for 30 years if these signed solar contracts are the same. I'll be 97 years old before these is a possibility of decommissioning them back to ag if it ever is done. Utility solar is not agriculture in 30 years my grandchild recently born will have completed all of their schooling, their college degree and worked several years in their first job all without seeing this land in agriculture another solar project also unmentioned at these meetings is contracted near Rock Brach for around 3,000 acres My mom's um cousin owns 80 acres out there that he's turned into a nature preserve and I just uh recently inherited some land right next to that the solar would be out by there so utility solar is not agriculture the reason it's called agriculture preservation is to preserve it. These solar utility um facilities belong on industrial land.

Elizabeth Cindy Haase (Salix) (24:46 to 24:22) - https://youtu.be/qNpK3atf1k0?si=ffZv8N6kDOvv8g__&t=1486

I do have some concerns with the solar farming and one of them is uh the radiation that could be caused by it um cause I read some things about um the electromagnetic hypersensitivity to it that could give you um headaches and dizziness and nausea um and there are some who believe that there is increased risk of cancer for those who live next to them um and some of this makes sense because they're those who do live um near them have said that they have had headaches from them and so I think those are good reasons to um to think about.

WORK SESSION (WOODBURY COUNTY COURTHOUSE) – OCTOBER 16, 2023

On **October 16, 2023**, the Commission conducted a work session at the Courthouse to consider utility-scale solar energy systems. There were fourteen members of the public at the meeting. Below includes links to the audio and summaries, paraphrases and/or direct quote adaptations of the meeting content. The following is not intended to be a transcript but to provide context of the debate. The audio can be accessed on YouTube using the following direct link: <https://www.youtube.com/watch?v=lJAj6Xh3cSU>

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Work Session for Proposed Utility-Scale Solar Energy Systems Zoning Ordinance Amendment(s).

Prior to this meeting, the Zoning Commission has held two public hearings to collect comments from the public (Merville – 9/11/23 & Courthouse – 9/25/23). Subsequently, a follow up public hearing will be held on Monday, October 23 at the regular meeting of the Commission that begins at 5:00 PM.

Priestley offered an overview of the evening’s proceedings including five considerations for a potential utility-scale solar energy systems ordinance that could be considered by the Zoning Commission in preparation for a recommendation to the Board of Supervisors.

Consideration 1

Consider updating the General Development Plan and/or Future Land Use Map to facilitate the potential expansion of the General Industrial (GI) and Limited Industrial (LI) Zoning Districts and consider adding additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public.

Consideration 2

Consider retaining the current permitting procedures in the Woodbury County Zoning Ordinance but add additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public. Consider retaining the General Industrial (GI) Zoning District as the only allowed location for the consideration of a conditional use.

Consideration 3

Consider establishing a utility-scale solar energy systems overlay zoning district that requires a rezone application to be reviewed by the Zoning Commission and considered for approval by the Board of Supervisors that must meet specific criteria for the appropriateness of whether a particular area in the Agricultural Preservation (AP) Zoning District is suitable for utility-scale solar energy systems. Consider adding additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public.

Consideration 4

Consider establishing an agrisolar utility-scale solar energy systems overlay zoning district for the specific purpose to coincide with an existing farming operation where each parcel of land shall include over 51% of its usage for farming purposes.

Consideration 5

Consider retaining the current policy for utility-scale solar energy systems (No changes).

The Commission discussed the current process for the permitting of utility-scale solar on agricultural land including the issue of spot zoning and its relationship with the comprehensive plan's future land use map. Priestley referenced the future land use map as a tool for justifying future industrial areas that could facilitate the permitting of utility-solar. He indicated that industrial areas could be expanded on the map for future consideration of solar. However, it would take going through the comprehensive map approval process of amending the map to reflect additional industrial areas that could later justify additional areas.

Priestley discussed the concept of overlay districts as used by both Scott County and Linn County. Scott County relies on a CSR2 average of 60 or higher to authorize the rezone while Linn County uses a score card or rubric which identifies a number of issues not limited to CSR2, grading, vegetation, and good neighbor payments in order to obtain a permissible score. Priestley indicated that the rezone to an overlay is similar to a conditional use,

however, it adds the Board of Supervisors to the process of determining whether or not an area of the county is appropriate for solar. Therefore, the Zoning Commission and Board of Supervisors would be involved in the overlay district rezone process. Additionally, the Zoning Commission and Board of Adjustment would be involved with the conditional use permit process. The Board of Supervisors would be involved with authorizing each individual agreement such as decommissioning, road use, agricultural mitigation, etc.

Zellmer Zant indicated that she likes the involvement of the Zoning Commission, Board of Adjustment, and Board of Supervisors as it gives the public more opportunities to participate in the process. She also questioned whether the overlay district is permanent or temporary. Priestley indicated that depends on how the overlay district is designed. The goal of the district is to allow a new use but retain the base use. The policy for a decommissioning plan will be a determining factor as to whether the specific use of the overlay can continue or conclude.

Bride inquired as to whether there would be any issues if separate overlay districts associated with other projects were treated differently than others. Priestley indicated that there must be clear consistent expectations in the requirements for establishing the district, however there can be some room for conditions if information is identified that should be addressed. Priestley stated there must be a balance, but various options must be exhausted as applicants/developers must know what they are getting into from the start. Priestley discussed other considerations such as separation distances, setbacks, setback waivers, and the floodplain.

Priestley discussed a potential application process and expectations of staff, associated county departments, the commission, and boards. He discussed the concept of the solar-ordinance conditional use as being portable for either the industrial or overlay district. If the overlay district is not used, then an added feature conditional use permit process can be used for the general industrial areas. If the overlay district is used, there would need to be a set of parameters for determining how the overlay gets approved.

Bride shared a concern that if the Commission recommends no changes that the Supervisors might consider going with a stand-alone ordinance which does not involve zoning. Priestley indicated that a stand-alone ordinance does not include the zoning districts. Priestley stated that the Zoning Commission has the right to offer any reasonable recommendation to the Board of Supervisors. He indicated that everyone is mindful of the harvest season, and we will continue to offer multiple opportunities for input.

O'Tool inquired about the downside of using the overlay district. Priestley explained the debate of exclusively relying on CSR which could offer limitations for landowners. Meister mentioned in a previous public hearing questions about the reliability of CSR. He indicated that he likes Linn County's rubric as including CSR and other items. He also inquired who would be monitoring or policing the rubric for items such as grass species. Priestley responded that additional regulations create the need for more bureaucracy or more resources.

Meister inquired about how the Board of Supervisors arrived at 2% use of agricultural land. Is that enough or too much? He would like to see more information on how this equals to an existing power plant. Bride indicated that 2% is around 8,400 acres and stated that the Supervisors may be looking for a cap. Will Dougherty of MidAmerican discussed the acres on some existing projects in other counties. Meister offered concerns about the 2%. O'Tool inquired with Will Dougherty about the comparison of solar and wind in terms of megawatt capacity.

Bride inquired about the setbacks and if any of the allowed uses expand outside of the property lines. Priestley indicated the existing zoning ordinance does not include separation distances beyond the lot lines. Setbacks are determined by the zoning district dimensional standards in the zoning ordinance. Bride offered concerns about the impact of setbacks on other property owners. Priestley indicated that setback waivers could be used, and he cautioned about the law of unintended consequences.

O'Tool referenced the 5% slope proposed requirement. Bride inquired as to where the Supervisors arrived at that number. Priestley said it has been offered as part of the consideration for the Commission to research as a

possibility. Zellmer Zant referenced the importance of comparing practices with other counties and not necessarily reinventing the wheel. Zellmer Zant also referenced the needs of the cities including community solar. Bride used Merville as an example using an overlay to facilitate solar. He also referenced the use of the percentage as an issue. Priestley indicated that the 51/49% solar ratio is meant to ensure agriculture remains a primary function on ag land. Meister inquired about the proposed one mile notification area. Priestley responded that the purpose is to increase public awareness.

Zellmer Zant inquired with Will Dougherty as to whether these contracts are 10 years and questioned the rapid change of technology. Dougherty discussed maximizing efficiencies as a driving factor of change. He referenced ISU's study pertaining to the coexistence of agriculture and solar with aspects such as grazing. Bride inquired about damage to panels as a result of grazing. Dougherty referenced sheep as an option over others.

Bride inquired about how the land can be put back the way it was through decommissioning and referenced concrete left in the ground as result of wind turbines. Dougherty indicated that solar concrete footings are not being used. Zellmer Zant asked about the Port Neal solar field's footings. O'Tool asked Dougherty about buried power lines and if they can be buried in the floodplain. Priestley indicated that electrical assets must be elevated above the BFE. Bride and Zant indicated there are locations where lines are likely buried in the floodplain.

Zellmer Zant asked Dougherty about how much power gets lost from arrays through distribution. Bride asked Dougherty about the driving factor for locating solar parks.

Zellmer Zant inquired with the Commission about what they like/don't like in the packet considerations.

Parker referenced the Supervisors' discussion point of Light Industrial. Priestley indicated that the limited industrial use can be associated with Consideration #1 which would entail revising the development plan.

O'Tool referenced having a list of bullet points to follow to determine where an area is appropriate or not.

Zellmer-Zant stated that she prefers to not go with the map change as referenced in Consideration #1 because there are other systems in place. She indicated that she likes the conditional use and overlay district format as it includes multiple entities. Bride questioned the ability to accurately be able to paint/assign the industrial areas through mapping.

O'Tool indicated that the overlay could be used in AP areas. Bride discussed the flexibility of the overlay district and the permitting routes. Priestley discussed the creation of the overlay district on a project by project basis. He indicated that an acre cap could be instituted in the ordinance. Zellmer Zant stated that one of the counties she researched had a cap of 400 acres.

Zellmer Zant indicated that the Commission appears to be leaning toward Consideration #3. Priestley indicated that Consideration #4 is not field tested and was only brought into the discussion to discuss the relationship or co-existence of solar and agriculture. Agrisolar could be a part of Consideration #3. Priestley also discussed how battery systems should also be brought into the debate with the growing technology. He made reference to its inclusion in Linn County's ordinance. Will Dougherty discussed batteries in Iowa.

Zellmer Zant inquired if Consideration 5 is off the table. Bride indicated that not doing anything is not what the Supervisors are looking for. Priestley indicated the Commission has the latitude to make a recommendation as you see fit as long as it has an explanation and rationale behind it.

Zellmer Zant referenced the overlap between Considerations 2 and 3. Priestley discussed the overlay district and the overlay rezoning process.

Parker inquired if the county currently has an overlay district. Priestley stated that there is a conservation overlay district that could be petitioned for.

Zellmer Zant questioned the reference to the 10,000 acre limitation, dimensional standards, etc. between Consideration #3 and #4. She referenced the relationship between the 51% agricultural use and the CSR2 rating.

O'Tool questioned whether the CSR2 should be prohibited or not. Meister questioned the inconsistency and reliability of the CSR2.

Doyle Turner offered comments about the accuracy of CSR2. Leo Jochum referenced the difference in rainfall between CSR1 & CSR2.

Zellmer Zant indicated that CSR's may be over 65 in industrial areas. Priestley suggested the comprehensive plan and map allows for industrial areas to include areas of high CSR if the county plans for those areas to be industrial. Meiser is concerned with CSR being the sole factor. Priestley indicated that CSR has traditionally been a part of this county's determination of land use.

O'Tool indicated that it would be appropriate the spell out that a lower CSR would be preferable. Bride indicated that CSR is presently considered in the rezone decision process.

Zellmer Zant inquired about 5% slope for fixed arrays and whether there should be a range. Bride offered concerns about the fixed percentage and discussed erosion. Doyle Turner commented about farming practices across the state and discussed soil erosion including highly erodible land (HEL).

Zellmer Zant inquired about the policy toward the special flood hazard area (floodplain). O'Tool suggested that the standard floodplain regulations could be followed.

Zellmer Zant referenced the conditional use language as being included along with the overlay. Priestley replied that it would need to be discussed and debated.

Zellmer Zant inquired about the definitions and the remaining concerns in the conditional use and overlay section. Priestley suggested that the concepts must continue to be vetted through the County Attorney's office. It will be shared with both parties. Priestley recommended that future work sessions be held following next week's public hearing.

Leo Jochum offered concerns about the comparison between Scott County and Woodbury County and the use of CSR2. Jochum made reference to other counties such as Louisa County, Mills County, Johnson County, and Linn County. He referenced the scorecard as used by Linn County and the role of using seed mixes.

Doyle Turner suggested that elected people should have a say on the locations of the solar parks. Turner offered concerns that parameters set could limit the amount of land available for these projects. He recommends giving the Supervisors more than one recommendation which could include the industrial areas. As part of the conditional use, he offered questions about the hurdle of being necessary and desirable.

STAFF ANALYSIS

Woodbury County currently allows for the consideration of utility-scale solar energy systems in the General Industrial (GI) Zoning District with the use of the conditional use permit application process through the Zoning Commission for review and the Board of Adjustment for approval. The current debate is about whether to expand the opportunity for utility-scale solar on land in the Agricultural Preservation (AP) Zoning District.

Under the current regulations, if a property owner desires to install a utility-scale solar system on his or her property, they would check with the county and the respective zoning district would be identified. If the property were within the AP Zoning District, the proposal would not be allowed as it is designated as a “prohibited use” in the “Land Use Summary Table” (Section 3.03.4, p. 32) of the Woodbury County Zoning Ordinance. However, the landowner does have the right under the ordinance to request for their district to be rezoned to a designation that could facilitate utility-scale solar such as the GI Zoning District. Typically, there are instances that can hinder the rezoning process including incompatibility with the comprehensive plan, its future land use map and the concept of spot zoning which could fall under compatibility with adjacent land uses, etc.

The Zoning Ordinance Map Amendment (Rezoning) process within the zoning ordinance includes the following evaluation criteria as part of the review and decision-making by the Zoning Commission and Board of Supervisors. As per Section 2.02.4 D (p. 12), the Commission shall base their recommendation and the Board of Supervisors shall base their decision on the following criteria:

- Conformance with the goals and objectives set forth in the approved General Development Plan for Woodbury County including the Future Land Use Map;
- Compatibility and conformance with the policies and plans of other agencies with respect to the subject property;
- Consideration of the Corn Suitability Rating (CSR) of the property;
- Compatibility with adjacent land uses;
- Compatibility with other physical and economic factors affecting or affected by the proposed rezoning; and
- Any other relevant factors.

These criteria place emphasis on the comprehensive plan and its future land use map as a mechanism for determining whether or not a particular area of land is acceptable for a different set of land uses or zoning district. With this criteria, it could be challenging for a landowner in the middle of AP Zoned ground to switch the land to industrial through the rezoning process if the requested area for a rezoning is designated as agricultural on the future land use map. It could be difficult to meet the corn suitability rating and the compatibility with adjacent land uses. Hence, spot zoning could come into play which is defined in the zoning ordinance as:

An arbitrary zoning or rezoning of a small parcel of land, usually surrounded by other uses or zoning categories that are of a markedly or substantially different intensity, that is not consistent with the comprehensive land use plan, and that primarily promotes the private interest of the owner rather than the general welfare. This term is not used within these regulations, but is included here because it is commonly used to describe proposed rezonings, which may or not actually be spot zoning (Woodbury County Zoning Ordinance, p. 92).

As referenced in the October 23, 2023, backup materials for the Zoning Commission, if the comprehensive plan and/or its associated future land use map does not support a rezoning change, it is typically not recommended to proceed with the change in the zoning district. If there is desire to consider such a rezone, as required by ordinance, the development plan and map should be considered as part of the review process. With this being said, the regulations on the books signal that back in 2005, the residents of Woodbury County made it a priority to have a process in place that placed full scrutiny as to whether agricultural should or should not be used for other land uses and converted to different districts.

Under the current comp plan there is support for both renewable energy and agricultural land uses. The future land use map and the districts established in the zoning ordinance have placed requirements for where both can co-exist. In fact, Section 1.02.2 J of the zoning ordinance does reference “promoting conservation of energy resources and reasonable access to solar energy.” Consequently, Woodbury County decided in 2008 to allow for electrical energy generation (not including wind) to be placed only as a conditional use permit opportunity in the General Industrial (GI) Zoning District. Additionally, this use was designated as prohibited in every other zoning district. This designation can be construed as the county’s consensus at the time to place utility-scale solar assets in industrial areas over agricultural.

It is apparent that Woodbury County, based on the current comp plan, future land use map, and the parameters of existing ordinances are equipped to facilitate both agriculture and solar. As noted, there are opportunities for solar to be considered in GI. There are also opportunities for agriculture to be continued long-term in AP. However, due to the large majority of the unincorporated area being under the AP designation, it is inevitable that there would be a desire to use some AG land areas for utility-scale solar purposes. This is where the debate begins as to which areas within agricultural zoned land are appropriate or not for utility-scale solar energy systems.

As noted previously, the Board of Supervisors revised their direction to the Zoning Commission on September 26, 2023 to include the following concepts in mind as part of a future recommendation:

- A conditional use permit for AP "C" with Planning and Zoning and the Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- A slope of no more than 5% ONLY for fixed arrays (most technology is now movable arrays) in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- No more than 1% of industrial land conversion every 4 years for reclassification, roughly 5,700 acres.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A decommissioning plan from solar companies reviewed by P&Z/BOA subject to approval by the Woodbury County Board of Supervisors.

Each of the criteria presented by the Board of Supervisors are feasible with the three possible concepts subsequently presented in this report. It is important to note that the proposals presented are rough drafts and are subject to changes due to the inevitability of learning more information. The two draft proposals do provide for the concerns of the neighbors, land/soil, and other factors as part of the permit approval. Under the concepts presented then landowners within one (1) mile would be notified about the proceedings which could include public hearings about the Zoning Commission, Board of Adjustment and Board of Supervisors level depending if it is for the overlay district or the conditional use. The consideration of slope is included by the institution of a requirement for a geotechnical report submitted by a professionally licensed engineer qualified in the field of geotechnical engineering to assess the potential risk of slope instability or landslide for the proposed development in its existing

and post developed state. Additionally, the Commission may consider to recommend a specific cap on acres allowed to be converted to the overlay district with a time frame.

Based on the information received from the public so far, it is apparent that there is not a grand consensus about placing utility-solar on AG land. Both staff and the Commission have been conscious about the harvest season and have taken the time to analyze the issue and continue to collect information about the public's views. Through the course of three public hearings and one work sessions, there are legitimate concerns on both sides of the issue that must be kept in mind. From this perspective, and going back to the foundation of zoning, staff views the comp plan as the go-to or the starting point for policy. Therefore, staff has offers three possibilities that keep the comp plan in mind.

The first concept is to consider a new utility-scale solar energy conditional use process for the General Industrial (GI) Zoning District only. The second is to establish an overlay district to facilitate utility-scale solar within the Agricultural Preservation (AP) Zoning District. The third is to adopt the first concept and then to transfer the solar debate on agricultural land to the "Comprehensive Plan" adoption process that will likely occur in 2024. A working draft of the comp plan is available for public inspection at the following link: https://simpco.org/wp-content/uploads/2023/05/Draft_Woodbury-County-Comprehensive-Plan_5.2.23.pdf

SUMMARY OF PROPOSALS

1. **CONCEPT 1 - Draft Utility-Solar CUP:** A proposal to amend the zoning ordinance to offer specific requirements for obtaining a conditional use permit from the Zoning Commission and Board of Adjustment to facilitate the permitting of such systems in just the "General Industrial (GI) Zoning District." This proposal also requires that specific agreements be approved by the Board of Supervisors such as the Road Use and Repair Agreement, Drainage System Protection Agreement, Operation and Maintenance Plan, Decommissioning, Abandonment, and Site Restoration, Soil Erosion and Sediment Control, and Emergency Response. Additionally, this proposal could potentially place the building permit authorization authority with the Board of Supervisors which is ultimately the final decision in the permitting process. This proposal alone could be used for the permitting of utility-solar in just the General Industrial (GI) Zoning District or if there is abundant support to place these systems in the Agricultural Preservation (AP) Zoning District, the language could be modified to be compatible with the "overlay" concept that was referenced at previous meetings and mentioned below as the second concept. This proposal is included in the rough draft section entitled "Section 5.08 – Utility-Scale Solar Energy Systems" which is available for review in the subsequent pages.
2. **CONCEPT 2 - Draft Utility-Solar Overlay District:** The second concept would be to amend the zoning ordinance to offer parameters for the authorization of an "overlay" district entitled the "Utility-Scale Solar Energy Systems Overlay District." This district could follow a form of Zoning Ordinance Map Amendment (Rezone) process which includes a recommendation by the Zoning Commission and approval by the Board of Supervisors. If the district is approved over ag land, then potential applicants would also need to follow the parameters of the first concept above. Potentially, you could have the Zoning Commission, Board of Adjustment, and the Board of Supervisors involved in this process that would place the applicants in a position to provide the county with application materials that could be vetted by the Zoning Commission, Board of Adjustment and the Board of Supervisors. The debate on this overlay district will likely include whether to use Corn Suitability Rating 2, slope or other parameters as for criteria for approval of the overlay. There could also be consideration for the placement of a cap on the total number of acres that could be authorized by the Board of Supervisors for the overlay district (e.g. – 9,500). The overlay district would be created on a project-by-project basis and would retain the existing uses and rights of the primary zoning district, Agricultural Preservation (AP). This proposal is included in the rough draft section entitled "Section 5.09 – Utility-Scale Solar Energy Systems Overlay District" which

is available for review in the subsequent pages.

3. **CONCEPT 3 - Development Plan Process:** The third concept would be to consider only the first concept limited to only the General Industrial (GI) Zoning District and to not consider the adoption of the overlay district or another rezone procedure until the Woodbury County Comprehensive Plan for 2040 is complete, has been adopted as the official plan for Woodbury County. It would be prudent to consider utility-scale solar as part of the “Comprehensive Plan” (comp plan) debate to further gauge if there is new desire from the public to pursue utility-scale solar on agricultural land. The current development plan offers support for renewable energy, however, the policies including the zoning ordinance that came out of that process established industrial areas as the appropriate locations for electrical energy generation while protecting agricultural land. Woodbury County is currently at a convenient juncture to transfer this solar debate into the comp plan proceedings. The comp plan adoption process is a time to determine what the development priorities are for Woodbury County over the next 20 years.

It is a time to ask what type of county do we want to be? What are the goals for Agriculture? Land Use? Economic Development? Commercial? Industrial? Residential? Parks? Recreation? Conservation? Environment? Public Safety? Transportation? Facilities? Operations? If renewable energy is a top priority, the opportunity is ahead for the public to offer input on what “areas of land” are suitable for industrial or commercial expansion through the comp plan’s future land use map. This debate will take place before the Zoning Commission and the before the Board of Supervisors, likely in the spring of 2024. Further rationale for use of the comprehensive plan process is available for review in the subsequent section entitled “Comprehensive Plan Adoption Process and Current Outlook.”

ROUGH DRAFT – SUBJECT TO CHANGES

WOODBURY COUNTY, IOWA

ORDINANCE NO. ____

AN ORDINANCE AMENDING THE TEXT OF THE WOODBURY COUNTY ZONING ORDINANCE TO AMEND PORTIONS OF: THE TABLE OF CONTENTS; TO ADD A NEW SECTIONS ENTITLED SECTION 5.08: UTILITY-SCALE SOLAR ENERGY SYSTEMS, SECTION 5.09: UTILITY-SCALE SOLAR ENERGY SYSTEMS OVERLAY DISTRICT, AND SECTION 5.10: UTILITY-SCALE ENERGY SYSTEMS OVERLAY REZONE PROCESS; AND TO INCLUDE THE RENUMBERING OF SECTIONS, SUBSECTIONS AND PAGE NUMBERS.

WHEREAS STATEMENTS TO BE ADDED.

NOW, THEREFORE, BE IT ENACTED BY THE BOARD OF SUPERVISORS OF WOODBURY COUNTY, IOWA THAT THE BELOW ZONING ORDINANCE LANGUAGE AMENDMENTS BE MADE:

Amendment #1 –

On page iii: To add “Section 5.08: Utility-Scale Solar Energy Systems” under the Article 5, Supplemental Requirements category **Page TBD**

On page iii: To add “Section 5.09: Utility-Scale Solar Energy Systems Overlay District” under the Article 5, Supplemental Requirements category **Page TBD**

On page iii: To add “Section 5.10: Utility-Scale Energy Systems Overlay Rezone Process” under the Article 5, Supplemental Requirements category **Page TBD**

Amendment #2 –

On page **82?**: To add “Section 5.08: Utility-Scale Solar Energy Systems” **Page TBD**

On page **105?**: To add “Section 5.09: Utility-Scale Solar Energy Systems Overlay District” **Page TBD**

On page **107?**: To add “Section 5.10: Utility-Scale Energy Systems Overlay Rezone Process” **Page TBD**

Amendment #3 –

To renumber sections, subsections, and pages as follows: **TBD**



ROUGH DRAFT – SUBJECT TO CHANGES

Section 5.08: Utility-Scale Solar Energy Systems

1. **Statement of Intent.** The purpose of this Section is to facilitate the construction, installation, and operation of Utility-Scale Solar Energy Systems (US-SES) in Woodbury County, in a manner that promotes economic development, protects property values, and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands, conservation lands, and other sensitive lands.

If this Section conflicts with any other provision of the Woodbury County Zoning Ordinance, this Section shall control.

2. **Jurisdiction.** This Ordinance is adopted by the Woodbury County Board of Supervisors and governs all lands within the unincorporated areas of Woodbury County, Iowa. This Ordinance and its provisions shall not apply to those properties or projects occurring within the incorporated cities of Woodbury County.
3. **Definitions.** For use in this Ordinance, certain terms or words used herein shall be interpreted or defined as follows:
 - A. **Agrisolar or Agrivoltaics.** A utility-scale solar system co-located on the same parcel of land primarily adapted, by reason of nature and area, for use for agricultural production, including crop production, grazing, apiaries, or other agricultural products or services. Fifty-one percent (51%) of the use of the land is for agricultural purposes.
 - B. **Applicant.** The person or entity submitting the application under this Ordinance, which is normally expected to be the owner or operator of a US-SES, or the owner of the US-SES development.
 - C. **Community Solar.** A utility-scale solar energy system developed by a municipality, utility, or other third party that typically allows community members to subscribe to the project.
 - D. **Conditional Use Permit (CUP).** A use that is allowed in conformance with the regulations of the zoning district in which it is located, if and only if, approved by the Board of Adjustment as provided in subsection 2.02-9. A CUP issued by the Woodbury County Board of Adjustment is required before associated building permit(s) can be issued in unincorporated Woodbury County.
 - E. **Concentrating Solar Power Systems.** A system that generates solar power by using mirrors, lenses, or similar reflecting surfaces to concentrate sunlight collected over large areas onto smaller focal areas. Concentrating solar power systems are prohibited.

ROUGH DRAFT – SUBJECT TO CHANGES

- F. **Corn Suitability Rating 2 (CSR2).** An index to the inherent soil productivity of each kind of soil for row crop production. The index is scaled from 100, for the most productive soils, to 5 as the least productive.
- G. **Critical Slope Angle.** The maximum slope incline which the soil and rock materials underlying the slope can support, without failure, under existing climate, vegetation, and land use.
- H. **Developed Project Areas.** The total project area that is subject to an agreement between the Owner/Operator and the Participating Landowner and is actually developed and utilized for placement of a US-SES.
- I. **Easement.** A legal agreement for the use of property for a specified purpose.
- J. **Feeder Circuits/Lines.** A power line or network of lines used as a collection system that carries energy produced by a solar energy system to an interconnection point like a substation. Feeder circuits are most often placed underground.
- K. **Glare/Glint.** Light reflected off of a surface.
- L. **Ground-Mounted System.** A system where a rack(s) of panels is mounted on concrete posts or poles anchored in the ground and are wired or plumbed to an adjacent home or structure.
- M. **Interconnection.** Link between a generator of electricity and the electric grid. Interconnection typically requires connection via infrastructure such as power lines and a substation, as well as a legal agreement for the project to be connected to the grid.
- N. **Module.** An individual unit comprised of multiple photovoltaic (PV) cells, with multiple modules used in a solar energy system.
- O. **Mounting.** The method of anchoring solar energy system modules to the ground or a building.
- P. **Non-Participating Landowner.** A landowner who has not signed a binding agreement with the Applicant/Developer/Owner of the US-SES project.
- Q. **Occupied Structure.** For the purpose of this ordinance, shall include any existing occupied house, apartment, barn, or machine shed regularly used by the property owner, or parties in possession of the property at the time of the permit application.
- R. **Operator.** The entity or individual that operates a solar energy system.

ROUGH DRAFT – SUBJECT TO CHANGES

- S. **Owner.** The entity or entities with an equity interest in the US-SES, including their respective successors and assigns. Owner does not mean the landowner from whom a lease, easement, or other property right is acquired for locating the US-SES unless the landowner has an equity interest in the US-SES, or any person holding a security interest in the US-SES solely to secure an extension of credit, or a person foreclosing on such security interest provided that after foreclosure, such person seeks to sell the US-SES at the earliest practical date.
- T. **Participating Landowner.** A landowner under lease, easement or other binding property agreement with the applicant, developer, or owner of the US-SES.
- U. **Photovoltaic (PV) Cells.** Semiconductors which generate electricity whenever light strikes them; generally grouped on panels.
- V. **Professional Engineer.** A qualified individual who is licensed in the State of Iowa as a professional engineer.
- W. **Project Area.** The geographic area encompassing all components of a US-SES project, including border fencing.
- X. **Property Line.** The legal boundary between separately owned real estate parcels, and between privately owned parcels and public owned land or public right of way.
- Y. **Residence.** A house, apartment or other shelter that is the abode of a person, family, or household and regularly occupied.
- Z. **Setback.** The minimum distance from a certain object, structure or point to the edge of any part or component of the US-SES.
- AA. **Slope.** The inclination of the land surface from the horizontal, with the steeper and longer having the most erosion potential.
- BB. **Solar Array.** Equipment used for private or utility scale solar energy systems. Can be mounted on primary or accessory structures, on a racking system affixed to the ground, or integrated as a mechanical or structural component of a structure.
- CC. **Solar Collector.** A device, structure or part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy.
- DD. **Solar Easement.** An easement created to protect a solar project from encroachment by adjacent properties which would shade panels. See Iowa Code 564A.

ROUGH DRAFT – SUBJECT TO CHANGES

- EE. **Solar Energy.** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
- FF. **Solar Energy Systems, Private.** An energy system that converts solar energy to usable thermal, mechanical, chemical, or electrical energy primarily for immediate onsite use that already has an existing principal use on the same parcel. Solar Energy Systems, Private shall be allowed only as a non-utility scale accessory use to a permitted principal use. Surplus energy sold back to a utility must comply with all applicable laws including but not limited to Section 199, Chapter 15.11(5) of Iowa Administrative Code, and all requirements of the Iowa Utilities Board. Systems can be mounted on primary or accessory structures, on a racking system affixed to the ground, or integrated as a mechanical or structural component of a structure.
- GG. **Solar Energy Systems, Utility Scale (US-SES).** An energy system, commonly referred to as a “solar farm”, which converts solar energy to useable thermal, mechanical, chemical, or electrical energy primarily for transmission through the electrical grid for offsite use or wholesale and/or retail sale. Systems can be mounted on primary or accessory structures, on a racking system affixed to the ground, or integrated as a mechanical or structural component of a structure. Utility scale solar energy systems do not include concentrating solar power (CSP) systems.
- HH. **Solar Panel.** 1) A grouping of photovoltaic cells used to generate electricity directly from sunlight. A grouping of these panels is called an array. 2) A panel circulating water or other liquid through tubes to collect, transfer and store the sun’s heat for domestic hot water and building heat.
- II. **Solar Storage Battery.** A device that stores energy from the sun and makes it available in an electrical form.
- JJ. **Solar Storage Unit.** A component of a solar energy device that is used to store solar-generated electricity or heat for later use.
- KK. **Solar Thermal Energy System (STES).** A system that directly heats water or other liquids using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.
- LL. **Structure.** Anything constructed or erected on the ground or attached to the ground, including but not limited to, antenna(s), buildings, sheds, cabins, residences, signs, storage tanks, towers, wind turbines and other similar objects.
- MM. **Structure-Mounted Energy System.** A system where photovoltaic panels or solar thermal panels are mounted on racks attached to the roof or side-walls of a building. Panels can be flush-mounted or angled for optimal sun exposure.

ROUGH DRAFT – SUBJECT TO CHANGES

NN. Substation. A facility that converts electricity produced by a generator like a solar energy system to a higher voltage, allowing for interconnection to high-voltage transmission lines.

OO. System Height. The height of a solar energy system, usually referring to ground mounted systems. Total system height is the measurement from the ground to the top of the mounting or modules associated with a system.

PP. Transmission lines. Power lines used to carry electricity from collection systems or substations over long distances.

4. **Applicability.** It shall be unlawful to construct, erect, install, alter or locate any US-SES within unincorporated Woodbury County, without first obtaining a Conditional Use Permit from the Woodbury County Board of Adjustment and a US-SES Building Permit and associated agreements from the Woodbury County Board of Supervisors as outlined in this Ordinance.

A. No application for a US-SES Conditional Use Permit and a US-SES Building Permit shall be granted without first submitting all required information and documentation, and paying all associated fees to the County as included in this Ordinance.

5. **Conditional Use Permit (CUP).** US-SES shall require a Conditional Use Permit within the General Industrial (GI) Zoning District **or the Utility-Scale Solar Energy Systems Overlay District (US-SESOD)**. This use is prohibited in all other Zoning Districts in Woodbury County. This use shall be subject to the procedures and standards included in the Woodbury County Zoning Ordinance unless otherwise stated in this Section. Concentrating solar power systems are prohibited.

6. **Application Materials.** In addition to all submittal requirements of a conditional use application as defined in Section 2.02.9 and this Section, the application for a US-SES installation shall be submitted along with the following information:

A. The name and address of the applicant, as well as the proposed owners or operators of the project, including the contact information (name, address, telephone and email) of their authorized representatives. The application shall designate the entity who would be the permit holder of the conditional use permit and building permit.

B. Documentation of the applicant's legal control over the private property necessary for the project, signed by the property owner. Such legal control must vest in the permit holder of the Conditional Use Permit at the time of its issuance.

C. A certified abstractor listing of the names and mailing addresses of all owners of real property lying within one (1) mile from the subject property shall be provided with the application.

ROUGH DRAFT – SUBJECT TO CHANGES

- D. A plat of survey showing the parcels on which the solar array will be included in the project area.
- E. Legal descriptions of all properties, leased and/or owned, identified to be part of the project area.
- D. A Development Plan including:
 - (1) Project timeline. Project timeline showing how the site will be developed from beginning to end.
 - (2) Site plan. A professionally prepared site plan drawn to scale shall showing the location and spacing of every solar panel/array, all other facilities to be constructed and associated with the project, and all existing assets located in the project area. Specifically, the site shall include:
 - (a) North arrow and scale.
 - (b) Property lines and physical dimensions of the project area.
 - (c) Setback locations from the property line locations clearly marked for the applicable Zoning District.
 - (d) Location of the right-of-way.
 - (e) Location and layout of vehicle parking, loading and queuing areas, street accesses, and driveways.
 - (f) Easements present on the property including those for utilities.
 - (g) Total number, location and spacing with dimensions (length, width, & height) of solar panels/arrays and all other supporting structures including the distances from the property lines and other structures.
 - (h) Location with dimensions (length, width, & height) of existing structures and distances from the property lines and other structures.
 - (i) Location of underground and/or overhead electric lines.
 - (j) Location of field tile.

ROUGH DRAFT – SUBJECT TO CHANGES

- (k) Location of well.
 - (l) Location of the sanitary infrastructure (e.g. – Septic tank and system).
 - (m) Location of topography lines (2 foot contours).
 - (n) Flood hazard area designations.
 - (o) Such other information as the Zoning Director may require to determine compliance with the provisions of this Ordinance
- (3) Structure Plans. Architectural and/or engineer plans and specifications prepared pursuant to the acceptable professional standards.
 - (4) Pre-construction survey of nearby roads that may be impacted by construction of the facility.
 - (5) A map showing the separation distances of the project area from adjacent property lines; occupied residences; unoccupied non-residential buildings; public rights-of-way; public drainage districts; public conservation areas; cemeteries; city limits; airports (public and private); lakes; and permanent water courses.
 - (6) Setback analysis showing the minimum setback requirements, or any agreed on greater setback provisions, are met by the project.
 - (7) Grading plan. This plan shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.). The plan shall include soil erosion and sediment control considerations and storm water management practices as referenced in this Ordinance. A storm water pollution prevention plan (SWPPP) and permits from the Iowa Department of Natural Resources and other applicable government bodies must be submitted.
 - (8) Geotechnical report. A site-specific geotechnical report shall be submitted by a professional licensed engineer qualified in the field of geotechnical engineering, registered in the State of Iowa, and prepared in accordance with generally accepted geotechnical and environmental engineering practices to assess the potential risk of slope instability or landslide for the proposed development in its existing and post developed state.
 - (9) Floodplain data. Development within the Special Flood Hazard Area (SFHA) shall comply with federal, state, and local regulations. Proposals for the US-SESOD shall include base flood elevation data for

ROUGH DRAFT – SUBJECT TO CHANGES

the footprint of the project area. Proposals shall also include the elevation of the proposed development site (natural ground).

- (10) Utility plan. Planned location of all utilities, including underground or overhead electric lines.
 - (11) Landscaping/Screening plan. Planned location of all plants and screening.
 - (12) Road Impact Analysis. An inventory of the existing road network to be utilized for construction and maintenance of the facility and details on how the project will impact those roads over the life of the project, including during installation and decommissioning.
 - (13) Interconnection agreement. Provide the interconnection agreement with the utility company.
 - (14) Any Federal Aviation Administration (FAA), or other federal, state, or local permits or approvals that are necessary for the project. Applicant shall submit a copy of the actual permit, or proof that the permit has been filed with the appropriate agency.
 - (15) Operation and Maintenance Plan.
 - (16) Emergency Response Plan.
 - (17) Such additional information as the County may request due to the unique circumstances with the project.
 - (18) Any other information necessary to describe the intended development plan. Applicants are encouraged to have on-going discussions with the county zoning staff, county engineer, and other associated county departments during the preparation of the application.
7. **Submittal Requirements.** In addition to the requirements in Section 2.02.9, the applicant shall meet submit all requirements contained in this Section at the time of the application for a Conditional Use Permit.
- A. **Setbacks.** Setbacks for all structures (including the solar arrays themselves) must adhere to the minimum principal setback standards for the zoning district where the project is located as per Section 3.04 or the applicable the setback requirements of the US-SESOD.
 - B. **Height.** A solar panel shall be no less than two (2) feet (Twenty-Four inches) off the ground. A solar panel shall not exceed twenty (20) feet in height above grade

ROUGH DRAFT – SUBJECT TO CHANGES

at maximum tilt of the solar panel(s).

- C. Screening. Project shall provide vegetative screening for all dwellings within 1,000 feet of the project boundaries.
- (1) Applicant shall submit a screening plan for each dwelling within 1,000 feet of the project boundaries.
 - (2) Screening may be waived by the owner of a dwelling. Waiver must be in writing and recorded.
 - (3) Screening may be waived by the Board of Adjustment upon submission of a viewshed study from the applicant demonstrating that the project is not within the viewshed of the dwelling due to topography, existing vegetation, or other factors. The point of reference used in the viewshed study shall be as close to the dwelling as possible.
 - (4) Any vegetative screening within the project boundaries shall be maintained throughout the life of the project by the project owner. Any screening on the dwelling property shall be maintained by the project owner for no less than twelve months.
 - (5) Deciduous trees shall have a minimum caliper of 1.5” when planted, shall be at least six (6) feet tall within three (3) years of installation, and shall have a minimum mature height of twelve (12) feet.
 - (6) Screening plans shall use no less than two varieties of tree.
- D. Appurtenant structures. All appurtenant structures shall be subject to bulk and height regulations of structures in the underlying zoning district unless otherwise stated in this Section.
- E. Fencing/security. A security fence must be installed along all exterior sides of the utility scale solar installation and be equipped with a minimum of one gate and locking mechanism on the primary access side. Security fences, gates and warning signs must be maintained in good condition until the utility scale solar installation is dismantled and removed from the site.
- F. Lighting. If lighting is provided for the US-SES, lighting shall be shielded and downcast such that the light does not project directly onto the adjacent parcels nor into the night sky.
- G. Signage. All US-SES shall provide the following at all locked entrances: (a) a visible “High Voltage” warning sign, (b) name(s) and phone number(s) for the electric utility provider, (c) name(s) and phone number(s) for the site operator, (d)

ROUGH DRAFT – SUBJECT TO CHANGES

the facility's 911 address, (e) a lock box with keys as needed.

- H. Utility connections. Reasonable efforts shall be made to place all utility connections from the solar installation underground, depending on appropriate soil conditions, shape and topography of the site, distance to the connection, or other conditions or requirements.
- I. Glare minimization. All solar panels must be constructed to minimize glare or reflection onto adjacent properties and adjacent roadways and must not interfere with traffic, including air traffic, or create a safety hazard.
- J. Outdoor storage. Only the outdoor storage of materials, vehicles, and equipment that support the operation and maintenance of the US-SES shall be allowed.
- K. Floodplain considerations. Utility scale solar installations shall comply with local, state, and federal regulations of the Special Flood Hazard Area (SFHA). Proposals for the US-SESOD shall include base flood elevation data for the footprint of the project area. Proposals shall also include the elevation of the proposed development site (natural ground).
- L. Endangered species and wetlands. Applicant shall seek natural resource consultation with the Iowa Department of Natural Resources and the Woodbury County Conservation Board.
- M. Ground cover, buffer areas and weed control. Ground around and under solar arrays and in project site buffer areas shall be planted and maintained in perennial vegetated cover and meet the following standards:
 - (1) Top soils shall not be removed during development, unless part of a remediation effort.
 - (2) Soils shall be planted and maintained in perennial vegetation to prevent erosion, manage runoff, and build soil. Seeds include a mix of grasses and wildflowers, ideally native to the region of the project site that will result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in the buffer areas as appropriate for visual screening.
 - (3) Seed mixes and maintenance practices should be consistent with the recommendations made by qualified natural resource professionals such as those from the Iowa Department of Natural Resources, County Soil and Water Conservation District, or USDA Natural Resources Conservation Service.

ROUGH DRAFT – SUBJECT TO CHANGES

- N. Compliance with local, state and federal regulations. Utility scale solar installations shall comply with applicable local, state and federal regulations.
8. **Procedure for Review of US-SES Conditional Use Permit.** The applicant shall go through the following process prior to, during, and after the conditional use permit consideration process.
- A. Applicant shall meet with the Zoning Director and submit all required documents. If the director determines that the application lacks the required information as enumerated in this Ordinance, the director shall then provide the applicant with a written Notice of Deficiency. The applicant may refile an amended application once the deficiencies have been resolved.
 - B. Distribution and Staff Review. The Zoning Director shall distribute copies of the application and associated materials and agreements to the appropriate county departments, public agencies, and public utilities. The appropriate county, public agency and public utility shall review the application materials and prepare reports of their findings and comments to the Planning and Zoning Commission for review prior to the Board of Adjustment’s public hearing on the proposed application.
 - C. Schedule. Complete application submittals shall be included on the agenda of the Planning and Zoning Commission and the Board of Adjustment in accordance with the established administrative schedule.
 - D. The Zoning Director shall specifically review the conformance of the application and associated materials and agreements with the requirements of this Ordinance and the goals and objectives of the county’s general plan. The Zoning Director may make recommendations for conditions for approval including use restrictions required to preserve and improve the peace, safety, health, welfare, comfort, and convenience of the future residents of the property and neighboring properties.
 - E. The Woodbury County Board of Supervisors shall consider for approval the following agreements and plans prior to the submission of the conditional use permit to the Board of Adjustment:
 - (1) Woodbury County Road Use and Repair Agreement
 - (2) Woodbury County Public Drainage System Protection Agreement
 - (3) Operation and Maintenance Plan.
 - (4) Decommissioning, Abandonment, Escrow Account, and Site Restoration Plan

ROUGH DRAFT – SUBJECT TO CHANGES

(5) Soil Erosion and Sediment Control Plan

(6) Emergency Response Plan

Final approval of the US-SES Conditional Use Permit shall not proceed until the Board of Supervisors have approved each agreement and plan and the Chairman of the Board and the applicant have executed these agreements with the applicant.

- F. Conditional Use Permit Application will be presented to the Woodbury County Zoning Commission for review and the Woodbury County Board of Adjustment for a public hearing and decision on the Conditional Use Permit as per the requirements in this Ordinance.
- G. The use(s) outlined in the application shall be established in accordance with the draft plans considered by the Board of Adjustment within five (5) years of approval. “Commencing Construction” is determined by disturbance of soil at project site, that is not part of a primary farming operation. Any portion of the development plan not completed within five (5) years of approval by the Board of Adjustment shall not be installed until the development has been reauthorized by the Board of Adjustment. Reauthorization shall be subject to the regulations in effect at the time reauthorization is requested.
9. **US-SES Building Permit Requirement.** In addition to the requirements of the Conditional Use Permit, each US-SES project must obtain an approved US-SES Building Permit from the Board of Supervisors prior to the start of any construction. The building permit application shall be submitted with the conditional use permit application materials as required in this Ordinance not limited to the development plan, site plan, and structure plans. The Zoning Director will supply an application form to be used by any person or entity seeking to construct a US-SES project.
- A. The Director shall submit the building permit application for review, comment and recommendation by appropriate departments and agencies.
- B. Approval of the building permit by the Board of Supervisors shall be based upon findings that the proposed use of the site and the proposed location(s) and dimensions of the structure(s) on the subject parcel(s) of real property comply with the provisions of this ordinance.
- C. If the building permit is denied, the application shall be returned to the applicant with a written explanation for the reasons for the denial.
- D. Any building permit that is subsequently found to have been issued in conflict with the provisions of this ordinance shall be void.

ROUGH DRAFT – SUBJECT TO CHANGES

- E. Any approved US-SES building permit shall be valid for 24 months from the date of its issuance.

10. Required Agreements and Plans. As part of the approval process for the US-SES conditional use permit and building permit, the following agreements and plans shall be submitted to the Woodbury County Board of Supervisors for approval prior to the issuance of a Conditional Use Permit by the Board of Adjustment.

A. Woodbury County Road Use and Repair Agreement

- (1) Roads. Applicants shall adhere to the Woodbury County Road Use and Repair Agreement, and in doing so, shall identify all roads to be used for the purpose of transporting solar components, substation parts, cement, and/or equipment for construction, operation or maintenance of the solar installation and obtain applicable weight and size permits from the impacted road authority prior to construction.
- (2) Existing Road Conditions. Applicants shall conduct a pre-construction survey, in coordination with the impacted local road authorities to determine existing conditions of roads identified pursuant to Section 6.1. The survey shall include photographs or video and written documentation of the condition of the identified road facilities. The applicant is responsible for on-going road maintenance and dust control measures identified by the County Engineer during all phases of construction.

B. Woodbury County Public Drainage System Protection Agreement

- (1) Applicants shall adhere to the Woodbury County Public Drainage System Protection Agreement, and in doing so, shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation or maintenance of WECS (where required).

C. Operation and Maintenance Plan. The applicant shall submit a plan for the operation and maintenance of the solar installation including all necessary services, frequency of service, preventative maintenance measures, and monitoring. The operation and maintenance plan should include at a minimum:

- (1) Preventative maintenance practices and schedules for all on-site equipment including but not limited to: inverters, panels, equipment pads, tracking systems, transformers, access entrances, internal roads, gates, fencing, security systems, stormwater management installations.
- (2) Annual reporting and verification to county on the status or changes to ongoing service schedule.

ROUGH DRAFT – SUBJECT TO CHANGES

- (3) Schedule of all other monthly, annual, or semiannual reporting requirements for other submittals including: agricultural impact mitigation plan, decommissioning plan, and vegetation management plan.
- (4) Noise. No operating solar energy equipment shall produce noise exceeding any of the following limitations, with the exception of initial construction and routine maintenance. Adequate setbacks and effective noise mitigating equipment shall be used to comply with these limitations:
 - (a) An hourly average noise level of fifty-five (55) dBA during the day (between sunrise and sunset), and an hourly average noise level of fifty (50) dBA at night (between sunset and sunrise), as measured at the occupied dwelling of any adjacent property containing an existing residential structure. If the ambient sound pressure level exceeds 55 dBA during the day or 50 dBA at night, the standard shall be the ambient Leq (equivalent continuous sound pressure level) plus 5 dBA.
 - (b) A baseline noise evaluation shall be completed by a board certified professional by the Institute of Noise Control Engineering (INCE), or an appropriately licensed Professional Engineer (PE) prior to construction of the proposed solar site.
 - (c) A post-construction noise evaluation shall be performed by a third-party board certified professional by the Institute of Noise Control Engineering (INCE), or an appropriately licensed Professional Engineer (PE) following commencement of commercial operation of the project to verify compliance with the County's standards.
 - (d) The owner(s) of an adjacent property may voluntarily agree, by written and recorded waiver, to a higher noise level.
- (5) Issue resolution protocols. Contact information for responsible party to address issues that may arise (damaged equipment causing excessive noise, etc).
- (6) Disposal/recycling plan for damaged or obsolete facility equipment or hazardous waste. No storage of inoperable or obsolete equipment shall be allowed to remain on-site. Site operator shall be responsible for the cleanup of debris related to storm damage.
- (7) Cleaning chemicals and solvents. During operation of the proposed installation, all chemicals or solvents used to clean photovoltaic panels should be low in volatile organic compounds and the operator should use recyclable or biodegradable products to the extent possible. Any on-site

ROUGH DRAFT – SUBJECT TO CHANGES

storage of chemicals or solvents shall be referenced.

- (8) Maintenance, repair, or replacement of facility. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to emergency response officials. Any retrofit, replacement or refurbishment of equipment shall adhere to all applicable local, state and federal requirements.
- (9) Repowering. Proposals to replace more than twenty five percent (25%) of the panels in a facility within a twelve (12) month period will be required to submit a new conditional use permit application based on the requirements in this ordinance for review and approval. A repowering event does not include replacement of panels in previously approved locations due to weather damage, equipment failure, or a force majeure event.
 - (a) The plan shall include updated information for some or all of the reports and plans required by this section, as determined necessary by the Zoning Director.
 - (b) The Board of Adjustment shall review and approve, conditionally approve, or deny the repowering plan as per the requirements of Section 2.02.9 and 5.08.

D. Decommissioning, Abandonment, Escrow Account, and Site Restoration Plan.

- (1) The application must include a decommissioning plan that describes the following:
 - (a) The anticipated life of the utility scale solar installation.
 - (b) The anticipated manner in which the project will be decommissioned, including plans to recycle components and dispose of any hazardous materials.
 - (c) The anticipated site restoration activities.
 - (d) The estimated decommissioning costs in current dollars.
 - (e) The method for ensuring that funds will be available for decommissioning and restoration of the site.
- (2) Decommissioning cost considerations. The applicant shall provide the estimated cost of decommissioning, excluding the salvage value, should

ROUGH DRAFT – SUBJECT TO CHANGES

be presented from both the solar developer and from an independent third-party engineer, at the recommendation of the Woodbury County Engineer, at the expense of the developer.

- (a) Removal of any hazardous materials at the facility, as determined by a Toxic Characteristic Leaching Procedure (TCLP) or other similar test approved by Woodbury County and as described in the facility's Operations and Maintenance Plan. TCLP testing shall be performed prior to any ground disturbance at the project site.
 - (b) Salvage value shall not be included in the cost estimate.
 - (c) The estimated decommissioning cost must be updated every 5 years of the project using the same process as the initial decommissioning cost process.
- (3) Site restoration activities. Restoration activities shall include, but not be limited to, the following:
- (a) Removal of all components and equipment.
 - (b) Soil in project area shall be decompacted and seeded with a cover crop, unless otherwise specified in the approved grading or soil erosion and sediment control plan.
 - (c) For any part of the energy project on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates or repurposed buildings in place or regarding restoration of agricultural crops or forest resource land. Any use of remaining structures must be in conformance with the regulations in effect at that time.
- (4) Performance agreement and proof of financial surety. At the time of permitting, the applicant, facility owner, or site operator shall provide a Performance Agreement and accompanying financial surety instrument to cover the cost of decommissioning in accordance with the following:
- (a) A bond shall be required for 125% of the most recent estimated decommissioning total cost paid for by the project owner/developer. The bond shall remain in place until one (1) year after the last day of decommissioning.
 - (b) Decommissioning funds shall be maintained in the form of a performance bond, surety bond, bank letter of credit, stable parent company guarantee, or other form of financial assurance as approved by the Woodbury County Board of Supervisors. Any

ROUGH DRAFT – SUBJECT TO CHANGES

financial document evidencing the maintenance of the decommissioning funds shall include provisions for releasing the funds to the County in the event decommissioning is not completed in a timely manner.

- (c) Prior to any ground disturbance, grading or construction activity on the site, twenty-five percent (25%) of total estimated decommissioning costs shall be provided by any of the means listed above. An additional twenty five percent (25%) shall be provided within five (5) years and ten (10) years of the date of initial approval, and the remaining twenty five percent (25%) of the total re-estimated decommissioning costs shall be provided within fifteen (15) years of the date of initial approval. From that point forward, 100% of the total estimated decommissioning costs as determined by the most recent re-estimation shall be maintained in the decommissioning fund until the end of the functional life of the project.
 - (d) Financial surety shall be maintained for the life of the project.
 - (e) Proof of recertification of the financial surety instrument must be submitted to the County annually.
 - (f) Every five (5) years, the facility owner or operator shall retain an independent Licensed Iowa Engineer approved by the County to re-estimate the total cost of decommissioning and attest that the value of the financial surety instrument is appropriate. This report shall be filed with the County and shall incorporate any new industry information learned since the last cost determination.
 - (g) The required amount of the decommissioning fund shall match the re-estimated cost of decommissioning. Within ninety (90) days of filing the re-estimation report with the County, the facility owner or operator shall cause the fund balance of the financial surety instrument to be adjusted to ensure that it matches the re-estimated decommissioning cost.
- (5) Escrow Account. At the time of permitting, the applicant, facility owner, or site operator shall provide at least \$100,000 per megawatt of project in an escrow account in addition to the total decommissioning funds that shall remain in the account up until one year after the last day of the decommissioning upon successful completion will be returned to the application/owner/operator. Any interest earned in the account shall belong to the County.
- (6) Commencement of site decommissioning. Decommissioning of the site shall commence at the time identified in the project decommissioning

ROUGH DRAFT – SUBJECT TO CHANGES

plan or performance agreement, or when the facility is determined to have been abandoned.

- (a) Decommissioning shall be completed in accordance with the approved decommissioning plan.
- (b) The landowner or tenant shall notify the Zoning Director both when the project is discontinued and when decommissioning is complete.
- (c) Third-party verification, as well as County verification of completed decommissioning will be required before the financial surety may be released.
- (d) The facility will be considered abandoned or out of commission in the following circumstances:
 - (i) Upon termination or expiration of the solar farm leases/easements or
 - (ii) After one year without production, storage of energy, or use as a backup facility.
 - (iii) Exceptions could be made for:
 1. A force majeure event that has occurred or is occurring, which will prevent the facility from resuming operation within 12 months.
 2. If the facility is in the process of being repowered.
 3. The project is pending completion of construction of the facility due to a backlog of cases or service requests in the MISO queue.
 4. A situation in which the project owner can provide evidence to the Woodbury County Board of Supervisors, that the facility's period of continuous inactivity is due to circumstances beyond the project owners control and that the facility has not been abandoned.
 5. Appeal of the notice of abandonment from the county within a set time of the project owner's receipt of the notice in which the project owner explains the reasons for operational difficulty and

ROUGH DRAFT – SUBJECT TO CHANGES

provides a timeframe for corrective action that the county deems reasonable.

- E. **Soil Erosion and Sediment Control Plan.** A grading plan shall be submitted and shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.). The plan shall be accompanied with the following documentation:

(1) Erosion and Sediment Control

- (a) The applicant agrees to conduct all roadwork and other site development work in compliance with a national pollutant discharge elimination system (NPDES) permit as required by the state department of natural resources and comply with requirements as detailed by local jurisdictional authorities during the plan submittal. If subject to NPDES requirements, the applicant must submit the permit for review and comment, and an erosion and sediment control plan before beginning construction. The plan must include both general 'best management practices' for temporary erosion and sediment control both during and after construction and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to prevent sediment-laden runoff into waterways.

(2) Stormwater Management Plan

- (a) For the purposes of pollutant removal, stormwater rate and runoff management, flood reduction and associated impacts, the applicant shall provide a detailed analysis of pre- and post-development stormwater runoff rates for review by local jurisdictional authorities.

(3) Ground cover and buffer areas. Ground around and under solar arrays and in project site buffer areas shall be planted and maintained in perennial vegetated ground cover, and meet the following standards:

- (a) Top soils shall not be removed during development, unless part of a remediation effort.
- (b) Soils shall be planted and maintained in perennial vegetation for the full operational life of the project to prevent erosion, manage runoff and build soil. Seeds should include a mix of grasses and wildflowers native to the region of the project site that will result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual

ROUGH DRAFT – SUBJECT TO CHANGES

screening. Non-native or naturalized species may be selectively planted for maintenance purposes as part of an approved site plan.

- (c) See mixes and maintenance practices should be consistent with recommendations made by qualified natural resource professional such as those from the Department of Natural Resources, County Soil and Water Conservation Service, or Natural Resource Conservation Service.
- (4) Plan material must not have been treated with systemic insecticides, particularly neonicotinoids.

F. Emergency Response Plan

- (1) The applicant shall submit an emergency response plan prior to any ground disturbance at the project site detailing the planned response actions that will be taken by the solar facility operator, including any battery energy storage systems in the event of an emergency situation. These actions are intended to minimize health risks to personnel and people in the surrounding community, as well as minimize adverse impacts to the environment.
 - (a) The plan shall include, but is not limited to, a detailed narrative of response procedures and the facility representatives responsible for management of the following plausible contingencies that could occur at the facility: natural disaster/severe weather, fire, security incident, capacity/transmission, environmental, chemical, pipeline (if applicable), and medical. It shall include procedures for a site evacuation, designated egress routes and emergency staging areas.
 - (b) The plan shall include a stand-alone section detailing the emergency response protocols specific to battery energy storage areas (if applicable).
 - (c) The plan shall be developed in coordination with local first responders, Woodbury County Emergency Management & Woodbury County Public Health personnel.

11. Future Operators. Future operators, successors, assignees, or heirs shall agree in writing to accept and to conform to all conditions of approval in the staff report. Prior notice to the County of the intent to sell or transfer ownership shall be done in a timely manner. Such agreement shall be filed with and accepted by the County before the transfer to a new operator, successor, assignees, or heirs shall be effective.

12. Severability

ROUGH DRAFT – SUBJECT TO CHANGES

- F. Should any section or provisions of this Ordinance be declared by the courts to be invalid or unconstitutional, such decision shall not affect the validity of the Ordinance as a whole, or any part thereof other than the part so declared to be invalid or unconstitutional.

13. Penalty

- F. Any person, persons, firms, partnerships or corporations, whether acting alone or in concert with any other, who violates this Ordinance shall be guilty of a simple misdemeanor as authorized by Iowa Code Section 331.302.

14. Effective Date

- F. This Ordinance shall be in effect after its final passage, approval, and publication as provided by law.

Section 5.09 Utility-Scale Solar Energy Systems Overlay District

1. **Purpose and Intent.** The Utility-Scale Solar Energy Systems Overlay District (US-SESOD) is intended to be mapped as an overlay of the Agricultural Preservation (AP) Zoning District. The US-SESOD zone is intended to allow for the orderly development of utility-scale solar energy projects including utility-scale solar energy systems, community solar systems, and agrisolar or agrivoltaic systems. This section establishes an overlay district that serves the following purposes:
 - (1) To provide a reasonable and thoughtful balance to limited development and use of utility-scale energy systems in the AP Zoning District.
 - (2) To encourage the continued role of agriculture as the primary economic sector in the unincorporated areas of Woodbury County and the continued preservation of its rural character.
 - (3) To encourage development that conforms to the vision, goals, and policies in the Woodbury County Development Plan.

ROUGH DRAFT – SUBJECT TO CHANGES

- (4) To encourage sustainable and energy efficient development and reasonable access to renewable energy not limited to solar.
 - (5) To maintain or enhance soil health for future agricultural use after project decommissioning.
2. **Allowed Uses.** The specific land uses allowed as principal allowed, conditional and accessory in the AP Zoning District are allowed in the US-SESOD in addition to the following use(s) which are hereby established as conditional uses:
- (1) Utility-Scale Solar Energy Systems (US-SES)
 - (2) Community Solar Systems
 - (3) Utility Agrisolar Systems
3. **Area Limitations.** The US-SESOD shall be capped to 8,540 acres over the Agricultural Preservation (AP) Zoning District. No more than 8,540 acres shall be established as the overlay of the Agricultural Preservation (AP) Zoning District. Each granted Zoning Ordinance Map Amendment (rezone) shall reduce the cap by the number of acres approved in each rezone until the original 8,540 acres cap is reduced to 0.
4. **Dimensional Standards.** Section 3.04 includes a table of comparative dimensional standards for all zones. The dimensional standards of the AP Zoning District shall apply to the US-SESOD unless otherwise stated in this Ordinance.
5. **Grading, erosion and sedimentation control.** All grading activity must be in compliance with the grading erosion/sediment control regulations of Woodbury County and the Iowa Department of Natural Resources.
6. **Supplemental regulations.** All pertinent provisions of Article 5, Supplemental Regulations, shall apply to uses and development in the US, Utility-Scale Solar Overlay Zoning District.

Section 5.10: Utility-Scale Energy Systems Overlay Rezone Process

- 1. **Authority.** The Board of Supervisors shall amend the zoning district map to provide a Utility-Scale Solar Energy Systems Overlay District (US-SESOD) pursuant to the procedures set out in this Ordinance and Section 335 of the Iowa Code.
- 2. **Purpose.** As set forth in subsection _____, The US-SESOD is intended to allow for the orderly development of utility-scale energy system projects. As the title describes, the US-SESOD is not intended to be a free-standing zoning district; it is to be applied as an overlay to an existing zoning district.

ROUGH DRAFT – SUBJECT TO CHANGES

3. **Evaluation Criteria.** The Planning and Zoning Commission shall base their recommendation and the Board of Supervisors shall base their decision on the requested zoning ordinance map amendment to the US-SESOD on the following criteria:
- A. Consideration of the Corn Suitability Rating 2 (CSR2) of the property to protect prime farmland as determined by high corn suitability ratings from conversation to other land uses:
 - i. Corn Suitability Rating 2 (CSR2). Areas within the AP Zoning District may be considered for rezoning to the US-SESOD with soil that scores an average CSR2 score of 65.0 or lower. Calculation of Iowa CSR2 ratings of a specific area of land is strictly limited to the following:
 - 1. Average CSR2 is to be calculated using current Soil Survey Geographic Database (SSURGO) data furnished by the United States Department of Agriculture Natural Resources Conservation Service (NRCS).
 - 2. Average CSR2 is to be calculated using the Decision Tool “Calculating a Weighted Average CSR2” available through the Iowa State University Extension.
 - 3. The Area of Interest (AOI) established in “Calculating a Weighted Average CSR2” must be delineated to reflect the precise, contiguous land area being developed with arrays, buildings, and utility and access infrastructure, and shall not include land area set aside for conservation or agriculture, or land otherwise undisturbed by development.
 - 4. The AOI must be established and CSR2 must be calculated prior to the start of site preparation work, including grading or topsoil removal or displacement. If site preparation work is completed prior to submitting an application for rezoning, historical CSR2 data may be utilized to reflect pre-development site characteristics.
 - 5. The Planning and Zoning Commission and Board of Supervisors may consider any AOI with a Weighted Average CSR2 of 65 or greater as Prime Agricultural Land.
 - B. The area to be rezoned contains a soil slope of no more than 5% only for fixed arrays to preserve the land and to account for soil erosion, compaction, and future land stewardship.
 - C. The proposed US-SESOD will be in harmony with the general purpose and intent of this ordinance and the goals, objectives and standards of the general plan.

ROUGH DRAFT – SUBJECT TO CHANGES

- D. The proposed US-SESOD will not have a substantial or undue adverse effect upon adjacent property, the character of the neighborhood, traffic conditions, parking, utility facilities, and other factors affecting public health, safety and general welfare.
- E. The proposed US-SESOD will be located, designed, constructed and operated in such a manner that it will be compatible with the immediate neighborhood and will not interfere with the orderly use, development and improvement of surrounding property.
- F. Essential public facilities and services will adequately serve the proposed US-SESOD.
- G. The proposed US-SESOD will not result in unnecessary adverse effects upon any significant natural, scenic or historic features of the subject property or adjacent properties.
- H. The proposed use or development, at the particular location is necessary or desirable to provide a service or facility that is in the public interest or will contribute to the general welfare of the neighborhood or community.
- I. All possible efforts, including building and site design, landscaping and screening have been undertaken to minimize any adverse effects of the proposed use or development.
- J. Separation Distances (Setbacks). All US-SES, accessory structures and any upgrades to existing solar energy systems shall observe the following setbacks, to be measured from the edge of the solar panels and equipment (not underground facilities such as cable or fencing):

Protected Area TBD	Setback Requirement TBD
Adjacent Property Lines	TBD? 50 feet*
Occupied Residence	TBD? 1000 feet
Unoccupied Non-Residential Building	TBD? 100 feet
Public Road Right-of-Way	TBD? 100 feet
Public Drainage District Right-of-Way	TBD? 100 feet
Public Conservation Area	TBD? 1 mile
Cemetery	TBD? 600 feet
City Limits	TBD? 2 miles
Airports (public and private)	TBD? 5 miles and FAA consultation and determination required.

* US-SES to be built on more than one parcel and parcels are abutting, a zero (0) side or rear setback shall be permitted to the property line in

ROUGH DRAFT – SUBJECT TO CHANGES

common with the abutting parcel(s).

- i. Setback Waivers. Property owners and municipalities may request a waiver from the setbacks as established in this Section, except for the following protected areas: airports, cemeteries, public conservation areas, and public road rights-of-way

PROVIDED, a waiver shall not alter any other non-waived setback requirement.

To effectuate such a waiver, the applicant must provide the Zoning Director with a recordable instrument signed by all owner(s)(or the controlling governmental entity) of the affected protected area that specifically identifies the nature and extent of the waiver. All waivers must be reviewed by the Board of Supervisors for compliance with this Section; and if deemed compliant, it shall be recorded in the office of the Woodbury County Recorder by the applicant. No waiver shall be granted for setbacks less than the required minimums for the Zoning District.

- K. Floodplain Requirements. Development within the Special Flood Hazard Area (SFHA) shall comply with federal, state, and local regulations. Proposals for the US-SESOD shall include base flood elevation data for the footprint of the project area. Proposals shall also include the elevation of the proposed development site (natural ground).
- L. Disruption to Existing Agricultural Operations. Any development plan must provide documentation that the project will not negatively affect the operation of existing agricultural drainage tiles on adjacent properties.
 - i. The Commission may recommend to the Board of Supervisors that an agricultural nuisance waiver be included within the application if determined to be applicable. Such waiver would restrict applicants from filing lawsuits for private nuisance against legitimate agriculture operations in the vicinity of the solar installation.
 - ii. Landowners in the Agricultural Preservation (AP) and Agricultural Estates (AE) zoning districts adjacent to the proposed area to be rezoned may file a written request to the Commission to consider enhanced setbacks from their zoning district boundary of up to 1,000 feet (see Section F(3)a) to prevent disruption to their agricultural operations. The Commission may recommend to the Board of Supervisors that those requests be honored and considered official conditions of rezoning approval, and included in the ordinance to rezone.
- M. Compatibility and conformance with local, state, and federal regulations.

ROUGH DRAFT – SUBJECT TO CHANGES

- N. Compatibility with other physical and economic factors affecting or affected by the proposed US-SESOD.
 - O. Any other relevant factors.
4. **Application Materials.** The application for a US-SESOD installation shall include the following information along with the application, supplied by the utility scale installation owner, operator or contractor installing the structures:
- F. The name and address of the applicant, as well as the proposed owners or operators of the project, including the contact information (name, address, telephone and email) of their authorized representatives.
 - G. Documentation of the applicant’s legal control over the private property necessary for the project, signed by the property owner.
 - H. A certified abstractor listing of the names and mailing addresses of all owners of real property lying within one (1) mile from the subject property shall be provided with the application.
 - I. A plat of survey showing the parcels on which the solar array will be included in the project area.
 - J. Legal descriptions of all properties, leased and/or owned, identified to be part of the project area.
 - E. A Development Plan including:
 - i. Project timeline. Project timeline showing how the site will be developed from beginning to end.
 - ii. Site plan. A professionally prepared site plan drawn to scale shall showing the location and spacing of every solar panel/array, all other facilities to be constructed and associated with the project, and all existing assets located in the project area. Specifically, the site shall include:
 - 1. North arrow and scale.
 - 2. Property lines and physical dimensions of the project area.
 - 3. Setback locations from the property line locations clearly marked for the applicable Zoning District.
 - 4. Location of the right-of-way.

ROUGH DRAFT – SUBJECT TO CHANGES

5. Location and layout of vehicle parking, loading and queuing areas, street accesses, and driveways.
 6. Easements present on the property including those for utilities.
 7. Total number, location and spacing with dimensions (length, width, & height) of solar panels/arrays and all other supporting structures including the distances from the property lines and other structures.
 8. Location with dimensions (length, width, & height) of existing structures and distances from the property lines and other structures.
 9. Location of underground and/or overhead electric lines.
 10. Location of field tile.
 11. Location of well.
 12. Location of the sanitary infrastructure (e.g. – Septic tank and system).
 13. Location of topography lines (2 foot contours).
 14. Flood hazard area designations.
 15. Such other information as the Zoning Director may require to determine compliance with the provisions of this Ordinance
- iii. Structure Plans. Architectural and/or engineer plans and specifications prepared pursuant to the acceptable professional standards.
 - iv. Pre-construction survey of nearby roads that may be impacted by construction of the facility.
 - v. A map showing the separation distances of the project area from adjacent property lines; occupied residences; unoccupied non-residential buildings; public rights-of-way; public drainage districts; public conservation areas; cemeteries; city limits; airports (public and private); lakes; and permanent water courses.
 - vi. Setback analysis showing the minimum setback requirements, or any agreed on greater setback provisions, are met by the project.

ROUGH DRAFT – SUBJECT TO CHANGES

- vii. Grading plan. This plan shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.). The plan shall include soil erosion and sediment control considerations and storm water management practices as referenced in this Ordinance. A storm water pollution prevention plan (SWPPP) and permits from the Iowa Department of Natural Resources and other applicable government bodies must be submitted.
- viii. Geotechnical report. A site-specific geotechnical report shall be submitted by a professional licensed engineer qualified in the field of geotechnical engineering, registered in the State of Iowa, and prepared in accordance with generally accepted geotechnical and environmental engineering practices to assess the potential risk of slope instability or landslide for the proposed development in its existing and post developed state.
- ix. Utility plan. Planned location of all utilities, including underground or overhead electric lines.
- x. Landscaping/Screening plan. Planned location of all plants and screening.
- xi. Road Impact Analysis. An inventory of the existing road network to be utilized for construction and maintenance of the facility and details on how the project will impact those roads over the life of the project, including during installation and decommissioning.
- xii. Interconnection agreement. Provide the interconnection agreement with the utility company.
- xiii. Any Federal Aviation Administration (FAA), or other federal, state, or local permits or approvals that are necessary for the project. Applicant shall submit a copy of the actual permit, or proof that the permit has been filed with the appropriate agency.
- xiv. Operation, and maintenance plan.
- xv. Decommissioning, abandonment, escrow account, and site restoration plan.
- xvi. Soil erosion and sediment control plan.
- xvii. Emergency response plan.
- xviii. Such additional information as the County may request due to the unique circumstances with the project.

ROUGH DRAFT – SUBJECT TO CHANGES

- xix. Any other information necessary to describe the intended development plan. Applicants are encouraged to have on-going discussions with the county zoning staff, county engineer, and other associated county departments during the preparation of the application.

6. **Required Agreements and Plans.** As part of the approval process for the US-SESOD, US-SES conditional use permit, and US-SES building permit, the following agreements and plans shall be submitted to the Woodbury County Board of Supervisors for approval prior to the issuance of a Conditional Use Permit by the Board of Adjustment.

D. Woodbury County Road Use and Repair Agreement

- i. Roads. Applicants shall adhere to the Woodbury County Road Use and Repair Agreement, and in doing so, shall identify all roads to be used for the purpose of transporting solar components, substation parts, cement, and/or equipment for construction, operation or maintenance of the solar installation and obtain applicable weight and size permits from the impacted road authority prior to construction.
- ii. Existing Road Conditions. Applicants shall conduct a pre-construction survey, in coordination with the impacted local road authorities to determine existing conditions of roads identified pursuant to **Section ___**. The survey shall include photographs or video and written documentation of the condition of the identified road facilities. The applicant is responsible for on-going road maintenance and dust control measures identified by the County Engineer during all phases of construction.

E. Woodbury County Public Drainage System Protection Agreement

- i. Applicants shall adhere to the Woodbury County Public Drainage System Protection Agreement, and in doing so, shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation or maintenance of WECS (where required).

- F. **Operation and Maintenance Plan.** The applicant shall submit a plan for the operation and maintenance of the solar installation including all necessary services, frequency of service, preventative maintenance measures, and monitoring. The operation and maintenance plan should include at a minimum:

- i. Preventative maintenance practices and schedules for all on-site equipment including but not limited to: inverters, panels, equipment pads, tracking systems, transformers, access entrances, internal roads, gates, fencing, security systems, stormwater management installations.

ROUGH DRAFT – SUBJECT TO CHANGES

- ii. Annual reporting and verification to county on the status or changes to on-going service schedule.
- iii. Schedule of all other monthly, annual, or semiannual reporting requirements for other submittals including: agricultural impact mitigation plan, decommissioning plan, and vegetation management plan.
- iv. Noise. No operating solar energy equipment shall produce noise exceeding any of the following limitations, with the exception of initial construction and routine maintenance. Adequate setbacks and effective noise mitigating equipment shall be used to comply with these limitations:
 - 1. An hourly average noise level of fifty-five (55) dBA during the day (between sunrise and sunset), and an hourly average noise level of fifty (50) dBA at night (between sunset and sunrise), as measured at the occupied dwelling of any adjacent property containing an existing residential structure. If the ambient sound pressure level exceeds 55 dBA during the day or 50 dBA at night, the standard shall be the ambient Leq (equivalent continuous sound pressure level) plus 5 dBA.
 - 2. A baseline noise evaluation shall be completed by a board certified professional by the Institute of Noise Control Engineering (INCE), or an appropriately licensed Professional Engineer (PE) prior to construction of the proposed solar site.
 - 3. A post-construction noise evaluation shall be performed by a third-party board certified professional by the Institute of Noise Control Engineering (INCE), or an appropriately licensed Professional Engineer (PE) following commencement of commercial operation of the project to verify compliance with the County's standards.
 - 4. The owner(s) of an adjacent property may voluntarily agree, by written and recorded waiver, to a higher noise level.
- v. Issue resolution protocols. Contact information for responsible party to address issues that may arise (damaged equipment causing excessive noise, etc).
- vi. Disposal/recycling plan for damaged or obsolete facility equipment or hazardous waste. No storage of inoperable or obsolete equipment shall be allowed to remain on-site. Site operator shall be responsible for the cleanup of debris related to storm damage.
- vii. Cleaning chemicals and solvents. During operation of the proposed installation, all chemicals or solvents used to clean photovoltaic panels should

ROUGH DRAFT – SUBJECT TO CHANGES

be low in volatile organic compounds and the operator should use recyclable or biodegradable products to the extent possible. Any on-site storage of chemicals or solvents shall be referenced.

- viii. Maintenance, repair, or replacement of facility. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to emergency response officials. Any retrofit, replacement or refurbishment of equipment shall adhere to all applicable local, state and federal requirements.
- ix. Repowering. Proposals to replace more than twenty five percent (25%) of the panels in a facility within a twelve (12) month period will be required to submit a new conditional use permit application based on the requirements in this ordinance for review and approval. A repowering event does not include replacement of panels in previously approved locations due to weather damage, equipment failure, or a force majeure event.
 - 1. The plan shall include updated information for some or all of the reports and plans required by this section, as determined necessary by the Zoning Director.
 - 2. The Board of Adjustment shall review and approve, conditionally approve, or deny the repowering plan as per the requirements of Section 2.02.9 and 5.08.

G. Decommissioning, Abandonment, Escrow Account, and Site Restoration Plan.

- i. The application must include a decommissioning plan that describes the following:
 - 1. The anticipated life of the utility scale solar installation.
 - 2. The anticipated manner in which the project will be decommissioned, including plans to recycle components and dispose of any hazardous materials.
 - 3. The anticipated site restoration activities.
 - 4. The estimated decommissioning costs in current dollars.
 - 5. The method for ensuring that funds will be available for decommissioning and restoration of the site.

ROUGH DRAFT – SUBJECT TO CHANGES

- ii. Decommissioning cost considerations. The applicant shall provide the estimated cost of decommissioning, excluding the salvage value, should be presented from both the solar developer and from an independent third-party engineer, at the recommendation of the Woodbury County Engineer, at the expense of the developer.
 - 1. Removal of any hazardous materials at the facility, as determined by a Toxic Characteristic Leaching Procedure (TCLP) or other similar test approved by Woodbury County and as described in the facility's Operations and Maintenance Plan. TCLP testing shall be performed prior to any ground disturbance at the project site.
 - 2. Salvage value shall not be included in the cost estimate.
 - 3. The estimated decommissioning cost must be updated every 5 years of the project using the same process as the initial decommissioning cost process.

- iii. Site restoration activities. Restoration activities shall include, but not be limited to, the following:
 - 1. Removal of all components and equipment.
 - 2. Soil in project area shall be decompacted and seeded with a cover crop, unless otherwise specified in the approved grading or soil erosion and sediment control plan.
 - 3. For any part of the energy project on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates or repurposed buildings in place or regarding restoration of agricultural crops or forest resource land. Any use of remaining structures must be in conformance with the regulations in effect at that time.

- iv. Performance agreement and proof of financial surety. At the time of permitting, the applicant, facility owner, or site operator shall provide a Performance Agreement and accompanying financial surety instrument to cover the cost of decommissioning in accordance with the following:
 - 1. A bond shall be required for 125% of the most recent estimated decommissioning total cost paid for by the project owner/developer. The bond shall remain in place until one (1) year after the last day of decommissioning.
 - 2. Decommissioning funds shall be maintained in the form of a performance bond, surety bond, bank letter of credit, stable parent

ROUGH DRAFT – SUBJECT TO CHANGES

company guarantee, or other form of financial assurance as approved by the Woodbury County Board of Supervisors. Any financial document evidencing the maintenance of the decommissioning funds shall include provisions for releasing the funds to the County in the event decommissioning is not completed in a timely manner.

3. Prior to any ground disturbance, grading or construction activity on the site, twenty-five percent (25%) of total estimated decommissioning costs shall be provided by any of the means listed above. An additional twenty five percent (25%) shall be provided within five (5) years and ten (10) years of the date of initial approval, and the remaining twenty five percent (25%) of the total re-estimated decommissioning costs shall be provided within fifteen (15) years of the date of initial approval. From that point forward, 100% of the total estimated decommissioning costs as determined by the most recent re-estimation shall be maintained in the decommissioning fund until the end of the functional life of the project.
 4. Financial surety shall be maintained for the life of the project.
 5. Proof of recertification of the financial surety instrument must be submitted to the County annually.
 6. Every five (5) years, the facility owner or operator shall retain an independent Licensed Iowa Engineer approved by the County to re-estimate the total cost of decommissioning and attest that the value of the financial surety instrument is appropriate. This report shall be filed with the County and shall incorporate any new industry information learned since the last cost determination.
 7. The required amount of the decommissioning fund shall match the re-estimated cost of decommissioning. Within ninety (90) days of filing the re-estimation report with the County, the facility owner or operator shall cause the fund balance of the financial surety instrument to be adjusted to ensure that it matches the re-estimated decommissioning cost.
- v. Escrow Account. At the time of permitting, the applicant, facility owner, or site operator shall provide at least \$100,000 per megawatt of project in an escrow account in addition to the total decommissioning funds that shall remain in the account up until one year after the last day of the decommissioning upon successful completion will be returned to the application/owner/operator. Any interest earned in the account shall belong to the County.

ROUGH DRAFT – SUBJECT TO CHANGES

- vi. Commencement of site decommissioning. Decommissioning of the site shall commence at the time identified in the project decommissioning plan or performance agreement, or when the facility is determined to have been abandoned.
 - 1. Decommissioning shall be completed in accordance with the approved decommissioning plan.
 - 2. The landowner or tenant shall notify the Zoning Director both when the project is discontinued and when decommissioning is complete.
 - 3. Third-party verification, as well as County verification of completed decommissioning will be required before the financial surety may be released.
 - 4. The facility will be considered abandoned or out of commission in the following circumstances:
 - a. Upon termination or expiration of the solar farm leases/easements or
 - b. After one year without production, storage of energy, or use as a backup facility.
 - c. Exceptions could be made for:
 - i. A force majeure event that has occurred or is occurring, which will prevent the facility from resuming operation within 12 months.
 - ii. If the facility is in the process of being repowered.
 - iii. The project is pending completion of construction of the facility due to a backlog of cases or service requests in the MISO queue.
 - iv. A situation in which the project owner can provide evidence to the Woodbury County Board of Supervisors, that the facility's period of continuous inactivity is due to circumstances beyond the project owners control and that the facility has not been abandoned.
 - v. Appeal of the notice of abandonment from the county within a set time of the project owner's

ROUGH DRAFT – SUBJECT TO CHANGES

receipt of the notice in which the project owner explains the reasons for operational difficulty and provides a timeframe for corrective action that the county deems reasonable.

H. Soil Erosion and Sediment Control Plan. A grading plan shall be submitted and shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.). The plan shall be accompanied with the following documentation:

i. Erosion and Sediment Control

1. The applicant agrees to conduct all roadwork and other site development work in compliance with a national pollutant discharge elimination system (NPDES) permit as required by the state department of natural resources and comply with requirements as detailed by local jurisdictional authorities during the plan submittal. If subject to NPDES requirements, the applicant must submit the permit for review and comment, and an erosion and sediment control plan before beginning construction. The plan must include both general 'best management practices' for temporary erosion and sediment control both during and after construction and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to prevent sediment-laden runoff into waterways.

ii. Stormwater Management Plan

1. For the purposes of pollutant removal, stormwater rate and runoff management, flood reduction and associated impacts, the applicant shall provide a detailed analysis of pre- and post-development stormwater runoff rates for review by local jurisdictional authorities.

iii. Ground cover and buffer areas. Ground around and under solar arrays and in project site buffer areas shall be planted and maintained in perennial vegetated ground cover, and meet the following standards:

1. Top soils shall not be removed during development, unless part of a remediation effort.
2. Soils shall be planted and maintained in perennial vegetation for the full operational life of the project to prevent erosion, manage runoff and build soil. Seeds should include a mix of grasses and wildflowers native to the region of the project site that will result in a short stature prairie with a diversity of forbs or flowering

ROUGH DRAFT – SUBJECT TO CHANGES

plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening. Non-native or naturalized species may be selectively planted for maintenance purposes as part of an approved site plan.

3. See mixes and maintenance practices should be consistent with recommendations made by qualified natural resource professional such as those from the Department of Natural Resources, County Soil and Water Conservation Service, or Natural Resource Conservation Service.
 4. Plan material must not have been treated with systemic insecticides, particularly neonicotinoids.
- iv. Other practices, such as small-scale farming or grazing, may be allowed in the project area as part of the conditions of approval for the project.

I. Emergency Response Plan

- i. The applicant shall submit an emergency response plan prior to any ground disturbance at the project site detailing the planned response actions that will be taken by the solar facility operator, including any battery energy storage systems in the event of an emergency situation. These actions are intended to minimize health risks to personnel and people in the surrounding community, as well as minimize adverse impacts to the environment.
 1. The plan shall include, but is not limited to, a detailed narrative of response procedures and the facility representatives responsible for management of the following plausible contingencies that could occur at the facility: natural disaster/severe weather, fire, security incident, capacity/transmission, environmental, chemical, pipeline (if applicable), and medical. It shall include procedures for a site evacuation, designated egress routes and emergency staging areas.
 2. The plan shall include a stand-alone section detailing the emergency response protocols specific to battery energy storage areas (if applicable).
 3. The plan shall be developed in coordination with local first responders, Woodbury County Emergency Management & Woodbury County Public Health personnel.

4. Procedure for Review of US-SESOD Zoning District Application

ROUGH DRAFT – SUBJECT TO CHANGES

- A. Applicant shall meet with the Zoning Director and submit all required documents. If the Director determines that the application lacks the required information as enumerated in this Ordinance, the Director shall then provide the applicant with written a written Notice of Deficiency. The applicant may refile an amended application once the deficiencies have been resolved.
- B. Distribution. The Zoning Director shall distribute copies of the application and associated materials and agreements to the Planning and Zoning Commission, appropriate county departments, public agencies, and public utilities.
- C. Schedule. Complete application submittals shall be included on the agenda of the Planning and Zoning Commission in accordance with the established administrative schedule.
- D. Staff Review. The appropriate county, public agency and public utility shall review the application materials and prepare reports of their findings and comments to the Planning and Zoning Commission prior to the public hearing on the proposed US-SESOD Zoning District application.
- E. The Zoning Director shall specifically review the conformance of the application and associated materials and agreements with the requirements of this Ordinance and the goals and objectives of the county’s general plan. The Zoning Director may make recommendations for conditions for approval including use restrictions required to preserve and improve the peace, safety, health, welfare, comfort, and convenience of the future residents of the property and neighboring properties.
- F. Planning and Zoning Commission Review
 - i. Public hearing. The Planning and Zoning Commission shall conduct a public hearing on the US-SESOD Zoning District application. Notice of the date, time and location of the hearing will be mailed to the owners of all property within one (1) mile of the subject property not less than four, nor more than twenty, days prior to the date of the hearing.
 - ii. Review and recommendation. The Planning and Zoning Commission shall review the application and the associated materials, agreements, and the staff reports, and such other information as may brought forward during the public hearing to determine whether the application conforms to the ordinances, the general plan and other policies of the county. To assure conformance with the goals and objectives of the county’s general plan, the Planning and Zoning Commission may recommend specific conditions for approval including use restrictions required to preserve and improve the peace, safety, health, welfare, comfort, and convenience of the future residents of the property and neighboring properties. The Planning and Zoning Commission shall forward a report of its findings and recommendation to the Board of Supervisors with a copy of the report and recommendation to the applicant, as well as the proposed owners or

ROUGH DRAFT – SUBJECT TO CHANGES

operators of the project.

- iii. Time limit for recommendation. A recommendation to the Board of Supervisors for approval, approval with conditions or disapproval on the proposal, shall be made within 35 days from the conclusion of the public hearing unless the applicant consents to an extension of time. If no recommendation is made within 35 days from the conclusion of the public hearing, the issue will be forwarded to the Board of Supervisors with no recommendation.

- G. Board of Supervisors action. Following receipt of the recommendation of the Planning and Zoning Commission, the Board of Supervisors shall consider and act upon a proposed amended to the zoning district map as follows:
 - i. Hearings required. The Board of Supervisors shall conduct up to three (3) public hearings on the establishment of the US-SESOD Zoning District in accordance with the procedures and requirements outlined in this Ordinance.
 - ii. Public notification of the Board of Supervisors public hearings on the proposal. Notice of the date, time and location of the hearing will be mailed to the owners of all property within one (1) mile of the subject property not less than four, nor more than twenty, days prior to the date of the hearing.

- H. Board of Supervisors decision. Following the final public hearing, the Board of Supervisors may:
 - i. Defer consideration of the proposal; or
 - ii. Reject the proposal; or
 - iii. Proceed subject to subsections () and () below, to adopt an ordinance approving the amendment to the zoning district map.
 - iv. Super majority required. A 60 percent majority of the Board of Supervisors shall be required to adopt the proposed amendment of the zoning district map if the owners of more than 20 percent of either, (i) the area of the subject property or (ii) the area of real property lying within 500 feet of the subject property file a written objection prior to the conclusion of the public hearing.
 - v. The Board of Supervisors may impose restrictive conditions upon the approval of the establishment of the US-SESOD Zoning District, before the conclusion of the public hearing, the owner agrees to the conditions in writing.

ROUGH DRAFT – SUBJECT TO CHANGES

- vi. If approved, the conditions will be included with the ordinance changing the zoning. Final approval is contingent on state, federal, or other permit approvals and agreements with Woodbury County as may be required.
- vii. If the application is adopted by the Board of Supervisors, the Zoning Director shall update the zoning map to show the specific location of the US-SESOD zoning district, including the required separation spacing to other zoning districts.
- viii. Future Operators. Future operators, successors, assignees, or heirs shall agree in writing to accept and to conform to all conditions of approval. Prior notice to Woodbury County of the intent to sell or transfer ownership shall be done in a timely manner. Such agreement shall be filed with and accepted by the County before the transfer to a new operator, successor, assignees, or heirs shall be effective.

Adopted this ____ day of _____, 2023

THE WOODBURY COUNTY, IOWA BOARD OF SUPERVISORS

Matthew Ung, Chairman

Jeremy Taylor, Vice Chairman

ATTEST:

Daniel Bittinger II

Patrick Gill, Woodbury County Auditor

Mark Nelson

Keith Radig

Adoption Timeline

- _____ : Public Hearing and 1st Reading
- _____ : Public Hearing and 2nd Reading
- _____ : Public Hearing and 3rd Reading
- _____ : Adopted
- _____ : Published/Effective Date

COMPREHENSIVE PLAN ADOPTION PROCESS AND CURRENT OUTLOOK

As noted in the summary above, the current comprehensive plan (comp plan) on the books offers support for renewable energy, however, the policies including the zoning ordinance that came out of that process established industrial areas as the appropriate locations for electrical energy generation while protecting agricultural land with the Corn Suitability Rating (CSR). Woodbury County is currently at a convenient juncture to transfer this utility-scale solar debate into the final stages of the comp plan adoption process that will be going before the Zoning Commission and the Board of Supervisors in 2024.

It is essential to note that the institution of a comp plan is a countywide discussion to determine what the development priorities are for Woodbury County over the next 20 years. It is a time to ask what type of county do we want to be? What are the goals for agriculture? Land Use? Economic Development? Commercial? Industrial? Residential? Parks? Recreation? Conservation? Environment? Public Safety? Transportation? Facilities? Operations? This debate about utility-scale solar is consequential and fits in with the public's long-range decisions about the type of county that we want to be. The discussion gives those who are in support or those who are opposed to the expansion of solar, in agricultural areas, a voice in the setting of countywide policy. Depending on how solar policy is ultimately crafted, this debate could potentially include access to over 475,000 acres of agricultural land.

If through the planning process, renewable energy is shown as a top priority by the public, the opportunity is ahead for the public to offer input about what "areas of land" are suitable for industrial expansion through the comp plan's future land use map. Below is a copy of the current future land use map. The areas shaded in light green are planned for agriculture. Through the consideration process, the public could offer input or make specific requests on which areas may or may not be suitable for utility-solar. Additionally, through the debate, the public could request the expansion of residential, commercial, and industrial areas to facilitate future needs.

Current Land Use

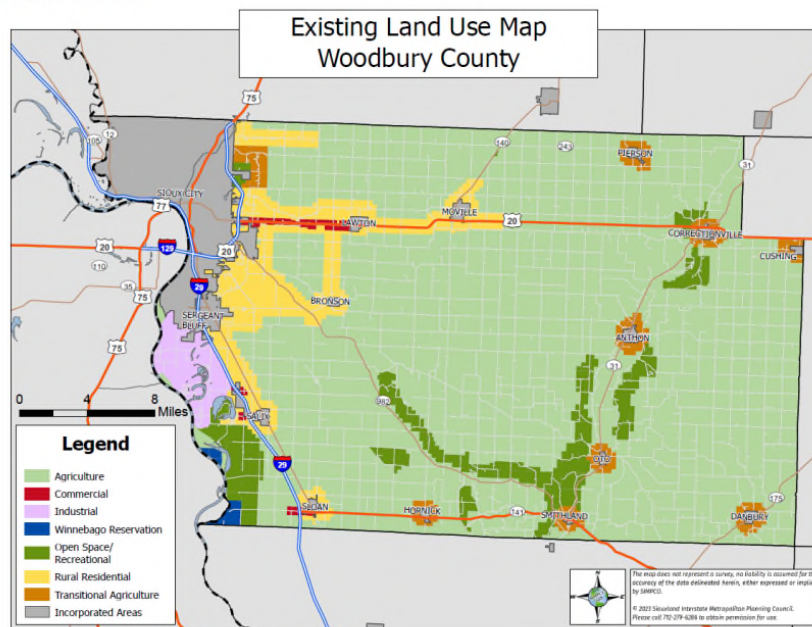


Figure 7.2. Existing Land Use Map, 2023.

Source: Current Land Use. *Draft Woodbury County Comprehensive Plan 2040.*

https://simpco.org/wp-content/uploads/2023/05/Draft_Woodbury-County-Comprehensive-Plan_5.2.23.pdf

At this time, it is absolutely essential to note that the draft comp plan has been in development over the past three (3) years and through the public engagement process in that timeframe, there has not been large-scale public support for renewable energy development. As of this date, the future land use map that has been presented to the public has not substantially changed from the current map. If specific requests have been made for a particular

area to be expanded, those requests would have been considered and would likely have been included in the future map. The draft future land use map is included below:

Future Land Use

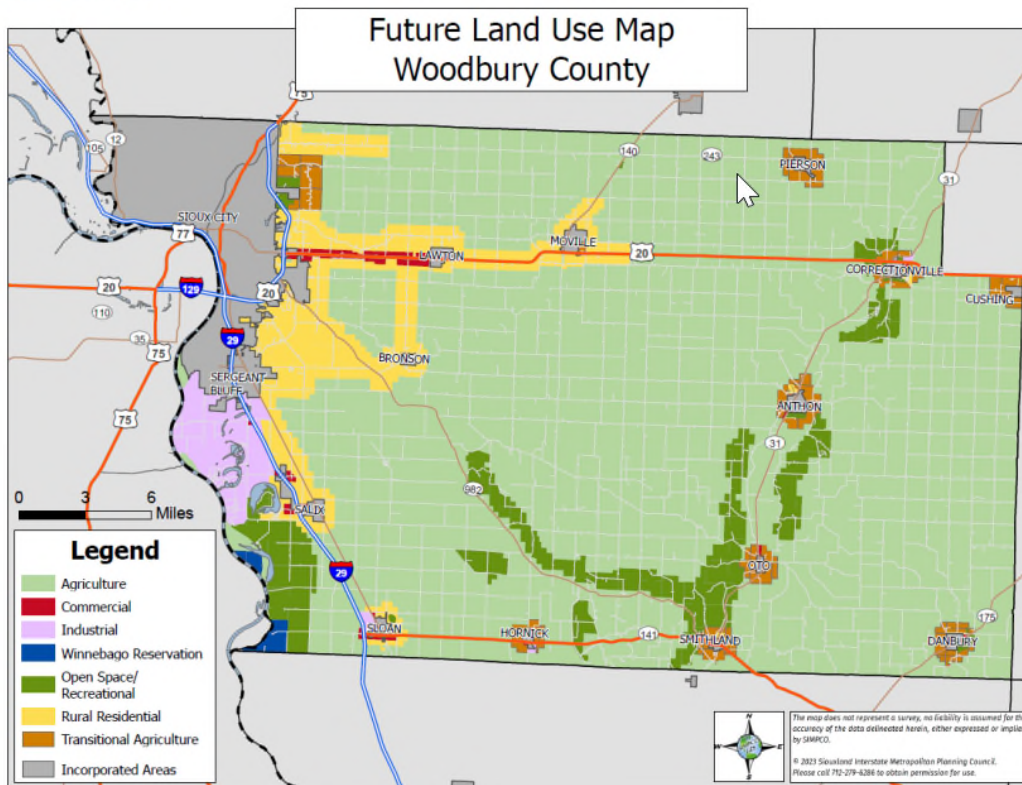


Figure 7.4 Future land use map

Source: Future Land Use. *Draft Woodbury County Comprehensive Plan 2040*.

https://simpco.org/wp-content/uploads/2023/05/Draft_Woodbury-County-Comprehensive-Plan_5.2.23.pdf

Below is an excerpt from page 70 of the **draft** *Woodbury County Comprehensive Plan 2040*:

Renewable Energy

There are currently no wind facilities located in Woodbury County, and many residents have been vocally opposed to these developments due to the impact wind facilities would have on the county's rural landscape.

At the same time, there is a great deal of federal support for shifting the energy source of the electric grid away from carbon-based fuels in favor of renewable options such as wind and solar. Due to a variety of federal and state financing programs, tax incentives, and funding opportunities, the network of wind turbines is growing throughout the country, state, and region. Tax credits are also incentivizing the installation of solar voltaic energy systems on private property. With these considerations, it is likely that the county could see demand from landowners for renewable energy developments in the future, as these facilities could present an economic opportunity for farmers and other landowners.

While wind turbines are largely unpopular in Woodbury County, renewable energy technologies are changing rapidly. The method of energy production and aesthetic form of wind and solar technologies are likely to continue developing over the next 20 years. With further development such technologies could become more appealing and less intrusive to residents. Supporting the development of diverse energy sources and planning ahead for regulations around these facilities will put the county in a position to embrace those that are appealing to residents and beneficial to the economy.

Access Link: https://simpco.org/wp-content/uploads/2023/05/Draft_Woodbury-County-Comprehensive-Plan_5.2.23.pdf

The above language is not in stone and the public retains the ability to offer comments during the debate process. If during the discussions, there is support for utility-scale solar energy systems for the future in Woodbury County, it would contribute to the justification for future policy changes.

If the public desires to create additional industrial areas on the comprehensive plan's future land use map, an overlay district would not be necessary as the existing rezone process could likely facilitate the application process to rezone from AP to GI.

SUMMARY AND CONCLUSION

The purpose of this report is to deliver information about the current status of the utility-scale solar energy debate in Woodbury County. The contents herein include input from the public and three potential concepts that could be considered to address utility-scale solar policy. Staff and the Zoning Commission have been mindful of the harvest season and look forward to continue collecting input from the public as an inevitable recommendation is prepared for the Board of Supervisors.

The three concepts that have been presented in this report include:

- Consider a new utility-scale solar energy conditional use process for the General Industrial (GI) Zoning District only.
- Establish an overlay district to facilitate utility-scale solar within the Agricultural Preservation (AP) Zoning District.
- Adopt the first concept and then to transfer the utility-solar debate on agricultural land to the "Comprehensive Plan" adoption process that will likely occur in 2024.

Staff is mindful of the intricacies of this discussion and recommends a future work session for the Commission to process a pathway forward. Staff also recommends one or more public hearings in the post-harvest period to give landowners further opportunities to be heard at the Zoning Commission level before this debate process is transferred to the Board of Supervisors for consideration.

REFERENCES

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APPENDIX

DIRECTION FROM THE BOARD OF SUPERVISORS – AUGUST 8, 2023

WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM

Date: 8/2/2023 Weekly Agenda Date: 8/8/2023

ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: <u>Supervisor J.Taylor/M. Nelson</u>		
WORDING FOR AGENDA ITEM:		
Upon Striking Agricultural Preservation as relates to Amendment 2 (Utility-Scale Solar), a Motion to Give Direction for a New Proposed Ordinance in Regards to Utility-Scale Solar		
ACTION REQUIRED:		
Approve Ordinance <input type="checkbox"/>	Approve Resolution <input type="checkbox"/>	Approve Motion <input checked="" type="checkbox"/>
Public Hearing <input type="checkbox"/>	Other: Informational <input type="checkbox"/>	Attachments <input type="checkbox"/>

EXECUTIVE SUMMARY:

The Board of Supervisors unanimously has voiced support for adding solar energy systems (private use) as accessory use in each zoning district and affirming support of solar energy systems (utility scale) in the G1 Zoning District. However, given that AP constitutes roughly 75% of Woodbury County's 875 sq. mi and inherent to Agricultural Preservation is the preservation of agriculture, we have an interest in doing what is inherent in the name: preserving agriculture. Toward that end, we are not against solar but think that the following strikes a very reasonable and thoughtful balance, something that can feel rushed in the readings and end up making solar development projects so loose as to not know the desired saturation, legal implications (at least 2 other counties are in lawsuits based on the conditions set after the fact), and how we want to grow the next 25, 50, and 100 years.

Iowa Farm Bureau states regarding energy policy: "Iowa should maintain a balanced electrical energy generation portfolio to ensure energy reliability and resilience at an affordable cost" (2023) and "Iowa's electrical energy policy should not promote new wind and solar energy generation on viable and productive agricultural ground. Existing structures and nonproductive ground should be utilized to expand our energy production" (2023).

BACKGROUND:

Iowa Cattlemen land use policy states: "Whereas the issue of land use in Iowa becomes increasingly important as Iowa population grows and the use of land becomes more intensified, and whereas the cattlemen of Iowa have distinctive problems and interests in the use of land for production of beef cattle; and whereas the complexities of the many issues and interests involved are substantial, not the least of which are the preservation of private property rights and the location of control over land-use decisions. Therefore, be it resolved, land suitable for the grazing of livestock should be deemed agricultural land worthy of preservation and that grazing and be given over recreational and/or urban uses. Be it further resolved, public lands should be subject to the same rules and regulations as privately owned lands."

As the two supervisors representing the most rural areas, we deeply desire the preservation of agriculture while at the same time understanding the need for balance: private property rights, economic development, clean energy, and freedom. Therefore, if the county was to engage in utility-scale solar, at minimum, the county should consider this only if the following is met:

- + A conditional use permit for AP "C" with Planning and Zoning and the Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- + A slope of no more than 5% in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- + A maximum height of no more than 20' for panel structures.
- + Of all AP, no more than 49% can be in such a project. In short, 51% must be for agricultural production or no longer considered "AP."
- + Utility solar can be no more than 2% of all AP "agricultural preservation," preserving 98% of AP. This equates to approximately 8,540 acres of the 427,000 acres of ag land, ag land constituting 75% of the 570,000 total acres in Woodbury County.

FINANCIAL IMPACT:

(cont...)

+ Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.

+ A requirement (or at least strong consideration) that the utility-scale solar project either be on a landowner's property or that the owner of the land be a resident of Woodbury County.

IF THERE IS A CONTRACT INVOLVED IN THE AGENDA ITEM, HAS THE CONTRACT BEEN SUBMITTED AT LEAST ONE WEEK PRIOR AND ANSWERED WITH A REVIEW BY THE COUNTY ATTORNEY'S OFFICE?

Yes No

RECOMMENDATION:

Upon Striking Agricultural Preservation as relates to Amendment 2 (Utility-Scale Solar), a Motion to Give Direction for a New Proposed Ordinance in Regards to Utility-Scale Solar

ACTION REQUIRED / PROPOSED MOTION:

Upon Striking Agricultural Preservation as relates to Amendment 2 (Utility-Scale Solar), a Motion to Give Direction for a New Proposed Ordinance in Regards to Utility-Scale Solar

Approved by Board of Supervisors April 5, 2016.

DIRECTION FROM THE BOARD OF SUPERVISORS – SEPTEMBER 26, 2023

WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM

Date: 9/21/2023 Weekly Agenda Date: 9/26/2023

ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: <u>Supervisor J. Taylor/M. Nelson</u>		
WORDING FOR AGENDA ITEM:		
Give Direction to Planning and Zoning/BOA for Further Considerations During Public Hearings Regarding Utility-Scale Zoning		
ACTION REQUIRED:		
Approve Ordinance <input type="checkbox"/>	Approve Resolution <input type="checkbox"/>	Approve Motion <input checked="" type="checkbox"/>
Public Hearing <input type="checkbox"/>	Other: Informational <input type="checkbox"/>	Attachments <input type="checkbox"/>

EXECUTIVE SUMMARY:

The Board of Supervisors unanimously has voiced support for adding solar energy systems (private use) as accessory use in each zoning district and affirming support of solar energy systems (utility scale) in the GI Zoning District. However, given that AP constitutes roughly 75% of Woodbury County's 875 sq. mi and inherent to Agricultural Preservation is the preservation of agriculture, we have an interest in doing what is inherent in the name: preserving agriculture. Toward that end, we are not against solar but think that the following strikes a very reasonable and thoughtful balance.

During the last item, we asked that consideration of adding utility-scale solar be considered in AP with limitations such as slope (<5%, no more than 2% of all AP be for solar, a "C" for conditional use, notification from 500 ft to 1 mi, at least 51% maintained in agricultural production.)

Upon public hearing comments and further reflection, we offer an alternative to be considered that might be preferable, namely the expansion of "Light Industrial." We would ask that landowners who desire such utility-scale solar be rezoned to this presently constituting only 101 acres of Woodbury County's 570,000 acres. Landowners could continue to farm the land but open up an avenue that would be far preferable than Agricultural Preservation and much more appropriate.

BACKGROUND:

- + A conditional use permit for AP "C" with Planning and Zoning and the Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- + A slope of no more than 5% ONLY for fixed arrays (most technology is now movable arrays) in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- + No more than 1% of industrial land conversion every 4 years for reclassification, roughly 5,700 acres.
- + Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- + A decommissioning plan from solar companies reviewed by P&Z/BOA subject to approval by the Woodbury County Board of Supervisors.

FINANCIAL IMPACT:

None

IF THERE IS A CONTRACT INVOLVED IN THE AGENDA ITEM, HAS THE CONTRACT BEEN SUBMITTED AT LEAST ONE WEEK PRIOR AND ANSWERED WITH A REVIEW BY THE COUNTY ATTORNEY'S OFFICE?

Yes No

RECOMMENDATION:

Move to give direction for a new proposed ordinance in regards to utility-scale solar

ACTION REQUIRED / PROPOSED MOTION:

Move to give direction for a new proposed ordinance in regards to utility-scale solar

Approved by Board of Supervisors April 5, 2016.

CONCEPT 1 – SUMMARY (Utility-Scale Solar CUP for GI)

- **Summary:** Retain the current permitting procedures in the Woodbury County Zoning Ordinance but add additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public.
 - **Zoning District:** General Industrial (GI)
 - **Permitting Mechanism:** Conditional Use Permit
 - **Review Board:** Zoning Commission
 - **Approval Board:** Board of Adjustment
 - **Notification Area:** One (1) mile from Project Area
 - **Development Plan Justification:**
 - Compatible with Economy and Economic Development Policy 2.5:
 - “Fully explore alternative renewable energy sources, particularly wind generation facilities both as a contribution to the total energy needs of the country and as a new source of income for property owners.”
 - Compatible with Agricultural Policy 3.4:
 - “Protect prime farmland as determined by high corn suitability ratings (i.e., over 65 CSR) from conversion to other land uses. Discourage non-agricultural uses in prime farmland areas and other agricultural districts by providing residential lot size requirements and proper separation distances between residential and agricultural uses.”
 - Compatible with Conservation and Environmental Policy 7.3:
 - “Establish standards and practices to encourage preservation of environmentally sensitive areas such as wetlands, wooded areas, waterways (streams, ponds, lakes, rivers, etc.), and other amenities.”
 - Compatible with Conservation and Environmental Policy #7.2:
 - “Establish grading standards that create stable development sites, minimize erosion and sedimentation and water runoff. These standards may encourage conservation of less developable sites, particularly in the steeper slopes of the Loess Hills.”

Brief Background:

- The Woodbury County Zoning Ordinance facilitates the permitting for utility-scale solar energy systems as a conditional use in the GI Zoning District. Presently, the Zoning Commission reviews the application and then makes a recommendation to the Board of Adjustment. Under this policy, utility-scale energy systems are construed as an industrial activity and have been placed into the industrial area of the county to ensure that productive farm ground can remain in production. The Zoning Ordinance facilitates the opportunity to rezone to the GI Zoning District in order for a conditional use permit to be considered. However, the rezoning process requires consideration of the following criteria:
 - Conformance with the goals and objectives set forth in the approved General Development Plan for Woodbury County including the Future Land Use Map;
 - Compatibility and conformance with the policies and plans of other agencies with respect to the subject property;
 - Consideration of the Corn Suitability Rating (CSR) of the property;
 - Compatibility with adjacent land uses;
 - Compatibility with other physical and economic factors affecting or affected by the proposed rezoning; and
 - Any other relevant factors
- **Spot Zoning** is defined in the Zoning Ordinance as “An arbitrary zoning or rezoning of a small parcel of land, usually surrounded by other uses or zoning categories that are of a markedly or substantially different intensity, that is not consistent with the comprehensive land use plan, and that primarily promotes the private interest of the owner rather than the general welfare. This term is not used within these regulations, but is included here because it is commonly used to describe proposed rezonings, which may or not actually be spot zoning.
- If the development plan and/or its associated future land use map does not support a rezoning change, it is not recommended to proceed with the change in zoning district. If there is a desire to consider such a rezoning, the development plan should be revisited, debated, and be considered for amendment(s) to the text of the plan or future land use map.

CONCEPT 2 – SUMMARY (Utility-Scale Solar Overlay District)

- **Summary:** Establish a utility-scale solar energy systems overlay zoning district that requires a rezone application to be reviewed by the Zoning Commission and considered for approval by the Board of Supervisors that must meet specific criteria for the appropriateness of the agricultural area to facilitate utility-scale solar systems.
 - **Proposed Zoning Districts:** Establishment of a “Utility-Scale Solar Overlay Zoning District” to be used only over the “Agricultural Preservation (AP) Zoning District.
 - **Permitting Mechanism:** Rezone and Conditional Use Permit
 - **Rezone to “Utility-Scale Solar Overlay Zoning District”**
 - Zoning Commission makes a recommendation to the Board of Supervisors as to whether the rezone to the overlay district is appropriate or not.
 - Establish a criteria to qualify an area as acceptable or not for the overlay district: CSR2?; Slope; Acre Cap; Density/Setbacks, No floodplain, agricultural use, etc.
 - Board of Supervisors approves the rezone process including approval of specific agreements with the county such as decommissioning, road use, etc.
 - **Conditional Use Permit**
 - The Woodbury County Zoning Commission reviews a conditional use permit application and makes a recommendation to the Board of Adjustment who approves or denies the permit.
 - **Building Permit**
 - This proposal could potentially place the building permit authorization authority with the Board of Supervisors which is ultimately the final decision in the permitting process.
 - **Notification Area:** One (1) mile.
 - **Development Plan Justification:**
 - Compatible with Economy and Economic Development Policy 2.5:
 - “Fully explore alternative renewable energy sources, particularly wind generation facilities both as a contribution to the total energy needs of the country and as a new source of income for property owners.”
- **Background:**
 - Both Linn County and Scott County use an overlay district to facilitate the permitting of utility-solar in agricultural areas. Linn’s overlay district is known as the “Renewal Energy Overlay District” while Scott’s is a “Utility Solar-Floating District.” They use the rezone process to switch the footprint of a solar project area to the overlay district. The effect is creating an area for solar but retaining primary uses of the base zoning district.
 - Specifically, Linn County’s ordinance states that “the renewable energy overlay district shall be geographically located in those areas currently zoned AG (Agricultural) or CNR (Critical Natural Resources).” The intention of Scott County’s floating district is to find a balance that keeps in mind the characteristics of the abutting properties and area, and other matters such as habitat, natural resources, agricultural preservation, safety, health, and general welfare. Scott County’s ordinance makes it clear it is not their intention to allow for utility solar on prime agricultural land.
 - This concept of an overlay district could be an option for a balanced policy in Woodbury County. For example, the county could establish a “Utility-Scale Solar Overlay Zoning District,” and enumerate standards that must be met in order to rezone the property to the overlay district while retaining all the existing uses of the base zone.
 - If the rezone were to be successful, then the Zoning Commission and Board of Adjustment could review the application through the CUP process (with additional criteria to be added) or the Board of Supervisors could approve the solar project through the overlay district creation process.
 - On page 28 (33 of the PDF) of the Zoning Ordinance, Woodbury County does have an example of the “CD -- Conservation Development Overlay Zoning District”. A “CD” can be instituted as an overlay over other districts such as AP, AE, NR, and SR. Also, see page 17 (22 of the PDF) which uses the rezone process.
 - Based on what Linn County and Scott County have done, this could be a feasible option to have the debate at the Board of Supervisors level as to whether a particular area of ag land would be suitable or not for utility solar.
 - The overlay district is designed to not be a spot zone but a way to look at the unique nature of an area for a special use without changing the base zone or the controlling zoning district’s land use requirements. Thus, if a solar farm is removed, it would revert back to the base use of the controlling zoning district or be considered for future conditional use permitting if a new solar system were to be proposed.

CONCEPT 3 – SUMMARY (Comprehensive Plan)

Woodbury County is currently in the process of organizing a new comprehensive plan (“plan”). Since early 2021, the plan has been in development but has been placed on hold. At this time, the County is at a convenient juncture evaluate whether renewable energy sources continue to be a development priority for the county over the next decade and beyond. The current debate considering the appropriateness of utility-solar systems being placed in areas of the county other than industrial naturally fits into the comprehensive plan adoption process.

The current plan that has been in place since 2005, acknowledges renewable energy sources in its Economy and Economic Development Policy 2.5 which states “fully explore alternative renewable energy sources, particularly wind generation facilities both as a contribution to the total energy needs of the county and as a new source of income for property owners” (p. 19). However, the plan also includes the initiative to protect prime farmland. In particular, Agricultural Policy 3.5 states “protect prime farmland as determined by high corn suitability ratings (i.e., over 65 CSR) from conversion to other land uses. Discourage non-agricultural uses in prime farmland acres and other agricultural districts by providing residential lot size requirements and proper separation distances between residential and agricultural uses” (p. 20).

The priorities of a community are embodied in a comprehensive plan to serve as a guide or a rationale for basing land use decisions. Iowa Code 335.1-3 states the following as it pertains to comprehensive plans:

1. The regulations shall be made in accordance with a comprehensive plan and designed to preserve the availability of agricultural land; to consider the protection of soil from wind and water erosion; to encourage efficient urban development patterns; to lessen congestion in the street or highway; to secure safety from fire, flood, panic, and other dangers; to protect health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to promote the conservation of energy resources; to promote reasonable access to solar energy; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. However, provisions of this section relating to the objectives of energy conservation and access to solar energy shall not be construed as voiding any zoning regulation existing on July 1, 1981, or to require zoning in a county that did not have zoning prior to July 1, 1981.
2. The regulations shall be made with reasonable consideration, among other things, as to the character of the area of the district and the peculiar suitability of such area for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such county.
3. The regulations and comprehensive plan shall be made with consideration of the smart planning principles under section 18B.1 and may include the information specified in section 18B.2, subsection 2.

Following the adoption of the General Development Plan: Planning for 2025 on November 22, 2005, the county established a revised Zoning Ordinance and Subdivision Ordinance that were adopted on July 22, 2008. Subsequent to adoption, the Zoning Ordinance has been amended numerous times as it takes an amendment to the Zoning Ordinance to change any zoning district from one designation to another. The most recent amendment occurred with the approval of Ordinance No. 75 which was a Zoning Ordinance Map Amendment (rezone) from the Agricultural Preservation (AP) Zoning District to the Agricultural Estates (AE) Zoning District.

The process of amending the ordinance, as was the case with Ordinance No. 75, requires a look at the priorities within the comprehensive plan. Is it appropriate or not to introduce a particular use onto property designated as agriculture? The current plan tells the community that Woodbury County has a priority to explore renewable energy sources. It also has an initiative to protect prime farmland by use of the Corn Suitability Rating. In 2005, when then this plan was developed, it also included a “Future Land Use Map” that illustrates the areas within the county that the public expects particular uses to be allowed or not allowed. Portions of the county were designated as agricultural, rural residential, transitional agriculture, commercial, industrial, and open space/recreation.

In 2008, a land use summary table was adopted within the Zoning Ordinance that directly enumerates the priorities of land use in the county. The public, appointed officials, and elected officials at that time, decided that electrical energy generation (not including wind) is a prohibited use in all zoning districts except for the General Industrial (GI) Zoning District. To be clear, this decision reflects the comprehensive plan. It shows the public is open to renewable energy, however, it demonstrates that the public chose the industrial areas as the most suitable locations to be considered through the conditional use process.

With a future comprehensive plan in the works and ready for debate before the Zoning Commission and Board of Supervisors, staff offers this concept as a pathway for considering the renewable energy priorities of the county. Within the comprehensive plan debate, the public can request expansion of the industrial areas for the placement of renewable energy assets. Therefore, it is feasible to explore expanding industrial areas on the future land use map which in turn could facilitate the rationale for an ordinance amendment to rezone additional areas for industrial uses such as utility-scale energy.

Minutes - Woodbury County Zoning Commission Special Meeting – September 11, 2023

The Zoning Commission (ZC) special meeting convened on the 11th of September at 5:00 PM at the Moville Community Center in Moville, Iowa. The meeting was also made available via teleconference.

ZC Members Present: Chris Zellmer Zant, Corey Meister, Jeff O'Tool, Tom Bride
 County Staff Present: Dan Priestley, Dawn Norton
 Public Present: Angie Heck, Tony Heck, Kim Luze, Rich Luze, Vicki Atwell, Steve Mrla, Leo Jochum, Bev Jochum, Janet Yanak, Tony Yanak, Dennis Ragan, JoAnn Sadler, Zach Hummel, Wally Wagner, John Johnston, Jeremy Taylor, Kevin Heck, Kyle Gates, Eric Nelson, Elizabeth Widman, Rebekah Moerer, Genise Hallowell, Kalyn Heetland, Josh Heetland, Elisabeth Cendejas, Jesus Cendejas, Robert Knaack, Greg Jochum, Brad Jochum, Tom Jochum, Bob Fritzmeier

Call to Order

Chair Chris Zant formally called the meeting to order at 5:00 PM. Four Commissioners were present. Commissioner Parker was absent.

Public Comment on Matters Not on the Agenda

None

Approval of Previous Meeting Minutes – July 24, 2023

O'Tool motioned to approve the minutes from July 24, 2023. Second: Bride. Motion carried: 4-0.

Formal approval of Zoning Commission Rules of Procedure

At the July 24, 2023 meeting of the Zoning Commission, the rules of procedure were approved and sent to the Board of Supervisors who voted to approve the rules on August 8, 2023. Motion to formally adopt the rules and authorize the chair to sign the Rules of Procedure by Meister. Second: O'Tool. Motion carried: 4-0.

Public Hearing: Proposed Janet Heck Subdivision (Parcel #874724300005)

Priestley read the preliminary report and staff recommendation into the record. Kevin Heck, executor for Janet K. Heck has filed for a one (1) lot minor subdivision on the property identified as Parcel #8747243000005. This subdivision is being completed to separate the house location from the farm ground. This agricultural subdivision proposal has been properly noticed in the Sioux City Journal legal section on August 29, 2023. The neighbors within 1000 FT have been duly notified via an August 23, 2023 letter about the September 11, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. This property is located in the Agricultural Preservation (AP) Zoning District and is located in the Special Flood Hazard Area (SFHA) – Zone A. The City of Salix waived their extraterritorial review authority with the approval of Resolution No. 2023-20. The area of the subdivision is less than 5 acres and the Base Flood Elevation (BFE) data is not required. Based on the information received and the requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Motion to close public hearing: O'Tool. Second: Bride. Carried: 4-0. Motion to recommend the approval to the Board of Supervisors as proposed: O'Tool. Second: Meister. Motion carried: 4-0.

Public Hearing: Proposed Zoning Ordinance Map Amendment (Rezone) (Parcel #884506200006)

Priestley read into record the preliminary report and staff recommendation. Richard and Kimberly Luze (Applicants/ Owners) have filed a Zoning ordinance Map Amendment application with Woodbury County to request their property (Parcel #884506200006) be rezoned from Agricultural Preservation (AP) Zoning District to the Agricultural Estates (AE) Zoning District. The applicants are making this request to pursue an eventual split of their parcel to facilitate the ability to add a neighboring single-family dwelling in the future as there are presently two houses located within the existing quarter-quarter section. The split will likely consist of approximately three acres from the existing 18+ acres. This will be initiated at a future date. The neighbors within 1000 FT have been notified via an August 23, 2023 letter about the September 11, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. This property is located in the Agricultural Preservation (AP) Zoning District and is not located in the floodplain. This requested zoning change is compliant with the future land use map of Woodbury County's development plan as this area is designated within the rural residential area. Based on the information received and the requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Staff recommends approval. Priestley has received some phone inquiries regarding future land uses. A Neighboring landowner spoke with concerns of possible subdivisions and increasing density. Priestley stated with Hwy 20 abutting the land, the state

would likely not allow more driveways off Hwy 20. If additional land splits were requested through a subdivision application, there would be public conversations and meetings. Ms. Atwell expressed concerns if a subdivision would go in and how it could affect her cattle farming. Bride stated it would have no impact on what she is currently doing and stated communication between landowners is important. Steve Mrla stated DOT could build a frontage road which would allow more access. Bride discussed how eliminant domain should not be used for private use. Bride motioned to close public hearing. Second: Meister. Carried: 4-0. Motion to recommend the approval to the Board of Supervisors as proposed: Meister. Second: Bride. Motion carried: 4-0.

Public Hearing: Utility-Scale Solar Systems – Consideration of Solar Ordinances for Recommendation(s) to the Board of Supervisors

Priestley read into the record the direction by the Woodbury County Board of Supervisors that occurred on August 8, 2023 for Planning and Zoning and the Zoning Commission to establish/examine a new ordinance as it relates to utility-scale solar systems. The purpose of this public hearing is to receive comments from the public about solar energy systems not limited to utility-scale solar systems, agrisolar or agrivoltaics, and community solar systems as the Commission works toward preparing a recommendation for a proposed ordinance or amendments to the Woodbury County Zoning ordinance to address the permitting process for such systems in industrial and/or agricultural areas. The Board of Supervisors have indicated that “if the county was to engage in utility-scale solar, at minimum, the county should consider this only if the following is met”:

- A conditional use permit for AP “C” with Planning and Zoning and Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- A slope of no more than 5% in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- A maximum height of no more than 20’ for panel structures.
- Of all AP, no more than 49% can be in such a project. In short, 51% must be for agricultural production or no longer considered “AP.”
- Utility solar can be no more than 2% of all AP “agricultural preservation,” preserving 98% of AP. This equates to approximately 8,540 acres of the 427,000 acres of ag land, ag land constituting 75% of the 570,000 total acres in Woodbury County.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A requirement (or at least strong consideration) that the utility-scale solar project either be on a landowner’s property or that the owner of the land be a resident of Woodbury County.

Priestley identified additional comments/resources that were received after the printing of the Zoning Commission agenda packet with backup materials. In particular, resources were received from the Center of Rural Affairs, the Northwest Iowa Power Cooperative (NIPCO), the Woodbury County Rural Electric Cooperative, and the Iowa Land & Liberty Coalition. Additionally, Priestley provided a copy of a map illustrating soil content with less than 5% slopes in comparison with soils with CSR2 ratings greater than 65 and 75. Priestley then offered a summary of potential approaches that could be taken to craft an ordinance including which entity would be in charge of the permitting. Looking at other counties, there is a mix of permitting utility-scale solar based on a conditional use permit via the Zoning Commission and Board of Adjustment in comparison with a standalone home rule ordinance where the Board of Supervisors are the permitting body. Priestley indicated that the following concepts would be up for discussion as an ordinance is considered: Certified Abstractor’s Listing – Public Notification Area; Site Plan; Setbacks; Height; Protected Areas; Slope; Landscaping/Buffer/Screening; Fencing/Security; Signage; Lighting; Noise; Outdoor Storage; Utility Plan / Utility Connections / Agreements; Floodplain; Habitat and Natural Resource Considerations; Solar Glare Minimization; Weed Control; Grading Plan; Compliance with applicable laws (local, state, federal); Access; Road Use; Aviation Protection; Maintenance, Repair, or Replacement / Repowering; Waste; Soil Erosion / Sediment Control; Stormwater Management; Administration / Enforcement / Violations; Emergency Management; Timeline; Safety; Abandonment / Cessation of Operations; Decommissioning and Reclamation; Fees; Agrivoltaics / Agrisolar; Community Solar Systems; Concentrating Solar Power; Solar definitions; Etc.

The following paraphrased public comments were offered:

Greg Jochum (Salix) addressed the Commission regarding the differences between CSR1 and CSR2 as well as height.

Brad Jochum (Plymouth County) addressed the Commission regarding out of county ownership.

Tom Jochum (Sgt. Bluff) addressed the Commission regarding the advantages of solar.

Eric Nelson (Moville) addressed the Commission regarding solar as a commercial/industrial entity.

Ron Wood (Salix) addressed the Commission regarding the need for solar power generation for growth.

Elizabeth Widman (Sgt. Bluff) addressed the Commission regarding the stewardship and protection of agricultural land from solar development.

Bob Fritzmeier (Sioux City) addressed the Commission regarding how solar installations help soil to rejuvenate and help the wildlife population.

Leo Jochum (Salix) addressed the Commission regarding renewable energy rates, vegetation for screening, capping AP land at 2%, and soil rejuvenation.

Kim Alexander (Smithland) addressed the Commission regarding money as a principal purpose for solar.

Will Dougherty (Urbandale) addressed the Commission on how MidAmerican works with various stakeholders as they pursue solar projects and offered an opportunity to tour the Port Neal solar site.

Ann Johnston (Salix) addressed the Commission with concerns on the impact of the farm ground and keeping the land the way it is.

Wally Kuntz (Merville) addressed the Commission inquiring about the tax income.

Supervisor Jeremy Taylor (Sioux City) addressed the Commission and responded to Mr. Kuntz's inquiry about generation usage tax.

Bride asked Will Dougherty from MidAmerican where the largest project was in Iowa, Dougherty stated Holiday Creek, north of Fort Dodge has an 800-acre, 100 M/Watt project. 8 acres generally produces 1 M/Watt.

Bride asked if there have been any requests to the Iowa Utilities Board for eminent domain for a commercial solar project.

Eric Nelson asked Dougherty about storage of excess power. Dougherty stated it is not an on-demand system. The grid goes where needed first, then to next load center. Port Neal is an on-demand system. Dougherty stated coal system is used as a back up to solar.

Motion to close public hearing: Meister. Second: O'Tool. Carried: 4-0.

Priestley thanked the attendees for their comments and questions. The information gathered will be taken into consideration as a proposal is prepared and possibly recommended by the Zoning Commission that would eventually go to the Board of Supervisors for up to three hearings. The next meeting of the Zoning Commission will be held on Monday, September 25 at 5:00 PM in the basement meeting room of the Woodbury County Courthouse where the Board of Supervisors meet.

Public Comment on Matters Not on the Agenda

None.

Commissioner Comment or Inquiry

None.

Staff Update

Priestley stated that the minor subdivision and rezone that were recommended this evening will be sent to the Board of Supervisors for consideration at future meeting(s).

Adjourn

Motion by Bride to adjourn; Second by O'Tool. Carried: 4-0. Adjourned: 6:34 p.m.

Minutes - Woodbury County Zoning Commission – September 25, 2023

The Zoning Commission (ZC) meeting convened on Monday, September 25 at 5:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. The meeting was also made available via teleconference.

ZC Members Present: Chris Zellmer Zant, Corey Meister, Jeff O'Tool, Tom Bride, Barb Parker
 County Staff Present: Dan Priestley, Dawn Norton
 Public Present: Greg Jochum, Gwen Brunk, Roger Brunk, Russell Petersen, Tom Jochum, Brian Jochum, Leo Jochum, Blair Ulery, Jarrod Ulery, Bill Jochum, Tony Ashley, Dan Bittinger, Alan Fagan, Rebekah Moerer, Elizabeth Widman, Deb Harpenau, Kevin Alons, Jenny Barber, Rex Barber, Jesus Cendejas, Peter Widman, Sophia Widman, Emily Segura, Ann Johnston
 Will Dougherty
 Telephone: Will Dougherty

Call to Order

Chair Chris Zant formally called the meeting to order at 5:04 PM. All five (5) Commissioners were present.

Public Comment on Matters Not on the Agenda

None

Approval of Previous Meeting Minutes – September 11, 2023

Meister motioned. Second: O'Tool. Motion carried: 5-0.

Public Hearing: Townley Addition, Minor Subdivision Proposal on Parcel #894607100007

Priestley read the preliminary report into the record. Donald J Townley, in his capacity as Trustee of the Derrill J. Townley Revocable Trust has filed for a one (1) lot minor subdivision on the property identified as Parcel #894607100007. This subdivision is being completed to separate the house location from the abutting ground. This proposal has been properly noticed in the Sioux City Journal legals section on September 14, 2023. The neighbors within 1000 FT have been duly notified via a September 11, 2023 letter about the September 25, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. This property is located in the Agricultural Preservation (AP) Zoning District and is located in the Special Flood Hazard Area (SFHA) – Zone A. The City of Sioux City conducted extraterritorial review with the acceptance and approval of the final plat with the approval of Resolution No. 2023-0696. The area of the subdivision is less than 5 acres and Base Flood Elevation (BFE) data is not required. Based on the information received and the requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. The Woodbury County Engineer recommended an easement which was prepared. Motion to close public hearing: Bride. Second: O'Tool. Carried: 5-0. Motion to recommend approval to the Board of Supervisors as proposed: O'Tool. Second: Bride. Motion carried: 5-0.

Review of Conditional Use Permit Application: Proposed Telecommunication Tower 120 FT Monopole on Parcel #874316300005

Priestley read the preliminary report into the record. AGM Technology Investment Group DBA Nextlink have filed a conditional use permit application to request to install a 120-monopole communication tower to supply high speed internet to surrounding areas on the property designated as Parcel #874316300005. The proposed location is around 2.5 miles south of Anthon and about 4.2 miles northeast of Oto. This proposal has been noticed in the Sioux City Journals legal section on September 14, 2023. The neighbors within one (1) mile were duly notified via a September 13, 2023 letter about the October 2, 2023 Board of Adjustment public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been requested to comment. This property is located in the Agricultural Preservation (AP) Zoning District. Based on the information received and the requirements set forth in the Zoning Ordinance, the proposal meets the appropriate criteria for approval of the conditional use request. It is the recommendation of staff to approve the proposal. Motion to recommend the proposal to Board of Adjustment: O'Tool. Second: Parker. Motion carried 5-0.

Public Hearing: Solar Energy – Utility-Scale Solar Systems – Consideration of Solar Ordinances for Recommendations(s) to the Board of Supervisors

Priestley summarized the utility-scale solar energy system process including eight topics to be discussed at this meeting. The Woodbury County Zoning Commission has been directed by the Board of Supervisors on August 8, 2023 to establish/examine a new ordinance as it relates to utility-scale solar systems. The purpose of this public hearing is to receive comments from the public about a potential ordinance that could facilitate the permitting of utility solar in the Agricultural Preservation (AP) Zoning District in addition to the General Industrial Zoning District. The Zoning Commission held their first public hearing at the Movable Area Community Center on September 11, 2023. The Board of Supervisors have indicated, through their direction on August 8, that "if the county was to engage in utility-scale solar, at a minimum, the county should consider this only if the following is met":

- A conditional use permit for AP "C" with Planning and Zoning and Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- A slope of no more than 5% in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- A maximum height of no more than 20' for panel structures.
- Of all AP, no more than 49% can be in such a project. In short, 51% must be for agricultural production or no longer considered "AP".
- Utility solar can be no more than 2% of all AP "agricultural preservation," preserving 98% of AP. This equates to approximately 8,540 acres of the 427,000 acres of ag land, ag land constituting 75% of the 570,000 total acres in Woodbury County.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A requirement (or at least strong consideration) that the utility-scale solar project either be on a landowner's property or that the owner of the land be a resident of Woodbury County.

Priestley also informed the Commission and the public that the Board of Supervisors have an agenda item for their September 26, 2023 meeting that may update the previous direction. The potential new direction would include the following:

- A conditional use permit for AP "C" with Planning and Zoning and the Board of Adjustment to be able to site-specifically take into consideration the concerns of neighbors, land/soil, and other factors when approving permit.
- A slope of no more than 5% ONLY for fixed arrays (most technology is now movable arrays) in order to preserve the land and to account for soil erosion, compaction, and future land stewardship.
- No more than 1% of industrial land conversion every 4 years for reclassification, roughly 5,700 acres.
- Current notification for utility-scale solar shall be 1 mile for public comment instead of 500 feet.
- A decommissioning plan from solar companies reviewed by P&Z/BOA subject to approval by the Woodbury County Board of Supervisors.

Matt Countryman (Renewable Energy Equity Partners) addressed the Commission regarding the importance of mitigation and ag restoration of land, and support of an overlay district.

Deb Harpenau (Salix) addressed the Commission supporting utility solar as a clean source of electrical generation.

Wally Wagner (Salix) addressed the Commission about progress, and change he has seen regarding his land, and types of land that would not be good for solar.

Jerrod Ulery (Ulery Energy) addressed the Commission supporting solar energy.

Kevin Alons (Salix) addressed the Commission regarding the use of solar on agricultural land as not an ag use, heavily subsidized, and questioned revenue for county.

Rebecca Moerer (Sioux City) addressed the Commission about not supporting solar in agriculture areas as it disturbs wildlife, and questions whether revenue would go.

Jesus Cendejas (Salix) addressed the Commission expressing concern for landowner stewardship, land depreciation, and impact of solar on neighbors.

Elizabeth Widman (Sergeant Bluff) addressed the Commission offering environmental concerns, impact on neighbors, glare, and noise issues.

Leo Jochum (Salix) addressed the Commission in favor of utility solar indicating that solar can co-exist with reasonable setbacks.

Ann Johnston (Salix) addressed the Commission opposing utility solar and questioning its recyclability

Will Dougherty (MidAmerican Energy) addressed the Commission indicating that there is not a one size fits all approach, plans could be put in place for decommissioning, buffers, and screening.

Leo Jochum submitted information sheet to Commissioners. Motion to accept: O'Tool. Second: Parker. Carried: 5-0. See received content beginning on Page 4 of the minutes.

Priestley presented photo of the utility solar system abutting Port Neal Road. He also should example photos of agrisolar or agrivoltaics.

Priestley provided a range of topics as an overview for a potential ordinance including: appropriate locations; ordinance type(s); process type(s); information collection; permitting requirements; and definitions. Priestley also discussed the concept of an "overlay district" which could be used in conjunction with the existing underlying zoning district. In particular, an overlay district is not intended to be a free-standing zoning district. It is applied to the

project area or footprint via the Zoning Ordinance Map Amendment (rezone) process. Specific standards or requirements can be directly tied to the overlay district. Thus, it is possible to create a series of requirements in which a proposed location would have to be met in order to be considered for the rezone to the overlay district. Therefore, as a hypothetical, the Zoning Commission and Board of Supervisors could consider a Zoning Ordinance Map Amendment (rezone) application to the Utility-Scale Solar Energy Systems Overlay District following the procedures set out in the Ordinance. This overlay could be applied over Agricultural Preservation (AP) zoned land while retaining its base uses. Once, the overlay district has been applied, conditional use permit application could be considered for the footprint of that area by going through a review by the Zoning Commission and consideration of the permit by the Board of Adjustment.

Priestley suggested that the Commission schedule a work study public meeting where the public and commissioners can discuss issues and form a preliminary ordinance or amendments to present to the Board of Supervisors as a recommendation.

Daniel Segura (Sioux City) addressed the Commission questioning the effectiveness of the overlay district as an added step.

Priestley indicated that specific requirements or conditions can be added to the rezone consideration process.

Bride motioned to close public hearing. Second: Parker. Carried: 5-0.

Zellmer Zant stated different applications are considered through different processes. Priestley explained that the overlay district would use the rezone process which requires a public hearing before the Zoning Commission and up to three public hearings before the Board of Supervisors. The Zoning Commission would offer a recommendation to the Board of Supervisors who ultimately would decide the appropriateness of the location. The Conditional Use Permit process would require review by the Zoning Commission and approval by the Board of Adjustment. The Board of Supervisors would be involved with special agreements such as road use and decommissioning. In terms of preparing an ordinance, both the rezone and conditional use processes will need to be defined including the approval/disapproval requirements for both.

Public Comment on Matters not on the Agenda

None

Staff Update

There will be a Board of Adjustment meeting on October 2, 2023 in the basement meeting room of the courthouse. The topic of solar will be shared with the Board only as an information item. The Board of Adjustment does not have a role as to the creation of new ordinances. The Zoning Commission formulates recommendations that are considered by the Board of Supervisors.

Adjourn

Motion by O'Tool to adjourn; Second by Meister. Carried: 5-0. Adjourned: 7:50 p.m.

RECEIVED FROM LEO JOCHUM (SALIX) – 6 PAGES

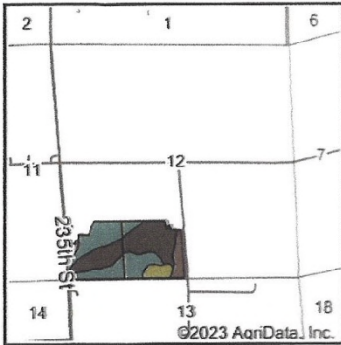
The first sheet is three farms located north of CF industries in the GI zone. Notice the CSR1 is 58 to 60, CSR 2 is around 10 to 12 points higher. This will be consistent throughout the higher quality soil in this area.

The left side of the next sheet shows where the Mid-America solar project is located with a CSR 1&2 of 61.9 and 71.1 respectively

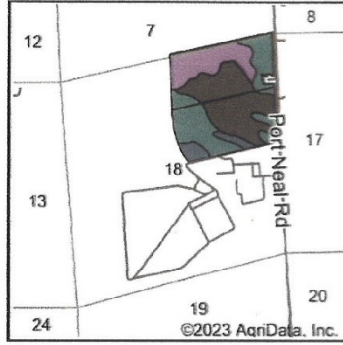
The right side of the page shows over 600 acres between hiway 75 and Interstate 29 with very high CSR1 and CSR2. The farms on these two sheets are within a large area which spans about six miles from east to west and are very consistent in quality. The land being discussed for solar is East of this area which has heavier soils and lower elevation.

The last three sheets represent farms located North and East of Salix that have CSR 1 ratings in the mid 40s with the exception of one. However the CSR2 increases by 30 plus points. The CSR1 rating is more relevant for land quality in that area because CSR2 has removed the rainfall factor. For this reason I don't think CSR should be considered for conditional use.

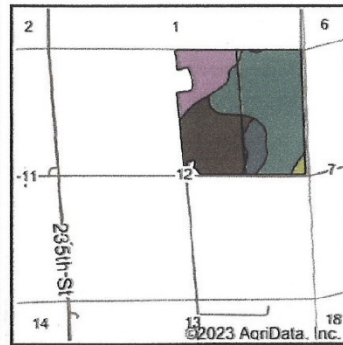
0 J



State: **Iowa**
 County: **Woodbury**
 Location: **12-87N-48W**
 Township: **Liberty**
 Acres: **72.02**
 Date: **9/18/2023**



State: **Iowa**
 County: **Woodbury**
 Location: **18-87N-47W**
 Township: **Liberty**
 Acres: **150.28**
 Date: **9/18/2023**



State: **Iowa**
 County: **Woodbury**
 Location: **12-87N-48W**
 Township: **Liberty**
 Acres: **150.89**
 Date: **9/18/2023**



Irr Class	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans	Irr Class	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans	Non-Irr Class	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans
lw	lw	77	63		lw	lw	77	63		ls	ls	72	65	80
llw	llw	72	57		ls	ls	72	65		lw	lw	77	63	58
ls	ls	72	65		lls		49	33		lls		49	33	37
llw	llw	45	51		lw		89	74		lw	lw	91	70	74
lllw		58	51		1.42	*-	70.2	58.1		lvw		5	37	2
lls		46	44							1.36	*-	70.1	59.2	*n 65.7
1.44	*-	70.7	60											

Nid America Solar Farm



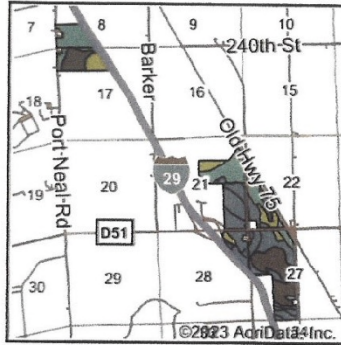
State: **Iowa**
 County: **Woodbury**
 Location: **18-87N-47W**
 Township: **Liberty**
 Acres: **123.17**
 Date: **9/18/2023**



Maps Provided By:



Land	Non-Irr Class *c	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans
	ls	ls	72	65	80
	lw	lw	77	63	58
	lllw		58	51	49
Age	1.35	*-	71.1	61.9	*n 67.7



State: **Iowa**
 County: **Woodbury**
 Location: **21-87N-47W**
 Township: **Liberty**
 Acres: **646.76**
 Date: **9/18/2023**



Maps Provided By:



Non-Irr Class *c	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans
lw	lw	77	63	58
ls	ls	72	65	80
lw	lw	94	79	83
lllw		86	65	60
lllw		58	51	49
lllw		81	47	52
lw		89	84	75
llw	llw	72	57	50
llw	llw	74	65	61
lw	lw	91	70	74
		5	5	
lw		89	74	71
*-	*-	77.8	64.5	*n 66



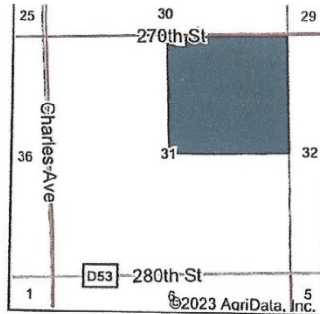
State: Iowa
 County: Woodbury
 Location: 36-87N-47W
 Township: Liberty
 Acres: 75.03
 Date: 5/22/2023



Maps Provided By:



	Non-Irr Class °c	Irr Class °c	CSR2**	CSR	*n NCCPI Soybeans
	llw		86	65	60
	lllw		81	47	52
	lllw	lllw	67	42	51
	lw	lw	77	63	58
	lw	lw	94	79	83
verage	2.27	°-	82.5	67.9	*n 58



State: Iowa
 County: Woodbury
 Location: 31-87N-46W
 Township: Grange
 Acres: 153.97
 Date: 4/27/2023



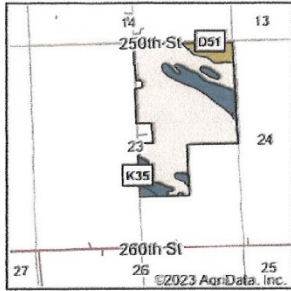
Maps Provided By:



	Non-Irr Class °c	Irr Class °c	CSR2**	CSR	*n NCCPI Soybeans
	llw		81	47	52
	lllw	lllw	67	42	51
verage	3.00	°-	81	47	*n 52

Similar to the original CSR, the CSR2 assumes a SMU is adequately managed, artificially drained where required, and there is no land leveling or terracing. A major difference between the CSR and the CSR2 is the CSR included a rainfall correction factor where the CSR2 does not.

One of the key differences between CSR and CSR2 will be the climate factor. CSR2 will not have a climate factor in its calculations. In the original CSR values, soil scientists made an adjustment based on the geographic region of a soil map unit (SMU). For example, SMUs in Northwest Iowa were adjusted downward more than SMUs in Southeast Iowa. Without a climate adjustment, CSR2 values will have an upward bias in counties located in Northwest Iowa.



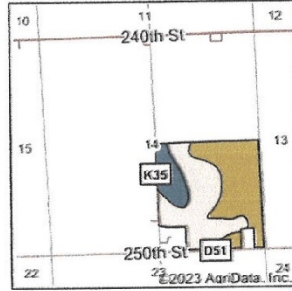
State: Iowa
 County: Woodbury
 Location: 23-87N-47W
 Township: Liberty
 Acres: 187.71
 Date: 4/26/2023



Maps Provided By:
surety
 CUSTOMIZED ONLINE MAPPING
 © AgriData, Inc. 2023 www.AgriDataInc.com



Non-Irr Class *c	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans
	llfw	67	42	51
	fw	91	70	74
	llfw	59	51	49
	llfw	81	47	52
	fw	77	63	58
Age	2.75	*-	69.9	*n 53.8



State: Iowa
 County: Woodbury
 Location: 14-87N-47W
 Township: Liberty
 Acres: 140.07
 Date: 4/26/2023



Maps Provided By:
surety
 CUSTOMIZED ONLINE MAPPING
 © AgriData, Inc. 2023 www.AgriDataInc.com



SR2 agand	Non-Irr Class *c	Irr Class *c	CSR2**	CSR	*n NCCPI Soybeans
		llfw	58	51	49
		llfw	67	42	51
		llfw	84	63	55
Age Average	2.87	*-	65.2	48.7	*n 50.6

3.



State: Iowa
 County: Woodbury
 Location: 12-87N-47W
 Township: Liberty
 Acres: 306.46
 Date: 4/26/2023



Maps Provided By:



Non-Irr Class °c	Irr Class °c	CSR2**	CSR	*n NCCPI Soybeans
ifw		74	51	52
lw	lw	94	79	83
fw		84	63	55
lw		89	74	71
ifw		59	37	49
1.95	-	83.2	64.2	*n 64.9



State: Iowa
 County: Woodbury
 Location: 5-86N-46W
 Township: Sloan
 Acres: 153.5
 Date: 4/26/2023



Maps Provided By:



Id	CSR2 Legend	Non-Irr Class °c	CSR2**	CSR	*n NCCPI Soybeans	
2%		ifw	81	47	52	
2%		ifw	74	51	52	
3%		lw	89	74	71	
Weighted Average			2.95	80.7	47.4	*n 52.1

Minutes - Woodbury County Zoning Commission Special Work Session – October 16, 2023

The Zoning Commission (ZC) meeting convened on Monday, the 16th of September, at 5:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. The meeting was also made available via teleconference.

Meeting Audio:

For specific content of this meeting, refer to the recorded audio on the Woodbury County Zoning Commission "Committee Page" on the Woodbury County website:

- County Website Link:
 - o https://www.woodburycountyiowa.gov/committees/zoning_commission/
 - YouTube Direct Link:
 - o <https://www.youtube.com/watch?v=IJAj6Xh3cSU>
-

ZC Members Present:

Chris Zellmer Zant, Corey Meister, Jeff O'Tool, Tom Bride, Barb Parker

County Staff Present:

Dan Priestley, Dawn Norton

Public Present:

Elizabeth Widman, Bill Jochum, Ann Johnston, Leo Jochum, Bev Jochum, Deb Harpenau, Jenny Barber, Emily Segura, Rebekah Moerer, Doyle Turner, Tom Jochum, Paula Wright, Jesus Cendejas Family, Daniel Segura, Will Dougherty

Call to Order

Chair Chris Zellmer Zant formally called the meeting to order at 5:03 PM. All Commissioners were present.

Public Comment on Matters Not on the Agenda

None

Work Session for Proposed Utility-Scale Solar Energy Systems Zoning Ordinance Amendment(s).

Prior to this meeting, the Zoning Commission has held two public hearings to collect comments from the public (Moville – 9/11/23 & Courthouse – 9/25/23). Subsequently, a follow up public hearing will be held on Monday, October 23 at the regular meeting of the Commission that begins at 5:00 PM.

Priestley offered an overview of the evening's proceedings including five considerations for a potential utility-scale solar energy systems ordinance that could be considered by the Zoning Commission in preparation for a recommendation to the Board of Supervisors.

Consideration 1

Consider updating the General Development Plan and/or Future Land Use Map to facilitate the potential expansion of the General Industrial (GI) and Limited Industrial (LI) Zoning Districts and consider adding additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public.

Consideration 2

Consider retaining the current permitting procedures in the Woodbury County Zoning Ordinance but add additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public. Consider retaining the General Industrial (GI) Zoning District as the only allowed location for the consideration of a conditional use.

Consideration 3

Consider establishing a utility-scale solar energy systems overlay zoning district that requires a rezone application to be reviewed by the Zoning Commission and considered for approval by the Board of Supervisors that must meet specific criteria for the appropriateness of whether a particular area in the Agricultural Preservation (AP) Zoning District is suitable for utility-scale solar energy systems. Consider adding additional requirements to the conditional use permitting process to make expectations clear for the applicants, area landowners, and the general public.

Consideration 4

Consider establishing an agrisolar utility-scale solar energy systems overlay zoning district for the specific purpose to coincide with an existing farming operation where each parcel of land shall include over 51% of its usage for farming purposes.

Consideration 5

Consider retaining the current policy for utility-scale solar energy systems (No changes).

The Commission discussed the current process for the permitting of utility-scale solar on agricultural land including the issue of spot zoning and its relationship with the comprehensive plan's future land use map. Priestley referenced the future land use map as a tool for justifying future industrial areas that could facilitate the permitting of utility-solar. He indicated that industrial

areas could be expanded on the map for future consideration of solar. However, it would take going through the comprehensive map approval process of amending the map to reflect additional industrial areas that could later justify additional areas.

Priestley discussed the concept of overlay districts as used by both Scott County and Linn County. Scott County relies on a CSR2 average of 60 or higher to authorize the rezone while Linn County uses a score card or rubric which identifies a number of issues not limited to CSR2, grading, vegetation, and good neighbor payments in order to obtain a permissible score. Priestley indicated that the rezone to an overlay is similar to a conditional use, however, it adds the Board of Supervisors to the process of determining whether or not an area of the county is appropriate for solar. Therefore, the Zoning Commission and Board of Supervisors would be involved in the overlay district rezone process. Additionally, the Zoning Commission and Board of Adjustment would be involved with the conditional use permit process. The Board of Supervisors would be involved with authorizing each individual agreement such as decommissioning, road use, agricultural mitigation, etc.

Zellmer Zant indicated that she likes the involvement of the Zoning Commission, Board of Adjustment, and Board of Supervisors as it gives the public more opportunities to participate in the process. She also questioned whether the overlay district is permanent or temporary. Priestley indicated that depends on how the overlay district is designed. The goal of the district is to allow a new use but retain the base use. The policy for a decommissioning plan will be a determining factor as to whether the specific use of the overlay can continue or conclude.

Bride inquired as to whether there would be any issues if separate overlay districts associated with other projects were treated differently than others. Priestley indicated that there must be clear consistent expectations in the requirements for establishing the district, however there can be some room for conditions if information is identified that should be addressed. Priestley stated there must be a balance, but various options must be exhausted as applicants/developers must know what they are getting into from the start. Priestley discussed other considerations such as separation distances, setbacks, setback waivers, and the floodplain.

Priestley discussed a potential application process and expectations of staff, associated county departments, the commission, and boards. He discussed the concept of the solar-ordinance conditional use as being portable for either the industrial or overlay district. If the overlay district is not used, then an added feature conditional use permit process can be used for the general industrial areas. If the overlay district is used, there would need to be a set of parameters for determining how the overlay gets approved.

Bride shared a concern that if the Commission recommends no changes that the Supervisors might consider going with a stand-alone ordinance which does not involve zoning. Priestley indicated that a stand-alone ordinance does not include the zoning districts. Priestley stated that the Zoning Commission has the right to offer any reasonable recommendation to the Board of Supervisors. He indicated that everyone is mindful of the harvest season, and we will continue to offer multiple opportunities for input.

O'Tool inquired about the downside of using the overlay district. Priestley explained the debate of exclusively relying on CSR which could offer limitations for landowners. Meister mentioned in a previous public hearing questions about the reliability of CSR. He indicated that he likes Linn County's rubric as including CSR and other items. He also inquired who would be monitoring or policing the rubric for items such as grass species. Priestley responded that additional regulations create the need for more bureaucracy or more resources.

Mesiter inquired about how the Board of Supervisors arrived at 2% use of agricultural land. Is that enough or too much? He would like to see more information on how this equals to an existing power plant. Bride indicated that 2% is around 8,400 acres and stated that the Supervisors may be looking for a cap. Will Dougherty of MidAmerican discussed the acres on some existing projects in other counties. Meister offered concerns about the 2%. O'Tool inquired with Will Dougherty about the comparison of solar and wind in terms of megawatt capacity.

Bride inquired about the setbacks and if any of the allowed uses expand outside of the property lines. Priestley indicated the existing zoning ordinance does not include separation distances beyond the lot lines. Setbacks are determined by the zoning district dimensional standards in the zoning ordinance. Bride offered concerns about the impact of setbacks on other property owners. Priestley indicated that setback waivers could be used, and he cautioned about the law of unintended consequences.

O'Tool referenced the 5% slope proposed requirement. Bride inquired as to where the Supervisors arrived at that number. Priestley said it has been offered as part of the consideration for the Commission to research as a possibility. Zellmer Zant referenced the importance of comparing practices with other counties and not necessarily reinventing the wheel. Zellmer Zant also referenced the needs of the cities including community solar. Bride used Moville as an example using an overlay to facilitate solar. He also referenced the use of the percentage as an issue. Priestley indicated that the 51/49% solar ratio is meant to ensure agriculture remains a primary function on ag land.

Mesiter inquired about the proposed one mile notification area. Priestley responded that the purpose is to increase public awareness.

Zellmer Zant inquired with Will Dougherty as to whether these contracts are 10 years and questioned the rapid change of technology. Dougherty discussed maximizing efficiencies as a driving factor of change. He referenced ISU's study pertaining to the coexistence of agriculture and solar with aspects such as grazing. Bride inquired about damage to panels as a result of grazing. Dougherty referenced sheep as an option over others.

Bride inquired about how the land can be put back the way it was through decommissioning and referenced concrete left in the ground as result of wind turbines. Dougherty indicated that solar concrete footings are not being used. Zellmer Zant asked about the Port Neal solar field's footings. O'Tool asked Dougherty about buried power lines and if they can be buried in the floodplain. Priestley indicated that electrical assets must be elevated above the BFE. Bride and Zant indicated there are locations where lines are likely buried in the floodplain.

Zellmer Zant asked Dougherty about how much power gets lost from arrays through distribution. Bride asked Dougherty about the driving factor for locating solar parks.

Zellmer Zant inquired with the Commission about what they like/don't like in the packet considerations.

Parker referenced the Supervisors' discussion point of Light Industrial. Priestley indicated that the limited industrial use can be associated with Consideration #1 which would entail revising the development plan.

O'Tool referenced having a list of bullet points to follow to determine where an area is appropriate or not.

Zellmer-Zant stated that she prefers to not go with the map change as referenced in Consideration #1 because there are other systems in place. She indicated that she likes the conditional use and overlay district format as it includes multiple entities. Bride questioned the ability to accurately be able to paint/assign the industrial areas through mapping.

O'Tool indicated that the overlay could be used in AP areas. Bride discussed the flexibility of the overlay district and the permitting routes. Priestley discussed the creation of the overlay district on a project by project basis. He indicated that an acre cap could be instituted in the ordinance. Zellmer Zant stated that one of the counties she researched had a cap of 400 acres.

Zellmer Zant indicated that the Commission appears to be leaning toward Consideration #3. Priestley indicated that Consideration #4 is not field tested and was only brought into the discussion to discuss the relationship or co-existence of solar and agriculture. Agrisolar could be a part of Consideration #3. Priestley also discussed how battery systems should also be brought into the debate with the growing technology. He made reference to its inclusion in Linn County's ordinance. Will Dougherty discussed batteries in Iowa.

Zellmer Zant inquired if Consideration 5 is off the table. Bride indicated that not doing anything is not what the Supervisors are looking for. Priestley indicated the Commission has the latitude to make a recommendation as you see fit as long as it has an explanation and rationale behind it.

Zellmer Zant referenced the overlap between Considerations 2 and 3. Priestley discussed the overlay district and the overlay rezoning process.

Parker inquired if the county currently has an overlay district. Priestley stated that there is a conservation overlay district that could be petitioned for.

Zellmer Zant questioned the reference to the 10,000 acre limitation, dimensional standards, etc. between Consideration #3 and #4. She referenced the relationship between the 51% agricultural use and the CSR2 rating.

O'Tool questioned whether the CSR2 should be prohibited or not. Meister questioned the inconsistency and reliability of the CSR2.

Doyle Turner offered comments about the accuracy of CSR2. Leo Jochum referenced the difference in rainfall between CSR1 & CSR2.

Zellmer Zant indicated that CSR's may be over 65 in industrial areas. Priestley suggested the comprehensive plan and map allows for industrial areas to include areas of high CSR if the county plans for those areas to be industrial. Meister is concerned with CSR being the sole factor. Priestley indicated that CSR has traditionally been a part of this county's determination of land use.

O'Tool indicated that it would be appropriate to spell out that a lower CSR would be preferable. Bride indicated that CSR is presently considered in the rezone decision process.

Zellmer Zant inquired about 5% slope for fixed arrays and whether there should be a range. Bride offered concerns about the fixed percentage and discussed erosion. Doyle Turner commented about farming practices across the state and discussed soil erosion including highly erodible land (HEL).

Zellmer Zant inquired about the policy toward the special flood hazard area (floodplain). O'Tool suggested that the standard floodplain regulations could be followed.

Zellmer Zant referenced the conditional use language as being included along with the overlay. Priestley replied that it would need to be discussed and debated.

Zellmer Zant inquired about the definitions and the remaining concerns in the conditional use and overlay section. Priestley suggested that the concepts must continue to be vetted through the County Attorney's office. It will be shared with both parties. Priestley recommended that future work sessions be held following next week's public hearing.

Leo Jochum offered concerns about the comparison between Scott County and Woodbury County and the use of CSR2. Jochum made reference to other counties such as Louisa County, Mills County, Johnson County, and Linn County. He referenced the scorecard as used by Linn County and the role of using seed mixes.

Doyle Turner suggested that elected people should have a say on the locations of the solar parks. Turner offered concerns that parameters set could limit the amount of land available for these projects. He recommends giving the Supervisors more than one recommendation which could include the industrial areas. As part of the conditional use, he offered questions about the hurdle of being necessary and desirable.

Public Comment on Matters Not on the Agenda

None

Staff Update

Priestley announced the statewide County Zoning Officials conference in 2024 will be hosted by Woodbury County May 22 – 24 at the Hilton Garden Inn in Sioux City. May 23, Woodbury County has the opportunity to showcase our area, suggestions are welcome, commissioners are encouraged to attend.

Adjourn

Meeting adjourned at 7:30 p.m.

Minutes - Woodbury County Zoning Commission Meeting – October 23, 2023

The Zoning Commission (ZC) meeting convened on Monday, 23rd of September, at 5:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. The meeting was also made available via teleconference.

ZC Members Present:	Chris Zellmer Zant, Corey Meister, Jeff O'Tool, Barb Parker
County Staff Present:	Dan Priestley, Dawn Norton
Public Present:	Leo Jochum, Bev Jochum, Dan Bittinger, Ann Johnston, Daniel Segura, Elizabeth Widman, Emily Segura, Bob Fritzmeier, Roger & Gwen Burnett, Elizabeth Cindy Haase, Russell Petersen, Hope Lynam
Telephone:	Chad Swanger

For specific content of this meeting, refer to the recorded video on the Woodbury County Zoning Commission YouTube channel: <https://www.youtube.com/watch?v=qNpK3atf1k0>

Call to Order

Chair Chris Zant formally called the meeting to order at 5:08 PM. Tom Bride was absent.

Public Comment on Matters Not on the Agenda

None

Approval of Previous Meeting Minutes – September 25, 2023 and October 16, 2023

O'Tool motioned. Second: Meister. Motion carried: 4-0.

Public Hearing: Back Acre Estates, Second Filing, Minor Subdivision Proposal on Parcel #884702200009

Priestley read the preliminary report and staff recommendation into the record. Chad Swanger, Trustee Terry V. Swanger Trust has filed for a one (1) lot minor subdivision on the property identified as Parcel #884702200009. This subdivision is being completed to separate the house location from the abutting ground. This proposal has been properly noticed in the Sioux City Journal legals section on October 10, 2023. The neighbors within 1000 FT have been duly notified via an October 6, 2023 letter about the October 23, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. This property is located in the Agricultural Preservation (AP) Zoning District and is NOT located in the Special Flood Hazard Area (SFHA). The City of Sioux City have accepted and approved the file plat with the approval of Sioux City council resolution No. 2023-0962. Staff recommends that a pavement agreement be signed with Woodbury County as a condition of approval of this final plat. Based on the information received and requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Owner has signed a pavement agreement which will be recorded with the final plat. O'Tool motioned to close public hearing. Second: Meister. Motion carried: 4-0. Motion to recommend acceptance and approval to Board of Supervisors by Meister. Second: Parker. Carried: 4-0. Item will be presented to the Board of Supervisors on October 31, 2023.

Public Hearing: Grays First Addition, Minor Subdivision Proposal on Parcel #884209200009

Priestley read the preliminary report and staff recommendation into the record. Marlis A. Gray, has filed for a one (1) lot minor subdivision on the property identified as Parcel #884209200009. This subdivision is being completed to separate the house location from the abutting ground. This proposal has been properly noticed in the Sioux City Journal legals section on October 10, 2023. The neighbors within 1000 FT have been duly notified via a October 6, 2023 letter about the October 23, 2023 Zoning Commission public hearing. Appropriate stakeholders including government agencies, utilities, and organizations have been notified and have been requested to comment. The Woodbury County Engineer found the proposal in compliance with Iowa Code closure requirements and found that the lot(s) have adequate access. However, there is a rounding error on the plat that must be corrected prior to recording. Priestley confirmed that the rounding error has been corrected and shared with the County Engineer who concurred. This property is located in the Agricultural Preservation (AP) Zoning District and is NOT located in the special Flood Hazard Area (SFHA). Exterritorial review is not required by a city as the property is further than two (2) miles from the closet incorporated jurisdiction. Based on the information received and the requirements set forth in the Zoning and Subdivision Ordinance, the proposal meets the appropriate criteria for approval. Motion to close public hearing: Meister. Second: O'Tool. Carried: 4-0. Parker inquired about a pavement agreement. Priestley indicated that pavement agreements are required when referenced/requested by the County Engineer. Zant asked about the well and septic location and Priestley indicated that the well and septic were on the lot. Motion to recommend acceptance and approval to the Board of Supervisors by Meister. Second: Parker. Carried: 4-0.

Public Hearing: Solar Energy – Utility-Scale Solar Systems – Consideration of Solar Ordinances for Recommendations(s) to the Board of Supervisors

Priestley summarized the purpose of the public hearing. The Woodbury County Zoning Commission has been directed by the Board of Supervisors on August 8, 2023 to establish/examine a new ordinance as it relates to utility-scale solar systems. The purpose of the public hearing is to receive comments and put together a proposal as a possible ordinance or amendments for

solar energy systems not limited to utility-scale systems, agrisolar or agrivoltaics, and community solar systems, together with the Commission addressing the permitting process for such systems in industrial and/or agricultural areas. The Zoning Commission held their first public hearing at the Merville Area Community Center on September 11, 2023. The second was held in the basement of the Woodbury County Courthouse on September 25, 2023. Both public hearings included constituents who offered comments both in support and opposition to the expansion of utility-scale solar in the Agricultural Preservation (AP) Zoning District. Audio of meetings may be accessed for review by visiting the Woodbury County Zoning Commission "Committee" page on the Woodbury County website at: www.woodburycountyiowa.gov. The Zoning Commission conducted a work session on October 16, 2023 to discuss the considerations for an ordinance. The audio for this meeting may be obtained by using the following link: <https://www.youtube.com/watch?v=1JAJ6Xh3cSU> or <https://tinyurl.com/Zoning101623>

Emily Segura (Sioux City) addressed the ZC about the impact of utility-scale solar on area farmland. She discussed the importance of taking care of the land and questioned the disposal and the economics of sending the panels to the dump. Segura recommended for the ZC to read the article "The Dark Side of Solar Power" by Atalay Atasu, Serasu Duran, and Luk N. Van Wassenhove from the Harvard Business Review which discusses a number of topics including the high cost of solar trash and disposal. She offered concerns about the emittance of toxic waste from the decommissioned panels.

Ann Johnston (Salix) addressed the ZC with concerns about slave labor groups in foreign countries such as the Uyghurs in China who are part of the supply chains that make up 95% of the solar panels worldwide. She referenced that much emphasis has been placed on Scott and Linn Counties but not enough on the western counties in Iowa. Johnston indicated that Sioux County is under a moratorium from solar renewables.

Elizabeth Widman (Sergeant Bluff) addressed the ZC indicating that two of the Board of Supervisors voted against putting solar on ag protected land. She asserted this is not a mandate from the board to ensure solar encroaches on ag land. Putting solar on ag land fundamentally changes the ag protected areas and should only be put in industrial zones. MidAmerica's largest Iowa project is 800 acres but they stated they do not have immediate plans to locate solar in Woodbury County. Widman indicated that the farming between solar panels is experimental and not done in America. MidAmerica stated that cattle grazing underneath solar panels would not work because they would rub against the panels and knock them down. Grass planted underneath would not help wildlife because fences need to be around these areas to protect the public. Widman questioned Daniel Priestley's comment at the previous work session that if applicants were to apply to the county to establish utility-solar they would have to be forthright in the application. However, at the public meetings it has not been mentioned that the pro-solar speakers have already signed contracts with an outside company, and we should be told who the company is. If you add up the acres in the plat book owned by these individuals in my area, it comes out to 2,600 acres or 4 square miles in comparison to the City of Sergeant Bluff which is only 2.11 square miles. All the remaining cities in Woodbury are less than one square mile. Four square miles is about the size of 1,936 football fields. Widman indicated that contracts are for 30 years. If these are the same, she will be 97 years old before the possibility of decommissioning them back to solar and her family will grow up to not see agriculture land. Widman asserted that utility-solar is not agriculture. Widman referenced a 3,000 acre solar project near Rock Branch that will be near her ground. She stated that agricultural preservation is meant to preserve agriculture. Widman asserted these utility-scale solar facilities belong on industrial land.

Elizabeth Cindy Haase (Salix) addressed the ZC offering concerns about the radiation caused by solar panels. She indicated that the electronic magnetic sensitivity causing, headaches, dizziness, nausea, cancer risk has been reported by people who reside close to solar systems.

Motion to close public hearing: Parker. Second: O'Tool. Carried: 4-0.

Zant commented there have been great comments from both sides, wants verification on some facts, Commission will work on collecting and reviewing more information. O'Tool appreciates feedback, good to hear all sides.

No Public Comment on Matters Not on the Agenda

Commissioner Comment of Inquiry

Due to harvest, O'Tool suggested waiting until regular November 27th meeting instead of scheduling a work session, all present commissioners agreed.

Staff Update

Priestley noted subdivisions recommended tonight will be presented to the Board of Supervisors on Oct 31, 2023. Woodbury County Community and Economic Development will be hosting the COZO conference in May of 2024.

Adjourn

Motion to adjourn: Meister. Second: O'Tool. Carried: 4-0.