WOODBURY COUNTY
ZONING COMMISSION

Monday, March 24, 2025 at 5:00 PM

The Zoning Commission will hold a public meeting on **Monday, March 24, 2025** at **5:00 PM** in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. Please use the 7th St. entrance. Public access to the conversation of the meeting will also be made available during the meeting by telephone. Persons wanting to participate in the public meeting and public hearings on the agenda may attend in person or call: **(712) 454-1133** and enter the **Conference ID: 638 086 537#** during the meeting to listen or comment. It is recommended to attend in person as there is the possibility for technical difficulties with phone and computer systems.

AGENDA	
1	**CALL TO ORDER**
2	**ROLL CALL**
3	**PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA (INFORMATION ITEM)**
4	**APPROVAL OF MINUTES FROM PREVIOUS MEETING: 2/24/25 (ACTION ITEM)**
5	**ITEM(S) OF BUSINESS**
»	**PUBLIC HEARING (ACTION ITEM): FOR THE CONSIDERATION OF NUCLEAR ENERGY FACILITIES AND NUCLEAR WASTE STORAGE TO BE INCLUDED AS PART OF THE WOODBURY COUNTY ZONING ORDINANCE. SUMMARY:** The Woodbury County Zoning Commission will hold a public hearing to discuss the potential inclusion of "Nuclear Energy Facilities," "Nuclear Waste Storage," and/or related uses as a land use options in the Woodbury County Zoning Ordinance in preparation for a potential recommendation to the Board of Supervisors. The hearing will address various aspects of permitting nuclear energy facilities, nuclear waste storage, 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 and Nuclear Waste Storage as either an allowed or conditional use in all or specific zoning districts 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.
»	**DIMENSIONAL SIZE FOR SINGLE-FAMILY DWELLINGS FOLLOW-UP FOR POTENTIAL RECOMMENDATION (ACTION ITEM). SUMMARY:** Follow-up for a potential recommendation to the Board of Supervisors following the January 27, 2025 public hearing concerning Section 4.11: Single-Family Detached Dwellings in the Woodbury County Zoning Ordinance.
6	**PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA (INFORMATION ITEM)**
7	**STAFF UPDATE (INFORMATION ITEM)**
8	**COMMISSIONER COMMENT OR INQUIRY (INFORMATION ITEM)**
9	**ADJOURN**

PACKET CONTENTS

Minutes - Woodbury County Zoning Commission – February 24, 2025

The Zoning Commission (ZC) meeting convened on the 24th Day of February, 2025 at 5:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA. The meeting was also made available via teleconference.

MEETING AUDIO:
For specific content of this meeting, refer to the recorded 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=RkHFoYupSFY

ATTENDANCE

ZC Members Present:	Chris Zellmer Zant, Tom Bride, Corey Meister, Jeff Hanson, Steve Corey (Remote)
County Staff Present:	Dan Priestley, Michael Montino (Remote)
Supervisor(s) Present:	Kent Carper, Dave Dietrich
Public Present:	Charles Woodford, Rick Plathe, Craig Levin, Chad Small, Elaine Knudson, Dan Rohde, Jeff Reed, Joe O'Neill, Daniel Hair, Doyle Turner, Kolby DeWitt, Chris McGowan, Steven Curtis (Remote)

1. CALL TO ORDER

- The meeting was called to order at 5:00 PM on February 24, 2025, by the Chair of the Woodbury County Zoning Commission.

2. ROLL CALL

- The Chair confirmed the presence of all Commissioners, with the exception of Commissioner Steve Corey, who participated via phone, compliant with the Rules of Procedure.
- No absences were noted; all Commissioners were accounted for.

3. PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA (INFORMATION ITEM)

- The Chair opened the floor for public comments on matters not listed on the agenda.
- No individuals present or on the phone offered comments.
- The item concluded with no public input.

4. APPROVAL OF MINUTES FROM PREVIOUS MEETING: 1/27/25 (ACTION ITEM)

- The Chair presented the minutes from the January 27, 2025, meeting for approval.
- A motion to approve the minutes was made by Corey and seconded by Meister.
- Vote: Unanimous approval ("Aye" from all present Commissioners), 5-0.

5. ITEM(S) OF BUSINESS

» PUBLIC HEARING (ACTION ITEM): Consideration of Nuclear Energy Facilities in the Woodbury County Zoning Ordinance

- Summary: The Commission held a public hearing to discuss the potential inclusion of Nuclear Energy Facilities as a land use option within the Woodbury County Zoning Ordinance, addressing nuclear energy generation, modular systems, and related technologies.

- Staff Presentation (Dan Priestley):
  - Dan Priestley, Zoning Coordinator, introduced the topic, noting the complexity of nuclear energy regulation across federal, state, and local levels.
  - He highlighted existing ordinance language allowing nuclear energy permitting as a conditional use in the General Industrial Zoning District (e.g., electrical energy generation, excluding wind, and nuclear waste storage comparable to chemical/gas bulk storage).

- The industrial area south of Sioux City, west of I-29, and east of the Missouri River was identified as a primary location for such facilities.
- Priestley referenced Iowa House Study Bill (HSB) 123, currently under consideration, which encourages diverse energy technologies, including nuclear reactors, and lowers thresholds for utility rate-making principles (from 300 MW to 40 MW).
- He emphasized the ordinance's flexibility under Section 3.03.3, allowing the Zoning Director to interpret unlisted uses (e.g., nuclear as a form of electrical energy generation), and stressed the importance of safety, emissions, and waste management standards.
- Priestley invited public input and introduced guest speaker Stephen Curtis, appearing via phone, to provide expertise on nuclear energy.

- Guest Speaker (Steven Curtis):
  - Curtis introduced himself, detailing his background: a Master's in Health Physics, experience with the Department of Energy investigating nuclear accidents, and eight years educating on nuclear power.
  - He explained nuclear fission's energy efficiency (50 million times more energy than coal per atom), the operation of light water reactors (e.g., Palisades in Michigan), and the management of spent fuel (stored in dry casks after three years in cooling ponds).
  - Curtis argued against labeling spent fuel as "waste," calling it "slightly used nuclear fuel" with 30 times the unextracted energy potential, proposing fast reactor technology to utilize it (offering 270 years of U.S. energy at current demand).
  - He noted the lack of a federal solution for spent fuel storage (e.g., Yucca Mountain's failure) and suggested Iowa could leverage its spent fuel for economic development, potentially negotiating with the federal government using the $50 billion Nuclear Waste Fund.
  - Curtis highlighted emerging needs (e.g., AI and cryptocurrency energy demands) and small modular reactors (SMRs) as safe, efficient options, citing their use in the Nuclear Navy and private sector interest (e.g., Bill Gates' Wyoming project).
  - He answered Commissioner questions:
    - Commissioner Steve (via phone): Confirmed 270 years of energy from current spent fuel using fast reactors; noted the technology's origins post-Manhattan Project, its intrinsic safety (demonstrated in Idaho for 30 years), and public fear as a barrier despite no injuries in 70 years of normal operations.
    - Commissioner Steve: Asked about timeline; Curtis estimated 3-5 years with political will, no technical hurdles, and private industry leadership using the Nuclear Waste Fund.
    - Commissioner Steve: Inquired about co-locating SMRs and spent fuel processing; Curtis suggested Iowa could accept spent fuel, negotiate federal terms, and attract industries (e.g., microgrids, national labs).
    - Commissioner Tom: Asked about Iowa's spent fuel capacity; Curtis estimated 576 years of state energy supply, advocating use of existing fuel first.
    - Supervisor Kent Carper: Queried safety communication and setbacks; Curtis noted SMRs require minimal zones (edge-of-facility vs. 1-mile for light water reactors) and could be sited remotely with transmission access.
    - Commissioner Chris: Asked about New Mexico/Texas resistance; Curtis explained opposition to interim storage facilities due to perceived permanence risks, predicting a court loss for the NRC.

- **Public Comments:**
  - Rick Plathe (IBEW Local 231): Supported nuclear energy for economic growth, citing the union's skilled electricians, job creation (hundreds of local jobs per DOE study), and SMRs as a coal replacement to attract AI-driven industries.

- Craig Levin (Sioux City, Iowa): Advocated for nuclear as a cleaner, baseload power option superior to wind and solar.

- Doyle Turner (Moville, Iowa): Noted Governor-initiated HSB 123, legislator support across counties, and Woodbury's proactive zoning advantage, emphasizing public education and industrial site suitability (remote, with rail, gas, water, and transmission access).

- **Closure:**
  - No further public comments were received.
  - A motion to close the public hearing was made by Corey, seconded by Hanson, and unanimously approved ("Aye" from all Commissioners).

» APPROVAL AND ADOPTION OF RULES OF PROCEDURES FOR THE WOODBURY COUNTY ZONING COMMISSION (ACTION ITEM)

- Summary: The Woodbury County Board of Supervisors approved the Rules of Procedure on February 11, 2025; the Commission was tasked with formal adoption.

- Staff Presentation (Dan Priestley):
  - Priestley explained the rules, including a Commission request for monthly meetings at 5:00 PM, were submitted to the Supervisors last month, approved without changes, and returned for adoption.

- Discussion: No changes or further discussion proposed.

- Motion: A motion to approve and adopt the rules was made by Hanson and seconded by Bride.

- Vote: Unanimous approval ("Aye" from all Commissioners).

- Action: The Chair signed and dated the document (February 24, 2025), witnessed by staff.

» DIMENSIONAL SIZE FOR SINGLE-FAMILY DWELLINGS FOLLOW-UP DISCUSSION (INFORMATION ITEM)

- Summary: Follow-up on last month's public hearing regarding Section 4.11 minimum dimensions for single-family detached dwellings, particularly mobile/manufactured homes.

- Staff Update (Dan Priestley):
  - Priestley reported ongoing consultation with County Attorney Joshua Widman on ordinance language below the 23-foot minimum dimension, referencing HUD and state codes.
  - Federal standards (e.g., snow load capacity) and state codes apply, despite no county building codes, requiring compliance for manufactured homes.
  - Modifications (e.g., additions) may violate precalculated structural standards, necessitating federal/state approval, potentially pushing owners toward double-wide homes.
  - No contact yet with the property owner who raised the issue; further refinement with Joshua Widman is pending.

- Supervisor Carper: Asked if a specific trailer meets code; Priestley clarified it likely does not under HUD standards without meeting the 23-foot requirement or double-wide alternative.

- Outcome: No action taken; discussion to continue as information is refined.

6. PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA (INFORMATION ITEM)

- The Chair opened the floor for additional public comments.
- No individuals offered comments.
- The item concluded with no public input**.**

7. STAFF UPDATE (INFORMATION ITEM)

- Dan Priestley:

- Reiterated the County's zoning infrastructure supports nuclear energy review via conditional use permits, aligning with the May 2024 Comprehensive Plan's goals (economic growth, job creation, infrastructure support).
- Noted public engagement's importance for signaling support to the Governor and legislature, citing interest from counties like Linn County.
- Encouraged monitoring state (HSB 123) and federal actions for nuclear policy developments.

8. COMMISSIONER COMMENT OR INQUIRY (INFORMATION ITEM)

- Commissioner Bride:
  - Attended a Friday meeting with Stephen Curtis, noting his lack of financial/political stake in nuclear advocacy.
  - Stressed the Supervisors' recognition of the conditional use permit process as suitable for nuclear proposals, valuing public input.

- Commissioner Corey:
  - Expressed gratitude for Curtis' insights, learning significantly as a new Commissioner, and polled others' views, favoring continued exploration of nuclear options.

- Dan Priestley (Response):
  - Suggested affirming the Zoning Director's interpretation of electrical energy generation and waste storage for clarity.
  - Urged Commissioners to study nuclear systems, safety records, and criteria for potential applications, noting industrial area transitions and emergency coordination needs (e.g., setbacks, Michael Montino's input).

- Commissioner Bride:
  - Cited Curtis' Friday advice on 100% county commitment, driven by public and supervisor support, noting higher attendance at this meeting.

- Supervisor Carper:
  - Initially skeptical in May 2023, now supports nuclear energy, excited by its potential.

9. ADJOURN

- A motion to adjourn was made by Meister and seconded by Hanson.
- Vote: Unanimous approval.
- The Chair thanked all participants for their attendance and contributions.

ORDINANCE NO. _____

WOODBURY COUNTY, IOWA

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

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 page 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, such as at Port Neal, 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, 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.

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.

THE WOODBURY COUNTY BOARD OF SUPERVISORS

_____
Daniel Bittinger II, Chairman

_____
Mark Nelson, Vice-Chairman

_____
Kent Carper

Attest:

_____
David Dietrich

_____ _____
Michelle Skaff, Woodbury County Auditor Matthew Ung

Adoption Timeline:
Date of Public Hearing and First Reading_____
Date of Public Hearing and Second Reading_____
Date of Public Hearing and Third Reading_____
Date of Adoption_____

Published/Effective Date_____

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

PRELIMINARY REPORT – REVISED 3-20-25

Consideration of Nuclear Energy Facilities and Nuclear Waste Storage

SCENARIO BEFORE THE ZONING COMMISSION:

The debate over nuclear energy and nuclear waste storage centers on the "permitting mechanism" within the county's zoning ordinance. The Land Use Summary table lists "electrical energy generation (not incl. wind)," which could potentially be interpreted as a "nuclear energy facility" conditional use in the General Industrial (GI) Zoning District. Similarly, "chemical and gas bulk storage" might be construed as "nuclear waste storage." A company could apply for a Conditional Use Permit (CUP) under these categories, leaving it to the Zoning Commission and Board of Adjustment to decide if such uses comply with Section 2.02.9 F(1)(a). This section states that a conditional use must be authorized in the zoning district and meet any specified conditions or standards. While the Commission and Board could interpret these categories to include nuclear-related uses, the county attorney's office advises that a use as significant as nuclear energy or waste storage should be explicitly defined as a distinct category, given the potential for legal challenges to such broad interpretations. The current discussion is not about approving specific projects but about whether "nuclear energy facilities" and "nuclear waste storage" should be clearly defined in the ordinance and how the conditional use permit process would apply. Under existing regulations, if an application for a nuclear energy facility or waste storage site were submitted, the Zoning Commission and Board of Adjustment could review it, but the public notification area would be limited to 500 feet from the site. This report proposes defining these uses explicitly and expanding the notification radius to ten miles. Per Section 2.01.4 D(1), the Zoning Commission is tasked with recommending district boundaries, regulations, and restrictions, and under Section 2.01.4 D(4), it can propose ordinance amendments to the Board of Supervisors. While this debate does not guarantee future applications, it addresses how the county would handle a scenario where an applicant, possibly after filing with the Nuclear Regulatory Commission, seeks a CUP under the current vague categories of "electrical energy generation" or "chemical and bulk storage." The key question is whether the county is prepared for such possibilities.

GENERAL SUMMARY:

This report includes information that could be considered to amend the Woodbury County Zoning Ordinance to explicitly designate **"Nuclear Energy Facilities"** and **"Nuclear Waste Storage"** as conditional uses within the General Industrial (GI) Zoning District under the Land Use Summary Table (Section 3.03.4). Currently, these uses are not specifically listed, though staff have interpreted them as falling under **"electrical energy generation (not incl. wind)" and "chemical and gas bulk storage,"** both conditional uses in the GI district. However, the County Attorney's Office has highlighted legal concerns in relying on this interpretation, as courts may not uphold unlisted uses, and the table's "comprehensive" nature suggests their exclusion may be intentional. The GI district's suitability for heavy industrial activities, including its infrastructure and separation from residential areas, supports potentially adding these nuclear-related uses.

Proposed amendments include: (1) updating Section 2.02.1 B(1)(e) to require a ten-mile notification radius for nuclear-related conditional use permits, reflecting their scale and public sensitivity; (2) adding "Nuclear Energy Facilities" and "Nuclear Waste Storage" as conditional uses in the GI district under Section 3.03.4; and (3) introducing definitions in Article 6 to ensure clarity and compliance with federal and state regulations, such as those of the Nuclear Regulatory Commission (NRC). These changes align with the Woodbury County Comprehensive Plan's goals of supporting technological advances and energy diversification while enhancing legal clarity and public transparency. Public input and regulatory oversight will remain critical to future consideration, ensuring safety and community alignment as nuclear technology evolves.

BACKGROUND AND ANALYSIS (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:**
    - 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:**
    - 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

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 legal clarity, reduces risk, and ensures alignment with the ordinance's intent.

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:**
  - "Nuclear energy facilities" – Place a "C" in the GI Zoning District column.
  - "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)	C	Conditional use, energy production
Existing: Solar Energy Systems, Utility Scale	C	Conditional use, renewable energy
Existing: Chemical and gas bulk storage	C	Conditional use, hazardous materials
Proposed: Nuclear Energy Facilities	C	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_2040_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.

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 docket number 50-608."
     - 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 interpretation.
    - **Citation:** 10 CFR § 50.2, available at: https://www.ecfr.gov/current/title-10/chapter-I/part-50/section-50.2

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).

3. **"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).
2. "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.
3. "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).
5. "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.
2. 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 installation.
  - 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)." An example of this process can be found at the following NRC website: https://www.nrc.gov/reactors/new-reactors/large-lwr/esp/north-anna.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/new-reactors/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

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 Federal laws governing the NRC 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 Title 10 of the *Code of Federal Regulations* (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

- 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)

TOP

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 ADVANCE Act of 2024, 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)

TOP

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)

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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)

TOP

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)

TOP

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)

TOP

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)

TOP

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)

TOP

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)

TOP

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 *Code of Federal Regulations*, Volume 1 (Parts 1 – 50) and Volume 2 (Parts 51 – 199) which the 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):
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Chapter I -- Nuclear Regulatory Commission

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Part 10	Criteria and procedures for determining eligibility for access to restricted data or national security information or an employment clearance
Part 11	Criteria and procedures for determining eligibility for access to or control over special nuclear material
Part 12	Implementation of the Equal Access to Justice Act in agency proceedings
Part 13	Program fraud civil remedies
Part 14	Administrative claims under Federal Tort Claims Act
Part 15	Debt collection procedures
Part 16	Salary offset procedures for collecting debts owed by Federal employees to the Federal government
Part 19	Notices, instructions and reports to workers: inspection and investigations
Part 20	Standards for protection against radiation
Part 21	Reporting of defects and noncompliance
Part 25	Access authorization
Part 26	Fitness for duty programs
Part 30	Rules of general applicability to domestic licensing of byproduct material
Part 31	General domestic licenses for byproduct material
Part 32	Specific domestic licenses to manufacture or transfer certain items containing byproduct material
Part 33	Specific domestic licenses of broad scope for byproduct material
Part 34	Licenses for industrial radiography and radiation safety requirements for industrial radiographic operations
Part 35	Medical use of byproduct material
Part 36	Licenses and radiation safety requirements for irradiators
Part 37	Physical protection of category 1 and category 2 quantities of radioactive material
Part 39	Licenses and radiation safety requirements for well logging
Part 40	Domestic licensing of source material
Part 50	Domestic licensing of production and utilization facilities
Part 51	Environmental protection regulations for domestic licensing and related regulatory functions
Part 52	Licenses, certifications, and approvals for nuclear power plants
Part 53	[Reserved]
Part 54	Requirements for renewal of operating licenses for nuclear power plants
Part 55	Operators' licenses
Part 60	Disposal of high-level radioactive wastes in geologic repositories
Part 61	Licensing requirements for land disposal of radioactive waste
Part 62	Criteria and procedures for emergency access to non-federal and regional low-level waste disposal facilities
Part 63	Disposal of high-level radioactive wastes in a geologic repository at Yucca Mountain, Nevada
Part 70	Domestic licensing of special nuclear material
Part 71	Packaging and transportation of radioactive material
Part 72	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
Part 74	Material control and accounting of special nuclear material
Part 75	Safeguards on nuclear material—implementation of safeguards agreements between the United States and the International Atomic Energy Agency
Part 76	Certification of gaseous diffusion plants

Part 81	Standard specifications for the granting of patent licenses
Part 95	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-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.

- **Baranwal, R. (2019).** *New DOE and NRC agreement will lead to faster deployment and licensing of U.S. nuclear.* U.S. Department of Energy. Retrieved from https://www.energy.gov/ne/articles/new-doe-and-nrc-agreement-will-lead-faster-deployment-and-licensing-us-nuclear
  - 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 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 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

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, and March 6, 2025. The comments received are provided for review below.

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

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 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?
- Which zoning districts do you think would be most suitable for accommodating nuclear energy facilities (General Industrial, Agricultural Preservation, etc.)? See map included.
- Are there any specific considerations or criteria we should prioritize in these areas?

Impact Assessment:

- What potential impacts (economic, environmental, social) do you foresee with the introduction of nuclear energy facilities in our community?

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?

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@woodburycountyiowa.gov, Woodbury County Planning and Zoning, 620 Douglas St., Sixth Floor, Sioux City, IA 51101** or call **712-279-6609** to discuss this matter further.

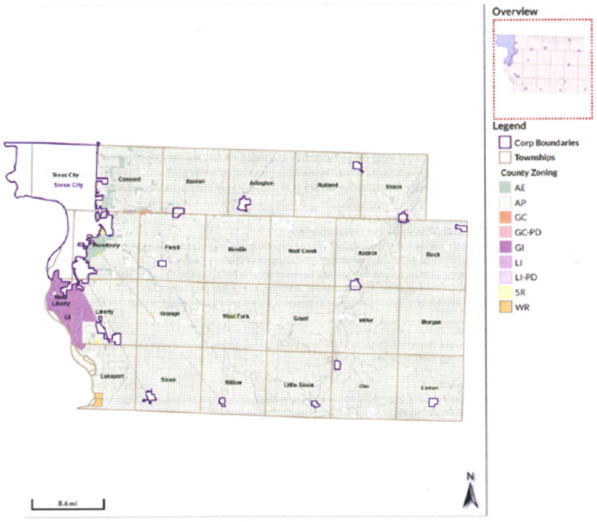
The Woodbury County Zoning Commission is in the introductory stage of this process. There will be an information / discussion agenda item at the next public meeting on **Monday, August 26 at 5:00 PM** at the Woodbury County Courthouse, 620 Douglas Street, Sioux City, IA, basement meeting area. Subsequently, 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 to hearing from you.

Respectfully and sincerely,

Daniel J. Priestley, MPA
Zoning Coordinator

Enclosure: Woodbury County Zoning Map



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

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

- 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 email to **dpriestley@woodburycountyiowa.gov**, by mail to **Woodbury County Planning and Zoning, 620 Douglas St., Sixth Floor, Sioux 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, Sioux City, IA**.

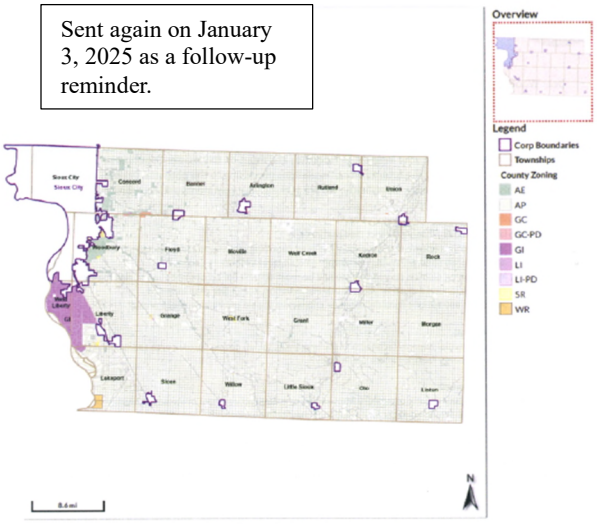
Thank you for your continued engagement in this important matter. We look forward to hearing from you and incorporating your perspectives into this decision-making process.

Respectfully and sincerely,

Daniel J. Priestley, MPA
Zoning Coordinator

Enclosure

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



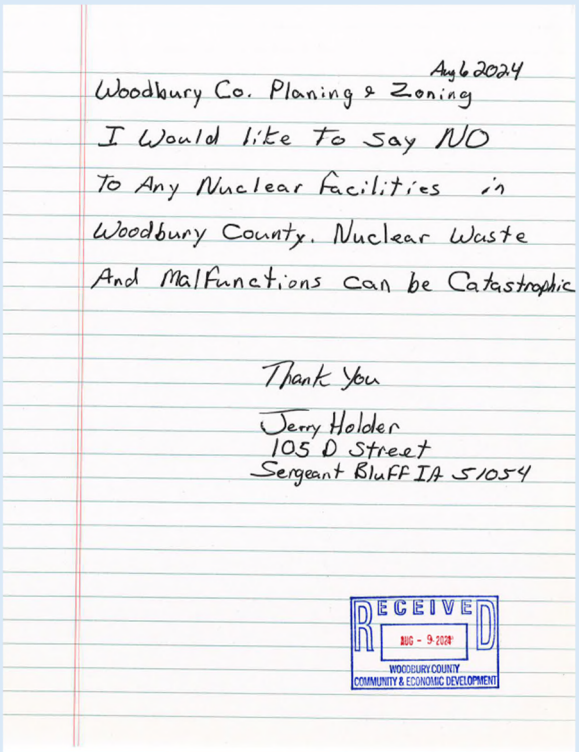
From: Wendi Hess
Sent: Wednesday, August 7, 2024 9:22 AM
To: Daniel Priestley
Subject: RE: Comments Requested Nuclear Energy in Woodbury County, Iowa

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



Aug 6 2024
Woodbury Co. Planing & Zoning
I Would like To say NO
To Any Nuclear facilities in
Woodbury County. Nuclear Waste
And Malfunctions can be Catastrophic

Thank You

Jerry Holder
105 D Street
Sergeant Bluff IA 51054

RECEIVED
AUG - 9 2024
WOODBURY COUNTY
COMMUNITY & ECONOMIC DEVELOPMENT

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: Follow up
Flag Status: 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.

- 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

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: Comments 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

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.

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

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 ☑

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:

0

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.

Approved by Board of Supervisors April 5, 2016.

Public Hearing Public Notifications in Newspapers:

Danbury Review – 9/18/24, 1/8/25, 2/12/25, 3/12/25

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

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

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

Sioux City Journal

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

Kevin King
(Signed)_____

PAMELA BAEZ
Notary Public - State of Florida
Commission # HH 186700
Expires on October 14, 2025

VERIFICATION

State of Florida
County of Orange

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

_____
Notary Public
Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARINGS BEFORE THE WOODBURY COUNTY ZONING COMMISSION

The Woodbury County Zoning Commission will have a public meeting and will hold public hearings on the following items hereafter described in detail on September 23, 2024 at 5:00 PM or as soon thereafter as the matters may be considered.

Said public hearings will be held in the Board of Supervisors' meeting room in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, Iowa. Copies of said items may now be examined at the office of the Woodbury County Community and Economic Development, on the 9th Floor of said courthouse by any interested persons. All persons who wish to be heard in respect to these matters should appear at the aforesaid public hearings in person or call: 712-454-1139 and enter the Conference ID: 638 386 537# 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 forward your written comments by mail or email to: Woodbury County Community and Economic Development, 6th Floor, Woodbury County Courthouse, 620 Douglas St., Sioux City, IA 51101; Emails should be sent to Daniel Priestley at: dpriestley@woodburycountyiowa.gov. Only signed comments will be considered and should be received no later than 10:00 AM on Wednesday, September 18, 2024.

Item One (1)

Nuclear Energy Facilities Zoning Ordinance Text Amendments

The Woodbury County Zoning Commission will hold a public hearing to consider Zoning Ordinance Text Amendments for the addition of nuclear energy as land use options in the Woodbury County Zoning Ordinance. The hearing will include topics of how to approach the permitting of nuclear energy. Possible options may include to amend the Land Use Summary Table of Allowed Uses (Section 9.29.4) by adding nuclear energy and/or nuclear energy facilities as permitted allowed uses or conditional uses in all or select Woodbury County zoning districts. Zoning Ordinance Text Amendments may also be discussed pertaining to the addition of new sections pertaining to nuclear energy, nuclear energy facilities, definitions, the renumbering, and reorganization of content within the zoning ordinance.

Item Two (2)

Zoning Ordinance Map Amendment (Rezone)

Pursuant to Section 335 of the Code of Iowa, the Woodbury County Zoning Commission will hold a public hearing to consider the application for a zoning ordinance map amendment (rezone) to the Woodbury County Zoning Ordinance and/or Map for the Unincorporated Area of Woodbury County, Iowa by Sandra K. Baker Revocable Trust (Sandra K. Baker - Applicant), 1997 Carroll Avenue, Sergeant Bluff, IA 51054 & Jimmie Lee Colyer & Renee T. Colyer (Owners), 1650 Old Highway 141, Sergeant Bluff, IA 51054.

The proposal is to rezone from the Agricultural Preservation (AP) Zoning District to the Agricultural Estates (AE) Zoning District for a 1.14-acre portion of the property located in the NW ¼ of the NE ¼ of Section 26, T88N R47W (Woodbury Township) in the County of Woodbury and State of Iowa. The property is known as GIS Parcel #884726220002 and is described as:

PART OF THE N.W.1/4 OF THE N.E.1/4 OF SECTION 26, TOWNSHIP 88 NORTH, RANGE 47 WEST OF THE 5TH PRINCIPAL MERIDIAN, WOODBURY COUNTY, IOWA, DESCRIBED AS FOLLOWS: BEGINNING AT THE N.W. CORNER OF LOT 1, RAKERS ACRES, AN ADDITION TO WOODBURY COUNTY, IOWA, THENCE S.0°00'15"E. ALONG THE WEST LINE OF SAID LOT 1 FOR 267.10 FEET TO THE S.W. CORNER OF SAID LOT 1, THENCE N.55°43'07"W. FOR 380.29 FEET; THENCE N.0°00'15"W. FOR 40.00 FEET TO THE NORTH LINE OF SAID N.W.1/4 OF THE N.E.1/4, THENCE N.88°42'30"E. ALONG SAID NORTH LINE FOR 322.55 FEET TO THE POINT OF BEGINNING. CONTAINING 1.14 ACRES. SUBJECT TO AND TOGETHER WITH ANY AND ALL EASEMENTS, RESTRICTIONS AND COVENANTS.

NOTE: THE NORTH LINE OF SAID N.W.1/4 OF THE N.E.1/4 IS ASSUMED TO BEAR N.88°42'30"E.

Petitioner Applicant(s): Sandra K. Baker Revocable Trust (Sandra K. Baker - Applicant), 1997 Carroll Avenue, Sergeant Bluff, IA 51054

& Jimmie Lee Collyer & Renee T. Collyer (Owners), 1650 Old Highway 141, Sergeant Bluff, IA 51054. Petitioner Applicant(s): Sandra K. Baker Revocable Trust (Sandra K. Baker - Applicant), 1997 Carroll Avenue, Sergeant Bluff, IA 51054 & Jimmie Lee Collyer & Renee T. Collyer (Owners), 1650 Old Highway 141, Sergeant Bluff, IA 51054. COL-IA-500805

Sioux City Journal

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 Cozart

(Signed)_____

SHERI SMITH
Notary Public - State of Florida
Commission # HH269383
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

S Smith

Notary Public
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 MINIMUM BUILDING DIMENSION FOR SINGLE-FAMILY DETACHED DWELLINGS IN THE WOODBURY COUNTY ZONING ORDINANCE

The Woodbury County Zoning Commission will have a meeting and will hold public hearings on the following items hereafter described in detail on January 27, 2025 at 5:00 PM or as soon thereafter as the matters may be considered.

Said public hearings will be held in the Board of Supervisors' meeting room in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, Iowa. Copies of said items may now be examined at the office of the Woodbury County 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 these matters should appear at the aforesaid public hearings in person or call: 712-454-1133 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 forward your written comments by mail or email to: Woodbury County Community and Economic Development, 6th Floor, Woodbury County Courthouse, 620 Douglas St., Sioux City, IA 51101; Emails should be sent to Daniel Priestley at: dpriestley@woodburycountyiowa.gov. Only signed comments will be considered and should be received no later than 10:00 AM on Fri., Jan 24, 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 districts 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.

Item Two (2)
MINIMUM BUILDING DIMENSION FOR SINGLE-FAMILY DETACHED DWELLINGS ZONING ORDINANCE TEXT AMENDMENT CONSIDERATION

The Woodbury County Zoning Commission will hold a public hearing to discuss potential changes to Section 4.11: Single-Family Detached Dwellings in the Woodbury County Zoning Ordinance. The hearing aims to gather input from the public on revising dimensional requirements for single-family dwellings, including but not limited to the regulations in Section 4.11. The review will consider whether to amend or remove Section 4.11.1, which currently states: "The main body shall have a minimum dimension of not less than 23 feet." Potential revisions may involve eliminating, reducing, modifying, or adding to the minimum dimension requirement, as well as other changes to the contents of Section 4.11 and its subsections. Amendments may also be discussed pertaining to the addition of new sections pertaining to single-family dwellings, definitions, the renumbering, and reorganization of content within the Woodbury County Zoning Ordinance.
COIL-IA-501246

Sioux City Journal

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)_____

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: 02/18/2025

_____
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

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.

Said public hearing will be held in the Board of Supervisors' meeting room in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, Iowa. Copies of said item may now be examined at the office of the Woodbury County 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: 712-454-1133 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 forward your written comments by mail or email to: Woodbury County Community and Economic Development, 6th Floor, Woodbury County Courthouse, 620 Douglas St., Sioux City, IA 51101; Emails should be sent to Daniel Priestley at: dpriestley@woodburycountyiowa.gov. Only signed 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 districts 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.
COL-IA-501389

Sioux City Journal

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
(Signed)_____

SHERI SMITH
Notary Public - State of Florida
Commission # HH269083
Expires on May 31, 2026

VERIFICATION

State of Florida
County of Broward

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

S Smith
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, NUCLEAR WASTE STORAGE AND/OR RELATED USES 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 March 24, 2025 at 5:00 PM or as soon thereafter as the matter may be considered.

Said public hearing will be held in the Board of Supervisors' meeting room in the basement of the Woodbury County Courthouse, 620 Douglas Street, Sioux City, Iowa. Copies of said item may now be examined at the office of the Woodbury County 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: 712-454-1133 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 forward your written comments by mail or email to: Woodbury County Community and Economic Development, 6th Floor, Woodbury County Courthouse, 620 Douglas St., Sioux City, IA 51101; Emails should be sent to Daniel Priestley at: dpriestley@woodburycountyiowa.gov. Only signed comments will be considered and should be received no later than 10:00 AM on Fri., Mar. 21, 2025.

Item One (1)

CONSIDERATION OF NUCLEAR ENERGY FACILITIES, NUCLEAR WASTE STORAGE AND/OR RELATED USES ZONING ORDINANCE TEXT AMENDMENTS FOR A RECOMMENDATION TO THE WOODBURY COUNTY BOARD OF SUPERVISORS

The Woodbury County Zoning Commission will hold a public hearing to discuss the potential inclusion of nuclear energy facilities, nuclear waste storage, and/or related uses as land use options in the Woodbury County Zoning Ordinance. The hearing will address various aspects of permitting these facilities, including nuclear energy generation, modular 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 such as the General Industrial (GI) Zoning District within Woodbury County. Additionally, the discussions may include amendments to add new sections related to nuclear energy facilities and nuclear waste storage and/or related uses, update definitions, renumber articles, sections, and pages, and/or reorganize the content of the Zoning Ordinance as necessary. The goal of the hearing is to gather public input and determine the appropriate way to address the potential inclusion of nuclear-related land uses in the Woodbury County Zoning Ordinance in terms of preparing a recommendation to the Woodbury County Board of Supervisors.
COL-IA-501513

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

DIMENSIONAL SIZE FOR SINGLE-FAMILY DWELLINGS FOLLOW-UP FOR POTENTIAL RECOMMENDATION (ACTION ITEM). SUMMARY: Follow-up for a potential recommendation to the Board of Supervisors following the January 27, 2025 public hearing concerning Section 4.11: Single-Family Detached Dwellings in the Woodbury County Zoning Ordinance.

Public Hearings before Zoning Commission

November 25, 2024: The Commission conducted a public hearing to consider potential amendments to Section 4.11 of the Woodbury County Zoning Ordinance, which pertains to the dimensional size for single-family dwellings. Dan Priestley noted that the current ordinance has been in effect since 2008 and has not generated significant controversy or public input. He emphasized that the ordinance aligns with state and federal laws. Jeff Hanson expressed that the existing ordinance does not appear to be problematic and suggested that no further time should be spent on it.

January 27, 2025: A public hearing was conducted to consider potential changes to Section 4.11: Single-Family Detached Dwellings in the Woodbury County Zoning Ordinance. The hearing considered whether to amend or remove Section 4.11.1, which currently states: "The main body shall have a minimum dimension of not less than 23 feet." Potential revisions may involve eliminating, reducing, modifying, or adding to the minimum dimension requirement, as well as other changes to the contents of Section 4.11 and its subsections. Amendments could include the addition of new sections pertaining to single-family dwellings, definitions, the renumbering, and reorganization of content within the Woodbury County Zoning Ordinance.

Jeanie and Ronnie Krueger: They expressed their desire to install a single-wide mobile home on their property for their grandson, arguing that the current 23-foot dimension requirement prohibits this due to the narrower width of single-wides. They emphasized the need for affordable housing options in the area.

Existing Regulation: The 23-foot minimum was discussed as a standard set to maintain uniformity across different types of housing, including mobile homes, without discrimination, as per federal regulations from HUD.

Issues Raised:
Affordability vs. Standards: Commissioners discussed the issue between maintaining community standards and providing affordable housing options.

Structure Expansion:
The Krueger's discussed expansion. Given that there are no building codes specifically addressing this scenario, the Commission questioned whether a mobile home could be brought to a site, expanded on the same foundation, and still be considered as having a single, continuous main body with a complete perimeter foundation? Priestley offered concerns about the main structure being on a continuous perimeter.

Potential Solutions:
Meister discussed potential solutions including a conditional use for a relative. Priestley discussed both the conditional use and variance scenarios.

Variance: Discussed the possibility of a variance, but noted the challenges in proving a practical difficulty or hardship as required by law.

Conditional Use Permit: Suggested for scenarios where the mobile home could be on the same lot as another structure, but this still wouldn't bypass the size requirement.

Public Demand: There was a concern over the lack of significant public demand for changing the ordinance, suggesting that broader community support would be needed for any amendment.

Decision Making:
The commission did not make an immediate decision to change the ordinance but decided to keep the issue open for further public input. They acknowledged the need for more research, particularly on how adding to the structure might satisfy the current requirements.

Hanson suggested that legal interpretation on the addition to structures might be sought from the county attorney to clarify if such additions would comply with the ordinance.

The issue is to remain on the agenda for future meetings to gather more community feedback.

Motion by Bride to close the public hearing. Second by Corey. Carried 5-0.

FINDINGS:

Other than the testimony by Jeanie and Ronnie Krueger on January 27, 2025 and no participation on November 25, 2024. There was not a large public demand to make any changes or adjustments to the Woodbury County Zoning Ordinance in terms of the minimum dimension. Therefore, staff recommends for the Zoning Commission to recommend back to the Board of Supervisors that after conducting two public hearings, **the Commission does not find enough public demand to make a county-wide change to the ordinance in terms of the minimum dimension.**

As per Commissioner Hanson's request on January 27, 2025, this matter was reviewed by the county attorney's office in terms of attachments or expansions that could potentially increase the size of the main body. The county attorney's office pointed out that the county is obligated to enforce both federal law and state code. In particular, Section 4.11.4 C states:

> *Compliance with the National Manufactured Housing Construction and Safety Standards Act and must have displayed an appropriate certification label issued by the United States Department of Housing and Urban Development, and must not have been altered in violation of applicable codes. If a structure lacks such certification, it must conform to the State Building Code.*

It was found that manufactured and mobile homes are regulated under 24 C.F.R. § 3280.212 and 24 C.F.R. § 3282.8(j) in terms of additions/attachments. In other words, they may not be expanded in any other way expect for meeting full compliance with both state and federal regulations. Thus, in terms of analyzing this situation with the county attorney's office, if an expansion were to meet federal and state guidelines, the manufactured or mobile home could be expanded to exceed the minimum dimension with an attachment that shares the weight load.

When an attached structure, such as a garage, is designed as part of the manufactured home—either factory-constructed or intended for site-built attachment—and is not self-supported, it can be considered part of the main body. This interpretation aligns with federal standards under 24 C.F.R. § 3280.212, which governs factory-constructed or site-built attached garages for manufactured homes. For such an add-on to be compliant, the following must be ensured:

- The manufactured home's design must accommodate all live and dead loads transferred from the attached structure to the home's support and anchoring systems, as specified by the manufacturer.
- Appropriate fire separation must be provided between the garage and the manufactured home (e.g., ½-inch gypsum board or equivalent, or 5/8-inch Type X gypsum board if beneath habitable rooms), per 24 C.F.R. § 3280.212 (c).
- Openings between the garage and the home must meet specific requirements, such as self-closing, fire-rated doors, and ducts must be constructed to prevent fire spread (24 C.F.R. § 3280.212 (e)-(f)).
- The manufacturer's installation instructions must detail acceptable attachment locations, design limitations, and support/anchorage designs to transfer imposed loads to the ground (24 C.F.R. § 3280.212 (g)).

As long as the add-on adheres to these standards and does not violate the requirements of Section 4.11.4.C—particularly HUD certification and applicable construction codes—it may reasonably be considered part of the main body of the manufactured home. However, any self-supported structure, such as a site-built garage not structurally dependent on the home is not considered part of the main body.

24 C.F.R. § 3282.8(j).

(j) ***Add-on.*** An add-on including an attached accessory building or structure added by the retailer or some party other than the manufacturer (except where the manufacturer acts as a retailer) as part of a simultaneous transaction involving the sale of a new manufactured home, is not governed by the standards and is not subject to the regulations in this part except as identified in this section and part 3280 of this chapter. The addition of any add-on or attached accessory building or structure must not affect the ability of the manufactured home to comply with the standards. If the addition of an add-on or attached accessory building or structure causes the manufactured home to fail to conform to the standards, then sale, lease, and offer for sale or lease of the home are prohibited until the manufactured home is brought into conformance with the standards.

(1) With the exception of attached accessory buildings or structures, add-ons must be structurally independent and any attachment between the home and the add-on must be for weatherproofing or cosmetic purposes only.

(2) If an attached accessory building or structure is not structurally independent all the following must be met for attachment to the manufactured home:

(i) Manufactured home must be designed and constructed to accommodate all imposed loads, including any loads imposed on the home by the attached accessory building or structure, in accordance with part 3280 of this chapter.

(ii) Data plate must indicate that home has been designed to accommodate the additional loads imposed by the attachment of the attached accessory buildings or structures and must identify the design loads.

(iii) Installation instructions shall be provided by the home manufacturer which identifies acceptable attachment locations, indicates design limitations for the attached accessory building or structure including acceptable live and dead loads for which the home has been designed to accommodate and provide support and anchorage designs as necessary to transfer all imposed loads to the ground in accordance with part 3285 of this chapter.