



N E B R A S K A

ENERGY POLICY PLAN

S U M M A R Y D R A F T

S E P T E M B E R

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Dear Nebraska Citizens:

Five months ago, I appointed 52 Nebraskans to the Energy Policy Council and asked for their help in fashioning an energy strategy for our state. Since that time, Council members have spent countless hours discussing energy policy with citizens across the state.

What follows is a summary of the Council's work thus far: a wide range of ideas for energy conservation, alternate energy sources and a variety of other issues related to a comprehensive energy policy. I commend the Council's efforts and I encourage their continued commitment through the remaining tasks ahead.

During the next few weeks, Nebraskans will have the opportunity to comment on the many ideas contained in this draft. Some are undoubtedly controversial; some will require tax dollars and must be considered in the overall context of the state budget; some may be in various stages of implementation already.

As I formulate my own response to these ideas, I look forward to hearing from people across the state. I am interested in your thoughts about which ideas are the most important to address, whether their implementation is feasible and information concerning activity currently underway.

I invite you to attend one of the public hearings listed on the back of this summary, or send your comments to the Nebraska Energy Office. Your comments and ideas are important. Please let me hear from you!

Sincerely,
Ben Nelson
Governor

Why does Nebraska need a comprehensive Energy Policy Plan? The opportunity to answer that question has been a challenge for the Energy Policy Council. Council members met this challenge by sharing their energy experience and knowledge, which have become an integral part of this plan.

Nebraskans also responded to this challenge during a series of 15 regional meetings. These meetings were held to receive comments on the Council's first draft of the plan. The recommendations and suggestions from the public were invaluable and gave the Council excellent direction.

The staff of the Energy Office provided invaluable support and information to the Council. The Energy Office became the library of information for use by the Council members. Without this extensive data base, the Council would have been unable to create this plan.

Building on the foundation established by Nebraska's energy suppliers, utilities, agencies, and the public's participation, the Council's work will establish a set of strategic objectives to guide policy decisions in the critical area of energy. But this is only a first step! Our course will change often over the coming decades as new technologies emerge. We must be prepared to adapt to a rapidly-changing future.

The shaded areas in this summary identify policy statements reflecting overall goals and concepts. Following the policy statements are a series of recommendations or options which could be implemented to achieve the major objectives.

Once the public hearings are completed, the Council will meet to finalize the recommendations to be made to Governor Nelson. The Energy Policy Council has made a substantial contribution to meeting one of the most important challenges we face. Plan to attend a public meeting. This is an important opportunity for all Nebraskans to be a part of deciding the future of energy in our state. Our efficient use of energy may well determine our success in the world marketplace.

Sincerely,
Corrinne Pedersen
Chair, Energy Policy Council

Agriculture

As Nebraska's largest and most diverse industry, special efforts should be made to encourage energy efficiency and conservation in all aspects of the agricultural sector.

- Information on energy saving techniques and opportunities should be disseminated to the agricultural sector through a variety of entities such as farm journals, the Department of Agriculture, the Cooperative Extension Service, the Agricultural Stabilization and Conservation Service, Farmers Home Administration, post-secondary institutions and agriculture-related organizations.

- The state should identify an agency or entity responsible for testing irrigation wells for water and energy efficiency. Consider using a circuit rider concept for well testing through the natural resources districts or other appropriate agency.
- Promote conversion of agricultural vehicles from diesel to alternate fuel engines.
- Solar power for farm installations should be promoted. Solar powered irrigation pumps are practical in areas such as the Sandhills where delivery of other power sources may cost more.
- Mandate the certification of agricultural vehicles and equipment in horsepower-hours per gallon at a 75% load factor.
- A presentation on ecofallow and energy use should be included in the Environmental Protection Agency's Certified Applications seminars.

Buildings

Take action to implement and encourage programs and processes which increase the affordability, cost-effectiveness and energy efficiency of buildings in Nebraska. Total operating costs, including the savings from energy efficiency, along with initial construction costs, should be considered in building design.

Building Codes

Nebraska should adopt a state-developed energy building code which is affordable, cost-effective, user-friendly and enforceable. Special consideration must be given to achieve energy efficiency without reducing housing affordability.

- A public process should be used to develop a code which is easily understood and achieves the goal of energy efficiency, affordability and cost effectiveness. The code should be regularly evaluated to keep the code current and effective. The code should be enforced on a regional basis and include provision for information and education in its requirements.
- Encourage local governments to develop ordinances or revise existing ordinances to allow for passive solar design.

Public Buildings

Maximize energy efficiency in public buildings so that government serves as a model for conservation and to reduce the tax burden of the state's citizens.

- Require compliance with the energy building code on all new and remodeled public buildings. Energy building audits, energy accounting audits and corrective action plans should be required for all public buildings. Noncompliance would result in loss of state funding.
- Require governmental subdivisions proposing to exceed budget limitations to demonstrate completion of a corrective action plan.
- Establish and/or maintain financing necessary for public entities to implement energy conservation building improvements.

Energy Rating System and Energy Efficient Mortgages

To improve the overall efficiency and affordability of residential, commercial and industrial structures, the state should institute a comprehensive and coordinated approach to energy improvements. These activities should include a home energy rating system, energy efficient mortgages, enforcement of energy building codes, incentives to building owners to make energy improvements and coordination among federal, state and local building efficiency programs.

- Endorse the implementation and use of Energy Rated Homes™ as a uniform rating system to document the energy efficiency of homes including heating, air-conditioning, lights and electric appliances.
- Educate and encourage potential home buyers to purchase energy efficient homes to reduce monthly expenses.
- Require all Nebraska Investment Finance Authority mortgages to adopt the rating systems.
- Recommend that lenders recognize the value of lower operating costs and include the value of these lower costs in energy efficient mortgage formulas.
- Examine the need to develop incentives for landlords to make existing rental units more efficient.
- Require recipients of heating assistance payments to also participate in the Weatherization Assistance Program to improve their home's energy efficiency.

Construction Waste

Implement programs to encourage reduction and recycling of construction waste.

- Encourage research in innovative construction material use.
- Facilitate recycling and reuse of materials.
- Teach building techniques that limit construction waste.

Education

Organize an Energy Education Action Council to facilitate resource sharing, communications and implementation of results-oriented activities which achieve a greater level of understanding and responsibility regarding energy use and production.

Coordination

- The Nebraska Energy Office, with guidance from the Action Council, should coordinate the design, development, promotion, implementation and evaluation of energy education programs. The purpose is to help Nebraskans take steps to increase their knowledge of energy production, efficient use of energy sources and benefits of Nebraska's publicly-owned power systems.

Implementation

- The Nebraska Energy Office, with guidance from the Action Council, should develop and implement an energy education

action plan with incentives for educators and objectives for elementary, secondary, post-secondary and life-long learners.

- Coordinate implementation of information and incentive programs with the Department of Education, Nebraska State Education Association, educational service units and other appropriate organizations.
- Utilize state colleges and community colleges to develop and provide in-service and pre-service training opportunities. They should also provide centrally located information, training and dissemination sites for elementary and secondary educators and the general public.
- State colleges and/or community colleges should offer courses or a degree in energy management.
- Offer continuing education courses at state colleges and/or community colleges for certification of energy professionals such as building code inspectors and energy auditors. Offer periodic classes or seminars for various trades and professions.

Electricity

Nebraska is the only state in the nation in which all of the electric power generated and used is publicly owned. As such, Nebraskans have a unique opportunity to impact how electricity is generated, used and conserved.

Conventional Resources

New technologies should be utilized to improve the efficiency of conventional energy sources. Efforts should be maintained to operate conventional generating plants in an environmentally safe manner.

- Support the development of clean coal technology.

Fully educate the public about nuclear power, keep abreast of technological developments and keep nuclear energy open as an option for the future.

- Monitor nuclear developments such as advanced reactor design and license extension requirements.
- Given the world class uranium deposit near Crawford, encourage the development of this energy resource consistent with safe environmental practices.

Utility Planning Coordination

Nebraska's electric utilities should fully participate in state and regional planning efforts to ensure adequate and low cost power for Nebraskans.

- The utilities should continue cooperation with Mid-Continent Area Power Pool, Western Area Power Administration and other regional suppliers providing power to the state.
- Continue coordination of electric utilities through the Nebraska Power Association (NPA). The NPA 1991 Statewide Resource and Transmission Planning Study recommends that starting in 1993, 228 megawatts of power be generated from demand side reductions such as load management and the use of heat pumps and energy efficient lighting. Cost savings from these are

estimated at \$299 million. Between 2002 and 2003, two 160 megawatt combustion turbines would be brought on line and in 2005, a 600 megawatt coal fired plant would be built.

Maintain awareness among Nebraska's congressional delegation of the need to continue Western Area Power Administration as a public entity and continue the Rural Electric Administration loan program.

Integrated Resource Planning

Identify an effective combination of supply-side and demand-side alternatives to achieve the most reliable electric service at the lowest reasonable cost and in an environmentally responsible manner.

Supply Side

Supply side resources generally address power generation issues. These would include new generating facilities, improved delivery techniques or improved regulatory actions.

- During integrated resource planning processes, environmental impacts must be an important consideration.
- Encourage the streamlining of federal permitting and repermitting and seek a greater role for states in the federal regulatory process.
- Encourage district energy systems which are central heating and cooling units providing heat and air conditioning to a number of buildings.

Demand Side

Demand side resources involve the customer's electrical use patterns. These may include improved efficiency such as load management and conservation to reduce the amount of electricity needed.

- Conservation and efficiency must be an integral part of an integrated resource plan. Encourage the use of high efficiency appliances and equipment, lighting and basic energy conservation improvements by the state and utilities.
- Endorse utility conservation programs currently operated by the state's electric utilities. Clarify the statutes regarding the ability of the state's public power providers to offer loan programs for energy conservation.
- Allow a state income tax exemption for cash rebates offered for energy efficiency improvements.
- Require utilities to tie rebates for equipment and appliances to the efficiency rating of the equipment.
- The Nebraska Energy Office should assist small utilities in complying with Western Area Power Administration regulations regarding integrated resource planning.
- Encourage all utilities to operate programs which control or limit peak demand.
- Expand the lighting program being developed by the Energy Office and the state's electric utilities to the residential sector.
- Support state and utility research of demand side resources available with specific emphasis on regional analysis.
- Encourage utilities to develop rate structures which reward conservation and are consistent with cost of service principles.

Energy Sources for the Future

Research, develop and fund environmentally responsible demonstration projects to show the full potential of all types of renewable and alternate energy sources.

- Overall policy must consider long term environmental costs, long term availability and best use of fossil fuel sources.
- Energy conservation and efficiency should be treated as viable energy sources.
- Financial incentives such as tax credits should be provided for the implementation of renewable energy projects.
- The use of renewable energy sources should be promoted where cost effective.

Solar

- Include solar resources in electric utilities' integrated resource planning activities.
- The state and state's utilities should develop and fund projects which show the viability of solar in Nebraska.
- Encourage the private sector to use both active and passive solar energy.

Wind

- Continue to consider wind as an energy source as new technologies improve cost-effectiveness.

Biomass

- Nebraska should aggressively pursue the use of biomass as an energy resource, including the use of biomass in the production of ethanol, in an environmentally responsible manner.

Hydro

- Hydropower should be utilized and further developed as an energy source as new technologies improve cost effectiveness. The environmental impacts must be assessed and considered in evaluating the cost effectiveness of hydropower installations.

Geothermal and Fuel and Hydrogen Cells

- These are examples of technologies which are currently not cost competitive, but which should continue to be pursued.

Financing Opportunities

The Nebraska Energy Office should explore opportunities to provide additional funding for the 5% Dollar and Energy Saving Loan Program.

- The Nebraska Investment Council should invest state funds in the Dollar and Energy Saving Loan Program at a 0% interest rate.
- Encourage the Unicameral to fund expansion of the program.
- Explore the possibility of additional funding for the program through the issuance of bonds similar to those issued by the Nebraska Investment Finance Authority.

- Modify the program to finance conversion of fleets to use compressed natural gas, propane and other alternate fuels.

The Nebraska Energy Office should research and summarize energy tax policy, check-offs and incentive plans used in other states.

- Use tax policy to change public behavior toward energy use and conservation.
- Offset loss of revenue due to implementation of tax credits through a tax on those industries benefiting from changes generated through this policy.

To expand energy efficiency in all buildings, building owners should be encouraged to make energy efficiency improvements and not incur penalties for making those improvements.

- Energy efficiency improvement costs should be allowed as a one-time credit on federal and state income tax and should be exempt from real estate valuation increases.
- Incentives should be available to landlords to promote energy efficient rental buildings.

Fossil Fuels

Promote initiatives which reduce fossil fuel use and reduce consumer energy costs.

- Develop a state-approved, certified energy efficiency audit program for public facilities as well as for residential, commercial, industrial and agricultural sectors. Audits would include checks for efficiency and safety in appliances and would be free to low-income residents. Use incentives to implement audit recommendations.

Crude Oil

- Stimulate Nebraska petroleum production to aid the economic development of oil producing regions and reduce dependency on out-of-state petroleum.
- Review the state's severance tax structure and make appropriate changes to encourage production.

Natural Gas

Promote the production, efficient use and continued price competitiveness of natural gas because of its environmental quality and abundant supply.

- Provisions should be made in state statutes or regulations to allow utilities which participate in state approved conservation activities to recover the cost of these activities in their rate base.
- Review the state's severance tax structure and make appropriate changes to encourage production.

Propane

Support legislation to form a state propane commission to oversee and regulate the production, distribution, safety and pricing of propane in Nebraska.

Heating Oil

- Encourage monitoring of the supply, pricing and efficient use of heating oil.

Other Opportunities

Nebraska should study the feasibility of reorganizing state agencies with energy responsibilities.

- Agencies considered for the study should include the Ethanol Authority, Gasohol Commission, Nebraska Energy Office, Power Review Board and the Oil and Gas Commission.
- The study should examine sources of funding, continuity of functions, elimination of duplication and opportunities for improved coordination.
- Provide adequate funding to carry out state mandates and the expanded activities resulting from this policy plan.
- Develop a framework to pursue cooperation and coordination among Nebraska's public and private energy entities.

Trees

Encourage the planting of trees as a renewable energy source, a method of pollution control, an energy conservation technique, an economic development opportunity and an improvement in our quality of life.

- Encourage the use of energy efficient landscaping and xeriscaping to conserve energy.
- Encourage low maintenance plant materials in the landscaping of public buildings and road right-of-ways.

Appliances

Promote the purchase and use of energy efficient appliances.

- Research and establish appliance and equipment efficiency standards for Nebraska.
- Encourage the use of efficient appliances through sales tax exemptions.

Research

Develop and fund research initiatives to foster financially and environmentally responsible use and production of energy. Coordinate current and future research efforts on a state, regional and national basis.

- Coordinate basic energy research in the state and facilitate technology transfer of energy research.
- Foster research efforts which will make Nebraska an energy producing state.
- Establish a Nebraska Energy Information Center within the Nebraska Energy Office to maintain a computerized energy data bank accessible to the general public.
- Encourage the state's electric utilities to continue funding research through the Electric Power Research Institute (EPRI). Foster EPRI information sharing with the Energy Office.

Transportation

Two-thirds of Nebraska's petroleum consumption is in the transportation sector. Inefficient automobiles contribute to environmental pollution as well as increase energy consumption.

Conventional Fuels

Create policies and programs to promote fuel efficiency, reduce dependence on petroleum and improve air quality in Nebraska.

- Encourage Nebraska's citizens and businesses to purchase fuel efficient vehicles.
- Institute a uniform vehicle emission inspection program for cars and light duty trucks. The program must be self-supporting and administered by a public entity. All vehicles under their present titles would be exempt from the program; however, the exemption would end when the title is transferred.
- Reinitiate a testing and enforcement policy for gasoline quality.
- Review Nebraska's energy emergency preparedness plan and assess the need for the state to monitor retail petroleum prices in the event of energy shortages.
- Encourage monitoring of the supply, pricing and efficient use of diesel fuel.

Alternate Fuels

Increase the use of alternate fuels such as ethanol, natural gas, propane and electricity in the public and private transportation sectors to lessen the use of petroleum and improve air quality.

- Establish a Fleet Alternate Fuel Incentive Fund to provide low interest loans for fleet conversions and fueling facilities.
- Provide incentives and demonstration projects to promote conversions of vehicles to alternate fuels.
- Encourage operators of public and private vehicle fleets to develop alternate fuel use policies.
- Extend the Nebraska Special Fuel User Permit program to all alternate fuel vehicles.
- Establish standards for motor fuel quality and require content labeling at retail fuel pumps.
- Tax all alternate fuels on an equal basis with the tax based on British Thermal Unit content rather than gallons.

Ethanol

Continue the state policy of increasing production of and demand for ethanol to lessen our dependence on foreign oil, provide local economic development, enhance the price of local grain products and provide for improved air quality.

- Continue federal and state tax incentives for ethanol production and use.
- By 2000, all gasoline-based motor fuel sold in the state should be at least a 10% blend of ethanol.
- Encourage the use of ethanol in county and local government vehicles.
- Support production of automobiles using an 85% ethanol-15% gasoline blend.

- Encourage research to reduce the amount of energy required to produce ethanol.

Natural Gas

Encourage the use of compressed natural gas as a motor fuel for private and government fleets and develop the fueling infrastructure necessary to support these fleets.

- Provide tax incentives for natural gas powered vehicles and for the development of natural gas fueling stations.
- Encourage automobile manufacturers to increase production of dedicated alternate fueled vehicles.

Electric and Propane Vehicles

- Encourage further research, development and demonstration of electric and propane vehicles.

Methanol

- Since methanol is a fuel which is converted from another energy source, it is not considered to be a viable alternate fuel for Nebraska.

Mass Transportation

- Assess inter and intra city transportation needs.
- Develop programs to stimulate the operation and use of mass transportation systems and incentives for vehicle pooling.
- Support efforts to retain or establish railroads in the state.
- Encourage greater use of bicycles and development of bicycle trails.

Public Hearings and Comments

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| <ul style="list-style-type: none"> • OMAHA
September 25, 7-10 p.m.
Kiewit Conference Center
Room 125
1313 Farnam-on-the-Mall • NORFOLK
September 26, 7-10 p.m.
Northeast Technical
Community College
McClay Building
Room 100A • ALLIANCE
September 30, 7-10 p.m.
Alliance National Bank
124 West Third | <ul style="list-style-type: none"> • NORTH PLATTE
October 1, 7-10 p.m.
Mid-Plains Technical
Community College
Main Building
Vo-Tech Campus • GRAND ISLAND
October 2, 7-10 p.m.
Central Technical
Community College
Seminar Room C
Southwest Administration
Office • BEATRICE
October 3, 7-10 p.m.
Southeast Technical
Community College
Adams Lecture Hall |
|--|---|

Comments may be made orally or in writing at any of the public hearings or mailed to the Energy Policy Council at the address below before October 15, 1991.

Waste

The State of Nebraska should affirm the hierarchy of solid waste management established by the U.S. Environmental Protection Agency of REDUCE, REUSE, RECYCLE, BURN AND BURY and implement policies and practices leading to energy conservation through waste management.

- Establish programs and incentives to promote reduced generation of waste and increased reuse of materials.
- Support research and demonstration projects for composting and digesting waste.
- Support development of regional recycling centers.
- Establish incentives for reuse, use of recycled materials and a used oil recycling system.
- Promote research to assess feasibility of waste-to-energy facilities with primary consideration for protecting air and water quality.
- Use the most environmentally safe methods for the burial of waste. Burial would take place only after all cost-effective energy has been extracted.

Government at all levels must lead by example in waste management through source reduction, reuse and recycling.

- Establish education and action programs for employees and constituents served by government.
- Support the development of a statewide solid waste management plan which emphasizes energy conservation and energy generation. Develop industries which reprocess recyclable materials.

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