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

| | Da | 7/23/25 | We | eekly Agenda Date | 7/29/25 | 4:40 | |
|---|---|---|---|--|--|---|---|
| | ELECTED OFFICIAL / DI WORDING FOR AGEND a. Conduct second public hearin allowed or conditional uses in so | Δ ITFM· | | Dan Priestle | | rage, and related use | s as |
| | a. Conduct second public hearin allowed or conditional uses in sp notification requirements, and ne zoning ordinance text amendme Industrial (GI) Zoning District and utility-scale solar energy systems | cessary updates to dents to make it clear that prohibited in all others. c. Approve the 2nd | efinitions and ordinance at the conditional use pe r districts and to remove Reading of the Zoning C | structure, and related of the struct | changes. b. Approve allowed for conside otification distance I ments. | e changes to the drafe eration within the Ger language concerning | it eral |
| | | | ACTION REC | UIRED: | | | |
| | Approve Ordinance | | Approve Resolut | ion 🗌 | Approve Moti | on 🔽 | |
| | Public Hearing 🗹 | | Other: Information | onal 🗌 | Attachments | V | |
| EXECU | TIVE SUMMARY: | | | | | | |
| The Board on nuclear energy the General definitions a | of Supervisors will hold a ergy facilities, nuclear wa I Industrial Zoning Distric and ordinance structure, | a public hearing iste storage, an ct, while addres and related cha | at 4:40 PM to did d related uses as sing prohibitions, anges. | scuss proposed s allowed or con public notification | Zoning Ordin ditional uses i on requiremer | ance Text Ame n specific zonii nts, and neces | endments related to ng districts, such as sary updates to |
| Following th (1) Defer co (2) Reject th (3) Adopt th | ne public hearing, the Bo pnsideration of the matte he proposed amendmen ne ordinance amending t | pard of Supervis r for further stud t; or he text of this ti | ors may: dy; or tle | | | | |
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| BACKG | BROUND: | | | | | | |
| The propos future. | ed ordinance changes a | im to establish | a permitting prod | ess for potential | l nuclear ener | gy projects tha | t may arise in the |
| The focus of promoting a | of this debate is on creati a specific project, but ratl | ing a clear and her about being | predictable proce prepared with a | ess for both the partern transparent fran | public and dev nework in plac | velopers. This i ce. | is not about |
| Itechnologie | newed interest in nuclea es like data centers, it's e ige can be located within | ssential that the | e county has a pr | art by the increas ocess to evalua | sing demand t te whether nu | for electricity to clear energy fa | power emerging acilities or nuclear |
| levaluating r | ed ordinance does not a potential projects. If a pro a specific location within | oject is propose | d, it would need | to go through th | ities. Instead, e conditional (| it ensures a cle use permit prod | ear process for cess to ensure it's |
| Establishir Ensuring t | nefits of this ordinance c ng a clear and predictab transparency and public vith state and federal reg | le process for e | valuating potenti ne conditional us | al nuclear energ e permit process | y projects | | |
| • Supporting | g the county's comprehe | nsive plan goal | of promoting en | ergy diversificati | on and techno | ological advand | ces |
| | | | | | | | |
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FINANCIAL IMPACT:

URTHER BACKGROUND:

Zoning Commission's Recommendation
• Unanimous recommendation on June 23, 2025, to adopt proposed amendments
• Emphasizes clarity in ordinance language, expanded notification, and alignment with state and federal regulations

- Oupdates Woodbury County Zoning Ordinance to address nuclear energy facilities and nuclear waste storage
 Responds to Board of Supervisors' July 2, 2024 directive to explore nuclear energy as a potential energy source
 No specific nuclear projects proposed; ensures regulatory clarity for future applications

Defines nuclear energy facilities and nuclear waste storage

- Designates nuclear energy facilities and nuclear waste storage as conditional uses in the General Industrial (GI) Zoning District Expands public hearing notification from 500 feet to 10 miles for nuclear-related conditional use permits

Alignment with Comprehensive Plan

- Supports Goal IU3: promoting energy diversification and technological advances
 Balances economic growth with environmental and safety considerations

- Public input gathered from August 2024 to June 2025 through multiple Zoning Commission hearings
 Mixed sentiments: support from local officials and labor groups, opposition from residents citing waste risks and safety concerns (minimal attendance)
 10-mile notification radius ensures broad community awareness and input for future proposals

Conditional Use Permit Process

- Authority: Zoning Commission reviews and the Board of Adjustment decides on conditional use permit applications

 Purpose: Evaluates unique impacts of nuclear energy and waste storage facilities to ensure suitability for specific sites

 Application: Filed by property owners or those with contractual interest

 Review Process: Planning and Zoning Commission reviews and advises (public meeting/agenda item); Board of Adjustment holds public hearing and decides within 35 days

- Federal agencies (Nuclear Regulatory Commission) oversee safety, licensing, and environmental standards
 County's role limited to zoning and conditional use permitting

- Economic and Environmental Considerations
 Benefits: supports clean energy goals, potential job creation, and energy demands
 Concerns addressed: restricts facilities to industrial zones, 10-mile notification enhances transparency

- Ensures no nuclear facilities or waste storage in agricultural or residential zones
 10-mile notification radius addresses concerns about emergency preparedness and community awareness
 Encourages dialogue on balancing economic development with safety and environmental stewardship.

- Next Steps Conduct public hearings to gather additional community input Board of Supervisors may adjust language during hearings Final adoption will establish a clear framework for potential nuclear energy developments

| IF THE | RE IS A CONTRA | ACT INVOLVED IN T | THE AGENDA ITEN | M, HAS THE CONTRAC | CT BEEN SUBMITTI | ED AT LEAST | ONE WEEK |
|--------|----------------|-------------------|-----------------|--------------------|------------------|-------------|----------|
| PRIOR | AND ANSWERE | D WITH A REVIEW | BY THE COUNTY | ATTORNEY'S OFFICE | ? | | |

| Yes | No | |
|-----|----|--|
| | | |

RECOMMENDATION:

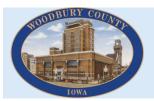
Open and close the public hearing. (Set Time: 4:40 PM)

Conduct and approve the second reading of the Zoning Ordinance Text Amendments.

The 3rd and final public hearing and reading of the ordinance has been scheduled for Tuesday, 8/5/25 at 4:40 PM.

ACTION REQUIRED / PROPOSED MOTION:

- a. Conduct second public hearing to amend the Zoning Ordinance to include nuclear energy facilities, nuclear waste storage, and related uses as allowed or conditional uses in specific zoning districts, such as the General Industrial Zoning District, while addressing prohibitions, public notification requirements, and necessary updates to definitions and ordinance structure, and related changes.
- b. Approve changes to the draft zoning ordinance text amendments to make it clear that the conditional use permit application is only allowed for consideration within the General Industrial (GI) Zoning District and prohibited in all other districts and to remove the reference to the notification distance language concerning utility-scale solar energy systems.
- c. Approve the 2nd Reading of the Zoning Ordinance Text Amendments.



WOODBURY COUNTY PLANNING & ZONING

620 Douglas Street, Sixth Floor, Sioux City, Iowa 51101 712.279.6609 – 712.279.6530 (Fax)

Daniel J. Priestley, MPA – Zoning Coordinator dpriestley@woodburycountyiowa.gov

Dawn Norton – Senior Clerk dnorton@woodburycountyiowa.gov

REPORT – REVISED 7-23-25

Consideration of Nuclear Energy Facilities and Nuclear Waste Storage

EXECUTIVE SUMMARY:

On June 23, 2025, the Zoning Commission unanimously recommended amending the Woodbury County Zoning Ordinance to explicitly include nuclear energy facilities and nuclear waste storage as conditional uses in the General Industrial (GI) Zoning District. The proposed amendment defines these terms, adds them to the Land Use Summary Table, and establishes a 10-mile notification radius for conditional use permits, enhancing public engagement and safety considerations.

Zoning Ordinance Text Amendment Summary:

- For nuclear energy facilities and nuclear waste storage facilities, notice must be mailed to all owners of real property within 10 miles of the subject property.
- Adding "nuclear energy facilities" and "nuclear waste storage" as conditional uses in the General Industrial (GI) zoning district, and prohibiting them in all other zoning districts.
- Defining "nuclear energy facility" and "nuclear waste storage" in the ordinance, with the definitions including compliance with federal and state regulatory requirements.
- The proposal also makes some technical changes, such as renumbering and reorganizing definitions, and adding a new page to the ordinance.



WOODBURY COUNTY ZONING COMMISSION

WOODBURY COUNTY COURTHOUSE 620 DOUGLAS STREET SIOUX CITY, IA 51101

To: Woodbury County Board of Supervisors

620 Douglas Street Sioux City, Iowa 51101

From: Christine Zellmer Zant, Chair

Woodbury County Zoning Commission

Date: June 24, 2025

Subject: Zoning Commission Recommendation Nuclear Energy Facilities and Nuclear

Waste Storage

Dear Members of the Board of Supervisors,

The Woodbury County Zoning Commission held a public hearing on June 23, 2025, to review and recommend amendments to the Woodbury County Zoning Ordinance regarding nuclear energy facilities and nuclear waste storage. This recommendation is the result of comprehensive deliberation and public input collected during six public hearings and two informational meetings held on August 26, 2024; September 23, 2024; November 25, 2024; January 27, 2025; February 24, 2025; March 24, 2025; May 28, 2025; and June 23, 2025. We respectfully submit the attached draft amendments for your consideration.

It is imperative to assert that these recommended amendments must not be construed as an endorsement of nuclear energy-related uses by the Zoning Commission. This recommendation is only intended to enhance regulatory clarity and public engagement. Key changes include explicitly defining "nuclear energy facilities" and "nuclear waste storage" as conditional uses in the General Industrial (GI) Zoning District and expanding the public notification radius from 500 feet to 10 miles to ensure robust community involvement.

The Commission identified that existing ordinance terms, such as "electrical energy generation, not including wind" and "chemical and gas bulk storage," could be interpreted to conditionally allow nuclear-related uses in the GI Zoning District. The proposed amendments address this ambiguity by providing precise definitions and expanding notification requirements.

Public input reflected diverse perspectives. Supporters, including Mayor Bob Scott, Kyle Gates, Mayor Ken Bauer, and representatives from the Northwest Iowa Building and Construction Trade Council, emphasized potential benefits. Opponents, including Jerry Holder, Janet Kruger, and Alan Fagan, expressed concerns about nuclear waste risks and the need for public approval mechanisms. Additional feedback from Wendy Hess and Mark Nahra highlighted infrastructure, emergency preparedness, and compliance with Nuclear Regulatory Commission standards.

Although no comments were received at the June 23 hearing, all prior input informed the Commission's deliberations.

The proposed amendments strengthen the current conditional use permit process by ensuring evaluation and enhanced public notification. We believe these changes provide a clear framework for considering nuclear-related applications while prioritizing community engagement.

We respectfully submit this recommendation for your consideration and look forward to further discussion at your upcoming hearings. For additional details about the Commission's recommendation, please refer to the attached draft copy of the Zoning Commission minutes.

Respectfully submitted,

Christine Zellmer Zant, Chair Woodbury County Zoning Commission

Dated this 24day of _______ 2025



WOODBURY COUNTY, IOWA

AN ORDINANCE AMENDING THE TEXT OF THE WOODBURY COUNTY ZONING ORDINANCE TO INCLUDE THE USES OF NUCLEAR ENERGY FACILITIES AND NUCLEAR WASTE STORAGE AS ENERGY AND NUCLEAR WASTE STORAGE OPTIONS IN UNINCORPORATED WOODBURY COUNTY AND TO ALLOW FOR THE CONSIDERATION OF SUCH FACILITIES IN GENERAL INDUSTRIAL ZONING AREAS AS CONDITIONAL USES.

WHEREAS, the Woodbury County Comprehensive Plan 2040, adopted on May 7, 2024, in Chapter 4 (Public Infrastructure and Utilities), encourages "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" on pages 71-72; and

WHEREAS, the Woodbury County Zoning Ordinance, in Section 3.03.4 (Land Use Summary Table of Allowed Uses), currently classifies "Electrical Energy Generation (not including wind)" as a conditional use within the General Industrial (GI) Zoning District, demonstrating an existing framework for accommodating advanced energy production facilities in areas designated for industrial activity; and

WHEREAS, the Zoning Ordinance also classifies "Chemical and gas bulk storage" as a conditional use in the GI Zoning District under Section 3.03.4, providing a precedent for the safe management and storage of potentially hazardous materials, which supports the inclusion of nuclear waste storage as a compatible conditional use within the same zoning classification; and

WHEREAS, the General Industrial (GI) Zoning District, as described in Section 3.01 of the Zoning Ordinance, is intended to provide for the orderly development of heavy commercial, warehousing, and limited industrial uses, with appropriate sites featuring excellent infrastructure and transportation access, making it a suitable location for the establishment of nuclear energy facilities and nuclear waste storage; and

WHEREAS, the addition of definitions for "Nuclear energy facilities" and "Nuclear waste storage" in Article 6, Section 6.02 of the Zoning Ordinance, ensures clarity and consistency in the application of the ordinance, specifying that such facilities must comply with federal and state regulations, including those of the Nuclear Regulatory Commission (NRC), thereby reinforcing the County's commitment to safety and regulatory oversight; and

WHEREAS, the Comprehensive Plan 2040, in Chapter 6 (Land Use and Natural Resources), emphasizes the importance of balancing economic development with environmental stewardship, and the inclusion of nuclear energy facilities and nuclear waste storage as conditional uses in the GI Zoning District supports this balance by leveraging existing industrial zones to minimize impacts on agricultural and residential areas; and

WHEREAS, the conditional use process outlined in Section 2.02.9 of the Zoning Ordinance provides a mechanism for the Woodbury County Zoning Commission to recommend and for the Woodbury County Board of Adjustment to evaluate and impose specific conditions on nuclear energy facilities and nuclear waste storage, ensuring compatibility with surrounding land uses and adherence to the Comprehensive Plan's vision for sustainable growth; and

WHEREAS, the exploration of nuclear energy as an alternative energy source responds to the County's proactive approach to energy planning, as evidenced by the Board of Supervisors' approval on July 2, 2024, to investigate zoning for nuclear power; and

WHEREAS, the proposed ordinance amendment enhances Woodbury County's ability to attract economic development opportunities in the energy sector, potentially replacing or supplementing existing energy infrastructure while maintaining the County's rural character and agricultural focus as prioritized in the Comprehensive Plan 2040;

NOW, THEREFORE, BE IT RESOLVED, that the Woodbury County Board of Supervisors hereby supports the passage of this Zoning Ordinance Text Amendment to include nuclear energy facilities and nuclear waste storage as conditional uses in the General Industrial Zoning District, consistent with the goals and policies of the Woodbury County Comprehensive Plan 2040 and the regulatory framework of the Woodbury County Zoning Ordinance.

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

Amendments:

On page 8: To repeal Section 2.02.1 B(1)(e) as follows:

For a Board of Adjustment hearing on a conditional use or special exception, notice shall be mailed to all owners of real property located within 500 feet of the subject property, except that in the case of a conditional use to allow an airport or a sanitary landfill, or construction of a telecommunication tower as provided in subsection 5.06-3, notices shall be mailed to all owners of real property located within one mile of the subject property.

On page 8: To replace Section 2.02.1 B(1)(e) with the following:

For a Board of Adjustment hearing on a conditional use or special exception, notice shall be mailed to all owners of real property located within 500 feet of the subject property, except that in the case of a conditional use to allow an airport, a sanitary landfill, a

nuclear energy facility, a nuclear waste storage facility, construction of a telecommunication tower as provided in subsection 5.05, or a Utility-Scale Solar Energy System (US-SES) as provided in subsection 5.08, notices shall be mailed to all owners of real property located within one mile of the subject property for an airport, sanitary landfill, telecommunication tower, or Utility-Scale Solar Energy System (US-SES), and within ten miles of the subject property for a nuclear energy facility or nuclear waste storage facility.

On page 39: To add the following line-item use language within zoning ordinance Section 3.03.4 Land Use Summary Table of Allowed Uses in each Zoning District under the "Utilities" category:

"Nuclear energy facilities". With placement of the letter "C" within the GI (General Industrial) Zoning Districts column on the table related to this line-item use.

"Nuclear waste storage". With placement of the letter "C" within the GI (General Industrial) Zoning Districts Columns on the table related to this line-item use.

On page 104: To add the following definition, "Nuclear energy facility" as definition 112 to Article 6. Definitions. Section 6.02: Definitions as "112. Nuclear energy facility" means any facility designed or used for the generation of electricity or power through nuclear fission or fusion, including nuclear reactors and associated structures, systems, or components necessary for the production of atomic energy, as well as the handling, processing, or temporary storage of nuclear materials or byproduct materials, all in compliance with federal and state regulatory requirements as administered by the Nuclear Regulatory Commission (NRC) or its duly authorized representatives.

On page 105: To add the following definition, "Nuclear waste storage" as definition 113 to Article 6. Definitions. Section 6.02: Definitions as "113. Nuclear waste storage" means any facility, structure, or area designated and engineered for the safe containment, isolation, or disposal of byproduct material, special nuclear material, or other radioactive materials generated from nuclear energy facilities, including temporary or permanent storage solutions, provided such storage complies with federal regulations under 10 CFR Part 50 and related parts, and is subject to oversight by the Nuclear Regulatory Commission (NRC) to protect public health, safety, and the common defense and security.

Following the addition of the new definitions as described above: to renumber each of the subsequent definitions beginning with 114 through 193 and to note the shift of the subsequent definitions to new page locations between pages 104 to 110 and to add page 110.

| Dated this _ | day of | , 2025. | |
|------------------------------|---|-------------------------------|-------------------------------|
| THE WOOI | DBURY COUNT | ΓY, IOWA BOAR | D OF SUPERVISORS |
| | | | Daniel Bittinger II, Chairman |
| | | | Mark Nelson, Vice-Chairman |
| | | | Kent Carper |
| Attest: | | | David Dietrich |
| Adopti Date of Date of | Skaff, Woodbury on Timeline: Public Hearing and F Public Hearing and S Public Hearing and T | irst Reading econd Reading | Matthew Ung |
| Date of | Adoptioned/Effective Date | | |
| | | DRAFT- | UT THE REVIEW |
| SUBJE | CT TO CHANG | PROCESS | ! |

WOODBURY COUNTY COMMUNITY & ECONOMIC DEVELOPMENT



620 Douglas St. - Sixth Floor - Sioux City, IA 51101 - Phone: 712.279.6609 - Fax: 712.279.6530 - Web: woodburycountyiowa.gov
Daniel J. Priestley, MPA – Zoning Coordinator - dpriestley@woodburycountyiowa.gov
Dawn Norton – Senior Clerk - dnorton@woodburycountyiowa.gov

STAFF COMMENT ON PROPOSED NUCLEAR RELATED ZONING ORDINANCE TEXT AMENDMENTS

 Staff recommends removal of the reference in the draft language to the Utility-Scale Solar Energy System (US-SES) notification distance. This is a current/existing regulation in Section 5.08. This was originally intended to be a housekeeping measure but should be addressed at a future time as the scope of the debate does not fit within the parameters of the nuclear related discussion.

On page 8: To replace Section 2.02.1 B(1)(e) with the following:

For a Board of Adjustment hearing on a conditional use or special exception, notice shall be mailed to all owners of real property located within 500 feet of the subject property, except that in the case of a conditional use to allow an airport, a sanitary landfill, a nuclear energy facility, a nuclear waste storage facility, construction of a telecommunication tower as provided in subsection 5.05, or a Utility-Scale Solar Energy System (US-SES) as provided in subsection 5.08, notices shall be mailed to all owners of real property located within one mile of the subject property for an airport, sanitary landfill, telecommunication tower, or Utility-Scale Solar Energy System (US-SES), and within ten miles of the subject property for a nuclear energy facility or nuclear waste storage facility.

Replace with:

On page 8: To replace Section 2.02.1 B(1)(e) with the following:

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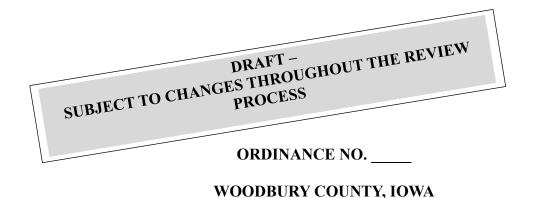
 Staff recommends adding the following revised language that makes it clear that the conditional use permit is only allowed for consideration within the GI – General Industrial Zoning District.

On page 39: To add the following line-item use language within zoning ordinance Section 3.03.4 Land Use Summary Table of Allowed Uses in each Zoning District under the "Utilities" category:

"Nuclear energy facilities". With placement of the letter "C" (Conditional use) within the GI (General Industrial) Zoning District column and with the placement of "--" (Prohibited use) within the AP (Agricultural Preservation) Zoning District, AE (Agricultural Estates) Zoning District, NR (Non-Agricultural Residential) Zoning District, SR (Suburban Residential) Zoning District, GC (General Commercial) Zoning District, HC (Highway Commercial) Zoning District, and LI (Limited Industrial) Zoning District columns on the table related to this line-item use.

"Nuclear waste storage". With placement of the letter "C" (Conditional use) within the GI (General Industrial) Zoning Districts Column and with the placement of "--" (Prohibited use) within the AP (Agricultural Preservation) Zoning District, AE (Agricultural Estates) Zoning District, NR (Non-Agricultural Residential) Zoning District, SR (Suburban Residential) Zoning District, GC (General Commercial) Zoning District, HC (Highway Commercial) Zoning District, and LI (Limited Industrial) Zoning District columns on the table related to this line-item use on the table related to this line-item use.

THE SUBSEQUENT PAGES INCLUDE A REVISED DRAFT FOR CONSIDERATION TO ADDRESS THESE POINTS.



AN ORDINANCE AMENDING THE TEXT OF THE WOODBURY COUNTY ZONING ORDINANCE TO INCLUDE THE USES OF NUCLEAR ENERGY FACILITIES AND NUCLEAR WASTE STORAGE AS ENERGY AND NUCLEAR WASTE STORAGE OPTIONS IN UNINCORPORATED WOODBURY COUNTY AND TO ALLOW FOR THE CONSIDERATION OF SUCH FACILITIES IN GENERAL INDUSTRIAL ZONING AREAS AS CONDITIONAL USES.

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WHEREAS, the conditional use process outlined in Section 2.02.9 of the Zoning Ordinance provides a mechanism for the Woodbury County Zoning Commission to recommend and for the Woodbury County Board of Adjustment to evaluate and impose specific conditions on nuclear energy facilities and nuclear waste storage, ensuring compatibility with surrounding land uses and adherence to the Comprehensive Plan's vision for sustainable growth; and

WHEREAS, the exploration of nuclear energy as an alternative energy source responds to the County's proactive approach to energy planning, as evidenced by the Board of Supervisors' approval on July 2, 2024, to investigate zoning for nuclear power; and

WHEREAS, the proposed ordinance amendment enhances Woodbury County's ability to attract economic development opportunities in the energy sector, potentially replacing or supplementing existing energy infrastructure while maintaining the County's rural character and agricultural focus as prioritized in the Comprehensive Plan 2040;

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| day of | , 2025. | |
|---------------------|---|---|
| BURY COUN | ΓY, IOWA BOAR | D OF SUPERVISORS |
| | | Daniel Bittinger II, Chairman |
| | | Mark Nelson, Vice-Chairman |
| | | Kent Carper |
| | | David Dietrich |
| xaff, Woodbury | County Auditor | Matthew Ung |
| ublic Hearing and S | econd Reading | |
| | BURY COUNT Timeline: ublic Hearing and F ublic Hearing and S ublic Hearing and T doption | ublic Hearing and First Readingublic Hearing and Second Readingublic Hearing and Third Readingdoption |

DRAFT –
SUBJECT TO CHANGES THROUGHOUT THE REVIEW
PROCESS

ZONING COMMISSION AUDIO AND MINUTES

August 26, 2024

- **Audio:** https://www.youtube.com/watch?v=ggkPBerPnWE
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2024-08-26 minutes zoning commission 5289.pdf
- **Backup Materials:** https://www.woodburycountyiowa.gov/files/committees/meetings/2024-08-26 packet zoning commission 11760.pdf

September 23, 2024

- Audio: https://www.youtube.com/watch?v=DXqp6jPtBtI
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2024-09-23 minutes zoning commission 3148.pdf
- Backup Materials: https://www.woodburycountyiowa.gov/files/committees/meetings/2024-09-23 packet zoning commission 6641.pdf

November 25, 2024

- **Audio:** https://www.youtube.com/watch?v=PRQLWaCt2P0
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2025-01-27 minutes zoning commission 1508.pdf
- **Backup Materials:** https://www.woodburycountyiowa.gov/files/committees/meetings/2024-11-25 packet zoning commission 89348.pdf

January 27, 2025

- **Audio:** https://www.youtube.com/watch?v=PRQLWaCt2P0
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2025-01-27 minutes zoning commission 1508.pdf
- **Backup Materials:** https://www.woodburycountyiowa.gov/files/committees/meetings/2025-01-27 packet zoning commission 46647.pdf

February 24, 2025

- **Audio:** https://www.youtube.com/watch?v=RkHFoYupSFY
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2025-02-24 minutes zoning commission 4958.pdf
- Backup Materials: https://www.woodburycountyiowa.gov/files/committees/meetings/2025-02-24 packet zoning commission 4361.pdf

March 24, 2025

- **Audio:** https://www.youtube.com/watch?v=nEaUL YC-xo
- **Minutes:** https://www.woodburycountyiowa.gov/files/committees/meetings/2025-03-24 minutes zoning commission 3044.pdf
- Backup Materials: https://www.woodburycountyiowa.gov/files/committees/meetings/2025-03-24 packet zoning commission 5490.pdf

May 28, 2025

- **Audio:** https://www.youtube.com/watch?v=HoUh4IVeBoI
- Minutes: https://www.woodburycountyiowa.gov/files/committees/meetings/2025-05-28 minutes zoning commission 2619.pdf
- Backup Materials: https://www.woodburycountyiowa.gov/files/committees/meetings/2025-05-28 packet zoning commission 6529.pdf

June 23, 2025

- **Audio:** https://www.youtube.com/watch?v=a5z4GlaHc2o
- Draft minutes provided below.
- Backup Materials: https://www.woodburycountyiowa.gov/files/committees/meetings/2025-06-23 packet zoning commission 3630.pdf

Woodbury County Zoning Commission Meeting Minutes

Date: June 23, 2025 **Time**: 5:00 PM

Location: Board of Supervisors' Meeting Room, Basement, Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA

MEETING AUDIO:

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

- County Website Link:
 - https://www.woodburycountyiowa.gov/committees/zoning_commission/
- YouTube Direct Link:
 - https://www.youtube.com/watch?v=a5z4GlaHc2o

Attendees

- Commissioners Present: Chris Zellmer Zant Chair, Tom Bride Vice Chair, Steve Corey, Jeff Hanson, Corey Meister
- Staff Present: Dan Priestley Zoning Coordinator, Dawn Norton Senior Clerk
- Supervisor(s) Present: Kent Carper
- Public Attendees: Kevin Heiss, Slater Ohm, Dana Neal (via phone), Lynn Drees (via phone)

Call to Order

Chair Chris Zellmer Zant called the meeting to order at 5:00 p.m. The Chair reviewed the meeting procedures, including the audiotaping of the meeting, the preparation of minutes, the request for cell phones to be turned off or set to vibrate, and the requirement for attendees to complete the attendance sheet. The Chair also outlined the public hearing procedures, including staff reports, applicant presentations, public comments (limited to three minutes per speaker), and the closure of hearings by motion and vote.

Roll Call

All the commissioners were present.

Public Comment on Matters Not on the Agenda (Information Item)

The Chair inquired if there were any public comments on matters not on the agenda. Seeing and hearing none, the meeting proceeded.

Approval of Minutes from Previous Meeting: May 28, 2025 (Special Meeting) (Action Item)

The Chair asked for any corrections or comments regarding the minutes from the previous meeting on May 28, 2025. Hearing none, a motion was entertained.

- Motion: To approve the minutes from the last meeting of May 28, 2025.
- Moved by: Tom Bride
- Seconded by: Corey Meister
- Vote: All in favor said "Aye." One commissioner (Jeff Hanson) abstained due to absence from the previous meeting.
- Action: The minutes of the previous meeting were approved.

5. Items of Business

a. Public Hearing and Action Item: Consideration of Nuclear Energy Facilities and Nuclear Waste Storage in the Woodbury County Zoning Ordinance (Action Item)

The public hearing was opened with Dan Priestley explaining that this discussion was a continuation from previous months (dating back to August/September 2024) regarding the inclusion of nuclear energy facilities, nuclear waste storage, and related uses in the Woodbury County Zoning Ordinance. He highlighted the complexity of the issue, noting the heavy involvement of federal (Nuclear Regulatory Commission - NRC) and state regulations.

Priestley explained that the existing Woodbury County Zoning Ordinance's land use summary table includes "electrical energy generation, not including wind," which could be interpreted to include nuclear facilities as a conditional use. However, the standard 500-foot public notification distance for conditional use permits was deemed insufficient for nuclear facilities. The current proposal extends this notification zone to 10 miles for any conditional use permit process related to nuclear energy or waste storage. This proposal utilizes the existing zoning ordinance infrastructure, requiring review by both the Zoning Commission and the Board of Adjustment.

Priestley clarified that the Board of Supervisors initiated this process to receive a recommendation from the Zoning Commission, with the Supervisors ultimately having up to three public hearings on any final proposal. He noted that public input had been collected over several meetings, and while not as extensive as for wind or solar energy, both support and opposition comments had been received.

Priestley presented a "Nuclear Energy Public Comments 2014-2025" document, summarizing past comments, and requested it be received into the public record.

- Motion: To receive the "Nuclear Energy Public Comments 2014-2025" document into the public record.
- Moved by: Tom Bride
- Seconded by: Jeff Hanson
- Vote: All in favor said "Aye."
- Action: The document was received into the public record.

Priestley then summarized key public comments:

- Support: Mayor Bob Scott (Sioux City), Kyle Gates (Secondary Roads), Mayor Ken Bauer (Correctionville), and Craig Levine and Rick Plathe (Northwest Iowa Building and Construction Trade Council).
- Opposition: Jerry Holder (concerns regarding waste risk and potential malfunctions), Janet Kruger (opposing nuclear activities, urging prohibition without public approval).
- Other Comments: Wendy Hess (9/11 Dispatch Center readiness, staff training, emergency exercises, budget increases), Mark Nara (former County Engineer, regarding infrastructure impact and NRC alignment), Patty Riesberg (clarified NRC's regulatory role). Brian Bergeon from the NRC had also provided details on their independent regulatory and licensing process in a previous packet.

Priestley reiterated that the local conditional use permit process allows for scrutiny and engagement with other levels of government, similar to telecommunication towers. He emphasized that the proposed ordinance amendment specifically defines "nuclear energy facilities" and "nuclear waste storage" and adds them to the land use summary table **only in the general industrial zoning district**. The 10-mile notification radius is a key added feature.

The Chair then opened the floor for public comments on this item.

- Public Comment: No one present in the room wished to comment.
- Public Comment (via phone): Lynn Drees (phone) from Danbury stated, "no comment." No other callers wished to comment.

The Chair then invited comments from the commissioners.

- Dan Priestley clarified that this process is proactive, and no specific nuclear project has been proposed or approached staff/county. The purpose is to determine if it should be a permitted use in the ordinance.
- Commissioner Tom Bride reiterated that the current ordinance covers electrical energy generation, but the proposed language provides more detail as recommended by the County Attorney's office.
- Dan Priestley explained that the County Attorney felt the previous language wasn't specific enough and that clearer
 definitions would prevent interpretation issues if an application were submitted. He also stressed the importance of
 the 10-mile notification over the standard 500 feet to avoid potential problems. He noted that the costs of extensive
 notifications for a 10-mile radius would be passed on to the applicant, aligning with the county's zoning fee schedule
 to prevent massive county expenses for wider-scale conditional uses.
- Commissioner Jeff Hanson emphasized that defining nuclear energy clarifies the language and expands the notification distance, which are important considerations.
- Dan Priestley reinforced that a conditional use permit is a "maybe" permit, not a "yes," allowing full scrutiny and public engagement in the process. He noted the difficulty of discussing hypotheticals without a specific project but stressed the importance of having a clear framework in the ordinance for potential future proposals.

The Chair inquired about the next steps. Dan Priestley explained that the commission could close the public hearing and then make a recommendation to the Board of Supervisors or continue the discussion. If a recommendation is sent, the Board of Supervisors would then consider scheduling up to three public hearings, which often draw more public engagement.

- Motion: To close the public hearing.
- Moved by: Jeff Hanson
- Seconded by: Corev Meister
- Vote: All in favor said "Aye."
- Action: The public hearing was closed.

Commissioner Jeff Hanson commented that this was the 12th time the issue had been heard at various levels.

- **Motion:** To recommend to the Board of Supervisors to move forward with the language as presented in draft pages 11, 12, 13, and 14 of the packet, which specifically defines nuclear energy facilities and nuclear waste storage.
- Moved by: Jeff Hanson
- · Seconded by: Steve Corey

Discussion on the motion:

- Supervisor Kent Carper asked if specific locations were picked out. Dan Priestley clarified that the proposed ordinance would only allow these uses in **general industrial areas**, typically south of the airport and west of Interstate 29, not in agricultural or residential zones.
- Dan Priestley added that the Board of Supervisors has the prerogative to adjust the language during their three
 public hearings, as the Zoning Commission's output is a recommendation.
- Commissioner Tom Bride clarified that the motion is not targeting new areas but is clarifying language, notification, and conditions for existing general industrial zones. He reiterated that the 10-mile notification is a significant improvement over 500 feet.
- Dan Priestley further clarified that both nuclear energy facilities and nuclear waste storage would be distinct, classified as conditional uses, and subject to the 10-mile notification apparatus.
- Vote: All in favor said "Aye." (Unanimous)
- Action: The commission voted unanimously to recommend to the Board of Supervisors to move forward with the
 proposed language for nuclear energy facilities and nuclear waste storage in the Woodbury County Zoning
 Ordinance.

b. Public Hearing and Action Item: Consideration of Zoning Ordinance Text Amendments for Accessory Dwelling Units to Comply with Iowa's Senate File 592 (Action Item)

The public hearing was opened with Dan Priestley stating this was a housekeeping item to bring the county ordinance into compliance with lowa Senate File 592. This state law, signed by Governor Kim Reynolds on May 1st, mandates that counties allow at least one accessory dwelling unit (ADU) on the same lot as a single-family residence, subject to specific conditions, and prohibits certain restrictive regulations.

Priestley explained that the state standard sets a minimum threshold of 1,000 square feet or 50% of the size of the existing dwelling, whichever is greater. While the state code allows counties flexibility to permit larger ADUs, the current proposal strictly follows the state's minimums. He noted that other jurisdictions (counties and cities) would also be grappling with the implications of this new law, particularly concerning wells and septics. He mentioned that the 23-foot minimum dimension for a dwelling would still apply for building permits.

Priestley stated that the staff's recommendation is to simply react to the state standard and keep the minimums, allowing for future re-evaluation if demand necessitates larger ADUs. He stressed that the county has a duty to make its ordinance compatible with state law.

The Chair then opened the floor for public comments on this item.

- Public Comment: No one present in the room wished to comment.
- Public Comment (via phone): No one wished to comment.

The Chair then invited comments from the commissioners.

- Motion: To close the public hearing.
- Moved by: Tom Bride
- Seconded by: Jeff Hanson
- Vote: All in favor said "Aye."
- Action: The public hearing was closed.

Commissioner Tom Bride commented that there is no alternative but to align with state code. He agreed with Dan Priestley that there is no immediate reason to allow larger structures beyond the state's minimums (1,000 sq ft or 50% of the existing dwelling). He viewed it as a housekeeping issue, with potential future reviews if needs arise. Other commissioners agreed.

- Motion: To recommend to the Board of Supervisors the approval of the zoning ordinance text amendments for accessory dwelling units in compliance with Senate File 592, as outlined in the draft on pages 48 and 49 of the packet.
- Moved by: Tom Bride
- Seconded by: Corey Meister
- Vote: All in favor said "Aye." (Unanimous)

• Action: The commission voted unanimously to recommend to the Board of Supervisors the approval of the zoning ordinance text amendments for ADUs, aligning with Senate File 592.

c. Review of a Conditional Use Permit Application: Kevin Heiss (Applicant) / Rent Properties, LLC (Owner) for an Off-Premise LED Billboard (Action Item)

Dan Priestley clarified that this was a review session, not a public hearing, which would take place at the Board of Adjustment meeting on July 7th at 5:00 p.m. The Zoning Commission's duty was to review the criteria, evaluate the application, and hear from the applicant and potentially the public.

Kevin Heiss, representing Rent Properties LLC, submitted a conditional use permit application to construct and operate a 14-foot by 48-foot LED billboard for off-premise advertising. The property is located in the north two-thirds of the north half of the northwest quarter, Section 6, Floyd Township, situated along the south side of Highway 20 and east of Charles Avenue, within the General Commercial zoning district. Off-premise advertising signs are classified as a conditional use in this district.

Priestley noted that the property includes a floodplain, and the applicants are aware of the need for a floodplain development permit and building permit. He confirmed that initial data suggests the sign would not be in the floodway, which was a concern for the lowa DNR. He reiterated that the county does not regulate content but evaluates the billboard itself, which is a two-sided, V-shaped LED billboard. The application addresses criteria such as appropriate zoning, compatibility with development plans, and potential adverse effects.

The Chair invited the applicant to speak.

• **Kevin Heiss (Applicant):** Stated the intent is for advertising, including for his own nearby businesses. They are working with SRA Group for construction and have ensured the operation will be well-maintained. He believes the location is suitable for a highly trafficked commercial area along Highway 20. Heiss confirmed they had consulted with Dan Priestley multiple times to ensure compliance with the process.

Commissioners' questions for the applicant:

- **Distance to Residents**: Kevin Heiss stated there are no residents within 1,000 feet, and nearby properties are commercial. Dan Priestley confirmed the presence of mixed districts in the area, with some residential properties further up the hill (Boatman's and Amick's on 162nd Street) that could be about 1,000 feet away. The ordinance specifically regulates distance from AE (Agricultural Estates) districts, where housing is expected, but not AP (Agricultural Preservation).
- Lighting and Brightness: Heiss stated it's a 21-millimeter LED product, which is extremely bright during the day to overcome the sun but dims at night like a "television night mode." He confirmed the back side of the V-shaped sign would be black and not emit light towards residential areas. He emphasized they chose Daktronics, a reputable company, to ensure proper design and operation.
- **DOT Requirements:** Heiss confirmed compliance with DOT requirements, which require 300 feet between signs, whereas Woodbury County's current ordinance requires 1,000 feet. This 1,000-foot county requirement makes placement challenging. Heiss and Priestley described a "chasing the result" scenario with DOT, where each wanted the other's approval first, but dialogue has been good.
- Setbacks: Heiss confirmed the sign is set back significantly from Highway 20 and Charles Avenue, likely in the
 middle of his field, approximately 150 feet from the Charles Avenue right-of-way line.
- **Letter of Support:** Dan Priestley presented a letter from Jerry and Vernell Steffan, neighbors at 1528 Jewel, stating they had "no issues with this request." He identified their property as directly abutting the applicant's property.
 - o Motion: To receive the letter from Jerry and Vernell Stefan into the record.
 - o Moved by: Tom Bride
 - Seconded by: Corey Meister
 - Vote: All in favor said "Aye."
 - Action: The letter was received into the record.

Public Comment (via phone): Dana Neal (162nd Street):

- Expressed concern that his home is within 1,000 feet of the proposed sign, despite measurements. His home is also 45 feet higher than the road. He worried the sign, which will be 25-30 feet off the ground, would shine directly into his windows.
- He stated he and his family built their home on their family farm for a country living experience, avoiding city nuisances like streetlights. He noted that he can see an existing billboard a mile away from his deck at night.
- He feared the double-sided 14x48 billboard would significantly impact his home's value and privacy, similar to how LED lights light up a building on a hill nearby.

• He asked if another location farther from homes could be considered.

Response to Dana Neal's comments:

- Kevin Heiss acknowledged the difficulty of finding locations due to the 1,000-foot separation requirement from other billboards, stating "we're in the middle of the rock." He emphasized the V-shape design focuses light on the road, with the back side being black to prevent light spill.
- Commissioner Corey Meister asked if the entire 67-acre parcel belonged to Heiss, which he confirmed, except for where Hobart's is located.
- Chair Chris Zellmer Zant noted a previous billboard existed near Steffan's property. Heiss confirmed it still exists and is in use, but their new sign cannot be placed there due to the 1,000-foot separation rule from other signs across the road.
- Kevin Heiss reiterated that the sign's design is specifically angled to face east and westbound traffic on Highway 20, minimizing light towards other directions. He confirmed there would be no additional security lighting.
- Dana Neal clarified his property location relative to the sign. He expressed concern about the entire "area lit up" at night. He requested to see the proposed sign in person and for the opinions of the Boatman's and Amick's (other residents on 162nd Street) to be considered.
- Kevin Heiss agreed to have a conversation with Dana Neal to explore design adjustments to help mitigate concerns.
 He expressed a desire to work with the community.
- Heiss explained that if a variance were granted to reduce the 1,000-foot separation from other signs, they could
 move the billboard closer to Highway 20. This would also benefit residents by lowering the sign and changing its
 angle relative to their homes.

Discussion on a potential variance:

- Commissioner Tom Bride asked if a variance could be requested to relocate the sign to a better position to minimize
 impact on residents.
- Dan Priestley explained that while a variance is a possibility, recent changes to lowa Code emphasize "practical difficulty" over "economic hardship." He cautioned against speculation on the Board of Adjustment's decision and stated staff generally avoid recommending variances due to their uncertain outcome.
- Kevin Heiss stated their primary goal was approval of the current location and that they would consider a variance later if needed but wanted conceptual approval first due to cost.
- Dan Priestley clarified that the Zoning Commission makes a recommendation, and the application will proceed to the Board of Adjustment regardless. He suggested a potential contingency for approval contingent on a variance, but again, stressed caution.
- Priestley also asked if the LED signs could be timed to dim or shut off at certain hours (e.g., midnight to 5 AM) to
 mitigate light pollution. Heiss replied that most digital signs are on 24/7 due to advertising sales, and dimming is
 already built in for nighttime, but completely shutting off or further dimming would make them ineffective.
- Commissioner Bride suggested that the applicant try to address the neighbors' concerns between now and the Board of Adjustment meeting on July 7th, perhaps by showing them existing similar signs or providing a visualization of the light impact. Heiss agreed to reach out to Dana Neal and share information.
- Dan Priestley confirmed that letters were sent to properties within the 500-foot threshold (as per the certified abstract listing).
- Heiss mentioned similar V-shaped LED signs at Hamilton and Casey's, by the Arena, and on I-29 near Outback, and at Third and Wesley Parkway as examples of what the proposed sign would look like. He also confirmed height restrictions are in place (not 35 feet, more like 18 feet off the ground).

Final comments from commissioners before motion:

- Commissioner Jeff Hanson stated he had no issue with the proposed location and thought other lit billboards in the area were more impactful. He would prefer the sign to be moved further north (closer to Highway 20) to protect future commercial development potential, as its current south placement pushes potential development further into residential areas. He agreed that moving it north would benefit adjacent landowners.
- Kevin Heiss reiterated their desire to work with the community and do things "right."
- **Motion:** To make a recommendation to the Board of Adjustment to consider the conditional use permit application for an off-premise billboard (14 ft x 48 ft), partially identified on the agenda, with a recommendation for approval.
- Moved by: Jeff Hanson
- Seconded by: Corey Meister

Discussion on the motion:

• Dan Priestley clarified that the recommendation was for approval.

- Commissioner Tom Bride suggested that the letter reflecting the commission's recommendation for approval should
 also include a discussion point for the Board of Adjustment to consider the possibility of a variance to address
 neighbor concerns, and the discussion regarding the benefits of moving the sign closer to Highway 20. Dan Priestley
 confirmed the letter would reflect the recommendation, touch on themes/concerns, and direct the Board of
 Adjustment to the minutes.
- Vote: All in favor said "Aye." (Unanimous)
- Action: The commission voted unanimously to recommend approval of the conditional use permit application for the
 billboard to the Board of Adjustment, with concerns noted for their consideration regarding potential variances and
 optimal placement. This item will be continued at the Board of Adjustment meeting on July 7th at 5:00 p.m.

Public Comment on Matters Not on the Agenda

The Chair inquired if there were any public comments on matters not on the agenda. Seeing and hearing none, the meeting proceeded.

Staff Update

Dan Priestley provided the following updates:

- Morningside University Conditional Use Permit Ballpark Proposal: The Board of Adjustment tabled this proposal at their last meeting for further consideration on July 7th. Public comments from the Zoning Commission and three property owners were reiterated at the Board of Adjustment, focusing on traffic, sound, and lighting issues. Jason Reynoldson, representing Morningside University, met with Priestley and the County Engineer to discuss traffic flow, including potential turning lanes and infrastructure improvements if traffic increases. They are awaiting information from Laura Sievers. Morningside University is expected to return on July 7th with further clarity on addressing these concerns.
- Board of Supervisors Updates:
 - Borrow Pit: The Board of Supervisors will hold their second public hearing on the borrow pit on June 24th and the third and final one on July 1st.
 - New Cooperative Rezone: They will have their third and final reading on this rezone on June 24th

Commissioners' Comments or Inquiries

The Chair asked if there were any comments or inquiries from the commissioners. Hearing none, the meeting moved to adjournment.

Adjournment

Motion: To adjourn the meeting.Moved by: Corey Meister

Seconded by: Jeff Hanson
Vote: All in favor said "Aye."

• Action: The meeting was adjourned at 6:44 PM.

APPENDIX – RECEIVED INTO THE RECORD

Please see the content received into the record on the subsequent pages.

NUCLEAR ENERGY PUBLIC COMMENTS 2024 to 2025

The comments on the proposed nuclear energy zoning ordinance amendments in unincorporated Woodbury County reflect a range of perspectives, concerns, and recommendations, summarized by both the property of the commendation of the property of the property of the commendation of the property of the prope

- Support for Nuclear Energy (7 comments):
 Bob Scott (July 29, 2024; Dec 4, 2024; Jan 3, 2025) strongly supports a small nuclear plant, citing economic benefits, job creation, rate stability, and minimal
 - risks compared to rewards. He also supports wind and solar but questions zoning laws for solar farms on annexed land. Kyle Gates Qian 16, 2025) endorses nuclear energy, emphasizing safety of modern reactors, economic growth, grid resilience, and innovative uses like waste heat for
 - Ken Bauer (Feb 6, 2025) supports nuclear for its reliability and efficiency, drawing on his Port Neal experience, and criticizes wind/solar as less viable without subsidies
 - without substites. Craig Levine (Mar 14, 2025) and Rick Plathe (Apr 1, 2025), representing Northwest Iowa Building Trades, advocate rezoning industrial land for nuclear, highlighting job creation, low-earbon benefits, and sustainable energy.

- Opposition to Nuclear Energy (2 comments):
 Jerry Holder (Aug 6, 2024) opposes nuclear facilities due to risks from waste and
 - Jerry Houser (Aug v, 48-71 opposes manufametions.)

 Janet Krueger (Mar 24, 2025) strongly opposes nuclear activities, including waste disposal, and urges zoning ordinances to prohibit them without public approval.

3. Concerns and Considerations (5 comments):

- Wendi Hess (Aug 7, 2024) raises concerns about the 911 Dispatch Center's readiness, noting needs for staff training, emergency exercises, and budget
- Mark Nahra (July 26, 2025) suggests heavy industrial zoning for nu facilities, highlights infrastructure and environmental impacts (traffic, water, waste), and stresses alignment with NRC regulations.

 Christopher Madsen (Mar 6, 2025) notes the addition of nuclear waste storage to
- the proposal, requesting research on storage processes and IDNR involvement. Craig Anderson (May 2, 2025) expresses skepticism about nuclear energy, prioritizing agricultural land preservation and questioning its viability without
- subsidies.

 Casey Meinen (July 26, 2024) simply forwarded the proposal to management, offering no opinion.

Regulatory and Technical Clarifications (2 comments):

 Patty Riesberg (Mar 20, 2025) clarifies that the NRC regulates nuclear power and waste, with Iowa HHS coordinating on other materials; Jowa DNR has no role.

- industrial use, away from residential zones, to minimize public exposure to potential risks.
- Impact Assessment: He notes potential impacts on infrastructure, such as
- Impact Assessment: He notes potential impacts on infrastructure, such as increased traffic during construction and operation, which could strain county roads. Environmental impacts, including water usage and waste storage, need thorough evaluation.

 Regulatory Framework: Nahm emphasizes that nuclear facilities are primarily regulated by the Nuclear Regulatory Commission (NRC), and local regulations should align with federal standards to avoid conflicts. He suggests the county focus on zoning and land use controls.

sher 4, 2024 – Bob Scott
Scummary: Bob Scott reiterates his support for a small nuclear plant near the Neal power plants, citing investment benefits and long-term rate stability. He believes the risks of low-level nuclear plants are outweighed by these benefits.
Additionally, he asks whether country orning laws regarding solar fiarms would apply to annexed city land, indicating a broader interest in land use regulations.

7. January 3, 2025 - Bob Scott

Summary: Bob Scott again expresses support for a small nuclear plant in Woodbury County.

January 6, 2025 – Diane Swoboda Peterson
 Summary: Diane Swoboda Peterson, Woodbury County Real Estate/Recorder
 Deputy, provides no comments on the nuclear energy proposal.

9. January 16, 2025 - Kyle Gates

ty 10, 2025 - Kyte Cates
Summary: Kyle Gates strongly supports nuclear energy in Woodbury County,
stating he would feel safe with a modern reactor nearby. He suggests
considerations including setbacks for security, land restoration after
decommissioning, co-location with industries to utilize waste heat (e.g., fertilizer
production), grid resilience through distributed power sources, and economic
development potential due to lower-cost electricity.

 Summary: Ken Bauer
 Summary: Ken Bauer, Mayor of Correctionville, supports nuclear energy, arguing it would be beneficial for the county. Drawing on his 26 years of experience at Port Neal, he considers nuclear plants second only to coal-fired plants in reliability. He criticizes wind and solar energy as less economical and reliant on tax incentives, praising nuclear for its efficiency and minimal landscape

March 6, 2025 - Christopher Madsen
 Summary: Christopher Madsen, Senior Planner for Sioux City, notes that the proposal now includes nuclear waste storage, which was not previously mentioned. He requests research on the process for establishing a storage facility

Bryan Bergeon (May 5, 2025) details the NRC's independent regulatory role, licensing process, and oversight of nuclear materials and waste, noting Iowa's Agreement State status

5. No Opinion (1 comment):

Diane Swoboda Peterson (Jan 6, 2025) provides no comments on the proposal.

- Economic and Environmental Impacts: Supporters emphasize jobs, growth, and clean energy; opponents and skeptics highlight risks (waste, malfunctions) and farmland loss.
 Zoning and Land Use: Suggestions include heavy industrial zoning, setbacks, and public imput for zoning changes.
 Regulation: NRC's primary role is emphasized, with local zoning and federal alignment.
- commended.
- Infrastructure and Preparedness: Concerns include traffic, water use, and emergency response readiness (e.g., 911 Dispatch).

Summaries of Comments by Date and Name

July 26, 2024 – Casey Meinen
 Summary: Casey forwarded the content to management officials.

2. July 29, 2024 - Bob Scott

Summary: Bob Scott supports the construction of a nuclear plant south of town, citing its potential to boost the local economy due to construction activity. He also supports wind energy and solar farms. Scott notes that nuclear plants are highly regulated, suggesting minimal local regulatory burden.

3. August 6, 2024 - Jerry Holder

Summary: Jerry Holder opposes any nuclear facilities in Woodbury County, citing the catastrophic risks associated with nuclear waste and malfunctions.

 August 7, 2024 - Wendi Hess
 Summary: Wendi Hess, Communications Center Director, expresses concerns about the impact of a nuclear facility on the 911 Dispatch Center. She highlights the need for additional staff training and participation in emergency exerci which would require increased budgetary allocations for overtime and training funds. She is unsure if specific certifications would be required for staff.

5. July 26, 2025 - Mark Nahra

- Summary: Mark Nahra, Woodbury County Engineer, provides preliminary houghts on nuclear energy, reserving the right to add further comments later. His responses to Daniel Priestley's July 26, 2024 email are as follows:

 Appropriate Locations / Zoning District Designation(s): Nahra suggests that nuclear facilities should be located in areas zoned for heavy

and the involvement of other entities, such as the Iowa Department of Natural Resources (IDNR), to inform further review

12. March 20, 2025 – Patty Riesberg
Summary: Patty Riesberg, Bureau Chief for the Bureau of Radiological Health with lowa HHS, clarifies the regulatory framework for nuclear energy and waste storage. She states that the Nuclear Regulatory Commission (NRC) regulates all commercial nuclear power and spent nuclear fuel in the U.S. through licensing, inspections, and enforcement. Iowa HHS coordinates with the NRC on other inspections, and enforcement lova This coordinates with the PixCo fordiner radioactive materials, but the lowa DNR has no regulatory role in nuclear power plants or waste storage. She advises close coordination with the NRC for compliance.

13. March 24, 2025 - Janet Krueger

124, 2025 – Janet Krueger Summary: Janet Krueger, along with Randy Krueger, strongly opposes nuclear-related activities, including waste disposal, in Woodbury County. They advocate for zoning ordinances to expressly prohibit such activities, requiring public input for any future proposals. They emphasize preventing nuclear activities unless explicitly approved through zoning changes.

 April 1, 2025 – Rick Plathe
 Summary: Rick Plathe, Business Manager of IBEW Local 231, submits a letter of support from Northwest Iowa Building Trades (authored by Craig Levine) endorsing the rezoning of industrial land for nuclear energy. He offers to address any questions or concerns, reinforcing the unions' collective support for the

16. May 2, 2025 - Craig Anderson

Summary:

- Appropriate Locations / Zoning District Designation(s): Implies nuclear facilities should avoid prime farmland, prioritizing agricultural land preservation.

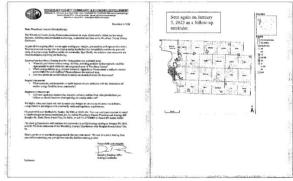
 Impact Assessment: Expresses concern about losing prime farmland,
- advocating for Iowa's land use to favor agriculture.

 Regulatory Framework: Should focus on agriculture. Does not address
- specific regulations, focusing on land use policy.

Additional Comments: Skeptical of nuclear energy's desirability, suggesting public opposition and questioning its viability without tax incentives. Advocates for agricultural land use balance.

17. May 5, 2025 - Bryan Bergeon

5, 2025 - Bry an Bergeon
Summary: Bryan Bergeon, Acting Region III Government Liaison Officer for the
NRC, provides a detailed explanation of the NRC's role as a regulator of civilian
nucleur materials, emphasizing its independence and focus on public health,
safety, and security. He outlines the NRC's regulatory mission covering reactors,
materials, and waste, and the complex, multiyear licensing process governed by
federal laws and 10 CRr regulations. Bergeon clarifies that the NRC does not
advocate for nuclear energy (unlike the Department of Energy) and regulates
waste storage, including low-level and high-level waste. He notes lowa's status as
an Agreement State for certain nuclear materials and advises prospective
applicants to engage with the NRC's licensing process.



PUBLIC COMMENTS Wendi Hess Wednesday, August 7, 2024 9:22 AM Dariel Priesdey RE: Comments Requested Nacieer Energy in Woodbury County, Iowa Follow Up Flag: Fleg Status: Dan: In regards to the 911 Dispatch Center- having this type of facility in our response area would potentially create a need for additional training for our staff members along with participating in regular recordes and training related to potential emergencies at the fattlib. For our that would become a budgety from reading to add training funds to our annual budget for conclided, etc. related to the additional training activity tast would be necessary. I am not sure if there are any specific conflictations that would be regulated by our staff. Thanks, Wendi Wend! Hess Communications Center Director/Accreditation Manager Woodsay County Communications (70 Box 447) Sicus CRy, IA 5102 Office: 172.279.208 Whess@bisna-thv.ors

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6.47 Have a great weekend. Cascy Meinen
Lend, Electric Distribution Engineering
Casey, meineus@midamerican.com
Phone (71-2-23-46-31)
MIDAMERICAN
ENERGY COMPANY. *ENERGY COMPANY

Ecb Scott Wednesday, December 4, 2024 4:04 PM Dariel Priestley RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

Follow Up Flag:

Lam speaking for reyself but I am in fewor of a small rake plant in the area around Nesi power pheth. I think the investment and the long term affect on rates is worth the risk for these low level type plants. And I have a question if we annex land into the city, you rowing laws regarded point arrans cannot payly to ben't in the city can they?

Bob SCO Prince P

Tours Common Section S

No comments

Nyfe Gates
Thursdop, January 16, 2025 5:33 PM
Daniel Phasoling
RE: Comment's Requested Nuclear Energy in Woodbury County, Jones

- New abundances to mind:

 Setupoles for perinaser socially

 Setupoles for perinaser socially

 Returning land to previous state after future decommissioning

 Possible collocation with industries for use of the vocatifree westable set, (jertile ar production for example)

 Ord resultance/industriation, you is circle to all collections are and users providing baselood power

 If a lower cost, per lout in attainable, there is a potential for account celevelopment.
- THE PROPERTY OF THE PROPERTY O

Fellow Up Flag: Flag Status:

I believe modew energy would be very beneficial to our county, I worked at port neal for 26 years. I believe coal fired plants are second only to mediate plants. The wind milits and solute only makes brookenhauletweey did not the peyers bank. The wind count of thempt of the peyers bank. The wind count of thempt of the peyers bank. The wind count of the peyers bank. The second be more occorrelated that with our distinctions would be more occorrelated that without the peyers believe the peyers of correctionable.

waverere with one swar mitter or soler panels. Ken Blauer, maybe of ConnectionNile.

Contrapplier Neuclea.

Tournday, March 4, 2023 30 P PM

District Street Street

If so would you send that over for us to look at?

Chris R. Maduen, AiGP, CPM Senior Planner City of Sioux City Phone: 712.279.5941 Email: creadusen@aioux-city.org 405 5th Strees, Box 447 Sioux City 34.51162 Box Cly X 5143

87

Riesburg, Pathy (HAS) < pathyziesburg@hits.iowa.gov> Thursday, March 20, 2025-120 PM Daziel Priestley Regulation of Nuclear Energy and Storage

Fellow Up Rag:

Daniel,

Good afternoon. I are the Bureau Chief for the Bureau of Radiological Health with I tows HHS. I received your inquiry below, forwards of from one of my team in rambers, Stuart Lordia. The linculoid a response below to your question states in the second peragnaph. Byour have any further questions, please feel free to leash out to me. Then is, you.

All commercial nuclear power in the United States, which includes spent nuclear fluel, is the Nuclear Regulatory Commission (NRC) through a combinetion of regulatory requirem idensing, inspections and enforcement activities.

Considerations for nuclear energy facilities and nuclear waste storage should involve close coordination with the NRC to ensure regulatory compliance, lows HHS works closely with NRC to regulate all other radioactive meterials in the state of lows.

lova DNR does not play a regulatory role for nuclear power plants or the storage of weste Daniel Priestley

Janet Krueger «Irusgeris@idoud.com» Monday, March 24, 2025 12:47 PM Daniel Priestley Commants for public hearing on nuclear zoning

Bo: Public heating on soning for nuclear evident income comments

Sant from my IPhone

89

Daniel Priestle

Rick Plathe rplathe@ibew231.com>
Tuesday, April 1, 2025 1027 AM
Daniel Priestiey
Support Letter Northwest I ow a Builde
NMMA Building Trades Zoning Letter.de

vorthwest Iowa Building Tindes Trades Zoning Letter.docs

Follow Up Flag: Flag Status:

QAUTION, This eroot, originated from OUTRIDE of the original adds. Please veiler the sender and use control of the pressage centrals any attachments, this, a crecumb for information as the person may NOT be when they claim. If you are asked for investment of the pressure of the pressur

Dun Pierare sees the attached letter of support form all Livione affiliated with Nocinwest love Building Trades for the recording of industrial land in Woodbury Councy to add Nuclear language. Please reach out of me if you have any questions or concerns. Thanks

Business Manager BEW Local 231 5001 Harbor Drive Sioux City, le 51111 (712) 255-8138



Craig Levine President 712-202-3100 <u>clevine@ibew231.com</u>

Jose Montes Recording Secretary 712-420-7680 Jmontes@iwlocal21.com

Craig Levine - President PO Box 1051 Sioux City, IA, 51101 (712) 202-3100

March 14, 2025

Dan Priestley
Zoning Coordinater
Office of Community & Economic Development
6220 Douglas St. Floor 6
Sioux City, IA 51101

I hope this letter finds you well. I am writing to show our support for an important initiative in our community—the rezoning of industrial space to allow for nuclear energy production. As energy demands continue to rise and the need for a cleaner, more extainable source of power becomes increasingly urgent, it is essential that we explore all viable options for securing our energy fature. Nuclear energy, with its proven track record of providing reliable, low-carbon electricity, is a critical component of this transition.

Currently, many industrial areas are underuillized, and repurposing these spaces for nuclear energy production, including small modular reactors, presents an opportunity to drive economic growth, create jobs, and contribute to a greener energy portfolio in Woodbury Couny. By rezoning these areas, we can ensure that racker energy cas be integrated into our community in a safe, extrinomentally responsible manner.

The benefits of nuclear energy extend far beyond just providing a reliable energy source. It can help us reduce our carbon footprint and mitigate the impacts of climate change, all while strengthening local economies through job creation, technological innovation, and new infrastructure development. Purthermore, by supporting this initiative, we would be aligning ourselves with forward-thinking policies that prioritize sustainable energy solutions for future generations.

We believe that our organization's influence and commitment to [community/environmental issues/sustainable growth/innovation] would be a powerful voice in advocating for this rezoning

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Prince:

Online I Reg. 2, 2013 23-14-94.

Reg. 2, 2013

initiative. With your support, we can help ensure that the benefits of nuclear energy are re while addressing our community's needs for economic development, energy security, and environmental responsibility.

I kindly ask for you to record our endorsement of this effert and would be happy to discuss the details further at your convenience. Together, we can take meaningful steps toward a cleaner, more sustainable energy future for our community.

Thank you for your time and consideration. I look forward to the possibility of working together to make this initiative a reality.

Sincerely, Craig Levine - President, Northwest Iowa Building Trades

Rick Plathe - Business Manager, IBEW Local 231

Jose Montes - Business Representative, Iron Workers Local 21

John Hanson - Business Manager, Heat and Frost Insulators Local 39

Dean Bradham - Organizer, Plumber and Steamfitters UA Local 33

Spencer Yockey - Business Representative, Operating Engineers Local 234

Terry Victor - Business Representative, SMART local 3

Bob Briley - Business Manager, Bricklayers Local 3

Tom Dve -- Vice President, Boilermakers Local 83

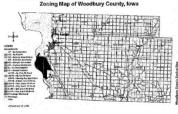
maintain this baterion? I think in fewa land use should tip in favor of agricultured. Prime for should be preserved. Hany of the so-called clear energy sources would fell although the ten kneed time, Leoking of the reactions of the eithers of this serse to wide energy and the carbo sould think that if a majority would not want this industry in the county.

4. Days Interestry additional comments, concerns, seggentions, or gased one about nucleor energy prediction, nor passed in many predictions, nor manifest insimple. Please section is your readourness by Falley, Mey 23, 2028 Seriors 1666 MHODT is discussful gifteed energy energy large, and restrict endes with all the Mannes with the Washbury County Zoung Commission and Board of Eugenments on the many flush force of Mannes your froy set many discussions. A many flush force of Mannes you froy set many designations.

Initiation and Board or Supermones and instance of Woodbury Country.

CALLY EXPENDED.

CALL



Phone: 712-279-6609 Fax: 712-279-6530

Virus-fre-wymano.com

The Department of Energy's Office of Nuclear Energy mission is to promote the domestic use of nuclear energy and supports advanced reactor developers. The DOE has a Gateway for Accelerated Innovation in Nuclear (OANN). https://gai.inl.gog/industros/unpod/regulator/support/negulator/support/sup

Including owar potential funding thereof.

The NRCs also regulates weats storage. Low-Level waste includes items that have become contaminated with redisactive materia to have become reclassitive through exposure to result on radiation and is typically stored on-site until it can be disposed of or until amounts are importantly to ally to low-lead waste processing contam. High-level waste an explaint from the processing contam. High-level waste are replainted to the processing contam. High-level waste processing contam. High-level waste processing contam. High-level waste as the processing contam. High-level waste processing contam. High-level waste processing contam. High-level waste as processing the processing contaments of the processing contaments and the processing contaments are replainted to the

With regards to nuclear meterials (not including nuclear waste, as discussed above), the NRC essentially turns its jurisdiction over to the streta, via a program called the Agreement State Program https://www.xarc.gov/egreemestates.html. NFC profides assistance to States apropaining interest in actabilishing program to essumm NRO regulatory authority. The NRC redinguishes to the States protions of its regulatory authority to license and regulate bybroduct metaricals (product profits and programs); source materials (unration and thorium); and certain quantides of apocial run materials. Iown, for example, is an agreement state with respect to nuclear materials.

Bryan Bergeen Acting Region III Government Lieison Officer U.S. Nuclear Regulatory Commission Bovan.bergeonishure.ibax 630-829-9719 (w) 240-704-5879 (c)

From: Daniel Priestley «dpriestley@woodburycountylowa.govo-sent: Monday, April 28, 2025 10-53 AM To: Bryan Bergeon-Stryan Bergeon@thrc.govo-Subject: [Externat_Sender] Nuclear Energy Woodbury Councy Zoning

This message is a follow up from our March 25 conversation regarding nuclear energy and county lovel permitting as Woodbury County, lows is currently examining nuclear energy as a potential land use.

As noted in our conversation, we are interested in the various aspects of the NRC permitting process, including nucloar types, edefinitions, and potential permitting scenarios. At this time, I wanted to check and see if you have additional information that we can include in our upcoming meetings not limited to nuclear of children and types of nuclears. Additionally, twewould like more details about the relationably between federal, state, and local government 2

Daniel Priestley

Bryan Bergeon < Bryan.Bargeon@nrc.gov> Monday, May 5, 2025 10:39 AM

Daniel Priestley RE: Nuclear Energy Woodbury County Zoning

CAUTION: This enable originated from OUTSIDE of the organization. Phases withly the sender and use caution if the message complete any extechnisers, links, or rejugents for information actitity person ringry NOT be who they daim. If you are asked for your assertance and perseword, please acts WOLCO and DONE ENTER any data.

He Daniel,

The NRO is a Regulator of califian use of nuclear materials and does not advocate for the use thereof. There is a definitive like between what the NRC does and what other agencies de, like Department of Energy. The NRC's Principality of Lond Englishing starts with independence. This means the NRC in one a consulting organization—individual applicants must offer proposed design-specific methods or design changes to meet the NRC's regulation. In NRC-approad matched by which can applicant can meet the regulations are published in regulation by gladica, interin staff guidance, and (in limited cases) NAREOL, Applicants meny ask whether a design component or design-specific mathod meets the regulations are published in regulations and reviews was very use underlying information is protected due to proprietary or other sensitive appears governed by the regulations in 10 CFR 2380, (See more on this https://www.nrc.gov/resotra/new-nearions/devanced/incolumnes/sinfo/disclopendersit-angulatos. Links)

The NRO's Mission is to protect public health and safety and advances the ration's common defense and security by enabling the safe and secure use and deployment of civilian rus/der energy technologies and redioactive matricise strough efficial rad retailable Scensing, oversight, and engulation for the heafth of society and the environment. The NRO's regulatory mission covers three main areas: Secotors—Commandation records for generating electric power and research and test reactors used for research,

teating, and training. <u>Selectrical</u>—Uses of nuclear meterials in medical, industrial, and academic settings and facilities that produce nuclear text

Weste - Transportation, storage, and disposal of nuclear materials and weste, and decommissioning of nucleal Solitities from service

The NRC accomplishes the mission through Laws and Regulation. New nuclear reactor licensing is a complex, multi-year process governed by both fodoral Laws passed by the U.S. Congress and regulations developed by the NRC. The Enderal Laws governing the NRC generally have high-tevel directives for the children use of nuclear materials. The finer decisis of reactor idensing and other crystal ruses are found in <u>Intel 10.1 the Condent Enderal Regulations</u> (10 CFF). The NRC develops and issues these regulations for all areas under its jurisdiction. All U.S. children uses of materials must comply which floatis Laws and the regulations in 10 CFF. (See more on this https://www.nrc.gov/reactors/new-reactors/savanced/now-app/general-info/law-reg_html)

The Nuclear Regulatory Commission (NRC) "New Applicant" web page: [https://www.nrc.gov/reactors/ne The Moclear Regulatory Commission (NRC) "New App Seart" web page (https://www.nrc.gov/reactors/new-reactors/de/wond/new-appignose/africh.hrml) in the starting point for (responsive applicants. Prospective applicants should come to the NRC with a specific reactor technology, illensie class, regulatory approach, business model (to help correctly guide the Licensing process), and a project timeline. With this information, the prospective applicant about fill be utther of intent(i.a. a design), https://www.nrc.gov/reactors/new-rescions-advanced/new-aprignormal-guidance/pro-app-process.nrtnl. From them, the NRC aesigns a least project manager after a potential applicant bagin cregaling with the applicant through the regulatory process and will be there to answer questione, organize meetings, and feditions all communications with both PRC staff. (See more on this: bitos-shaws, etc., gruntoestors/move.seastors/sdvanceds/seaspa/gendus/infr/communications).

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bodies as it pertains to nuclear permitting. It was my understanding that some resources would be made available to

Thank you for your assistance with this motter

Respectfully and sincerely,

Daniel J. Priestley, MPA Woodbury County Zoning Coordinator 620 Douglas Street #609 Slotux City, IA 51101

June 19, 2025

Jerry & Vernell Steffen Co-Trustees of Steffen Revocable Trust 1528 Jewell Ave. Moville, IA 51039

Daniel Priestley, MPA Woodbury County Zoning Coordinator 620 Douglas Street #609 Sioux City, IA 51101

RE: 2025 Conditional Use Permit Request for Parcel #884606100002.

For Rent Properties, LLC, Applicant: Kevin Heiss.

Dear Mr. Priestley:

We have reviewed the Conditional Use Permit Application. Jerry & Vernell Steffen Trust has no issues with this request.

Thanks for the Notice.

BACKGROUND AND ANALYSIS (LAST UPDATED) – 3/20/25

Section 3.03.4 of the Woodbury County Zoning Ordinance contains the "Land Use Summary Table of Allowed Uses in Each Zoning District," which categorizes permitted land uses across zoning districts. Under the current table:

- **Utilities Category:** "Electrical energy generation (not incl. wind)" is listed as a conditional use ("C") in the General Industrial (GI) Zoning District but prohibited ("--") in all other districts.
- Warehousing and Freight Handling Category: "Chemical and gas bulk storage" is a conditional use ("C") in the GI Zoning District, permitted in the Limited Industrial (LI) Zoning District, and prohibited elsewhere.

Staff initially interpreted these categories under Section 3.03.4 of the Woodbury County Zoning Ordinance as encompassing "nuclear energy facilities" and "nuclear waste storage" due to operational and regulatory similarities:

1. Nuclear Energy Facilities vs. Electrical Energy Generation:

- o Both involve large-scale industrial processes for energy production.
- They require significant infrastructure (e.g., reactors, turbines, transmission systems), stringent safety protocols, and compliance with environmental regulations.
- Nuclear facilities produce electricity via controlled reactions, aligning with the broader intent of energy generation in industrial zones.

2. Nuclear Waste Storage vs. Chemical and Gas Bulk Storage:

- o Both manage hazardous materials requiring specialized containment and safety measures.
- They are subject to rigorous regulatory oversight and are ideally located in industrial zones to minimize risks to residential areas.

However, this administrative interpretation lacks explicit clarity in the ordinance, prompting further review.

County Attorney's Office Review (5-21-25 – Update)

The Woodbury County Attorney's Office, via Assistant County Attorney Joshua Widman, advised against relying solely on administrative interpretation due to potential legal vulnerabilities:

- Zoning ordinances define permissible land uses. Courts may not uphold an administrator's interpretation that "electrical energy generation" includes nuclear facilities or that "chemical and gas bulk storage" covers nuclear waste if these uses are not explicitly listed. This ambiguity could lead to litigation, delaying or halting projects.
- The Land Use Summary Table is described as "comprehensive." Since nuclear uses existed when the ordinance was drafted, their absence might be interpreted as intentional exclusion rather than an oversight, weakening the case for inclusion via interpretation.
- Section 2.02.1 B(1)(e) mandates a 500-foot notification radius for conditional use permits (CUPs), with exceptions (e.g., airports, landfills) requiring 1,000 feet. Nuclear projects, given their scale and public sensitivity, may warrant a larger radius, necessitating an amendment.

Zoning Staff take-away: Amending the ordinance to explicitly list "Nuclear Energy Facilities" and "Nuclear Waste Storage" as conditional uses in the GI Zoning District provides clarity and ensures alignment with the ordinance's intent. Below are copies of comments received from Joshua Widman, Assistant County Attorney.

Daniel Priestley

From: Joshua Widman

Sent: Friday, February 28, 2025 2:24 PM

To: Daniel Priestley

Subject: RE: Nuclear Energy Policy Question

Dan,

Following up on our phone conversation. Given the nature of a nuclear project and the potential for challenge or litigation, I think the best course of action would be to amend the zoning ordinance to explicitly address the two proposed uses rather than solely relying on the zoning administrator's interpretation to make it fit within the existing framework. A court would not be bound by the zoning administrator's interpretation of the ordinance and could have a different view. Since these projects take several years to come to fruition, I think it would be prudent to change the ordinance on the front end rather than leaving open the potential for a court to invalidate a zoning action (CUP application) and potentially set a project back several years.

Of the two uses you mention under the existing framework, the argument that a nuclear project would fit under "electrical energy generation" is the stronger of the two arguments. However, the Section 3.03 references the Land Use Summary Table as two different times as being "comprehensive." So in general, if a use is not listed there, it's not a permitted use. At the same time, the ordinance acknowledges that the list can be incomplete due to "omissions" or "new uses" and that is where the role of the zoning director can potentially supplement with an interpretation. Nuclear power and nuclear waste storage were well-established uses known at that time the zoning ordinance was created and they are very intensive uses. A court would likely find it was intentional on the part of the Board to not allow for it in the table rather than and "omission" due to an oversight. Also, there may be recent changes in the technology, but it would be difficult to find that the category of nuclear power or storage is a "new use" on the whole.

The notice requirements for a CUP application are clearly set out in the ordinance (Section 2.02 (1)B(1)(e). There is not room for "interpretation" on that. The rule is 500 ft except for a couple of enumerated exceptions where the rule is 1000 ft. If a different notice radius is desired for a nuclear facility, then the ordinance should be amended to provide for that. As we discussed, there are likely very good reasons to have a greater than 500 ft formal notification requirement for a nuclear project.

In regards to a Board resolution, I do not think it would be accurate to assert that we have an established framework in place. Yes, there are arguments to be made under the existing ordinance for how to approach it, but there is gray area as well. I don't think this is a type of project where anyone would want to operate in gray area or interpretations. That wouldn't prevent the BOS, if the BOS desires, from sending a letter of support for anything that may be happening at the state level or indicating an interest in hosting such a project. I just wouldn't say that we have strong zoning framework in place at this time to deal with a project.

Joshua D. Widman Assistant Woodbury County Attorney 3701 28th St. Sioux City, IA 51105

Phone: 712-279-6516

Daniel Priestley

From: Joshua Widman

Sent: Wednesday, May 21, 2025 11:52 AM

To: Daniel Priestley

Subject: RE: Nuclear Energy Woodbury County Zoning

Dan,

I'm following up on our phone conversation yesterday regarding this issue. Here are the main points we discussed:

- I stand by the analysis in my 2/28/25 email. From a legal standpoint, it is preferable to have a clear legislative determination by the BOS that a use is specifically permitted as opposed to basing permit approval on interpretation, gray area, or flexibility in the current language. Put another way, without adding the two uses to the land use summary table, there is a legitimate path to challenging a potential conditional use permit in court based on the argument that the current ordinance does not allow it. On the other hand, overturning a clear legislative determination is much more difficult than arguing an improper interpretation or application of an ordinance.
- The uncertainty in our ordinance, if not addressed, would likely disadvantage Woodbury County in the site selection process for a company with a potential project as opposed to other locations with zoning regulations that specifically permit the use.
- The current notification requirements are clearly inadequate for a nuclear project. While there are some specific instances in the ordinance that require greater than the default notice, nuclear is not one of them. I think the lack of specific nuclear notification requirements in the existing ordinance is strong evidence that nuclear projects were not contemplated in the existing ordinance.
- Section 3.03 (3) of the ordinance says that the land use summary table may be updated by the Board of Supervisors to reflect legislative acceptance or rejection of the interpretations of the land use table. This is an acknowledgement of the first bullet point above. It also highlights the uncertainty of relying on interpretations of the table, namely, the BOS is free to legislatively accept or reject interpretations. If/when the Board is aware of an interpretation, my recommendation, especially for a use as intensive as nuclear, is to legislatively act to cut potential legal challenges based on arguments related to the interpretation of the ordinance. There is no reason to take a gamble on the outcome of the litigation. In addition, the potential cost of the litigation would not be responsible stewardship of taxpayer dollars when we could reasonably anticipate that the interpretation was subject challenge and knew of action steps to take to mitigate potential challenges but failed to do so.

Joshua D. Widman Assistant Woodbury County Attorney 3701 28th St. Sioux City, IA 51105

Phone: 712-279-6516

Compatibility with the General Industrial (GI) Zoning District

The GI Zoning District is designed for heavy industrial activities, including manufacturing, processing, and hazardous material storage. Adding nuclear-related uses as conditional uses aligns with its purpose:

- **Infrastructure Suitability:** The GI district offers large parcels, transportation access, and utility availability necessary for energy production and waste management.
- **Buffer Zones:** Its separation from residential areas mitigates risks associated with nuclear operations.
- **Regulatory Oversight:** Nuclear facilities and waste storage are governed by federal (e.g., Nuclear Regulatory Commission, 10 CFR Part 50) and state regulations

Proposed Amendments to the Zoning Ordinance

To address the identified issues, the following amendments could be considered:

1. Amend Notification Requirements (Section 2.02.1 B(1)(e), Page 8)

Current Text:

"For a Board of Adjustment hearing on a conditional use or special exception, notice shall be mailed to all owners of real property located within 500 feet of the subject property, except that in the case of a conditional use to allow an airport or a sanitary landfill, or construction of a telecommunication tower as provided in subsection 5.06-3, notices shall be mailed to all owners of real property located within one mile of the subject property."

• Proposed Repeal and Replacement:

- "For a Board of Adjustment hearing on a conditional use or special exception, notice shall be mailed to all owners of real property located within 500 feet of the subject property, except that in the case of a conditional use to allow an airport, a sanitary landfill, a nuclear energy facility, a nuclear waste storage facility, or construction of a telecommunication tower as provided in subsection 5.05, notices shall be mailed to all owners of real property located within one mile of the subject property for an airport, sanitary landfill, or telecommunication tower, and within ten miles of the subject property for a nuclear energy facility or nuclear waste storage facility."
- Rationale: A ten-mile notification radius for nuclear uses reflects their unique scale, potential impact, and public interest, ensuring broader stakeholder engagement and transparency beyond the standard 500 feet or the 1,000 feet used for other significant uses. Also, as a point of housekeeping, it is recommended to change the referenced section regarding telecommunication towers from 5.06-3 to 5.05 to reflect the correct reference.

2. Update the Land Use Summary Table (Section 3.03.4, Page 39)

- Addition under "Utilities" Category:
 - o "Nuclear energy facilities" Place a "C" in the GI Zoning District column.
 - o "Nuclear waste storage" Place a "C" in the GI Zoning District column.
- Updated Table Snapshot:

| Utility Type | GI Status | Notes |
|---|-----------|---|
| Existing: Electrical energy generation (not incl. wind) | С | Conditional use, energy production |
| Existing: Solar Energy Systems, Utility Scale | С | Conditional use, renewable energy |
| Existing: Chemical and gas bulk storage | С | Conditional use, hazardous materials |
| Proposed: Nuclear Energy Facilities | (' | Amendment addition, nuclear energy generation |
| Proposed: Nuclear Waste Storage | C | Amendment addition, nuclear waste management |

• Rationale: Explicitly listing these uses clarifies their status as conditional in the GI district (and removing the reliance on an administrative interpretation), aligning with similar energy and hazardous material activities while subjecting them to the CUP process.

3. Add Definitions (Article 6, Section 6.02, Pages 104-105)

• New Definition 112 (Page 104):

"Nuclear energy facility means any facility designed or used for the generation of electricity or power through nuclear fission

or fusion, including nuclear reactors and associated structures, systems, or components necessary for the production of atomic energy, as well as the handling, processing, or temporary storage of nuclear materials or byproduct materials, all in compliance with federal and state regulatory requirements as administered by the Nuclear Regulatory Commission (NRC) or its duly authorized representatives."

• New Definition 113 (Page 105):

"Nuclear waste storage means any facility, structure, or area designated and engineered for the safe containment, isolation, or disposal of byproduct material, special nuclear material, or other radioactive materials generated from nuclear energy facilities, including temporary or permanent storage solutions, provided such storage complies with federal regulations under 10 CFR Part 50 and related parts, and is subject to oversight by the Nuclear Regulatory Commission (NRC) to protect public health, safety, and the common defense and security."

- **Subsequent Adjustments:** Renumber existing definitions 112–193 as 114–195 and adjust page locations (pages 104–110, adding page 110 as needed).
- **Rationale:** Precise definitions ensure legal and operational clarity, tying these uses to federal oversight and distinguishing them from other energy or storage activities.

Alignment with Comprehensive Plan

The amendments comport with the Woodbury County Comprehensive Plan (Chapter 4, Page 81):

- Goal IU3: "Support technological advances."
- **Objective:** "Work with energy providers to diversify sources."
- **Timeframe:** 0-5, 5-10, 10-20 years. (Page 155-156)
- Lead Partners: Board of Supervisors, utility companies. (Page 155-156)
- **Cost:** Moderate (\$\$).(Page 155-156)

Nuclear energy represents a technological advancement in energy diversification, and the GI district's industrial designation aligns with the plan's intent to separate heavy industrial uses from residential and agricultural areas.

• Source:

https://www.woodburycountyiowa.gov/files/community_economic_development/woodbury_county_comprehensive_plan_2 040 89417.pdf

Moving Forward: Public and Regulatory Considerations

As nuclear technology evolves (e.g., modular reactors, nuclear waste storage, etc.), Woodbury County has an opportunity to clarify its zoning policy toward "electrical energy generation" and "chemical and gas bulk storage." Key questions for stakeholders include:

- 1. Do citizens view nuclear energy including its waste storage as a viable future option?
- 2. Are specific areas within the GI district suitable for nuclear facilities?

Public input, alongside industry feedback, would guide any future conditional use permit projects. Any nuclear project would require:

- County Process: A conditional use permit reviewed by the Zoning Commission and Board of Adjustment.
- External Oversight: Compliance with Nuclear Regulatory Commission (NRC) and state regulations, ensuring safety and environmental standards are met.

By amending the ordinance, the county could reduce legal uncertainty by removing the interpretation and align with its industrial zoning framework.

Conclusion

Amending the Woodbury County Zoning Ordinance to explicitly include "Nuclear Energy Facilities" and "Nuclear Waste Storage" as conditional uses in the GI Zoning District, with updated definitions and a ten-mile notification radius, provides clarity, reduces legal concerns, and supports long-term planning. This step would remove the administrative interpretation and bring the unique case before the Zoning Commission and Board of Adjustment under a defined framework to evaluate the criteria of a conditional use permit application for a nuclear energy facility and/or a nuclear waste storage site.

NUCLEAR REGULATORY COMMISSION COMMENTS:

Daniel Priestley

From: Bryan Bergeon < Bryan.Bergeon@nrc.gov>

Sent: Monday, May 5, 2025 10:39 AM

To: Daniel Priestley

Subject: RE: Nuclear Energy Woodbury County Zoning

CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data.

Hi Daniel,

The NRC is a Regulator of civilian use of nuclear materials and does not advocate for the use thereof. There is a definitive line between what the NRC does and what other agencies do, like Department of Energy. The NRC's Principals of Good Regulation starts with independence. This means the NRC is not a consulting organization - individual applicants must offer proposed design-specific methods or design changes to meet the NRC's regulations. The NRC-approved methods by which an applicant can meet the regulations are published in regulatory guides, interim staff guidance, and (in limited cases) NUREGs. Applicants may ask whether a design component or design-specific method meets the regulations in various ways, such as utilizing public meetings and submitting white papers for review. The NRC's response will be publicly available unless the underlying information is protected due to proprietary or other sensitive aspects governed by the regulations in 10 CFR 2.390. (See more on this: https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info/independent-regulator.html)

The NRC's **Mission** is to protect public health and safety and advances the nation's common defense and security by enabling the safe and secure use and deployment of civilian nuclear energy technologies and radioactive materials through efficient and reliable licensing, oversight, and regulation for the benefit of society and the environment. The **NRC's regulatory mission covers three main areas:**

Reactors – Commercial reactors for generating electric power and research and test reactors used for research, testing, and training

Materials – Uses of nuclear materials in medical, industrial, and academic settings and facilities that produce nuclear fuel

Waste – Transportation, storage, and disposal of nuclear materials and waste, and decommissioning of nuclear facilities from service

The NRC accomplishes the mission through Laws and Regulation. New nuclear reactor licensing is a complex, multiyear process governed by both federal laws passed by the U.S. Congress and regulations developed by the NRC. The <u>Federal laws governing the NRC</u> generally have high-level directives for the civilian use of nuclear materials. The finer details of reactor licensing and other civilian uses are found in <u>Title 10 of the Code of Federal Regulations</u> (10 CFR). The NRC develops and issues these regulations for all areas under its jurisdiction. All U.S. civilian uses of materials must comply with federal laws and the regulations in 10 CFR. (See more on this: https://www.nrc.gov/reactors/newreactors/advanced/new-app/general-info/law-reg.html)

The Nuclear Regulatory Commission (NRC) "New Applicant" web page: (https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info.html) is the starting point for prospective applicants. Prospective applicants should come to the NRC with a specific reactor technology, license class, regulatory approach, business model (to help correctly guide the licensing process), and a project timeline. With this information, the prospective applicant should file a letter of intent (i.e. a design). https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-guidance/pre-app-process.html. From there, the NRC assigns a lead project manager after a potential applicant begins engaging with the agency; this person will be the main point of contact between the NRC and applicant. The project manager will guide the applicant through the regulatory process and will be there to answer questions, organize meetings, and facilitate all communications with other NRC staff. (See more on this:

https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info/comms.html)

The Department of Energy's Office of Nuclear Energy mission is to promote the domestic use of nuclear energy and supports advanced reactor developers. The DOE has a Gateway for Accelerated Innovation in Nuclear (GAIN). https://gain.inl.gov/industry-support/regulatory-support/regulatory-route-to-deployment/. This helps applicants understand the current U.S. regulatory framework for commercial reactors. The series also facilitates nuclear industry efforts to identify and address regulatory uncertainties and associated deployment risks (technical, financial, schedule). Essentially, the DOE is who will advocate for and help potential licensees pursue projects, including even potential funding thereof.

The NRC also regulates waste storage. Low-Level waste includes items that have become contaminated with radioactive material or have become radioactive through exposure to neutron radiation and is typically stored on-site until it can be disposed of or until amounts are large enough to ship to low-level waste processing centers. High-level wastes are highly radioactive materials produced as a byproduct of the reactions that occur inside nuclear reactors; spent reactor fuel and waste materials remaining after spent fuel is processed. Commercial reprocessing is currently not practiced in the United States, although it has been allowed in the past. The NRC regulates high level wastes in spent fuel pools and dry cask storage, at independent spent fuel storage installations (ISFSI) and consolidated interim storage facilities (CISF). Note, these CISF's at different than permanent storage facilities such as Yucca Mountain, which is under DOE jurisdiction. The DOE, Office of Spent Fuel and High-Level Waste Disposition and its three subprogram offices: the Office of Disposal R&D, the Office of Storage & Transportation, and the Office of Consent-Based Siting, are developing an Integrated Waste Management system for storage, transportation, and disposal of spent nuclear fuel and high-level radioactive waste. Learn more. The DOE Waste Isolation Pilot Plant (WIPP) is the nation's only deep geologic long-lived radioactive waste repository. Located 26 miles southeast of Carlsbad, New Mexico, WIPP permanently isolates defense-generated transuranic (TRU) waste 2,150 feet underground in an ancient salt formation. (See more on this: https://wipp.energy.gov/wipp-site.asp and https://www.energy.gov/ne/office-spent-fuel-and-highlevel-waste-disposition).

With regards to nuclear materials (not including nuclear waste, as discussed above), the NRC essentially turns its jurisdiction over to the states, via a program called the **Agreement State Program https://www.nrc.gov/agreement-states.html**. NRC provides assistance to States expressing interest in establishing programs to assume NRC regulatory authority. The NRC relinquishes to the States portions of its regulatory authority to license and regulate byproduct materials (radioisotopes); source materials (uranium and thorium); and certain quantities of special nuclear materials. Iowa, for example, is an agreement state with respect to nuclear materials.

Bryan Bergeon
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From: Daniel Priestley <dpriestley@woodburycountyjowa.gov>

Sent: Monday, April 28, 2025 10:53 AM

To: Bryan Bergeon < Bryan.Bergeon@nrc.gov>

Subject: [External_Sender] Nuclear Energy Woodbury County Zoning

Mr. Bergeon,

This message is a follow up from our March 25 conversation regarding nuclear energy and county level permitting as Woodbury County, Iowa is currently examining nuclear energy as a potential land use.

As noted in our conversation, we are interested in the various aspects of the NRC permitting process, including nuclear types, definitions, and potential permitting scenarios. At this time, I wanted to check and see if you have additional information that we can include in our upcoming meetings not limited to nuclear definitions and types of nuclear. Additionally, we would like more details about the relationship between federal, state, and local government

bodies as it pertains to nuclear permitting. It was my understanding that some resources would be made available to us.

Thank you for your assistance with this matter.

Respectfully and sincerely,

Daniel J. Priestley, MPA Woodbury County Zoning Coordinator 620 Douglas Street #609 Sioux City, IA 51101

Phone: 712-279-6609 Fax: 712-279-6530

Website: WoodburyCountylowa.gov

DEFINITIONS AND TERMINOLOGY OF INTEREST

Nuclear energy facility means any facility designed or used for the generation of electricity or power through nuclear fission or fusion, including nuclear reactors and associated structures, systems, or components necessary for the production of atomic energy, as well as the handling, processing, or temporary storage of nuclear materials or byproduct materials, all in compliance with federal and state regulatory requirements as administered by the Nuclear Regulatory Commission (NRC) or its duly authorized representatives.

Explanation of Definition:

This definition incorporates concepts from multiple NRC regulations, particularly those in 10 CFR Part 50, which governs the domestic licensing of production and utilization facilities. The NRC uses terms like "production facility" and "utilization facility" to describe facilities involved in nuclear energy production, and these terms are defined in 10 CFR § 50.2. Here's how the definition aligns with specific regulatory sources:

- 1. "Facility designed or used for the generation of electricity or power through nuclear fission or fusion":
 - This aligns with the definition of a "utilization facility" in 10 CFR § 50.2, which states: "Utilization facility means any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233; or An accelerator-driven subcritical operating assembly used for the irradiation of materials containing special nuclear material and described in the application assigned
 - Nuclear reactors for electricity generation (typically fission-based) are the primary focus of Part 50, as it regulates commercial nuclear power plants. Fusion is not currently regulated under Part 50, as it is not yet commercially viable, but the inclusion here may reflect a broad
 - Citation: 10 CFR § 50.2, available at: https://www.ecfr.gov/current/title-10/chapter-I/part-50/section-50.2

"Including nuclear reactors and associated structures, systems, or components necessary for the production of atomic energy":

- The term "structures, systems, or components" (SSCs) is a key concept in NRC regulations, particularly in safety-related contexts. While not explicitly defined as part of a "nuclear energy facility" in one place, 10 CFR § 50.2 defines "safety-related structures, systems, and components" as those
- relied upon to ensure reactor safety, which implies their inclusion in the facility's scope. The phrase "production of atomic energy" echoes the Atomic Energy Act of 1954 (AEA), which underpins NRC authority (see 42 U.S.C. § 2014), defining "atomic energy" as energy released from fission or fusion.
- Citation: 10 CFR § 50.2 (see URL above); Atomic Energy Act, Section 11, available at: https://www.nrc.gov/about-nrc/governing-laws.html (via NUREG-0980).

"Handling, processing, or temporary storage of nuclear materials or byproduct materials":

- This broadens the scope beyond power generation to include activities regulated under 10 CFR Part 50 and related parts (e.g., Part 30 for byproduct material). 10 CFR § 50.2 defines "byproduct material" and "special nuclear material," and licensing under Part 50 includes provisions for handling and temporary storage (e.g., spent fuel pools at reactor sites). **Citation:** 10 CFR § 50.2 (see URL above).

4. "In compliance with federal and state regulatory requirements as administered by the NRC":

- This reflects the NRC's authority under the AEA and Energy Reorganization Act of 1974, delegated through 10 CFR Part 50, which sets licensing and operational requirements for nuclear facilities. Agreement States (under AEA Section 274) may regulate certain materials, but Part 50 facilities are under NRC jurisdiction unless specified otherwise.
- **Citation:** 10 CFR Part 50, available at: https://www.ecfr.gov/current/title-10/chapter-I/part-50

Conclusion:

The definition is a composite derived from 10 CFR § 50.2 definitions (e.g., "utilization facility," "byproduct material") and the broader regulatory purpose of Part 50, which licenses nuclear power reactors and associated activities. The primary source is 10 CFR § 50.2, supplemented by the AEA's foundational terminology.

Nuclear waste storage means any facility, structure, or area designated and engineered for the safe containment, isolation, or disposal of byproduct material, special nuclear material, or other radioactive materials generated from nuclear energy facilities, including temporary or permanent storage solutions, provided such storage complies with federal regulations under 10 CFR Part 50 and related parts, and is subject to oversight by the Nuclear Regulatory Commission (NRC) to protect public health, safety, and the common defense and security.

Explanation of Definition

- 1. Facility, structure, or area designated and engineered for the safe containment, isolation, or disposal" aligns with language in NRC regulations, such as 10 CFR Part 60 (Disposal of High-Level Radioactive Wastes in Geologic Repositories) and 10 CFR Part 72 (Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste).
- "Byproduct material, special nuclear material, or other radioactive materials" reflects definitions in 10 CFR Part 20
- (Standards for Protection Against Radiation) and the Atomic Energy Act of 1954, as amended. "Generated from nuclear energy facilities" ties to the scope of 10 CFR Part 50, which covers domestic licensing of production and utilization facilities (e.g., nuclear power reactors).

- 4. "Temporary or permanent storage solutions" and "complies with federal regulations under 10 CFR Part 50 and related parts" suggest a broad interpretation encompassing both interim storage (e.g., 10 CFR Part 72) and permanent disposal (e.g., 10 CFR Part 60 or 61).
 "Subject to oversight by the NRC to protect public health, safety, and the common defense and security" mirrors the
- NRC's mission and regulatory authority as stated in its enabling legislation and regulations.

Related Sources:

- 10 CFR Part 50: This part addresses the licensing of nuclear power plants but does not explicitly define "nuclear waste storage." It indirectly relates through requirements for managing radioactive materials (e.g., 10 CFR 50.2 defines terms like "byproduct material" and "special nuclear material"). Available at: https://www.ecfr.gov/current/title-10/chapter-I/part-50.
- 10 CFR Part 72: This part provides a more direct connection, defining terms and requirements for independent spent fuel storage installations (ISFSIs), which are engineered for the "storage of spent nuclear fuel, high-level radioactive waste, and reactor-related greater than Class C waste." See: https://www.ecfr.gov/current/title- 10/chapter-I/part-72.
- NRC Backgrounder on Radioactive Waste: This provides a general overview of radioactive waste management, including storage: https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html.

Conclusion:

The definition is not explicitly stated in any single NRC regulation or document but appears to be a composite derived from multiple sources, primarily within the Code of Federal Regulations, Title 10, administered by the NRC. The most relevant specific URL for the regulatory framework underpinning this definition would be the NRC's compilation of regulations, such as: https://www.ecfr.gov/current/title-10/chapter-I (Title 10, Chapter I – Nuclear Regulatory Commission).

NRC Emergency Planning Zone

- 1. The following URL includes safety zones including a10-mile Plume Exposure Pathway EPZ and 50-mile Ingestion Exposure Pathway EPZ, which could serve as the basis for public notification and emergency planning.
- URL: https://www.nrc.gov/about-nrc/emerg-preparedness/about-emerg-preparedness/planning-zones.html

NRC Licensing

https://www.nrc.gov/about-nrc/regulatory/licensing.html

NRC Public Involvement in Licensing

https://www.nrc.gov/about-nrc/regulatory/licensing/pub-involve.html

Nuclear Power Plant

A nuclear power plant is a thermal power station that harnesses energy from nuclear fuel fission. Here's how it works: the heat released during fission boils water, producing steam. This steam drives a turbine connected to a generator, ultimately producing electricity.

Small Modular Reactors (SMR)

- Type of advanced nuclear reactor designed to be smaller in size and capacity compared to traditional nuclear reactors.
- Characteristics:
 - Small Size. SMRs have a power capacity of up to 30 MW per unit, which is about one-third of the capacity of conventional nuclear reactors.
 - Modular Construction. These reactors are designed to be factory-assembled and transported to the site for
 - Flexibility. SMRs can be deployed in single or multiple modules, making them suitable for a variety of application, including industrial use and remote areas with limited grid capacity.
 - Safety. Many SMR designs incorporate passive safety features, which rely on natural physical processes rather than active controls to ensure safety.

NUCLEAR PROCESS BEFORE THE NUCLEAR REGULATORY COMMISSION

Nuclear energy power plants including their establishment is primarily governed by the United States Nuclear Regulatory Commission (NRC). The NRC has a significant amount of control over the permitting and operation of such plants. Companies who wish to get involved in nuclear must directly work with the NRC through the process of obtaining an "Early site permit (ESP)." example of this process can be found at the following NRC website: https://www.nrc.gov/reactors/new-reactors/large-lwr/esp/northanna.html

This website illustrates the process for the North Anna Site that was submitted by Dominion Nuclear North Anna, LLC. It includes application information, a review schedule, a safety evaluation report, a final environmental impact statement, the North Anna Early Site Permit, and contacts. There is also a "combined license process" which includes construction and operation approvals. The applicants must provide detailed plans for the plant's design, construction, and operation as well as safety measures. It is the duty of the NRC to thoroughly review the submissions. The following website includes a list of combined license applications for new reactors: https://www.nrc.gov/reactors/new-reactors/large-lwr/col.html

An example of a combined license can be found at this link for the North Anna, Unit 3 site: https://www.nrc.gov/reactors/newreactors/large-lwr/col/north-anna.html. The application materials include: referenced documents; application information; review schedule; safety evaluations; early site permit; final supplemental environmental impact statement; combined licenses; related application information; and contacts. In the combined license process, the application is reviewed and includes a public participation process, safety and environmental reviews and compliance with the National Environmental Policy Act (NEPA). The NRC also is involved in design certification, construction and operation, and post-license oversight.

It appears at this time that the permitting process for nuclear power plants including modular is a multi-governmental complex process largely governed by the NRC. The Iowa legislature appears to have considered two study bills (House Study Bill 555 and Senate

Study Bill 3075) which would designate modular nuclear as an alternative energy production facility in Iowa. For more information, there is a January 25, 2024 article written by Wally Taylor entitled "Iowa Utilities bill includes a good idea – and a lost cause" https://www.bleedingheartland.com/2024/01/25/iowa-utilities-board-bill-includes-a-good-idea-and-a-lost-cause/

Nuclear Regulatory Commission Website Resources – Excerpts from NRC.GOV

Source: https://www.nrc.gov/reactors/new-reactors/advanced.html



The HRC refers to non-light water reactor (non-LWR) designs and small modular light water reactors (SMRs) as advanced reactors. These reactors incorporate innovative technologies compared to existing operating reactors, such as passive safety features, alternative fuel or coolant types, or smaller reactor sizes. While non-LWRs use distinct technologies and materials. SMRs are a subset of light water reactors that are designed to be more compact, scalable, and potentially safet, with many sharing features like passive safety systems and advanced engineering designs.



















Page Last Reviewed/Updated Tuesday, March 04, 202:

Laws and Regulations



New nuclear reactor licensing is a complex, multi-year process governed by both federal laws passed by the U.S. Congress and regulations developed by the NRC. The <u>Federal laws governing the NRC</u> generally have high-level directives for the civilian use of nuclear materials. The finer details of reactor licensing and other civilian uses are found in <u>Title 10 of the Code of Federal Regulations</u> (10 CFR). The NRC develops and issues these regulations for all areas under its jurisdiction. All U.S. civilian uses of materials must comply with federal laws and the regulations in 10 CFR.

Governing Legislation

The NRC was established by the Energy Reorganization Act of 1974. A summary and a text of this law, as well as other key laws that govern our operations, are provided below. The texts of other laws may be found in Nuclear Regulatory Legislation (NUREG-0980).

This page includes links to files in non-HTML format. See Plugins, Viewers, and Other Tools for more information.

On this page

- Fundamental Laws Governing Civilian Uses of Nuclear Materials and Facilities
- Nuclear Waste
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- Fundamental Laws Governing the Processes of Regulatory Agencies
- Atomic Energy Act of 1954, as Amended
- Energy Reorganization Act of 1974
- Reorganization Plans
- Nuclear Waste Policy Act of 1982, as Amended
- Low-Level Radioactive Waste Policy Amendments Act of 1985
- Uranium Mill Tailings Radiation Control Act of 1978
- Nuclear Non-Proliferation Act of 1978
- Administrative Procedure Act (5 U.S.C. Chapters 5 through 8)
- National Environmental Policy Act

Fundamental Laws Governing Civilian Uses of Nuclear Materials and Facilities

- Atomic Energy Act of 1954, as Amended (summary below, full-text version)
- Energy Reorganization Act of 1974 (summary below, full-text version)

Reorganization Plans (summary below, full-text version)

Nuclear Waste

- Nuclear Waste Policy Act of 1982 (summary below, full-text version)
- Low-Level Radioactive Waste Policy Amendments Act of 1985 (summary below, full-text version)
- Uranium Mill Tailings Radiation Control Act of 1978 (summary below, full-text version)

Non-Proliferation

Nuclear Non-Proliferation Act of 1978 (summary below, full-text version)

Fundamental Laws Governing the Processes of Regulatory Agencies

- Administrative Procedure Act (5 U.S.C. Chapters 5 through 8) (summary below, full-text version)
- National Environmental Policy Act (summary below, full-text version)



Atomic Energy Act of 1954, as Amended

This Act is the fundamental U.S. law on both the civilian and the military uses of nuclear materials. On the civilian side, it provides for both the development and the regulation of the uses of nuclear materials and facilities in the United States, declaring the policy that "the development, use, and control of atomic energy shall be directed so as to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise." The Act requires that civilian uses of nuclear materials and facilities be licensed, and it empowers the NRC to establish by rule or order, and to enforce, such standards to govern these uses as "the Commission may deem necessary or desirable in order to protect health and safety and minimize danger to life or property." Commission action under the Act must conform to the Act's procedural requirements, which provide an opportunity for hearings and Federal judicial review in many instances.

Under section 274 of the Act, the NRC may enter into an agreement with a State for discontinuance of the NRC's regulatory authority over some materials licensees within the State. The State must first show that its regulatory program is compatible with the NRC's and adequate to protect public health and safety. The NRC retains authority over, among other things, nuclear power plants within the State and exports from the State

A major amendment to the Act established compensation for, and limits on, licensee liability for injury to off-site persons or damage to property caused by nuclear accidents. The Act was most recently amended by the <u>ADVANCE Act of 2024</u>, including amendments to the Act's definition of byproduct material to address fusion machines explicitly and to provide the NRC with additional tools to strengthen the NRC workforce.

(full-text version)



Energy Reorganization Act of 1974

This Act established the Nuclear Regulatory Commission. Under the Atomic Energy Act of 1954, a single agency, the Atomic Energy Commission, had responsibility for the development and production of nuclear weapons and for both the development and the safety regulation of the civilian uses of nuclear materials. The Act of 1974 split these functions, assigning to one agency, now the Department of Energy, the responsibility for the development and production of nuclear weapons, promotion of nuclear power, and other energy-related work, and assigning to the NRC the regulatory work, which does not include regulation of defense nuclear facilities. The Act of 1974 gave the Commission its collegial structure and established its major offices. The later amendment to the Act also provided protections for employees who raise nuclear safety concerns.

(full-text version)



Reorganization Plans

Reorganization Plan No. 3 of 1970 established the U.S. Environmental Protection Agency (EPA) and gave it a role in establishing "generally applicable environmental standards for the protection of the general environment from radioactive material."

Reorganization Plan No. 1 of 1980 strengthened the executive and administrative roles of the NRC Chairman, particularly in emergencies, transferring to the Chairman "all the functions vested in the Commission pertaining to an emergency concerning a particular facility or materials ... regulated by the Commission." This Reorganization Plan also provided that all policy formulation, policy-related rulemaking, and orders and adjudications would remain vested with the full Commission.

(full-text version)



Nuclear Waste Policy Act of 1982, as Amended

This Act establishes both the Federal government's responsibility to provide a place for the permanent disposal of high-level radioactive waste and spent nuclear fuel, and the generators' responsibility to bear the costs of permanent disposal. Amendments to the Act have focused the Federal government's efforts, through the Department of Energy, regarding a possible site at Yucca Mountain, Nevada. (full-text version)

Low-Level Radioactive Waste Policy Amendments Act of 1985

This Act gives States the responsibility to dispose of low-level radioactive waste generated within their borders and allows them to form compacts to locate facilities to serve a group of States. The Act provides that the facilities will be regulated by the NRC or by States that have entered into Agreements with the NRC under section 274 of the Atomic Energy Act. The Act also requires the NRC to establish standards for determining when radionuclides are present in waste streams in sufficiently low concentrations or quantities as to be "below regulatory concern."

(full-text version)



Uranium Mill Tailings Radiation Control Act of 1978

This Act establishes programs for the stabilization and control of mill tailings at uranium or thorium mill sites, both active and inactive, in order to prevent or minimize, among other things, the diffusion of radon into the environment. Title II of the Act gives the NRC regulatory authority over mill tailing at sites under NRC license on or after January 1, 1978. (full-text version)



Nuclear Non-Proliferation Act of 1978

This Act seeks to limit the spread of nuclear weapons by, among other things, establishing criteria governing U.S. nuclear exports licensed by the NRC and taking steps to strengthen the international safeguards system. (full-text version)



Administrative Procedure Act (5 U.S.C. Chapters 5 through 8)

This Act is the fundamental law governing the processes of Federal administrative agencies. Its original focus was on rulemaking and adjudication. It requires, for example, that affected persons be given adequate notice of proposed rules and an opportunity to comment on the proposed rules and that, in cases in which another statute requires that the agency provide a hearing "on the record," the parties are given adequate opportunity to present facts and argument and the hearing officer is impartial. The Act gives interested persons the right to petition an agency for the issuance, amendment, or repeal of a rule. It also provides standards for judicial review of agency actions. The Act has been amended often and now incorporates several other acts that cover a great range of processes. Three of these incorporated acts deal with access to information. The Freedom of Information Act requires that agencies make public their rules, adjudicatory decisions, statements of policy, instructions to staff that affect a member of the public, and, upon request, such other material as does not fall into one of the Act's exceptions for material dealing with national security, trade secrets, and the like. The Government in the Sunshine Act requires that collegial bodies such as the Commission hold their meetings in public, with certain exceptions for meetings on matters such as, again, national security. The Privacy Act limits release of certain information about individuals. Two of the acts incorporated into the Administrative Procedure Act provide for alternative mechanisms for resolving differences. The Negotiated Rulemaking Act allows agencies to develop rules in certain situations by negotiations among a limited number of parties, negotiations aimed at reaching a consensus on the proposed rule and avoiding litigation over the final rule. The Administrative Dispute Resolution Act urges agencies to use negotiation, mediation, arbitration, and related techniques in place of adjudication, enforcement, rulemaking, or court litigation.

Two other incorporated acts are noteworthy. The Regulatory Flexibility Act requires that agencies consider the special needs and concerns of small entities in conducting rulemaking. The Congressional Review Act requires that every agency rule be submitted to Congress before being made effective, and that every "major" rule sit before Congress for 60 days before being made effective, during which time the rule can be subjected to an accelerated process that can lead to a statutory modification or disapproval of the rule.

(full-text version)



National Environmental Policy Act

Every proposal for a major Federal action significantly affecting the quality of the human environment requires a detailed statement on, among other things, the environmental impact of the proposed action and alternatives to the proposed action. The statement is to accompany the proposal through the agency review process. The Act also established in the Executive Office of the President a Council on Environmental Quality, which has issued regulations on the preparation of environmental impact statements and on public participation in the preparation of the statements.

(full-text version)

NRC Regulations Title 10, Code of Federal Regulations

Requirements binding on all persons and organizations who receive a license from NRC to use nuclear materials or operate nuclear facilities Effective Dates | Federal Register Notices | Rulemaking

See also NRC's regulations, Title 10, Chapter I, of the \overline{Code} of Federal Regulations, $\underline{Volume\ 1\ (Parts\ 1-50)}$ and $\underline{Volume\ 2\ (Parts\ 51-199)}$ which the $\underline{Government\ Publishing\ Office}$ maintains and updates annually.

Standards Incorporated By Reference into Chapter I of Title 10 of the Code of Federal Regulations

Download Title 10 (ZIP archive file):

HTML format [9,893 KB], Portable Document Format (PDF) [7,613 KB]

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| <u>Part 52</u> | Licenses, certifications, and approvals for nuclear power plants | | | | |
| <u>Part 53</u> | [Reserved] | | | | |
| <u>Part 54</u> | Requirements for renewal of operating licenses for nuclear power plants | | | | |
| <u>Part 55</u> | Operators' licenses | | | | |
| <u>Part 60</u> | Disposal of high-level radioactive wastes in geologic repositories | | | | |
| <u>Part 61</u> | Licensing requirements for land disposal of radioactive waste | | | | |
| <u>Part 62</u> | Criteria and procedures for emergency access to non-federal and regional low-level waste disposal facilities | | | | |
| <u>Part 63</u> | Disposal of high-level radioactive wastes in a geologic repository at Yucca Mountain, Nevada | | | | |
| <u>Part 70</u> | Domestic licensing of special nuclear material | | | | |
| <u>Part 71</u> | Packaging and transportation of radioactive material | | | | |
| <u>Part 72</u> | Licensing requirements for the independent storage of spent nuclear fuel and high-level radioactive waste, and reactor-related greater than Class C waste | | | | |

| Part 73 | Physical protection of plants and materials |
|----------------|--|
| Fait 13 | Friysteat protection of plants and materials |
| <u>Part 74</u> | Material control and accounting of special nuclear material |
| <u>Part 75</u> | Safeguards on nuclear material—implementation of safeguards agreements between the United States and the International Atomic Energy Agency |
| <u>Part 76</u> | Certification of gaseous diffusion plants |
| <u>Part 81</u> | Standard specifications for the granting of patent licenses |
| <u>Part 95</u> | Facility security clearance and safeguarding of national security information and restricted data |
| Part 100 | Reactor site criteria |
| Part 110 | Export and import of nuclear equipment and material |
| Part 140 | Financial protection requirements and indemnity agreements |
| Part 150 | Exemptions and continued regulatory authority in Agreement States and in offshore waters under section 274 |
| Part 160 | Trespassing on Commission property |
| Part 170 | Fees for facilities, materials, import and export licenses, and other regulatory services under the Atomic Energy Act of 1954, as amended |
| Part 171 | Annual fees for reactor licenses and fuel cycle licenses and materials licenses, including holders of certificates of compliance, registrations, and quality assurance program approvals and government agencies licensed by the NRC |
| Parts 172-199 | [Reserved] |

ANNOTATED BIBLIOGRAPHY

The following annotated bibliography reveals several key themes surrounding nuclear energy. It begins with a foundational understanding of nuclear energy's scientific principles and its role in electricity generation, emphasizing its low-emission potential alongside the challenge of radioactive waste management. A significant focus is placed on the pros and cons, highlighting benefits like carbon-neutral power, reliability, and efficiency, while addressing drawbacks such as safety risks, high costs, and waste disposal concerns. Emerging technologies, including small modular reactors (SMRs) and high-assay low-enriched uranium (HALEU), are explored as innovative solutions offering enhanced safety and cost-effectiveness. Policy and regulatory efforts, particularly in the U.S., aim to streamline deployment and licensing to bolster the nuclear sector. Nuclear energy's role in combating climate change is underscored by its low carbon footprint, though economic factors like high capital costs and the need for government support remain critical. Finally, the persistent challenge of radioactive waste management is a recurring theme, with progress in interim storage and geological repositories tempered by delays, costs, and public opposition, leaving long-term solutions unresolved. Together, these themes reflect nuclear energy's complex balance of promise and peril.

Theme 1: General Overview and Science of Nuclear Energy

This theme covers sources that provide foundational explanations of nuclear energy, its scientific basis, and its role in energy production.

- Endesa. (2022). *Nuclear energy: what it is and its advantages and disadvantages*. Retrieved from https://www.endesa.com/en/the-e-face/power-plants/nuclear-power
 - The article aims to clarify nuclear energy, its generation, and its role in energy production, particularly in Spain. It seeks to provide an informative overview for understanding nuclear energy's implications, especially in land use planning for county zoning ordinances.
- Galindo, A. (2022). What is nuclear energy? The science of nuclear power. International Atomic Energy Agency. Retrieved from https://www.iaea.org/newscenter/news/what-is-nuclear-energy-the-science-of-nuclear-power
 - Nuclear energy, derived from nuclear fission, is harnessed in power plants to generate electricity. The process involves splitting
 uranium atoms, managing radioactive waste, and adhering to international safety standards set by the IAEA.
- National Geographic. (2020). Nuclear energy. Retrieved from https://education.nationalgeographic.org/resource/nuclear-energy/
 - Nuclear energy, derived from splitting atoms, is harnessed in reactors to generate electricity. While clean and renewable, it requires careful handling of radioactive waste.
- U.S. Energy Information Administration. (n.d.). *Nuclear explained. Nuclear power and the environment.* Retrieved from https://www.eia.gov/energyexplained/nuclear/nuclear-power-and-the-environment.php
 - Nuclear power plants in the U.S. have robust safety measures and containment structures. While nuclear power generation is low-emission, it produces radioactive waste requiring strict management and disposal.

Theme 2: Pros and Cons of Nuclear Energy

This theme includes sources that evaluate the advantages and disadvantages of nuclear energy, focusing on safety, cost, efficiency, and environmental impact.

- Iginia, M. (2023). The advantages and disadvantages of nuclear energy. Earth.org. Retrieved from https://earth.org/the-advantages-and-disadvantages-and-disadvantages-of-nuclear-energy/
 - Educates readers on nuclear energy's environmental, economic, and safety implications. This information is crucial for zoning and land use policies.
- Just Energy. (2023). Pros and cons of nuclear energy: Safety, cost, efficiency. Retrieved from https://justenergy.com/blog/pros-and-cons-of-nuclear-energy-safety-cost-efficiency/
 - Nuclear energy offers carbon-neutral power and significant energy output, but risks include accidents, waste disposal, and limited resources. Technological advancements are crucial for improving safety and efficiency.
- Let's Talk Science. (2019). What are the pros and cons of nuclear energy? Retrieved from https://letstalkscience.ca/educational-resources/stem-in-context/what-are-pros-and-cons-nuclear-energy

- Nuclear energy has both advantages and disadvantages. While it offers safety and reduces air pollution, concerns remain about nuclear weapons proliferation, waste management, and potential accidents.
- Lumley, G. (2024). Pros and cons of nuclear energy. BKV Energy. Retrieved from https://bkvenergy.com/learning-center/nuclear-energy-pros-and-cons/
 - Nuclear energy offers low emissions and high efficiency but faces challenges like accidents, waste management, and high costs. While it can reduce fossil fuel dependency, safety, proliferation, and long-term viability concerns remain.
- Mathis, J. (2023). The pros and cons of nuclear power. The Week. Retrieved from https://theweek.com/climate-change/1013907/the-pros-and-cons-of-nuclear-power
 - Nuclear power is a double-edged sword, offering emissions-free energy and energy security but posing challenges like waste management, high costs, and safety risks.
- Moses, M. (2020). What are the advantages of nuclear energy? EDF Energy. Retrieved from https://www.edfenergy.com/energywise/what-are-advantages-nuclear-energy
 - Nuclear energy is a low-carbon, reliable, and efficient solution. It provides a stable power supply, is highly efficient, and has a long operational life.
- Smith, J. (n.d.). The pros and cons of nuclear energy in 2025. Solar Reviews. Edited by Catherine Lane. Retrieved from https://www.solarreviews.com/blog/nuclear-energy-pros-and-cons
 - Nuclear energy offers low-cost, reliable power with zero-carbon emissions, but it comes with environmental concerns, water usage, and the risk of accidents.
- The Conversation. (2021). How to make up your mind about the pros and cons of nuclear power. Retrieved from https://theconversation.com/how-to-make-up-your-mind-about-the-pros-and-cons-of-nuclear-power-172474
 - Nuclear power offers low carbon emissions and reliable energy, but concerns remain about accidents, waste disposal, and high initial costs.
- Unwin, J. (2019). *Nuclear power: The pros and cons of the energy source*. Power Technology. Retrieved from https://www.power-technology.com/features/nuclear-power-pros-cons/
 - Nuclear power offers low carbon emissions and reliable energy, but risks nuclear accidents and waste disposal. High initial costs and long-term storage challenges must be considered.
- U.S. Department of Energy. (2024). Advantages and challenges of nuclear energy. Retrieved from https://www.energy.gov/ne/articles/advantages-and-challenges-nuclear-energy
 - Nuclear energy is a clean and reliable source of power, but faces challenges such as public perception, used fuel management, and high construction and operating costs.
- X-Energy. (2023). The advantages of nuclear energy. Retrieved from https://x-energy.com/blog-all/investing-in-our-planet-earth-day-and-beyond-2sz9p
 - Nuclear energy is highlighted as a clean, safe, and reliable solution. Advanced nuclear technologies, like small modular reactors, offer benefits such as reduced water usage, enhanced safety, and cost-effectiveness.

Theme 3: Advanced Nuclear Technologies (e.g., Small Modular Reactors, HALEU)

This theme focuses on emerging nuclear technologies, such as small modular reactors (SMRs) and high-assay low-enriched uranium (HALEU).

- Kanost, T., & Lawrence, B. (2022). Without a plant currently operating in Iowa, does nuclear energy have a future in the state?. We Are Iowa. Retrieved from https://www.weareiowa.com/article/tech/science/climate-change/nuclear-energy-in-iowa-future-developments-midamerican/524-aaed2ac4-7c3b-406a-a84b-c6e356b181ee
 - MidAmerican Energy's Wind PRIME project explores nuclear energy, specifically small modular reactors (SMRs), to achieve net-zero emissions. While SMRs offer potential benefits, safety, cost, and waste management concerns remain.
- Liou, J. (2023). What are small modular reactors (SMRs)? International Atomic Energy Agency. Retrieved from https://www.iaea.org/newscenter/news/what-are-small-modular-reactors-smrs
 - Small Modular Reactors (SMRs) are compact, factory-built nuclear reactors with a power capacity of up to 300 MW(e). They
 offer advantages like flexible siting, cost-effectiveness, and enhanced safety, making them suitable for various applications and
 locations.
- U.S. Department of Energy. (n.d.). Advanced Small Modular Reactors (SMRs) Retrieved from https://www.energy.gov/ne/advanced-small-modular-reactors-smrs
 - Advanced Small Modular Reactors (SMRs) offer versatility, safety, and economic benefits, with government support and funding opportunities for their development.
- U.S. Department of Energy. (2024). What is high assay low enriched uranium (HALEU)? Retrieved from https://www.energy.gov/ne/articles/what-high-assay-low-enriched-uranium-haleu
 - High-Assay Low-Enriched Uranium (HALEU) is essential for advanced nuclear reactors, and the DOE is exploring production
 methods to meet the growing domestic demand. The Piketon Demonstration Project and HALEU Availability Program aim to
 ensure a domestic supply chain for HALEU.
- U.S. Department of Energy. (2024). NRC dockets construction permit application for TerraPower's Natrium reactor. Retrieved from https://www.energy.gov/ne/articles/nrc-dockets-construction-permit-application-terrapowers-natrium-reactor
 - The NRC accepted TerraPower's application for a sodium-cooled fast reactor in Wyoming, marking the first time in over 40 years. The project aims to demonstrate advanced reactor technology and support clean energy.

Theme 4: Policy, Regulation, and Deployment

This theme addresses governmental policies, regulatory frameworks, and efforts to deploy nuclear energy.

- The U.S. Department of Energy and the NRC are collaborating to accelerate the deployment of advanced nuclear technologies. This partnership will streamline the licensing process, provide information sharing, and enable faster commercialization of these technologies.
- Nuclear Regulatory Commission. (n.d.). Backgrounder on nuclear power plant licensing process. Retrieved from https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/licensing-process-fs.html
 - The Nuclear Regulatory Commission (NRC) oversees the licensing process for nuclear power plants in the United States, which
 involves a two-step process, combined license, early site permits, and design certification. The NRC ensures compliance with
 regulations for public health, safety, and environmental protection throughout the plant's lifetime.
- Nuclear Regulatory Commission. (n.d.). Office of Nuclear Material Safety and Safeguards. Retrieved from https://scp.nrc.gov/
 - The Office of Nuclear Material Safety and Safeguards (NMSS) within the Nuclear Regulatory Commission (NRC) manages communication and relationships with various government entities. NMSS also oversees key programs like the Agreement State Program and Tribal Liaison Program, providing resources and support.
- U.S. Department of Energy. (2024). Newly signed bill will boost nuclear reactor deployment in the United States. Retrieved from <a href="https://www.energy.gov/ne/articles/newly-signed-bill-will-boost-nuclear-reactor-deployment-united-states#:~:text=President%20Biden%20signed%20the%20Fire,t%20seen%20since%20the%201970s
 - The ADVANCE Act, part of the Fire Grants and Safety Act, aims to revitalize the U.S. nuclear power sector by accelerating reactor deployment, supporting innovation, and ensuring a secure, clean energy future.
- White House-Biden Administration. (2024). Fact sheet: Biden-Harris administration announces new steps to bolster domestic nuclear industry and advance America's clean energy future. Retrieved from <a href="https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/05/29/fact-sheet-biden-harris-administration-announces-new-steps-to-bolster-domestic-nuclear-industry-and-advance-americas-clean-energy-future/
 - The Biden-Harris Administration announced initiatives to strengthen the domestic nuclear industry, reduce reliance on Russian uranium, and advance clean energy. These efforts aim to support a carbon-free electricity sector by 2035.

Theme 5: Nuclear Energy and Climate Change

This theme explores nuclear energy's role as a solution to climate change and its environmental implications.

- Rhodes, R. (2018). Why nuclear power must be part of the energy solution: Environmentalists and climate. Yale Environment 360. Retrieved from https://e360.yale.edu/features/why-nuclear-power-must-be-part-of-the-energy-solution-environmentalists-climate
 - Nuclear power, with its low carbon emissions and high capacity factor, is a valuable solution to climate change, despite concerns
 about accidents and waste.

Theme 6: Economics of Nuclear Power

This theme focuses on the financial aspects of nuclear energy, including costs, competitiveness, and government support.

- World Nuclear Association. (2021). *Economics of nuclear power*. Retrieved from https://world-nuclear.org/information-library/economic-aspects/economics-of-nuclear-power
 - Nuclear power is cost-competitive, especially with low fuel costs and long-term operation, despite high capital costs. Government support is crucial for financing nuclear power projects in deregulated markets.

Theme 7: Radioactive Waste Management and Disposal

This theme covers the challenges, methods, and policies related to managing and disposing of nuclear waste.

- Earth.Org. (2022). The nuclear waste disposal dilemma. Retrieved from https://earth.org/nuclear-waste-disposal/
 - Finland's Onkalo repository showcases a pioneering approach to permanent disposal, potentially setting a global standard. Critics note technical uncertainties and high costs, questioning its viability as a universal solution.
- Ewing, R. C. (2018). The steep costs of nuclear waste in the U.S. Stanford Doerr School of Sustainability. Retrieved from https://sustainability.stanford.edu/news/steep-costs-nuclear-waste-us
 - Interim storage is well-contained, but aging tanks at sites like Hanford have leaked, releasing radioactivity into the environment. Permanent disposal could save billions, yet funding and political will remain inadequate.
- International Atomic Energy Agency (IAEA). (2022). New IAEA report presents global overview of radioactive waste and spent fuel management. Retrieved from https://www.iaea.org/newscenter/news/new-iaea-report-presents-global-overview-of-radioactive-waste-and-spent-fuel-management
 - Positives include significant progress in safe interim storage and the development of deep geological repositories (DGRs), with
 Finland nearing operation of the first such facility. Negatives include prolonged storage due to delays in disposal capacity,
 increasing the need for additional facilities and raising safety concerns over time.
- Macfarlane, A., & Ewing, R. C. (2023). *Nuclear waste is piling up. Does the U.S. have a plan?* Scientific American. Retrieved from https://www.scientificamerican.com/article/nuclear-waste-is-piling-up-does-the-u-s-have-a-plan/
 - Temporary storage at reactor sites is safe for decades, but the lack of a geologic repository shifts risks to future generations. The
 authors highlight job creation potential in repository projects, though political gridlock and community opposition remain
 significant barriers.
- Nuclear Energy Agency (NEA). (n.d.). The disposal of high-level radioactive waste (Issue Brief No. 3). Retrieved from https://www.oecd-nea.org/jcms/pl 14918/issue-brief-no-3-the-disposal-of-high-level-radioactive-waste
 - DGRs provide a sustainable solution with robust isolation, supported by international cooperation. Challenges include high costs, technical uncertainties over millennia, and the need for public trust in safety assurances.
- U.S. Energy Information Administration (EIA). (2022). *Nuclear explained. Nuclear power and the environment*. Retrieved from https://www.eia.gov/energyexplained/nuclear/nuclear-power-and-the-environment.php
 - Nuclear power plants produce minimal carbon emissions, and high-level waste is initially stored safely in water pools or dry casks. However, the U.S. lacks a permanent disposal site, leaving waste at reactor sites indefinitely, posing long-term environmental and safety risks.

- U.S. Environmental Protection Agency (EPA). (2025). Radioactive waste. Retrieved from https://www.epa.gov/radtown/radioactive-waste
 - Strict regulations ensure safe handling and transport of high-level waste, minimizing immediate risks. Long-term isolation remains unresolved, with potential environmental contamination if storage fails over time.
- U.S. Government Accountability Office (GAO). (2023). Nuclear waste disposal. Retrieved from https://www.gao.gov/nuclear-waste-disposal
 - Storage facilities like the Waste Isolation Pilot Plant (WIPP) demonstrate successful disposal of transuranic waste, but high-level
 waste from commercial reactors remains stranded, costing billions in damages to utilities and lacking a clear disposal path.
- U.S. Nuclear Regulatory Commission (NRC). (2024). Backgrounder on radioactive waste. Retrieved from https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html
 - High-level waste is securely managed in robust containers, with strict regulations ensuring safety during storage. However, the
 absence of a permanent repository in the U.S. increases reliance on temporary solutions, raising concerns about aging
 infrastructure and potential leaks.
- World Nuclear Association. (2024). Storage and disposal of radioactive waste. Retrieved from https://world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-wastes/storage-and-disposal-of-radioactive-waste.aspx
 - Positives include proven technologies for interim storage (e.g., dry casks) and international consensus on deep geological disposal as a safe long-term solution. Negatives involve public resistance and the high costs of constructing DGRs, delaying implementation in many countries.
- World Nuclear Association. (2024). Radioactive waste Myths and realities. Retrieved from https://world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-waste/radioactive-wastes-myths-and-realities
 - High-level waste's radioactivity decreases significantly over time, and geological disposal is technologically feasible, offering long-term isolation. Negatives include misconceptions fueling public fear, complicating site selection and increasing costs.
- World Nuclear Waste Report. (n.d.). World Nuclear Waste Report: Focus Europe. Retrieved from https://worldnuclearwastereport.org/
 - Wet storage dominates in Europe, posing risks if pools fail, but dry storage offers safer alternatives. High costs and lack of final disposal sites increase reliance on interim solutions, shifting burdens to future generations.

INFORMATIONAL MEETINGS AND PUBLIC HEARINGS

- Zoning Commission, Information Item August 26, 2024
- Board of Adjustment, Information Item September 4, 2024
- Zoning Commission, Public Hearing September 23, 2024
- Board of Adjustment, Information Item October 7, 2024
- Zoning Commission, Information Item –November 25, 2024
- Zoning Commission, Public Hearing January 27, 2025
- Zoning Commission, Public Hearing February 24, 2025
- Board of Adjustment, Information Item March 3, 2025
- Zoning Commission, Public Hearing March 24, 2025
- Zoning Commission, Public Hearing May 28, 2025
- Zoning Commission, Public Hearing June 23, 2025

STAKEHOLDER COMMENTS

Stakeholders including other jurisdictions, government agencies, utilities, and organizations have been contacted and have been requested to comment on July 26, 2024, December 4, 2024, and January 3, 2025, February 6, 2025, March 6, 2025, June 6, 2025. The comments received are provided for review below.



WOODBURY COUNTY COMMUNITY & ECONOMIC DEVELOPMENT

July 26, 2024

Dear Woodbury County Stakeholder(s):

The Woodbury County Zoning Commission has been tasked to explore the addition of nuclear energy including modular nuclear facilities as a potential land use to the Woodbury County Zoning Ordinance.

Currently, we are requesting your insights, perspective, and input on this matter. Your participation uplay a crucial role in shaping the future zoning regulations pertaining to the potential siting of nuclear energy plants in our community. Specifically, we are seeking your comments and recommendations regarding the following a spects:

- Appropriate Locations / Zoning District Designation(s):

 Where do you believe nuclear energy facilities, including modular nuclear reactors, could be appropriately sited within the unincorporated areas of Woodbury County?

 Which zoning districts do you think would be most suitable for accommodating nuclear energy facilities (General Industrial, Agricultural Preservation, etc.)? See may included.

 Are there any specific considerations or criteria we should prioritize in these areas?

Are there any specific regulatory frameworks or best practices from other jurisdictions that you believe we should consider when updating our zoning ordinance to include nuclear energy?

Your perspective is highly valued in helping us make informed decisions that reflect the interests and concerns of all Woodbury County stakeholders involved. We aim to ensure that any changes to our zoning ordinance are comprehensive, inclusive, and aligned with both community needs and regulatory standards.

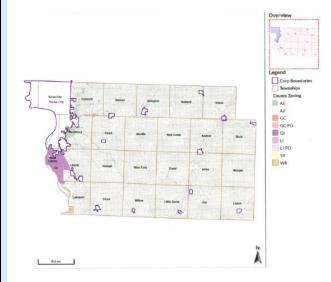
Please provide your initial feedback by August 23, 2024 before 10:00 AM. You can send your response to dpriestley@woodburycountylowa.gov, Woodbury County Planning and Zoning, 620 Douglas St., Sixth Floor, Sloux City, IA 51101 or call 712-279-6609 to discuss this matter further.

The Woodbury County Zoning Commission is in the introductory stage of this process. There will be an information / discussion agenda item at the next public meeting on Monday, August 26 at 5:00 PM at the Woodbury County Courthbours, 6:20 Douglas Street, Sloux City, IA, basement meeting area. Subsequently, public hearings and work sessions will be scheduled and announced at a future date.

Thank you in advance for your time and contribution to this important investigation. We look forward

Dutte Daniel J. Priestley, MPA Zoning Coordinator

Enclosure: Woodbury County Zoning Map





WOODBURY COUNTY COMMUNITY & ECONOMIC DEVELOPMENT

us City, IA 51101 - Phone: 712.279.6609 - rax: -12.2 56y, MPA – Zoning Coordinator - dpriestey@wor n Norton – Senior Clerk - dnorton@woodburycou

December 4, 2024

Dear Woodbury County Stakeholder(s):

The Woodbury County Zoning Commission continues its study of potentially adding nuclear energy facilities, including modular nuclear technology, as potential land uses in the Woodbury County Zoning Ordinance

As part of this ongoing effort, we are again seeking your insights, perspectives, and input on this matter. Your involvement remains vital to shaping zoning regulations that thoughtfully consider the potential siting of nuclear energy facilities within our community. Specifically, we welcome your comments and recommendations regarding the following:

- Appropriate Locations / Zoning District Designations (see enclosed map)

 Where do you believe nuclear energy facilities, including modular nuclear reactors, could be appropriately located within the unincorporated areas of Woodbury County?

 Which zoning districts (e.g., General Industrial, Agricultural Preservation) would you consider most suitable for such facilities? Please reference the enclosed map.

 Are there particular considerations or criteria we should prioritize for these areas?

Impact Assessment

What economic, environmental, or social impacts do you anticipate with the introduction of nuclear energy facilities in our community?

Regulatory Framework

atory Framework Are there regulatory frameworks, examples, or best practices from other jurisdictions you believe we should examine when updating our zoning ordinance?

We highly value your input and seek to ensure any changes to our zoning ordinance are inclusive, comprehensive, and aligned with community needs and regulatory requirements.

Please provide your feedback by January 20, 2025, at 10:00 AM. You may send your response via emait of dpriestley@woodburycountylowa.gov, by mail to Woodbury County Planning and Zoning, 620 Douglas St., Sixth Floor, Sloux City, IA 51101, or call 712-279-6609 to discuss this matter further.

The Zoning Commission will continue this exploration at public hearings starting on January 27, 2025, at 5:00 PM in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sloux City, IA.

Thank you for your continued engagement in this important matter. We look forward to hearing from you and incorporating your perspectives into this decision-making process.

Respectfully and sincerely, 2/-Daniel J. Priestlev, MPA Zoning Coordinato

Sent again on January 3, 2025 as a follow-up reminder.



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Corp Bound
Townships
County Zoning GC GC-PD GI LI LI-PD SR WR

Enclosure

COMMENTS

From: Wendi Hess

Sent: Wednesday, August 7, 2024 9:22 AM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

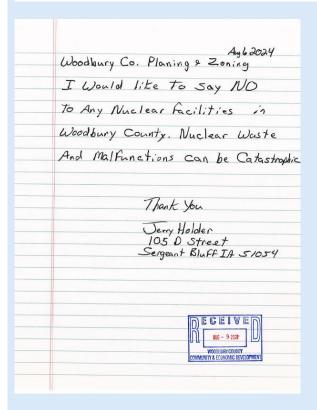
Follow Up Flag: Follow up Flag Status: Flagged

Dan: In regards to the 911 Dispatch Center- having this type of facility in our response area would potentially create a need for additional training for our staff members along with participating in regular exercises and training related to potential emergencies at the facility. For us that would become a budgetary item needing to add training funds to our annual budget for overtime, etc related to the additional training activity that would be necessary. I am not sure if there are any specific certifications that would be required by our staff.

Thanks, Wendi

Wendi Hess Communications Center Director/Accreditation Manager Woodbury County Communications PO Box 447 Sioux City, IA 51102

Office: 712-279-6268 whess@sioux-city.org



From: Bob Scott

Sent: Monday, July 29, 2024 9:44 AM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

I am all four a nuke plant in the area south of town. I am also for wind energy and solar farms. The construction of a nuclear plant would be a boon to our local economy. Nuclear plants are so highly regulated that we should not have to do much locally.

From: Mark Nahra

Sent: Friday, July 26, 2024 4:11 PM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

Follow Up Flag: Flag Status: Follow up Flagged

Dan.

I gave this some thought, but reserve the opportunity to add to these comments at a later date. See my preliminary thoughts in red.

Mark J. Nahra, P.E. Woodbury County Engineer 759 E. Frontage Road Moville, IA 51039

Phone: 712-873-3215 or 712-279-6484

Fax: 712-873-3235

Email: mnahra@woodburycountyiowa.gov

From: Daniel Priestley dpriestley@woodburycountyiowa.gov

Sent: Friday, July 26, 2024 10:16 AM

To: Daniel Priestley <dpriestley@woodburycountyiowa.gov>

Subject: Comments Requested Nuclear Energy in Woodbury County, Iowa

Importance: High

Dear Woodbury County Stakeholder(s):

The Woodbury County Zoning Commission has been tasked to explore the addition of nuclear energy including modular nuclear technology as a potential land use to the Woodbury County Zoning Ordinance.

Currently, we are requesting your insights, perspective, and input on this matter. Your participation will play a crucial role in shaping the future zoning regulations pertaining to the potential siting of nuclear energy plants in our community. Specifically, we are seeking your comments and recommendations regarding the following aspects:

Appropriate Locations / Zoning District Designation(s):

• Where do you believe nuclear energy facilities, including modular nuclear reactors, could be appropriately sited within the unincorporated areas of Woodbury County? I think the General industrial zoning areas are the best for these facilities with the exception of allowing such a facility to be located within a city's two mile jurisdictional area. Communities desiring to control their own power generation should be able to expand into the rural area from their current boundaries to their two mile jurisdictional limits. When we lived in Tipton, IA, we lived in a community with its own electric generation capacity. I don't feel the county ordinance should interfere with communities' efforts to be energy self-sufficient.

1

- Which zoning districts do you think would be most suitable for accommodating nuclear energy facilities (General Industrial, Agricultural Preservation, etc.)? See map included. General industrial plus portions of districts bordering cities as noted above.
- Are there any specific considerations or criteria we should prioritize in these areas? On site
 security should be a priority to prevent sabotage to nuclear generation plants. I am not sure
 what this looks like as I sit here today, but feel it should be noted as a consideration in
 developing site selection standards. Additional concerns may include items like standoff
 from existing/future housing, distances from water or wastewater treatment facilities, land
 drainage characteristics, offsets from highways and public properties.

Impact Assessment:

What potential impacts (economic, environmental, social) do you foresee with the
introduction of nuclear energy facilities in our community? Less costly, clean energy for
county residents and our city dwellers. I don't see a downside to allowing nuclear to develop
within the county. I think public perception of the safety of such plants will be a huge issue for
entities seeking to develop nuclear power generation.

Regulatory Framework:

Are there any specific regulatory frameworks or best practices from other jurisdictions that
you believe we should consider when updating our zoning ordinance to include nuclear
energy? Depending upon the size of the reactor and its construction needs, the county should
require a Road agreement to assure restoration of county roads damaged by nuclear plant
construction. The road agreement for wind generation can, and should be utilized, for nuclear
plant construction to assure taxpayers aren't left holding the bag for energy plant
construction.

From: Meinen, Casey (MidAmerican) < Casey.Meinen@midamerican.com>

Sent: Friday, July 26, 2024 10:33 AM

To: Daniel Priestley

Subject: RE: [INTERNET] Comments Requested Nuclear Energy in Woodbury County, Iowa

CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data.

Daniel,

I have forwarded this to company Management for their input.

Have a great weekend.

Casey Meinen

Lead, Electric Distribution Engineering

Casey.meinen@midamerican.com

Phone (712-233-4831)

MIDAMERICAN

ENERGY COMPANY

From: Bob Scott

Sent: Wednesday, December 4, 2024 4:04 PM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

Follow Up Flag: Follow up Flag Status: Flagged

I am speaking for myself but I am in favor of a small nuke plant in the area around Neal power plants. I think the investment and the long term affect on rates is worth the risk for these low level type plants. And I have a question if we annex land into the city, your zoning laws regarding solar farms cannot apply to land in the city can they?

From: Bob Scott

Sent: Friday, January 3, 2025 10:47 AM

To: Daniel Priestley

Subject: RE: Comment's Requested Nuclear Energy in Woodbury County, Iowa

Follow Up Flag: Follow up Flag Status: Flagged

Not thast the county will care what my opinion is but I would be supportive of a small nuke plant.

 From:
 Diane Swoboda Peterson

 Sent:
 Monday, January 6, 2025 9:12 AM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

Follow Up Flag: Follow up Flag Status: Flagged

No comments

Diane Swoboda Peterson Woodbury County Real Estate/Recorder Deputy 620 Douglas Street; Room 106 Sioux City, Iowa 51101 (712)279-6528 From: Kyle Gates

Sent: Thursday, January 16, 2025 3:33 PM

To: Daniel Priestley

Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

I fully support Nuclear Energy in Woodbury County and would feel quite safe with a modern reactor next door.

Items that come to mind:

- · Setbacks for perimeter security
- Returning land to previous state after future decommissioning
- Possible collocation with industries for use of low cost/free waste heat (fertilizer production for example)
- Grid resilience/redundancy via distributed locations near end users providing baseload power
- If a lower cost per kwh is attainable, there is a potential for economic development

From: ken bauer <kjbauer57@hotmail.com>
Sent: Thursday, February 6, 2025 12:41 PM

To: Daniel Priestley

Subject: Nuclear energy in Woodbury county.

Follow Up Flag: Follow up Flag Status: Flagged

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I believe nuclear energy would be very beneficial to our county. I worked at port neal for 26 years. I believe coal fired plants are second only to nuclear plants. The wind mills and solar only makes brookshirehathaway rich off tax payers back. The wind doesn't always blow and the sun doesn't always shine (especially at night). I believe it would be more economical than either and the landscape wouldn't be cluttered with old wind mills or solar panels. Ken Bauer, mayor of Correctionville.

From: Christopher Madsen

Sent: Thursday, March 6, 2025 3:09 PM

To: Daniel Priestley

Subject: RE: Nuclear Energy Public Hearing Notice – March 24, 2025: Nuclear Energy and Waste

Storage Ordinance Amendments - Your Input Needed

Follow Up Flag: Follow up Flag Status: Flagged

Good afternoon Dan,

It appears this has been updated to include nuclear waste storage which was not in the last email notice. Have you done any research on the process needed for a storage facility and other entities that would review (such as IDNR)?

If so would you send that over for us to look at?

Thanks!

Chris R. Madsen, AICP, CFM Senior Planner City of Sioux City Phone: 712.279.6341

Email: cmadsen@sioux-city.org

405 6th Street, Box 447 Sioux City IA 51102

From: Riesberg, Patty [HHS] < patty.riesberg@hhs.iowa.gov>

Sent: Thursday, March 20, 2025 1:29 PM

To: Daniel Priestley

Subject: Regulation of Nuclear Energy and Storage

Follow Up Flag: Follow up Flag Status: Flagged

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Daniel,

Good afternoon. I am the Bureau Chief for the Bureau of Radiological Health with I owa HHS. I received your inquiry below, forwarded from one of my team members, Stuart Jordan. I've included a response below to your question stated in the second paragraph. If you have any further questions, please feel free to reach out to me. Thank you.

Question: One of the questions I received from a stakeholder is how does the State of Iowa, including the Iowa DNR regulate both nuclear power plants, and the storage of nuclear waste?

All commercial nuclear power in the United States, which includes spent nuclear fuel, is regulated by the Nuclear Regulatory Commission (NRC) through a combination of regulatory requirements, licensing, inspections and enforcement activities.

Considerations for nuclear energy facilities and nuclear waste storage should involve close coordination with the NRC to ensure regulatory compliance. Iowa HHS works closely with NRC to regulate all other radioactive materials in the state of Iowa.

Iowa DNR does not play a regulatory role for nuclear power plants or the storage of waste.

From:

Janet Krueger <kruegerjs@icloud.com>

Sent:

Monday, March 24, 2025 12:47 PM

To:

Daniel Priestley

Subject:

Comments for public hearing on nuclear zoning

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Re: Public hearing on zoning for nuclear-related items - comments

Mr. Priestley

We believe ALL levels of zoning in Woodbury County should EXPRESSLY PROHIBIT any nuclear-related activities (including nuclear waste disposal). That way, if any entity wants to perform nuclear-related activities in the county, they would need to propose zoning changes that allow the public to weigh in on a particular usage. We do NOT want nuclear-related activities to "slip in" before they are expressly prohibited in our zoning ordinances.

Sincerely, Janet Krueger Randy Krueger 4862 Bradford Lane Sioux City, IA 51106

Sent from my iPhone

 From:
 Rick Plathe <rplathe@ibew231.com>

 Sent:
 Tuesday, April 1, 2025 10:27 AM

To: Daniel Priestley

Subject: Support Letter Northwest Iowa Building Trades
Attachments: NWIA Bulding Trades Zoning Letter.docx

Follow Up Flag: Follow up Flag Status: Flagged

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Dan

Please see the attached letter of support form all Unions affiliated with Northwest Iowa Building Trades for the rezoning of industrial land in Woodbury County to add Nuclear language. Please reach out of me if you have any questions or concerns.

Thanks Rick Plathe

--

Business Manager IBEW Local 231 5001 Harbor Drive Sioux City, Ia 51111 (712) 255-8138



Craig Levine 712-202-3100 President clevine@ibew231.com

712-294-4365

Spenser Yockey Vice President spencer@local234.org

Jose Montes 712-420-7680

Recording Secretary jmontes@iwlocal21.com

Craig Levine - President PO Box 1051 Sioux City, IA, 51101 clevine@ibew231.com

(712) 202-3100

March 14, 2025

Dan Priestley

Zoning Coordinator Office of Community & Economic Development 6220 Douglas St. Floor 6 Sioux City, IA 51101

Dear Sioux City Zoning Commission,

I hope this letter finds you well. I am writing to show our support for an important initiative in our community—the rezoning of industrial space to allow for nuclear energy production. As energy demands continue to rise and the need for a cleaner, more sustainable source of power becomes increasingly urgent, it is essential that we explore all viable options for securing our energy future. Nuclear energy, with its proven track record of providing reliable, low-carbon electricity, is a critical component of this transition.

Currently, many industrial areas are underutilized, and repurposing these spaces for nuclear energy production, including small modular reactors, presents an opportunity to drive economic growth, create jobs, and contribute to a greener energy portfolio in Woodbury County. By rezoning these areas, we can ensure that nuclear energy can be integrated into our community in a safe, environmentally responsible manner.

The benefits of nuclear energy extend far beyond just providing a reliable energy source. It can help us reduce our carbon footprint and mitigate the impacts of climate change, all while strengthening local economies through job creation, technological innovation, and new infrastructure development. Furthermore, by supporting this initiative, we would be aligning ourselves with forward-thinking policies that prioritize sustainable energy solutions for future generations.

We believe that our organization's influence and commitment to [community/environmental issues/sustainable growth/innovation] would be a powerful voice in advocating for this rezoning initiative. With your support, we can help ensure that the benefits of nuclear energy are realized while addressing our community's needs for economic development, energy security, and environmental responsibility.

I kindly ask for you to record our endorsement of this effort and would be happy to discuss the details further at your convenience. Together, we can take meaningful steps toward a cleaner, more sustainable energy future for our community.

Thank you for your time and consideration. I look forward to the possibility of working together to make this initiative a reality.

Sincerely,

Craig Levine - President, Northwest Iowa Building Trades

Rick Plathe - Business Manager, IBEW Local 231

Jose Montes - Business Representative, Iron Workers Local 21

John Hanson - Business Manager, Heat and Frost Insulators Local 39

Dean Bradham - Organizer, Plumber and Steamfitters UA Local 33

Spencer Yockey – Business Representative, Operating Engineers Local 234

Terry Victor - Business Representative, SMART local 3

Bob Briley - Business Manager, Bricklayers Local 3

Tom Dye – Vice President, Boilermakers Local 83

From: Craig A NDERSON < craignan@msn.com >

Sent: Friday, May 2, 2025 2:14 PM

To: Daniel Priestley

Subject: Re: Comments Requested Nuclear Energy Facilities and Nuclear Waste Storage

Follow Up Flag: Follow up Flag Status: Flagged

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From: Daniel Priestley <dpriestley@woodburycountyiowa.gov>

Sent: Friday, May 2, 2025 12:49 PM

To: Daniel Priestley <dpriestley@woodburycountyiowa.gov>

Subject: Comments Requested Nuclear Energy Facilities and Nuclear Waste Storage

Dear Woodbury County Stakeholders,

The Woodbury County Zoning Commission is continuing its review of nuclear energy facilities and nuclear waste storage, considering the potential addition of these uses to the Woodbury County Zoning Ordinance as conditional uses, specifically in areas zoned as General Industrial (GI) – (see map below). The next public hearing will be on Wednesday, May 28 at 5:00 PM in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, Iowa.

We value your continued input as we evaluate nuclear energy facilities and nuclear waste storage (see draft definitions below). To help us better understand your perspectives and concerns, we kindly request your feedback by responding to the following questions on or before Friday, May 23, 2025 before 10:00 AM CDT.

- 1. What specific concerns, if any, do you have regarding the safety of nuclear energy facilities or nuclear waste storage in the unincorporated areas of Woodbury County, and how do you believe these concerns could be addressed through the conditional use process? While I believe the nuclear energy and nuclear waste facilities are safe; when something goes wrong it is a very serious situation. It is very much "a not in my backyard" issue. I am not sure that the BoA, as a board of appointed citizens, have the expertise or experience or the desire to be the ones that make the conditions that satisfy all the safety concerns.
- 2. What potential impacts, positive or negative, do you foresee on surrounding agricultural, residential, or commercial areas if nuclear facilities and nuclear waste storage are permitted in the GI Zoning District? The positive impacts are economic; it will provide clean energy and jobs. The negative; no one wants to be the neighbor. Safety issues are high on the list of negatives. Even in the GI district; I think most of the agricultural, residential, and commercial neighbors would rather have something else. The thought of a nuclear energy mishap would have a negative effect on residential and commercial expansion.
- How do you view the balance between energy solutions and preserving Woodbury County's
 agricultural and environmental priorities? Are there specific safeguards you would recommend to

maintain this balance? I think in Iowa land use should tip in favor of agricultural. Prime farmland should be preserved. Many of the so-called clean energy sources would fail without the tax credit incentives. Looking at the reactions of the citizens of this area to wind energy and the carbon pipeline, I would think that the majority would not want this industry in the county.

4. Do you have any additional comments, concerns, suggestions, or questions about nuclear energy facilities or nuclear waste storage?

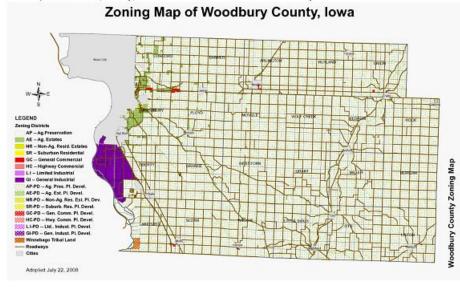
Please submit your responses by **Friday, May 23, 2025 before 10:00 AM CDT to**dpriestley@woodburycountyiowa.gov. Your feedback will be shared with the Woodbury County Zoning Commission and Board of Supervisors to inform their decision-making process.

Thank you for your time and engagement in shaping the future of Woodbury County.

DRAFT DEFINITIONS:

"Nuclear energy facility" means any facility designed or used for the generation of electricity or power through nuclear fission or fusion, including nuclear reactors and associated structures, systems, or components necessary for the production of atomic energy, as well as the handling, processing, or temporary storage of nuclear materials or byproduct materials, all in compliance with federal and state regulatory requirements as administered by the Nuclear Regulatory Commission (NRC) or its duly authorized representatives.

"Nuclear waste storage" means any facility, structure, or area designated and engineered for the safe containment, isolation, or disposal of byproduct material, special nuclear material, or other radioactive materials generated from nuclear energy facilities, including temporary or permanent storage solutions, provided such storage complies with federal regulations under 10 CFR Part 50 and related parts, and is subject to oversight by the Nuclear Regulatory Commission (NRC) to protect public health, safety, and the common defense and security.



Sincerely,

Daniel J. Priestley, MPA Woodbury County Zoning Coordinator 620 Douglas Street #609 Sioux City, IA 51101

Phone: 712-279-6609 Fax: 712-279-6530

Website: WoodburyCountylowa.gov

× Manual

Virus-free.www.avq.com

From: Bryan Bergeon < Bryan.Bergeon@nrc.gov>

Sent: Monday, May 5, 2025 10:39 AM

To: Daniel Priestley

Subject: RE: Nuclear Energy Woodbury County Zoning

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Hi Daniel.

The NRC is a Regulator of civilian use of nuclear materials and does not advocate for the use thereof. There is a definitive line between what the NRC does and what other agencies do, like Department of Energy. The NRC's Principals of Good Regulation starts with independence. This means the NRC is not a consulting organization - individual applicants must offer proposed design-specific methods or design changes to meet the NRC's regulations. The NRC-approved methods by which an applicant can meet the regulations are published in regulatory guides, interim staff guidance, and (in limited cases) NUREGs. Applicants may ask whether a design component or design-specific method meets the regulations in various ways, such as utilizing public meetings and submitting white papers for review. The NRC's response will be publicly available unless the underlying information is protected due to proprietary or other sensitive aspects governed by the regulations in 10 CFR 2.390. (See more on this: https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info/independent-regulator.html)

The NRC's **Mission** is to protect public health and safety and advances the nation's common defense and security by enabling the safe and secure use and deployment of civilian nuclear energy technologies and radioactive materials through efficient and reliable licensing, oversight, and regulation for the benefit of society and the environment. The **NRC's regulatory mission covers three main areas:**

Reactors – Commercial reactors for generating electric power and research and test reactors used for research, testing, and training

Materials – Uses of nuclear materials in medical, industrial, and academic settings and facilities that produce nuclear fuel

Waste – Transportation, storage, and disposal of nuclear materials and waste, and decommissioning of nuclear facilities from service

The NRC accomplishes the mission through **Laws and Regulation.** New nuclear reactor licensing is a complex, multi-year process governed by both federal laws passed by the U.S. Congress and regulations developed by the NRC. The <u>Federal laws governing the NRC</u> generally have high-level directives for the civilian use of nuclear materials. The finer details of reactor licensing and other civilian uses are found in <u>Title 10 of the Code of Federal Regulations</u> (10 CFR). The NRC develops and issues these regulations for all areas under its jurisdiction. All U.S. civilian uses of materials must comply with federal laws and the regulations in 10 CFR. (See more on this: https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info/law-reg.html)

The Nuclear Regulatory Commission (NRC) "New Applicant" web page: (https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info.html) is the starting point for prospective applicants. Prospective applicants should come to the NRC with a specific reactor technology, license class, regulatory approach, business model (to help correctly guide the licensing process), and a project timeline. With this information, the prospective applicant should file a letter of intent (i.e. a design). https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-guidance/pre-app-process.html. From there, the NRC assigns a lead project manager after a potential applicant begins engaging with the agency; this person will be the main point of contact between the NRC and applicant. The project manager will guide the applicant through the regulatory process and will be there to answer questions, organize meetings, and facilitate all communications with other NRC staff. (See more on this: https://www.nrc.gov/reactors/new-reactors/advanced/new-app/general-info/comms.html)

The **Department of Energy's Office of Nuclear Energy** mission is to promote the domestic use of nuclear energy and supports advanced reactor developers. The DOE has a **Gateway for Accelerated Innovation in Nuclear (GAIN)**. https://gain.inl.gov/industry-support/regulatory-support/regulatory-route-to-deployment/. This helps applicants understand the current U.S. regulatory framework for commercial reactors. The series also facilitates nuclear industry efforts to identify and address regulatory uncertainties and associated deployment risks (technical, financial, schedule). Essentially, the DOE is who will advocate for and help potential licensees pursue projects, including even potential funding thereof.

The NRC also regulates waste storage. Low-Level waste includes items that have become contaminated with radioactive material or have become radioactive through exposure to neutron radiation and is typically stored on-site until it can be disposed of or until amounts are large enough to ship to low-level waste processing centers. High-level wastes are highly radioactive materials produced as a byproduct of the reactions that occur inside nuclear reactors; spent reactor fuel and waste materials remaining after spent fuel is processed. Commercial reprocessing is currently not practiced in the United States, although it has been allowed in the past. The NRC regulates high level wastes in spent fuel pools and dry cask storage, at independent spent fuel storage installations (ISFSI) and consolidated interim storage facilities (CISF). Note, these CISF's at different than permanent storage facilities such as Yucca Mountain, which is under DOE jurisdiction. The DOE, Office of Spent Fuel and High-Level Waste Disposition and its three subprogram offices: the Office of Disposal R&D, the Office of Storage & Transportation, and the Office of Consent-Based Siting, are developing an Integrated Waste Management system for storage, transportation, and disposal of spent nuclear fuel and high-level radioactive waste. Learn more. The DOE Waste Isolation Pilot Plant (WIPP) is the nation's only deep geologic long-lived radioactive waste repository. Located 26 miles southeast of Carlsbad, New Mexico, WIPP permanently isolates defense-generated transuranic (TRU) waste 2,150 feet underground in an ancient salt formation. (See more on this: https://wipp.energy.gov/wipp-site.asp and https://www.energy.gov/ne/office-spent-fuel-and-highlevel-waste-disposition).

With regards to nuclear materials (not including nuclear waste, as discussed above), the NRC essentially turns its jurisdiction over to the states, via a program called the **Agreement State Program https://www.nrc.gov/agreement-states.html**. NRC provides assistance to States expressing interest in establishing programs to assume NRC regulatory authority. The NRC relinquishes to the States portions of its regulatory authority to license and regulate byproduct materials (radioisotopes); source materials (uranium and thorium); and certain quantities of special nuclear materials. Iowa, for example, is an agreement state with respect to nuclear materials.

Bryan Bergeon
Acting Region III Government Liaison Officer
U.S. Nuclear Regulatory Commission
Bryan.bergeon@nrc.gov
630-829-9719 (w)
240-704-5879 (c)

From: Daniel Priestley <dpriestley@woodburycountyiowa.gov>

Sent: Monday, April 28, 2025 10:53 AM

To: Bryan Bergeon < Bryan.Bergeon@nrc.gov>

Subject: [External_Sender] Nuclear Energy Woodbury County Zoning

Mr. Bergeon,

This message is a follow up from our March 25 conversation regarding nuclear energy and county level permitting as Woodbury County, Iowa is currently examining nuclear energy as a potential land use.

As noted in our conversation, we are interested in the various aspects of the NRC permitting process, including nuclear types, definitions, and potential permitting scenarios. At this time, I wanted to check and see if you have additional information that we can include in our upcoming meetings not limited to nuclear definitions and types of nuclear. Additionally, we would like more details about the relationship between federal, state, and local government

bodies as it pertains to nuclear permitting. It was my understanding that some resources would be made available to us.

Thank you for your assistance with this matter.

Respectfully and sincerely,

Daniel J. Priestley, MPA Woodbury County Zoning Coordinator 620 Douglas Street #609 Sioux City, IA 51101

Phone: 712-279-6609 Fax: 712-279-6530

Website: WoodburyCountylowa.gov

From: Meinen, Casey (MidAmerican) < Casey.Meinen@midamerican.com>

Sent: Monday, June 9, 2025 8:01 AM

To: Daniel Priestley

Subject: RE: [INTERNET] Comments Requested Accessory Dwelling Units and Nuclear Energy (Zoning

Commission, June 23 at 5:00 PM)

Follow Up Flag: Follow up Flag Status: Flagged

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Dan.

I have reviewed the following proposed zoning amendments for MEC electric and we have; no conflicts.

Psychology is more contagious than the flu.

Casey Meinen Lead, Electric Distribution Engineering

Casey.meinen@midamerican.com





BOARD OF SUPERVISORS' DIRECTION WOODBURY COUNTY BOARD OF SUPERVISORS AGENDA ITEM(S) REQUEST FORM Date: 6/27/24 Weekly Agenda Date: 7/2/24 ELECTED OFFICIAL / DEPARTMENT HEAD / CITIZEN: Supervisor Keith Radig WORDING FOR AGENDA ITEM: Motion to direct the Zoning Commission to look at the zoning of nuclear energy. ACTION REQUIRED: Approve Ordinance Approve Resolution Approve Motion M Public Hearing Other: Informational [] Attachments EXECUTIVE SUMMARY This directs the Zoning Commission to look at the zoning of nuclear energy as a potential energy option in Woodbury County. BACKGROUND: The Zoning Commission shall explore the zoning potential of nuclear energy as a potential option. FINANCIAL IMPACT: 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: Approve the motion. ACTION REQUIRED / PROPOSED MOTION: Motion to direct the Zoning Commission to look at the zoning of nuclear energy,

Public Hearing Public Notifications in Newspapers:

Approved by Board of Supervisors April 5, 2016.

Danbury Review – 9/18/24, 1/8/25, 2/12/25, 3/12/25, 5/14/25, 6/11/25

Moville Record – 9/18/24, 1/9/25, 2/12/25, 3/13/25, 5/15/25, 6/12/25

Sergeant Bluff Advocate – 9/12/24, 1/9/25, 1/12/25, 3/13/25, 5/15/25, 6/12/25

Sioux City Journal – 9/12/24, 1/11/25, 2/11/25, 3/13/25, 5/13/25, 6/12/25

ADDITIONAL COMMENTS RECEIVED

From:

Tambrey Groves <tambrey.groves@gmail.com>

Sent:

Thursday, July 17, 2025 3:09 PM

To: Subject: Daniel Priestley Nuclear re-zoning

Follow Up Flag:

Follow up

Flag Status:

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Mr. Priestly,

While I am unable to take time off of work to come look at the proposed zoning changes, nor will I be able to attend a meeting, since they are geld during normal working hours, I am sending an email to voice my concerns about any zoning changes to be made near my home.

We moved to our property south of Sloan a year ago. We love the peace and quiet, snd just want to raise our chickens and grow our own food...and not need to worry about nuclear waste or explosions! If anything is proposed to be near our sleepy little town, I ask that you reconsider. We don't want or need it this close to home.

Thank you

Sincerely. Tambrey & David Groves 2073 2073 340th St Sloan, IA

Daniel Priestley From: Tambrey Groves <tambrey.groves@gmail.com> Sent: Thursday, July 17, 2025 5:11 PM Daniel Priestley To: Cc: Karen James Subject: Re: Nuclear re-zoning CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data. Thank you for your fast reply! I did also think after I sent my email, that I have a beautiful view from all of our windows and decks, and I dont want that ruined with having to look at a nuclear plant. We took a year to find our perfect retirement homestead, and just want to live out our days in peace and quiet, with lovely views. Thanks again! Tambrey & David Groves On Thu, Jul 17, 2025, 3:54 PM Daniel Priestley dpriestley@woodburycountyiowa.gov wrote: Dear Tambrey and David Groves, Thank you for taking the time to email us and express your concerns regarding the proposed zoning ordinance text amendments concerning nuclear energy facilities and nuclear waste storage. We have received your comments and appreciate you sharing your thoughts with us. We understand that attending meetings during working hours can be challenging, and we appreciate your willingness to participate in the process through written comments. Your input is valuable to us and will be included in the record. Thank you again for your email. If you have any further comments or concerns, please do not hesitate to reach out to us. Respectfully and sincerely, Daniel J. Priestley, MPA

Woodbury County Zoning Coordinator

620 Douglas Street #609

| Sioux City, IA 51101 |
|--|
| Phone: 712-279-6609 |
| Fax: 712-279-6530 |
| Website: WoodburyCountylowa.gov |
| From: Tambrey Groves < tambrey.groves@gmail.com > Sent: Thursday, July 17, 2025 3:09 PM To: Daniel Priestley < dpriestley@woodburycountyiowa.gov > Subject: Nuclear re-zoning |
| CAUTION: This email originated from OUTSIDE of the organization. Please verify the sender and use caution if the message contains any attachments, links, or requests for information as this person may NOT be who they claim. If you are asked for your username and password, please call WCICC and DO NOT ENTER any data. |
| Mr. Priestly, |
| While I am unable to take time off of work to come look at the proposed zoning changes, nor will I be able to attend a meeting, since they are geld during normal working hours, I am sending an email to voice my concerns about any zoning changes to be made near my home. |
| We moved to our property south of Sloan a year ago. We love the peace and quiet, snd just want to raise our chickens and grow our own foodand not need to worry about nuclear waste or explosions! If anything is proposed to be near our sleepy little town, I ask that you reconsider. We dont want or need it this close to home. |
| Thank you |
| |
| Sincerely. |
| Tambrey & David Groves |
| 2073 <u>2073 340th St</u> |
| Sloan, IA |



Email from the Woodbury County Website

Name: Suzy Turnquist

Email: Sturng@yahoo.com

Comments:

So I saw on the news where you were considering a nuclear waste dump? In an area that grows a lot of food? I would hate to see this happen. With trumps tariffs on veggies from other down south, maybe we should consider using land to build large greenhouses and grow healthy food in the Midwest year around. And look for cleaner sources of electricity. Europeans are doing things with solar roads. Sioux City is worth so much more than a place to be a dumping ground for nuclear waste that no one knows what to do with. Let's be a great example. Not a dumping ground. Thank you for all you do.

This form was submitted via the Woodbury County website at 7:05 am on July 22, 2025.

My name is Riley Galvin. I am 26 yrs old, I am a member of the Omaha Tribe but I am also Hochunk from the Winnebago Tribe, I've lived on the reservation/Sioux city area my whole life. I am writing this letter to address the concerns I have for this nuclear plant. I am concerned about this being built because of the radiation that gets release into the air that can contaminate our water, land, and air. As a spiritual person, these things that we get from Mother Earth are sacred and we need to take care of them. I have a son and family I am worried about, especially for the future. I am worried about nuclear accidents/nuclear waste, which materials can still remain dangerous and radioactive for thousands of years! That should be the main reason why this plant does not get built, on top of that, what about the costs of building something like this? I know it's not cheap and from my understanding they only last about 40-50 years. IS IT EVEN WORTH IT? I'm not interested in the "pros" that nuclear reactors do, I am worried about health and safety of human beings if something goes left and radiation is exposed to the public – which will have long lasting effects such as cancer and death. Accidents happen all the time – why not prevent something horrible from happening? Even if it may not affect you directly. Think about your families, children, and grandchildren.

WINNEBAGO TRIBE OF NEBRASKA

P.O. Box 687 * Winnebago, Nebraska 68071 * PH: 402-878-2272 * Fax: 402-878-2963

Visit us at: www.winnebagotribe.com

September 23, 2024

Chairperson Matthew Ung Woodbury County Board of Supervisors 620 Douglas St. Sioux City, IA 51101

RE: Woodbury County Zoning Land for Nuclear Power Usage

Dear Chairperson Ung,

On behalf of the Winnebago Tribe ("Tribe"), I write to express our concerns regarding the recent decision of the Woodbury County Board of Supervisors to explore the possibility of zoning land in Woodbury County (the "County") as appropriate for nuclear power usage. The Tribe is concerned, at the outset, that any expansion of nuclear power upriver and adjacent to the Tribe's lands is a risk to the health and well-being of the Winnebago people and their neighbors in Woodbury County and the surrounding area.

As you know, the Winnebago Reservation is located in Northeast Nebraska and Northwest Iowa, with land and significant assets within or near the boundaries of Woodbury County. The Missouri River runs through the Winnebago Reservation lands and along great portions of Woodbury County. With the return of land to the Tribe through congressional action, the land and water of the Tribe in Woodbury County has recently increased. The sanctity of the Missouri River water is of considerable cultural and religious concern for many of our citizens and the purity of our land is crucial to our continued cultural and economic survival. While I hope you will engage with the Tribe in future discussions as to the potential uses of land and water resources, the Tribe nevertheless remains concerned that the County would consider such a path as inviting the hazards of a nuclear power plant to pollute and endanger our communities.

Nuclear Power Plants are a Danger Not Worthy of Consideration

The Nuclear Power Industry is so dangerous that it does not believe in the safety of its own constructions. In 2024, the Biden administration and Congress extended the limitations on liability found in the Price-Anderson Act (Atomic Energy Act) for nuclear power providers to 2065. These limitations would force the taxpayers to pay for the costs of a catastrophic nuclear event, shielding the companies from full financial liability. If the nuclear industry were as safe as they claim, there would be no need for such financial incentives to promote the construction of such a dangerous source of power.

These dangers include a meltdown, the release of nuclear materials, vulnerability to cyber-attacks, and the creation of a potential target for sabotage and terrorism. There is still no solution to the problem of accumulating nuclear waste and waste stored at sites invariably leaks into the environment. Elevated radiation levels in the environment are particularly harmful to children, increasing the chances of cancer. Construction of nuclear plants invariably goes over

Woodbury County Board of Supervisors September 23, 2024 Page 2

budget, usually by more than a billion dollars. Renewable options are safe and can be brought online more quickly and inexpensively. With new untested models being promoted by the nuclear industry, the already high risk of an early accident in the commissioning of a nuclear power plant increases significantly. Decommissioning a nuclear plant is dangerous and expensive, and not commonly considered in the true costs of energy (making the power generated more expensive than other sources of power). Further, the inflexible necessities of nuclear power management monopolize power grids, preventing the expansion of more flexible renewable power sources into the same energy grid.

The Tribe must object to the very notion of bringing such an unsupportable risk to our communities. Nuclear power plants will inevitably pollute the land and water of both our communities, as well as tie up resources that could be better spent on developing and implementing renewable energy sources that would benefit all. The cost, both financially and environmentally, is not worth it when there are viable, safer, less expensive alternatives.

As we have only recently become aware of the County's plans to explore nuclear power options, our concerns and comments here are initial and cursory. As our departments have more time to consider this matter, we may have more and more detailed concerns, but the central concern of the Tribe is the potential dangers of a nuclear leak, spill, long-term storage of radioactive waste, catastrophic accidents, and the monopolization of the power grid in such a way that safer, cleaner, alternative will be locked out.

Conclusion

Thank you for taking this time to consider the Tribe's position on this matter of such importance to both our peoples. We hope our comments are taken in the constructive manner in which they are offered. The Winnebago Tribe hopes your government will reject any proposal to develop or expand nuclear power facilities in our backyard, and not take action to invite such activity.

Respectfully,

Victoria Kitcheyan, Chairwoman Winnebago Tribe of Nebraska

CC: Daniel Bittinger II, Vice Chairperson Mark Nelson, Supervisor Keith Radig, Supervisor Jeremy Taylor, Supervisor

WINNEBAGO TRIBE OF NEBRASKA

P.O. Box 687 * Winnebago, Nebraska 68071 * PH: 402-878-2272 * Fax: 402-878-2963

Visit us at: www.winnebagotribe.com

July 22, 2025

Woodbury County Board of Supervisors
Woodbury County Community and Economic Development
Attn: Daniel Priestley
Woodbury County Courthouse, 6th Floor
620 Douglas St.
Sioux City, IA 51101
dpriestley@woodburycountyiowa.gov

RE: Winnebago Tribe Comments on the Woodbury County Nuclear Power Usage Zoning Ordinance Update

Dear Board of Supervisors and Mr. Priestly:

The Winnebago Tribe is deeply concerned that Woodbury County is moving forward with proposed zoning changes that will permit future consideration of nuclear facilities. This action will impact the health, wellbeing, and federally protected water rights of the Winnebago Tribe. The Tribe previously expressed its interest and concerns in this matter in a letter to the Woodbury County Board on September 23, 2024. We would like that letter and these additional comments to be included and reviewed as public comments received. The Winnebago Tribe has land that is intimately connected to Woodbury County and has significant interest in any activity that may affect our tribal citizens. We request that the Tribe be included in all future communications to area governmental stakeholders and consulted in any decisions that might in any way impact the Winnebago people, lands, waters, and interests in surrounding communities.

We understand the proposed zoning changes will potentially pave the way for nuclear development in Woodbury County. Such development will necessarily endanger the surrounding communities, water resources and critical cultural and environmental resources - harming more than just the Winnebago people. Nuclear power and waste storage will not provide sustainable economic development and will harm efforts to produce diverse renewable power options that are readily available today. The Winnebago Tribe opposes any such development.

1. Background

Woodbury County has been considering the changes clarifying nuclear use zoning since early 2024 and the Winnebago Tribe learned of these considerations through press reports. In September 2024, the Tribe sent a letter to the Woodbury County Board of Supervisors, expressing the Tribe's interest and objection in the matter. The 1865 Treaty that established the Winnebago Reservation, by implication, secured rights and interests in the waters of the Missouri River sufficient to maintain the reservation. The Winnebago Reservation is located in Northeast Nebraska and Northwest Iowa, with land and significant financial assets within or near the boundaries of Woodbury County. The Missouri River runs through the Winnebago Reservation

lands and runs along great portions of Woodbury County. With the recent return of land illegally taken by the Army Corps of Engineers, the local interests of the Tribe have only increased.

The sanctity of the Missouri River water is of considerable cultural and religious concern for many of our citizens and the purity of our land is crucial to our continued cultural and economic survival. As the same underground water source runs throughout the region, a spill, leak, or other nuclear accident jeopardizes the safety of the water supply for all communities across Nebraska. The proposed changes could potentially permit nuclear facilities within FEMA floodplains, with a dangerous proximity to the Missouri River, and overlapping with endangered species' habitats. The risks of nuclear facilities to traditional use areas elevate the environmental and cultural risks beyond typical industrial projects. Historical nuclear incidents—combined with climate-driven flooding trends—reinforce the need for thorough scrutiny, public accountability, and tribal consultation. For these reasons, and those more detailed below, the Winnebago Tribe prefers zoning ordinance changes to forestall the development of any nuclear programs, whether power generation, waste storage, or other.

2. Why This Matters to the Winnebago Tribe

- The Woodbury Country is adjacent tribal lands and the Missouri River, which is sacred and vital to tribal culture, water supply, and environmental stewardship.
- Cultural & Biodiversity Impacts: Winnebago views flora and fauna (e.g., sturgeon, migratory birds) as integral to ancestral and cultural heritage, and their loss threatens ecological and cultural continuity.
- The Tribe has long opposed industrial development that could jeopardize drinking water, traditional lifeways, or floodplain resilience.
- Environmental risks from past nuclear accidents (e.g., Fukushima, Chernobyl, Three Mile Island) show the need for caution.

3. Key Political Concerns Identified

- Despite the Winnebago Tribe writing directly to the Chair of the Board of Supervisors (September 23, 2024), the Board has neglected to provide notice to or engage in any discussion with representatives of the Winnebago government.
- The 1865 Treaty that established the Winnebago Reservation, by implication, secured rights and interests in the waters of the Missouri River sufficient to maintain the reservation.
- Drawing away or polluting the waters of the Missouri River directly threatens protected treaty rights to water belonging to the Winnebago people.
- The Nuclear Power Industry is so dangerous that it does not believe in the safety of its own constructions and lobbies for limitations on liability for their own accidents.
- In 2024, the Biden administration and Congress extended the limitations on liability found in the Price-Anderson Act (Atomic Energy Act) for nuclear power providers to 2065.

- These limitations would force the taxpayers to pay for the costs of a catastrophic nuclear event, shielding the companies from full financial liability. If the nuclear industry were as safe as they claim, there would be no need for such financial incentives to promote the construction of such a dangerous source of power.
- There is still no solution to the problem of accumulating nuclear waste and waste stored at sites invariably leaking into the environment.
- Elevated radiation levels in the environment are particularly harmful to children, increasing the chances of cancer.
- Construction of nuclear plants invariably goes over budget, usually by more than a billion dollars.
- Renewable options are safe, plentiful in the region, and can be brought online more quickly and inexpensively.
- -Decommissioning a nuclear plant is dangerous, expensive, and not commonly considered in the true costs of energy (making the power generated is more expensive than other sources of power).
- -The inflexible necessities of nuclear power management monopolize power grids, preventing the expansion of more flexible renewable power sources into the same energy grid.
- -This region of the country has been fortunate that it has significant flexible sources of power and this has permitted alternative energy to proliferate in the state; locking the power grid up with additional sources of nuclear power would only limit the expansion of these safe and healthy alternatives.

4. Key Environmental Concerns Identified

- Potential nuclear facility locations would fall within 100- and 500-year FEMA floodplains. Major Missouri River floods have occurred in 1993, 2008, 2011, and 2019—demonstrating the vulnerability of this site to water-related hazards.
- Potential cooling water withdrawal from the Missouri River could impact aquatic ecosystems and cultural water access. High-volume intake could reduce downstream flow, raise water temperatures, and harm aquatic species including pallid sturgeon and freshwater mussels, which are culturally and ecologically important.
- Proximity to sensitive habitats includes federally listed endangered species:
- Pallid Sturgeon
- Interior Least Tern
- Piping Plover
- Western Prairie Fringed Orchid
- Whooping Crane
- Documented nuclear facility failures:

- Fort Calhoun (NE, 2011) Flooded by Missouri River, required shutdown and sandbagging.
- Three Mile Island (PA, 1979) Reactor meltdown due to equipment failure and human error
- Davis-Besse (OH, 2002) Severe corrosion discovered in reactor vessel head
- Indian Point Energy Center (NY, 2015-2021) Repeated safety violations and environmental protests
- San Onofre Nuclear Station (CA, 2012) Shutdown due to radiation leak from faulty steam generator

5. Select Non-Nuclear Discharge Violations Into the Missouri River

MidAmerican Energy – George Neal Energy Center (Iowa)

Proposed to discharge coal ash leachate directly into the Missouri River, containing heavy metals like mercury, lead, arsenic, and cyanide. EPA and tribal advocates flagged this as unacceptable and in conflict with the Clean Water Act. Permit included Outfall 003 (leachate) and Outfall 016 (other plant wastewater). Outfall 003 has since ceased operation, but the proposal to combine leachate with Outfall 016 continues.

Tyson Foods (Dakota City, NE)

In 2018, the plant was criminally fined \$2 million and paid additional civil penalties after a wastewater release killed approximately 108,000 fish in Missouri via contaminated discharges. A 2024 investigation revealed Tyson discharged 371 million pounds of pollutants—including nutrients, oil, cyanide, and bacteria—into Nebraska & Missouri waterways between 2018–2022. Earlier, in the early 2000s, the Sedalia, MO plant admitted to 20 felony CWA violations and paid \$7.5 million.

Mid-America Pipeline Co. / Enterprise Products

In 2012, the company settled a CWA case with a \$1 million fine after pipeline ruptures and spilled 818 barrels of gasoline into the Missouri River near Onawa, Iowa (plus other regional spills).

6. Context for Existing River Impacts

| <u>Facility</u> | Violation/Issue | Impact to Missouri River |
|------------------------------|--|---|
| MidAmerican (Sergeant Bluff) | Coal ash leachate NPDES permit request | Potential discharge of heavy metals |
| Tyson Foods (NE plant) | CWA violation criminal case & major pollutants | Massive fish kill; 371M lbs of pollutants |
| Mid-America Pipeline | Gasoline leak via ruptured pipeline | Chemical spill directly into river |

These cases illustrate that nutrient, chemical, and contaminant loading in the Missouri River is already significant due to regulated and unregulated industrial activities. This river already faces persistent stressors—another major industrial facility, especially near floodplains

and tribal lands, may exacerbate cumulative impacts and make regulatory oversight more difficult. Any potential nuclear facility would be much too much for the environment to endure.

Thank you for taking this time to consider the Tribe's position on this matter of such importance to our people. We hope our comments are taken in the constructive manner in which they are offered. The Winnebago Tribe hopes the Woodbury County Board of Supervisors will reject the proposal to permit the potential expansion of nuclear power facilities in our backyard and alter the proposed changes accordingly. Further, the Tribe respectfully asks that the Winnebago Tribal Council be included in notices for comment as a stakeholder in the outcomes and decisions of the Woodbury County in matters such as the current nuclear zoning proposal.

Respectfully,

Victoria Kitcheyan, Chairwoman Winnebago Tribe of Nebraska

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Orange, ss:

Kevin King, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 2 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Sep. 12, 2024

NOTICE ID: UtDJi9El2Lg4DH520f4c PUBLISHER ID: COL-IA-500805

NOTICE NAME: ZC_Nuclear_Rezone_9_23_2024

Publication Fee: \$74.81

Kewin Kin

VERIFICATION

State of Florida County of Orange

PAMELA BAEZ Notary Public - State of Florida

Commission # HH 186700 Expires on October 14, 2025

Subscribed in my presence and sworn to before me on this: 09/13/2024

Notarized remotely online using communication technology via Proof.

OVERANTS. RESTRICTIONS AND COVERANTS. RESTRICTIONS AND COVERANTS. HOTE THE NORTH LINE OF SAID N.W.1/4 OF THE N.E.1/4 IS ASSUMED TO BEAR N88/42/90°E. Petitioner Applicantion:

 Jimmie Lee Colyer & Renee T. Colyer (Owners), 1650 Old Highway 141, Sergeant Bluff, IA 51054. Petitioner Applicant(s): Sandra K. Baiver Revocation Trust (Sandra K. Baiver - Applicant), 1997 Carlori Avenue, Sergeant Bluff, IA 51054 & Jimmie Lee Colyer & Renee T. Coliyer (Owners), 1650 Old Highway 141, Sergeant Bluff, IA 51054.

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Broward, ss:

Rachel Cozart, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Jan. 11, 2025

NOTICE ID: S8SDAh6euS0RWeBuKOhc

PUBLISHER ID: COL-IA-501246

NOTICE NAME: 24-1-27_ZC_Nuclear_Dwelling_Dimension

Publication Fee: \$61.57 Rachel Boyant



SHERI SMITH Notary Public - State of Florida Expires on May 31, 2026

VERIFICATION

State of Florida County of Broward

Subscribed in my presence and sworn to before me on this: 01/13/2025

Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARINGS BEFORE THE WOODBURY COUNTY ZONING COMMISSION REGARDING THE ADDITION OF NUCLEAR ENERGY FACILITIES AND THE REVIEW OF THE

will have a meeting and will hold public hear-ings on the following items hereafter described in cleatal on January 27, 2025 at 5:00 PM or as soon thereafter as the matters may be as soon thereafter as the matters may be considered to the public of the public of Said public meetings will be held in the Board of Superisor's meeting one in the basement of the Woodbury Courthy Courthouse, 820 Douglas Street Sour City, Iowa. Copies of said here may now be examined at the office of the Woodbury Courthy Commissing and Eco-orison who wish to be heard in respect to threse matters should appear at the aforesaid public hearings in person or oral. 712-45-4133 and enter the Conference to Sis 806 5374 outing the meeting to listen or comment. However, there is the possibility for lischnical difficulties them is the possibility for lischnical difficulties with prince and compiler systems. You may forward your written comments by mail or nearlit to "Woodbury Courty Community and Economic Development, 6th Floor, Woodbury Courty Courthous, 600 Douglas 93, Sours Courth Courthous, 600 Douglas 93, Sours Courthous Courthous, 6th Courthous Courthous Courthous (Courthous) Courthous Courthous (Courthous) Courthous C

DINNE GRONAUCE TEXT ALLE DULLET LOSSIDE AT LOSSIDE PATON ON CONSIDERATION THE Woodbury Courly Zoring Commission will hold a public hearing to discuss the potential inclusion of Nuclear Energy Facilities as a land use option in the Woodbury Courly Zoring Ordinance. The hearing will address the subsequence of permitting nuclear energy sentences, and open the public production and the subsequence of the commission will consider options such as amending the land to be Summary Table of Allowed Uses (Section 3.0.3.4) to design of Allowed Uses (Sectio

Nuclear Energy Facilities as either an allowed conditional use mail or specific zoning districts within Moodary County, Additionally, and the second control within Moodary County, Additionally, and the second control within Moodary County, Additionally, and the second control within Moodary County, and the second control residence and received control of the second county of the secon

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Orange, ss:

Bailee Liston, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Feb. 11, 2025

NOTICE ID: yNjuXD6R9qNMPencb3Xe PUBLISHER ID: COL-IA-501389 NOTICE NAME: ZC-2025-2-24 Publication Fee: \$41.71

Bailee Liston

(Signed)



VERIFICATION

State of Florida County of Orange

Subscribed in my presence and sworn to before me on this: 02/18/202\$

S. Ra

Notary Public

Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARING BEFORE THE WOODBURY COUNTY ZONING COMMISSION REGARDING THE ADDITION OF NUCLEAR ENERGY FACILITIES IN THE WOODBURY COUNTY ZONING ORDINANCE

IN THE WOODBURY COUNTY
ZONING ORDINANCE
The Woodbury County Zoning Commission
will have a meeting and will hold a public hearing on the following item hereafter described
in detail on February 24, 2025 at 5.00 PM
or as soon thereafter as the matter may be
considered.

Salid public hearing will be held in the Board of Supervisors' meeting room in the basement of the Woodbury Courth Courthouse, 620 Douglas Street, Sloux City, Iowa. Copies of said item may now be examined at the office of the Woodbury Courty Community and Economic Development, on the 6th Floor of said courthouse by any interested persons. All persons who wish to be heard in respect to the matter should appear at the aforesaid public hearings in person or active 17:12-464-1143 and enter the Conference ID: 638 086 537# during the meeting to listen or comment. However, it is recommended to attend in person as there is the possibility for technical difficulties with phone and computer systems. You may cover a state of the control of the community and conomic Development, 6th Floor, Woodbury County Courth Courthouse, 620 Douglas St., Sioux City, IAS+101; Emails should be sent to Danious County Courthouse, 620 Douglas St., Sioux City, IAS+101; Emails should be sent to particulate of the considered and should be received no later than 10:00 AM on Fri., Feb. 21, 2025.

ov. Only sighed comments will be considered and should be received no later than 10:00 AM on Fri., Feb. 21, 2025. Item One (1) NUCLEAR ENERGY FACILITIES ZONING ORDINANCE TEXT AMENDMENT CONSIDERATION

The Woodbury County Zoning Commission will hold a public hearing to discuss the potential inclusion of Nuclear Energy Facilities as a land use option in the Woodbury County Zoning Ordinance. The hearing will address various aspects of permitting nuclear energy facilities, including but not limited to nuclear energy generation, modular nuclear energy systems, and other nuclear technologies. The Commission will consider options such as amending the Land Use Summary Table of Allowed Uses (Section 3.03.4) to designate Nuclear Energy Facilities as either an allowed or conditional use in all or specific zoning distincts within Woodbury County. Additionally discussions may include amendments to add new sections related to nuclear energy facilities, update definitions, and renumber and/or reorganize the content of the Zoning Ordinance as necessary.

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Broward, ss:

India Johnston, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Mar. 13, 2025

NOTICE ID: V8vvwz7PwzxxxLzSJ6G9 PUBLISHER ID: COL-IA-501513 NOTICE NAME: ZC_3-24-25_Nuclear

Publication Fee: \$51.64 India Johnston



VERIFICATION

State of Florida County of Broward

Subscribed in my presence and sworn to before me on this: 03/14/2025



Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARING BEFORE THE WOODBURY COUNTY ZONING COMMISSION REGARDING THE ADDITION OF NUCLEAR ENERGY FACILITIES, NUCLEAR WASTE STORAGE AND/OR RELATED USES IN THE WOODBURY COUNTY ZONING ORDINANCE OF THE WOODBURY COUNTY WITH THE WOODBURY COUNTY WOUNTY TO THE WOODBURY COUNTY WOODBURY COUNTY ZONING THE WOODBURY COUNTY WOODBURY COUNTY ZONING THE WOO

ered. Said public hearing will be held in the Board Said public hearing will be held in the Board of Supervisors' meeting room in the basement of the Woodbury Courly Courlhouse, 620 Douglas Street, Sioux Gly, Iowa. Copies of said item may now be examined at the office of the Woodbury Courly Community and Economic Development, on the 6th Floor of said courthouse by any interested persons. All persons who wish to be heard in respect to the matter should appear at the aforesaid public hearings in person or call 7t2-454-138 and enter the Conference ID. G85 086 5374 during the meeting to islen or comment. However, it is recommended to attend in person as there is the possibility for technical difficulties with phone and computer systems. You may torward your written comments by mail or gmail to. Woodbury Courly Community and with plate and collapsed systems, to thinky toward your written comments by mail or email to. Woodbury County Community and Economic Development, 6th Floor, Woodbury County Coun

tental inclusion of nuclear energy facilities, nuclear water storage, antiver related uses as land use options in the Woodbury County Zoning Ordinance. The hearing will address various aspects of permitting these trailities, including nuclear energy generation, mobilar nuclear energy systems, nuclear waste storage, and other related nuclear technologies. The Commission will consider options such as amending the Land Use Summary Table of Allowed Uses (Section 3.03.4) to designate nuclear energy facilities, nuclear waste storage and/or related uses as either allowed or conditional uses in specific zoning districts or conditional uses in specific zoning districts. state housed energy facilities, include whose storage and/or related uses as either allowed or conditional uses in specific zoning districts such as the General industrial (ii)? Zoning Dis-trict within Woodbury County, Additionally, the discussions nay include amendments to add new sections related to nuclear energy facili-ties and nuclear waste storage and/or related uses, update definitions, renumber articles, sections, and pages, and/or renganize the content of the Zoning Ordinance as necessary. The goal of the heading is to gather public input, and determine the appropriate way to address the potential inclusion of nuclear-related and uses in the Woodbury County Zoning Ord-nance interns of perspiring a recommendation to the Woodbury County Board of Supervisors. COL-IA-501513

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Broward, ss:

Ankit Sachdeva, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 2 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

May. 13, 2025

NOTICE ID: dkZ1OAd0Y6egfblwzYPC PUBLISHER ID: COL-IA-501790 **NOTICE NAME:** ZC-2025-05-28 Publication Fee: \$117.84

Ankit Sachdeva



VERIFICATION

State of Florida County of Broward

Subscribed in my presence and sworn to before me on this: 05/20/2025



Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARINGS
DURING A SPECIAL PUBLIC
MEETING BEFORE THE
WOODBURY COUNTY ZORING
COMMISSION
The Woodbury County County of the Colonia County
The Woodbury County County County
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The Woodbury County
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The Woodbuy Gounty Zoning Commission Will have been a public hearing to consider a pro-posed ancression to visite 2, section 3.0.4 of the Woodbuy Courty Zoning Ordinarea. The proposed ancression extended with off extent to criange the castification of "Borrow as to criange the castification of "Borrow as conditional use in the Agricultura Estaties (AE) Zoning Details. Specially, the amenor would update the facility for grandinarial conditional control of the proposition of promising large patients while a "Cyrendinaria towy just to result in a default."

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ONING GROIN-ANCE MAP AMENDMENT

Fursaint to Section 255 of the Code of lova.
the Woodbury County Zoning Commission will
will be a zoning ordinance map amendment
for a zoning ordinance map amendment
(rezonie) to the Woodbury County Zoning
Odinance and/or Map for the Unincoporate
of Area of Woodbury County on by New
Amendment
on the Section 1

Odinance and/or Map for the Unincoporate
of Area of Woodbury County on by New

Odinance

Odi

operative, Inc., 2626 1st Ave. South, Fort Dodge, IA 50501.

The proposal is to rezone from the Agricultural Preservation (AP) Zoning District to the General Industrial (al) Zoning District to the General Industrial (al) Zoning District to a 12.92-ace portion of the property located in the SW X of the SW X of Section 29, T86N R46W (Sloam Township) in the County of Woodbury and State of Iowa. The property is known as cisi Parear #684629351012 and is described as: WIC TRACT One (1) in the Southwest Ouarier (SW14) of the Southwest Ouarier (SW14) described by meles and bounds as follows: Commencing at the Southwest Ouarier of said Section, thence North Telephyleight Degrees Twory Minutes Firty-vice (200,000) to the Point of Beginning thence North Two Degrees Seventeen Minutes Trity-egint 200,000 to the Southwest Ouarier (SW14) at disclarace of One Trousand Three Hurdred Four and Forty-one Hurdred their (SW14), thence North Two Degrees Seventeen Minutes Trity-egint Seconds (N 102*1738) West, a disclarace of One Trousand Three Hurdred Four and Forty-one Hurdred their (SW14), thence North Telephyleight Degrees Fifty-two Minutes Fifty-two South Seconds (N 102*1738) West, a disclarace of Four Hurdred Twory-Recorder's Office, hence South Sickeen Degrees Four Minutes Fifty-the and Thirty-four Hurdredfies teet (24.80; stat), thence South Nineteen Degrees Egifteen Minutes Fifty-the and Thirty-four Hurdredfies teet (24.85; stat), thence South Nineteen Degrees Egifteen Minutes Fifty-the and Thirty-four Hurdredfies teet (24.85; stat), thence South Nineteen Degrees South Egifty-the and Egipty-degree South Fouries (24.81) the South Fouries of South Egifty-the and Egipty-Hurdred Minutes Fifty-two South Fouri Docked South Fouries (24.81) the South Fouries of South Egifty-West and Egipty-Brown Minutes Fifty-two

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Broward, ss:

Rachel Cozart, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Jun. 12, 2025

NOTICE ID: TxNstLTD2qW0kCyrF41b PUBLISHER ID: COL-IA-501906

NOTICE NAME: ZC-6-23-25-NUCLEAR-ADUS

Publication Fee: \$65.54 Rachel Cozart



VERIFICATION

State of Florida County of Broward

Subscribed in my presence and sworn to before me on this: 06/13/2025



Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARINGS BEFORE THE WOODBURY COUNTY ZONING COMMISSION REGARDING THE CONSIDERATION OF ZONING OF THE CONSIDERATION OF THE CONSIDERATION OF THE CONSIDERATION OF THE CONSIDERATION OF THE COUNTY OF THE CONSIDERATION OF THE WOODBY COUNTY ZONING COmmission will have public featings on the following them created redecated in reseal for discribed in reseal for discribed and the county ZONING CONSIDERATION OF THE COUNTY COUNTY OF THE COUNTY COUNTY OF THE COUNTY COUNTY THE COUNTY OF THE

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will hold a public hearing to discuss amerium, an Woodbury County Sching Ordinarios to adstorage, and related uses. The discussion will include, but in fort limited by permitting undear energy generation, modular nuclear energy systems, nuclear wides shorage, and related uses. The discussion will include, but in fort limited to permitting undear energy generation, modular nuclear energy systems, nuclear words shorage, and related and the state of the sta

AFFIDAVIT OF PUBLICATION

Sioux City Journal 2802 Castles Gate Drive Sioux City 51106 (712) 293-4250

State of Florida, County of Orange, ss:

Anjana Bhadoriya, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Sioux City Journal, printed and published by Journal Communications, in Sioux City in Woodbury County and issued daily and Sunday and that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached:

PUBLICATION DATES:

Jul. 17, 2025

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NOTICE NAME:

BOS_Nuclear_PH_722_729_85_REVISED_NOTICE

Publication Fee: \$63.55 Anjana Bhadoriya



JESSICA GORDON-THOMPSON Notary Public - State of Florida Commission # HH301656 Expires on August 17, 2026

VERIFICATION

State of Florida County of Orange

Subscribed in my presence and sworn to before me on this: 07/21/2025

Notary Public

Notarized remotely online using communication technology via Probf.

NOTICE REGARDING PUBLIC HEARINGS BEFORE THE WOODBURY COUNTY BOARD OF SUPERVISORS FOR THE CONSIDERATION OF ZONNING GRIDINANCE TEXT AIREIDMENT TO SUPERVISOR FOR THE CONSIDERATION OF ZONNING GRIDINANCE TEXT AIREIDMENT ZONING GRIDINANCE NOT LIMITED TO NUCLEAR RELATED USES TO THE WOODBURY COUNTY ZONING ORDINANCE NOT LIMITED TO NUCLEAR ENERGY FACILITIES, NUCLEAR WASTE STORAGE, AND RELATED USES AND TO ADD PUBLIC NOTIFICATION OF THE CONTROL OF T

pate in the atoresaid hearing(s), tiem One (f):
CONSIDERATION OF ZONING ORDINACE TEXT AMENDMENTS FOR THE INCLUSION OF NUCLEAR RELATED USES TO THE WOODDBURY COUNTY ZONING ORDINANCE NOT LIMITED TO NUCLEAR WASTE STORAGE, AND RELATED USES AND TO

STORAGE, AND RELATED USES AND TO ADD PUBLIC NOTIFICATION REQUIRE-MENTS, AND REORGANIZE THE ORDI-NANCE
The Woodbury County Board of Supervisors will hold the said public hearings to discuss the potential indusion of nuclear energy facilities, nuclear waste storage, and/or related uses as land use options in the Woodbury County notes was biddings arrior related uses a notes of solution was been also as a consideration of the control of t County Zoning Ordinance. OOL-IA-502017