

# House Research Act Summary

**CHAPTER:** 11

**SESSION:** 2003 Special Session

**TOPIC:** Authorization for storage of additional spent nuclear fuel

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## Overview

This act contains four articles:

- Article 1 – Nuclear Energy Provisions
- Article 2 – Renewable Energy Provisions
- Article 3 – Other Provisions
- Article 4 – Innovative Energy Project

All articles are effective immediately.

Section**Article 1: Nuclear Energy Provisions**

This article:

- Authorizes additional dry cask storage at Prairie Island to allow that nuclear generation facility to continue to operate until the end of current license in 2013/2014;
- Delegates approval of a future storage facility or dry casks at either the Prairie Island or Monticello nuclear generation facilities to the Minnesota Public Utilities Commission;
- Requires opportunity for legislative review of a PUC decision authorizing additional storage; and
- Provides for recovery of expenses for a settlement with the Mdewakanton Dakota Tribal Council at Prairie Island regarding additional storage at Prairie Island.

**1 Definition of radioactive waste management facility.** Amends the definition of a radioactive waste management facility to specifically exclude a storage facility “located on the site of a Minnesota nuclear generation facility for dry cask storage of spent nuclear fuel generated solely by that nuclear facility.”

**2 Authorization for additional dry cask storage.**

**Subd. 1. Authorization for Prairie Island.** Grants authorization for sufficient dry cask storage (12 casks of the current type used at the facility) to allow the nuclear reactors at Prairie Island to continue to operate under the end of their current licenses (2013 for reactor unit 1 and 2014 for reactor unit 2).

**Subd. 2. Future storage.** Specifies that any future nuclear storage facility or dry casks at either the Prairie Island or Monticello nuclear generation facilities is subject to the approval of the Minnesota Public Utilities Commission, and must receive a certificate of need from the commission.

Grants the PUC explicit authority to make a decision that could result in a shut down of a nuclear generation facility.

Authorizes the PUC to consider whether the utility is in compliance with the renewable energy objectives, and the utility’s past performance with regard to those objectives.

**Subd. 3. Legislative review.** Stays a decision on a request for a certificate of need for additional storage pending opportunity by the legislature to review the decision. Specifies that the stay expires as of June 1 following the legislative session, if the legislature does not act to modify or reject the commission’s decision.

**Subd. 4. Other conditions.** Specifies that the storage of spent nuclear fuel in the pool and in dry casks at Prairie Island is to be managed to facilitate the shipment of waste out of state as soon as feasible in a manner that allows the continued operation of the plant. Clarifies that the authorization for storage capacity is limited to storage of spent fuel generated by a Minnesota nuclear generation facility, and stored on the site of that facility.

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**Subd. 5. Water standards.** Specifies that a dry cask storage facility is subject to certain specified groundwater protection standards.

**Subd. 6. Environmental review and protection.**

**Paragraph (a):** States that the siting, construction and operation of a dry cask storage facility is subject to all of the environmental review and protection provisions of chapters 115, 115B, 116, 116B, 116C, 116D, and 216B, except those that apply specifically to a radioactive waste management facility.

**Paragraph (b):** Requires an environmental impact statement for a proposal to construct and operate a new or expanded dry cask storage facility. Requires the EIS to demonstrate the facility is designed to meet the groundwater standards in section 116C.76, subdivision 1, clauses (1) to (3).

- 3 Recovery of costs relating to settlement with Prairie Island tribal council.** Authorizes the utility to recover without a general rate case the costs of a settlement with the Mdewakanton Dakota Tribal Council at Prairie Island regarding the contractual agreement entered into in 1994. Specifies that, although payments under the settlement may be used for the purchase of up to 1,500 acres of land within 50 miles of the current reservation at Prairie Island for placement in trust for housing and other residential purposes, the governor reserves the right to oppose any particular application to place land in trust.
- 4 Certificate of need; relicensing a nuclear facility.** Requires a certificate of need for additional storage of spent nuclear fuel for a facility seeking a license extension to address the impacts of continued operation over the period for which approval is sought.
- 5 Health study.** Directs the commissioner of health to review data collected by the department, and, in the context of information developed by the national institute for health and other entities, to report to the legislature by January 1, 2004, whether a further health study is necessary.

**Article 2: Renewable Energy Provisions**

Among a number of other things, this article:

- Requires the owner of a nuclear generation facility in the state to spend at least \$16 million on renewable energy development each year that the nuclear facility is in operation and spent nuclear fuel is stored in the state
- Funds hydrogen and other renewable research and development;
- Makes the renewable energy objective a requirement for the utility that owns the Prairie Island generation facility, and clarifies and expands on provisions related to the renewable energy objective for all utilities; and
- Increases the amount of small wind energy capacity which can qualify for production incentives and provides for production incentives for other renewable facilities.

- 1 Renewable development fund.** Requires a public utility that owns nuclear generation in the state to spend \$16 million annually on renewable development projects for each year the plant is in operation, and \$7,500,000 for each year thereafter the PUC determines the utility

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is not making a good faith effort to move the spent fuel out of state.

Directs that up to \$6 million annually is for production incentives for small wind energy facilities (2 megawatts and under), on-farm biogas reactors and other facilities.

**2 Hydrogen energy economy goal.** Establishes a state goal to move to hydrogen as an increasing source of energy for electrical power, heating and transportation.

**3 Renewable energy objectives (REO).**

**Subd. 1. Definitions.** Adds hydrogen to the list of renewable energy sources. Provides a definition for “total retail electric sales.” Adds mixed municipal solid waste and refuse derived fuel from mixed municipal solid waste to the definition of biomass.

**Subd. 2. Good faith effort.** Requires the Commission to issue criteria and standards by which it will measure a utility’s performance towards its REO, as well as a weighted scale for various eligible fuel sources, to provide multiple credit toward the REO’s for fuel sources which the commission finds is in the public interest to encourage. Makes technical language changes.

**Subd. 3. Public utilities commission.** Makes explicit that utilities must file their plans and activities regarding the REO with the commission, demonstrating that the utility is making a good faith effort. Requires the commissioner of commerce to report to the legislature on utilities’ progress toward the REO’s every two years.

**Subd. 4. Renewable energy credits.** Authorizes the commission to establish a system for tradeable credits for renewable energy. Allows a utility to meet some or all of its REO by purchasing credits.

**Subd. 5. Technology based on fuel combustion.** Specifies that electricity produced by fuel combustion may only count toward the objectives if the generation facility meets specified federal Clean Air Act standards. Allows the blending of a renewable energy source with non-renewable fuels, and specifies how to count that towards a utility’s REO.

**Subd. 6. Electric utility that owns a nuclear generation facility.** Specifies that a public utility that owns nuclear generation in the state, as part of its good faith effort towards its REO, is to deploy an additional 300 megawatts of wind energy capacity by 2010, 100 of which is to be under 2 megawatts. Makes the good faith objective a requirement for that utility, to the extent the eligible resources are the utility’s least cost resource.

**4 Clean energy technology.** Requires the utility that owns a nuclear generation facility in the state to supply at least 2 percent of the electric energy it provides to retail customers to be generated by a “clean energy technology,” provided the PUC finds this technology to be a least cost resource for the utility. Specifies that this energy must be supplied by an innovative energy project (see article 4) unless the PUC finds this to be contrary to the public interest.

Defines “clean energy technology” as one that “utilizes coal as a primary fuel in a highly efficient combined cycle configuration with significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions” when compared with traditional technologies.

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This section expires January 1, 2012.

- 5 **Renewable energy research.** Directs a public utility that owns a nuclear generation facility to spend five percent of its required conservation spending to support basic and applied research at the University of Minnesota Initiative for Renewable Energy and the Environment.
- 6 **Distributed energy resources.** Specifies that municipal and cooperative utilities that are meeting their renewable energy objectives, and any public utility, may spend 5 percent of their required conservation spending on eligible renewable energy sources and distributed generation. Eligible renewable energy sources includes: wind, hydrogen, solar, geothermal, small hydro, biomass, landfill gas, mixed municipal solid waste, and refuse derived fuel from mixed municipal solid waste. Authorizes utilities to pool resources under this section.
- 7 **Current biomass projects.** Increases the statutory cap on the amount of the biomass mandate that the St. Paul District Energy wood waste biomass facility (increased from 25 megawatts to 33) and the FibroMinn turkey litter facility (increased from 50 megawatts to 55) can satisfy.
- 8 **Transmission needed to support renewable resources.** Directs utilities subject to the state transmission planning process to determine necessary transmission upgrades to support development of renewable energy resources, and to include those upgrades in the utility's biennial transmission planning report.
- 9 **Renewable energy production incentive; administrative changes.** Sections 9 to 15 make a number of changes to the administration of the renewable energy production incentive.
- 10 **See section 9.**
- 11 **See section 9.**
- 12 **See section 9.**
- 13 **See section 9.**
- 14 **See section 9.**
- 15 **See section 9.**
- 16 **Reduction in biomass mandate.** Reduces the biomass mandate from 125 to 110, and directs the whole tree biomass project to reduce the size of its project by 15 megawatts.
- 17 **Renewable development fund administration.** Authorizes the PUC to review the appropriateness of transferring the administration of the renewable development fund from to an independent administrator answerable to a board of directors, rather than administration by the public utility. Authorizes the PUC to approve the transfer if it finds the transfer to be in the public interest.
- 18 **Hydrogen economy research.** Transfers \$10,000,000 of the unobligated funds in the renewable development fund to the University of Minnesota for its Initiative for Renewable Energy and the Environment, to support basic and applied research and demonstration activities regarding hydrogen and other renewables. Directs the University to ensure that at least \$3,000,000 of this amount is available to one rural campus or experiment station.
- 19 **Department of trade and economic development.**

Section**Subd. 1. Development of businesses engaged in hydrogen production.**

Requires the Department of Trade and Economic Development to develop a targeted program to promote and encourage the development and attraction of businesses engaged in defined aspects of the hydrogen economy. The Department is required to report to the Legislature by January 15, 2004, on legislative changes or funding needed, if any, to accomplish the purposes of this section.

**Subd. 2. Energy innovation zones.** Directs the commissioner of DTED, in consultation with the commissioners of commerce and revenue, to develop a plan to designate not more than three energy innovation zones to spur the development of fuel cells, fuel cell components, hydrogen infrastructure, and other energy efficiency and renewable energy technologies in the state. Requires the commissioner to report to the Legislature by January 15, 2004.

- 20 Hydrogen to electricity demonstration project.** Requires the commissioner of commerce, in consultation with the commissioner of DTED, to develop and issue a request for proposal for the construction of a hydrogen-to-electricity demonstration project.
- 21 Independent study on intermittent resources.** Directs the utility subject to section 216B.1691, subdivision 7 to contract for an independent study of the impacts of intermittent resources on the utility's electric system.
- 22 Effective date.** Makes article 2 effective immediately.

**Article 3: Other Provisions**

Among other things, this article:

- Establishes additional cold and extreme hot weather protections for energy consumers;
- Facilitates PUC approval of the Xcel Metropolitan Emissions Reduction Program, to repower two metro area coal-fired generation facilities to use natural gas, and to add significant pollution control technology to a third; and
- makes changes to the Legislative Electric Energy Task Force.

- 1 Disconnection during cold weather; service limiters.** Sections 1 and 2 amend the definition of disconnection to include any device that limits or interrupts electric service in any way.
- 2 See section 1.**
- 3 Disconnection during extreme heat.** Prohibits a utility from disconnecting residential service with an excessive heat watch, heat advisory or excessive heat warning has been issued.
- 4 Conservation improvements by cooperative and municipal electric utilities.** Specifies that the overview of a municipality with less than \$2.5 million in annual gross revenues may consist of a letter from the governing board of the municipal utility to the department certifying that the required amount has been spent on conservation programs.

Authorizes a municipal utility to use up to 50 percent of its required conservation spending on the refurbishment of an existing district energy system, and that this authority expires as

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of June 2007.

- 5 Township agreement with a natural gas utility. Township agreement with a natural gas utility.** Authorizes a township to enter into an agreement with a natural gas utility to provide service within the township. Specifies that, in the event of an annexation of township land for which the utility has an agreement to serve, the utility continues to have a nonexclusive right to offer and provide service in the area identified by the agreement.
- Clarifies that the utility's right to provide service is subject to the annexing city's authority to manage public rights of way within the city under Minnesota Statutes, section 216B.36, 237.162 and 237.163. Retains a municipality existing right to acquire property of a public utility.
- 6 Legislative electric energy task force; future energy solutions.** Directs the LEETF to gather information and make recommendations to the legislature regarding potential electric energy resources, in light of current electric energy guidelines and resource plan proceedings before the public utilities commission. Directs the task force to consider certain resource supply options, as well as issues related to transportation of spent nuclear fuel. Directs the public utility that owns the Prairie Island nuclear generation facility to update certain reports required by the 1994 Prairie Island legislation.
- 7 LEETF; report and recommendations.** Requires the task force to issue a report to the legislature every two years beginning January 15, 2005.
- 8 LEETF; assessment.** Increases the assessment authority of the task force, to \$250,000 annually.
- 9 LEETF; expiration.** Extends the expiration date of the task force from 2005 to 2007.
- 10 Reliability administrator; administrative issues.** Sections 10 and 11 amend the process for making assessments for the budget of the reliability administrator and for funding the department of administration's public buildings conservation program.
- 11 See section 10.**
- 12 Refurbishment of metropolitan generating plants.** Facilitates Commission approval of the Xcel Energy's Metropolitan Emissions Reduction Program, to re-power two metro area coal-fired generation facilities to use natural gas, and to add significant pollution control technology to a third. Directs the utility to implement the proposal once approved, or explain to the commission its decision not to do so. Current law only requires notice to the commission if the utility decides not to move forward with an approved emissions reduction project.
- 13 Conservation improvement plan; evaluation.** Provides for an evaluation of the CIP program overall. Allows the Department to recover the cost of the evaluation through a utility assessment.
- 14 Legislative approval of consumptive water use.** Sections 14 and 15 provides legislative authorization for the consumptive use of water for natural gas generation facilities in Mankato and Rosemount, subject to the determination by the commissioner of the department of natural resources that water resources will be adequate.
- 15 See section 14.**

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- 16**      **Repealer.** Repeals a requirement from the 1994 Prairie Island legislation that Xcel find and site an alternative spent fuel storage site in Goodhue County away from Prairie Island. Repeals sections of the LEETF statutes.
- 17**      **Effective date.** Makes article 3 effective immediately.

**Article 4: Innovative Energy Project**

This article provides for a number of regulatory incentives for an innovate energy project on the Iron Range, which generates electricity by utilizing “coal as a primary fuel in a highly efficient combined cycle configuration with significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions” when compared with traditional technologies. The regulatory incentives include:

- an exemption from demonstrating need for the facility or associated transmission facilities;
- a grant of eminent domain authority for transmission routes approved by the Environmental Quality Board; and
- an entitlement to enter into a power purchase agreement with Xcel Energy to provide 450 megawatts of capacity and energy, subject to the approval of the PUC.

This article is effective immediately.