

18 Aug/Sept/Oct.

interim

P243

Minnesota House of Representatives Aug.-Sept.-Oct. 1978

ENERGY

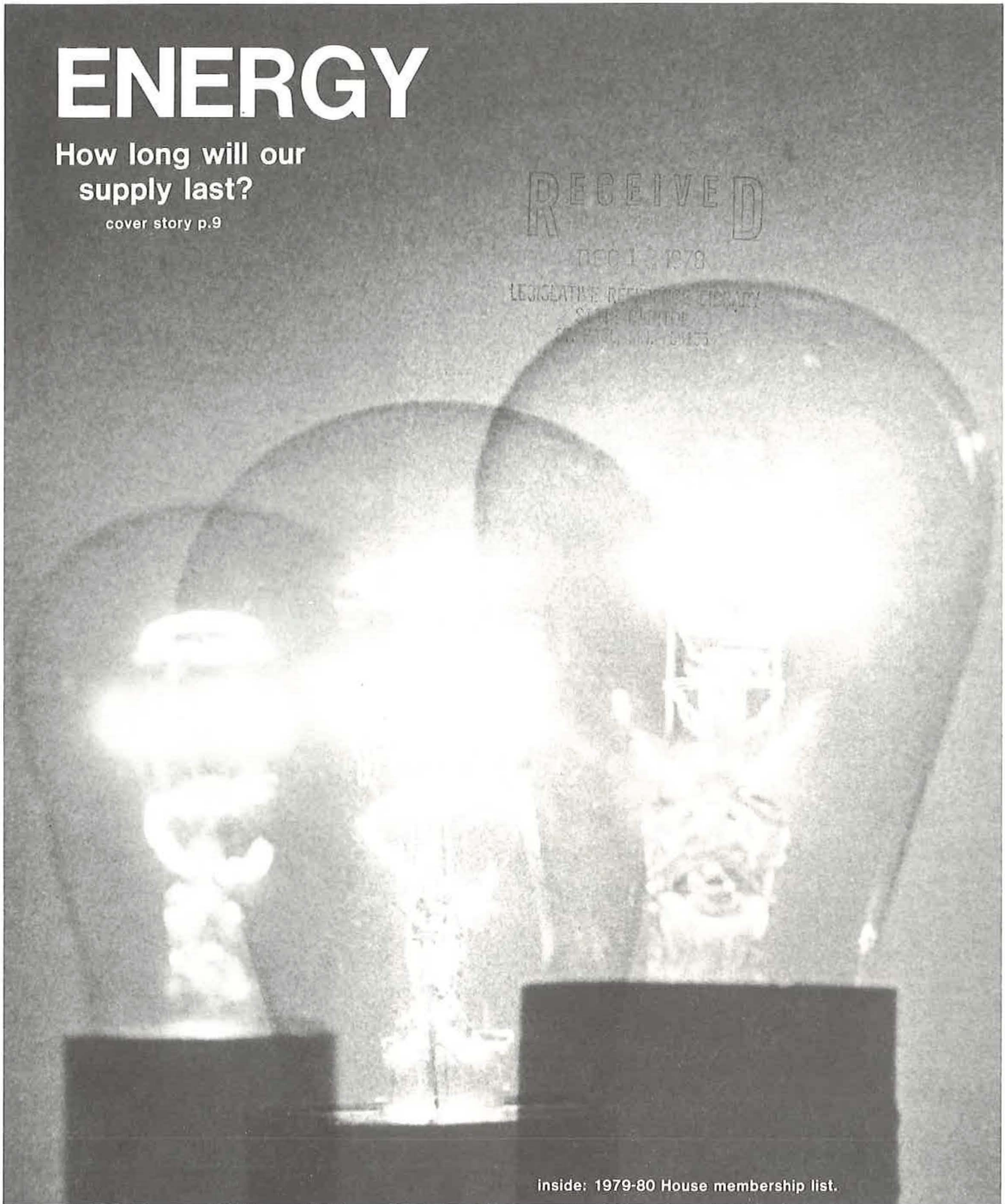
How long will our
supply last?

cover story p.9

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inside: 1979-80 House membership list.

interim

Minnesota House of Representatives

Aug.-Oct. 1978

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Readers Comment:

Comments and suggestions on Interim from our recent survey:
... how about a column with 'open letters from the people' ... I enjoy the special features that tell what's being done to solve specific problems ... I commend you on a most attractive and informative publication ... come out more often, a bit more on new laws ... articles made government easier to understand ... easy to read ... I use it to report to Board of teaching and to parents of PTSA ... the service is very helpful because of the completeness of the reporting ... please include a list of all representatives and their districts (coming next issue).

Most people said they share with others:
I add it to our library collection ... I share it with my co-workers ... with my family ... with my legislative district club ... I put it in the lounge at school.

Comments and suggestions are welcome. Please let us hear from you.

Coming next issue: introduction of house leadership for 1979-80—upcoming issues—plus new laws—the role of the Revisors office—new people, new faces—and more.

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library

The Minnesota Legislature established the Legislative Reference Library in 1969 as a non-partisan service to legislators and staff. The library's collection contains material on topics which have been, are, or may become, concerns to lawmakers. Director Linda Montgomery explains the department.

Establishment

"I think that, at the time of the library's establishment, legislators looked around and said, 'There's a collection here, and there's material there. It's time we pulled it all together.'

"Initially, the Legislature required the library to collect and make available subjects of interest to members and staff. At that time, they probably meant book-type materials or other printed materials. Under the law creating us, the library could also make reports, but we've never done that. We don't do evaluations. We provide materials, short answers and prepare bibliographies.

Importance

"When someone asks me, 'what does the library do and why is it important?' my answer is: 'If the library doesn't provide a good foundation for information and research, if the material we provide isn't correct and up-to-date, then the outcome of the research and the conclusions people draw are not going to be accurate.' Basically, within the legislative process, the library is very important.

Changes

"At first, we provided materials and organized them so we could locate them quickly. We gave them out when people asked for them. Because of the types of questions people ask, we've had to use other approaches. I think the staff has developed a community awareness. We know which resource people have the information we need and the people who can direct us to the proper sources. Library staff members are what I would call 'information generalists'.

Public Use

"Many citizens in past years have found out that we are responsible for collecting this material; they will come in to use the library.

"Mainly, we serve the legislators and their staff, but we are a public library, too. We serve the public on an as-time-permits basis.

"We often handle constituent requests from legislators. We are establishing what I call 'briefing files'. They contain pros and cons on issues the Legislature

discusses. Some of the files have reprints from popular magazines. For example, we can quickly send both sides of the capital punishment issue to an eighth grade constituent.

Tapes, newspapers

"The Rules Committees of both Houses gave us the duty of collecting tape recordings of committee and floor debate. This happened in 1973 for the House of Representatives and in 1975 for the Senate. So far, we've been told not to get rid of any of them. Legislative rules require us to make the tapes publicly available. They are very heavily used. We have an ever growing influx of



students asking for them. We also get citizens and attorneys using the tapes for their research.

"We receive about thirty-eight newspapers. Current newspapers seem to be a very important source of information. We thought that during an election year it would be wise to have one major newspaper from each of Minnesota's congressional districts.

"After we've had the newspaper for about two weeks, staff members mark and clip the articles and file the clippings by subject matter. We have a file for each year the library has been in existence. We have material on every subject and we also have a file for every elected person in the state. Some of our clippings are absolutely irreplaceable. There's no index to the metropolitan papers back that far. That makes our subject arrangement the only key indexing in existence anywhere."

Services

The library provides these materials to legislators, staff and public:

- 15,000 books and documents
- any book through interlibrary loan
- 800 active magazine subscriptions
- 38 newspaper subscriptions
- newspaper clippings arranged by subject since 1969
- Minnesota government publications since 1974
- legal materials such as USCA, MSA, State and Federal Regulations, etc.
- legislative manuals since 1887
- House and Senate Journals from 1909 to 1912 and from 1921 to the present
- all bills House and Senate members introduced since 1965
- Senate and House committee books
- Senate and House tapes of committee meetings and session floor debates.

Requests

Some typical questions the library receives are:

- Have there been more accidents since the lowering of the drinking age?
- Which states have not ratified the ERA?
- What is Congressman Nolan's address in Washington?
- What states have shield laws for newspaper journalist sources?
- Do you have material on the pros and cons of capital punishment?
- What was the percentage of voter turnout at the last election?
- Do you have clippings on an elected vs. an appointed Metropolitan Council?
- Do you have tapes of the committee hearings on the repeal of the motorcycle helmet law?
- Do you have a comparison of "food away from home" costs in the Twin Cities and other major cities for 1970, 1972, 1974, 1976 and 1978?

This is the second in a series of articles to acquaint the public with supportive legislative services. Next issue will cover the office of the revisor of statutes.

Linda Montgomery



committees

How many juvenile prostitutes operate in Minnesota?

Dave Nelson, project director of the *Enablers's study on juvenile prostitution said, of 80 women prostitutes researchers interviewed, 60 were under the age of 19. Findings show 52 of the women became actively involved in prostitution before they were 16 years old. Ninety percent said they had been prostitutes for nine months or less.

Sixty-five percent of the women 19 and under said they were "on the run" when they began. Half the women said material rewards and survival needs were reasons for their initial involvement.

Fifty-two of the juveniles said they were involved with a pimp. Sixty-two percent said the relationship lasted three months or less. In most of the pimp relationships, the pimp expected the women to turn over all the money they received. In 60 percent of the cases, the pimp had beaten the women at least once or twice.

Researchers found that juvenile prostitutes worked on the streets most often and, generally, didn't like their "tricks".

Nelson said there was little indication that anyone forced prostitutes to travel. Most travel was in the Midwest and with groups of people. The women didn't indicate involvement in a "pipeline" system of travel.

The general conclusions of the report estimate that "between 150 and 250 juveniles are working as prostitutes at any given time in the Minneapolis/St. Paul area."

Nelson appeared before an interim meeting of a Criminal Justice subcommittee on juvenile justice.

*Non-profit research organization

Should the state change its method of giving special tax breaks to the handicapped?

This interim, a new subcommittee of Taxes, the subcommittee on the Handicapped is studying the 3cc property tax classification, a special tax provision available for the handicapped.

Under 3cc, permanently and totally disabled persons are eligible for the tax breaks if they pass the 90 percent income test. That is, 90 percent of their income must come from the following sources:

- aid from any state as a result of their disability.
- supplemental security income for the disabled.
- workers compensation based on a finding of total and permanent disability.
- social security disability, or
- aid under the federal railroad retirement act of 1937.

At the Aug. 16 meeting, the subcommittee heard from two county assessors and the Department of Revenue. The assessors mentioned these difficulties:

- a blind person with a million dollar income would be eligible for 3cc because blind people can get 3cc tax relief regardless of their income sources.
- there are a number of inequities in the program. Some low income disabled taxpayers don't get the relief while those with higher incomes do.
- tax assessors have no access to income tax records so it's difficult for them to even know "what incomes are."
- since taxpayers are paying "last year's" property taxes, there are problems when the blind or disabled buy or sell property. If blind or disabled people sell their property, they lose their tax relief for one year, and the new owner gets it.

The assessors recommended dropping the 3cc classification and having the relief come through the circuit breaker. Rep. Joel Jacobs (DFL-Coon Rapids) suggested making some modifications instead of dropping the classification.

A Department of Revenue spokesman told the legislators that one special problem of the 3cc classification is with mobile homes. He said there isn't a requirement that the handicapped who live in mobile homes get the 3cc relief.

"It's become clear that we have something here that's not functioning the way it should," Chairman Rep. Linda Scheid (DFL-Brooklyn Park) said.

She suggested the subcommittee hear from those getting the relief before making a recommendation.

What is the state of Minnesota's economy?

Mark Dayton, acting commissioner, Department of Economic Development, says it's excellent. Speaking before the **Commerce and Economic Development Committee**, Aug. 30, Dayton told the legislators, "From most of the key indicators, it is indisputable that Minnesota has, in recent months and recent years, produced an outstanding record of economic growth."

Dayton cited the following statistics:

- from Jan. 1977 to July 1978, non-agricultural employment in Minnesota increased by 174,800 jobs, a growth of 11.5 percent.
- manufacturing employment during the same 18-month period increased by nearly 42,700 jobs, a growth of 13.3 percent.
- in July, there were 90,700 construction jobs, an 11.8 percent increase over a year ago.
- in July, Minnesota's unemployment rate was 3.8 percent, compared to the national rate of 6.3 percent.
- retail sales in Minnesota during the first quarter of 1978 increased by 531 million over the first quarter of 1977.
- first quarter agricultural marketing receipts showed a healthy 21 percent increase, compared with 5 percent nationwide.

What should the state do to financially aid the Department of Transportation?

The **Transportation and Appropriations Committees** met jointly, Aug. 23, to discuss the Department of Transportation's (DOT) financial difficulties and recommendations to solve them.

According to department personnel, DOT will have a deficit of approximately \$87 million by 1985 unless the Legislature alters the department's funding. Inflation has been particularly hard on the department and funding sources have not been able to keep pace.

Department representatives also mentioned that federal matching funds usually apply to new construction projects, and not maintenance. The 100 percent state funded maintenance will soon use up all of the department's budget, according to a spokesman.

Some of the department's recommendations to alleviate the money crunch include: possibly using the general fund to pay for the Highway Patrol and Department of Public Safety's services, instead of the highway fund; diverting the automobile sales tax revenues from the general fund to the highway fund; and changing the fuel tax formula to a percentage base.

Should Minnesota develop the concept of career education in public schools?

The **Education Division of Appropriations** and the **Education Committee** met jointly, Aug. 7, to consider the Minnesota Department of Education's plan for federal funds for an expanded career education program in Minnesota public schools.

Education Commissioner Howard Casney told the members the Education Department wants the Legislature to know about the development of career education because it is "a program that eventually will be picked up by the state."

"We could possibly get a total of \$2.5 to \$3 million in federal funds for this program, but eventually it will cost the state \$1.5 million. If you feel this is a concept that we should develop in Minnesota public schools, we would like your cooperation," the commissioner said.

What is career education and how would it help Minnesota students determine their future? J. Peter Devine, chairman of the Minnesota Career Education Task Force, said, "In order to make good decisions about what we do with our lives, we need to have information about ourselves — what kinds of choices are available to us, how to go about getting what we choose, and how our decisions affect others. Career education will provide this information."

Speaking for the business community, Lou Smerling, a member of the State Board of Education, told the committees that business is more than ready to cooperate with schools and career education programs. "We can no longer keep the students separate, as we have for so many years, from the rest of the state," he said. "If we are going to give them a real education, we have to give them an education that will ready them for the world of work."

Students also spoke in favor of the concept. "When I began to look seriously about career and college choices, I began to feel frustration at the lack of counseling in this area," said Lisa Heinzerling, president of the Minnesota Student Association. "This is a confusing period of time. Much of this confusion stems from the lack of knowledge about the possibilities open to people my age," she added.

Note: At the time of publication, Congress had not yet acted on federal legislation for career education, so the Minnesota Department of Education has not submitted its plan to the U.S. Department of Education.

Should all Minnesota financial institutions have similar powers and functions?

A new **subcommittee of Financial Institutions and Insurance** is looking into the various structures and powers of financial institutions in Minnesota and at HAB 98 (Kelly, R., DFL-St. Paul), a proposal calling for such a study.

According to the proposal: "The authorized powers and required structures of these financial institutions have been in a state of flux." The proposal states that various members of the financial community have sought, and are currently seeking, additional powers or changes in their structural requirements from the Legislature. These institutions, according to HAB 98, justify their legislative requests on the grounds that they are, either necessary to put the institutions on a parity with their federally chartered counterparts, or that they are necessary to allow them to compete with other state institutions, with similar purposes, which have already been granted the powers.

At a July meeting, Art Rolnick, senior economist with the Federal Reserve Bank, told the subcommittee, "Legislatures in the past saw that we needed specialization in the markets or we wouldn't get the needed funds. Should we continue to foster this environment? Maybe our objectives are not being met or maybe they've changed. It seems to me we've got to ask ourselves what we are attempting to do. Any committee, of any body of the Legislature, meeting on this issue, has to come to grips with what a change in the institutional arrangement means for the general economy." Hearings on this question will continue during the interim.

What has been happening in the study on solid and hazardous waste?

On Sept. 18 and Oct. 10, the State Planning Agency (SPA) presented research program plans to the **Joint Legislative Committee on Solid and Hazardous Waste**. (See cover story *Interim* for May, June, July).

Those plans include:

- surveys to local officials and public officers about the management of solid waste.
- consultant reports on the possibilities of resource recovery. (making waste products usable)
- analysis of past efforts at reducing waste.
- consultant advice on where to put and how best to manage a waste disposal facility.

Experts appearing before the committee again stressed the need for the public to get involved early in the decisions on what to do about the state's waste problems.

They said the failure to make use of available federal funds for a facility a year or so ago, was due to the lack of public understanding and public interest early enough in the search for a place to dispose of potentially dangerous waste. Allen Shilepsky, SPA project manager, told the Oct. 10 meeting that SPA research will take a close look at what government is doing about the waste problem and how effective government efforts have been.

Plans are to use a case study approach to land disposal and pollution and to see about making full use of resource recovery possibilities.

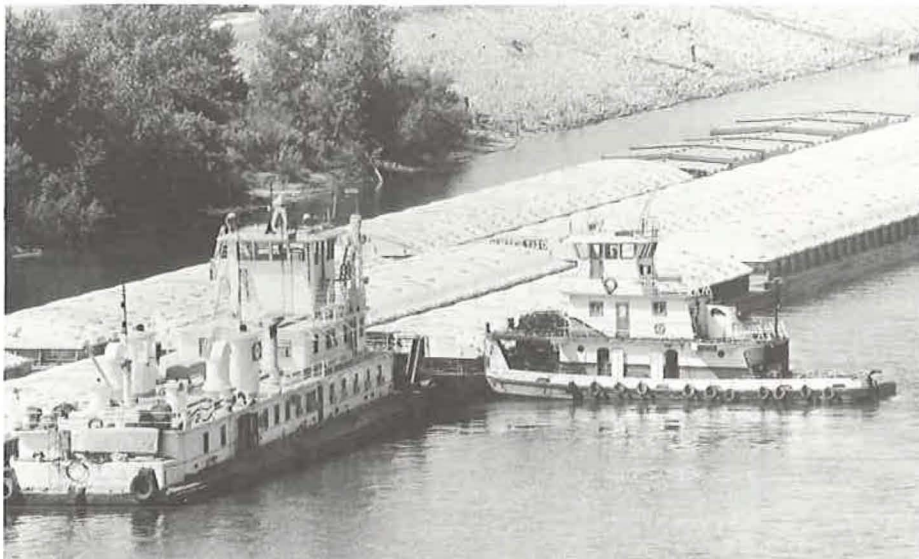
The research program is to collect information that will help legislators make necessary policy decisions during the upcoming legislative session.

Does Old Man River need help in moving Minnesota products?

Four legislators, this interim, traveled down the mighty Mississippi to observe firsthand the use of the waterway in the exporting of Minnesota corn and soybeans.

Under question was how best to maintain the river, and the barges — how best to use the river to move agriculture products to ports for shipment — and maintain the river's importance to the state and national economy.

Along for the information gathering tour were Reps. George Mann (DFL-Windom), chairman of the House Agriculture Committee, Tony Eckstein (DFL-New Ulm), Victor Schulz (DFL-Goodhue), and Douglas Carlson (IR-Sandstone).



commissions

House members serve on commissions meeting this interim . . . Here is a report on activity since the mid-July issue of *Interim*. **The Council on the Economic Status of Women** met July 20 at the State Capitol to review '77-78 programs and discuss program plans for '78-79 . . . held public hearings Aug. 23 in Willmar; Sept. 18 in Duluth; and Sept. 19 at the Leech Lake Indian Reservation to discuss topics relating to the economic status of women . . . **Legislative Audit Commission**, which reviews the effect of grant-in-aid programs, spending of public funds, and financing of government at all levels, met Sept. 18 to review subcommittee reports . . . subcommittees meeting included: **Advisory subcommittee for the Department of Personnel**, July 21 and Aug. 10 . . . **Advisory subcommittee for the Evaluation of the Liquor Control Division**, Aug. 9 . . . **Water Resources Management Subcommittee**, Aug. 2 . . . **Advisory subcommittee for the Evaluation of Nursing Home Rates**, Aug. 9 . . . **Organization and Salary Structure subcommittee**, Aug. 11.

Legislative Commission on Minnesota Resources conducted a three-day seminar in July, in Bemidji, to discuss energy and the environment, underground space resources, water resources, land needs, timber, and wildlife . . . met Sept. 14 and 15 to follow up on the seminar issues . . . **Legislative Commission on Pensions and Retirement** met July 28, 29, and 30 in Bemidji, to discuss topics relating to pensions and retirement, including fire and police funds, teachers retirement funds, unclassified employees retirement plan membership and benefits, present investment reporting procedures, reporting and disclosure to pension fund members, and disability benefit problems . . . **Legislative Commission to Review Administrative Rules** met July 31 to discuss Liquor Rule 39A, the Department of Revenue's rules governing sales and use tax on custom meat processors, and the study of the Public Service Commission . . . met again Sept. 26 to review their annual budget, direction for goals and objectives, custom meat processing complaints, and status reports on current complaint investigations . . . **Legislative Coordinating Commission** met Aug. 7 and Sept. 19 to review salaries of offices under their authority . . . **Minnesota-Wisconsin Boundary Area Commission** met July 27 in Hudson, Wisconsin to discuss issues relating to boundary lands, river valleys, and waters of Wisconsin and Minnesota . . . **Tax Study Commission** met Oct. 3 to review the progress of its subcommittees . . . **Business Climate subcommittee** met Aug. 6 to review the commission's study on Minnesota's business climate . . . **Income Tax subcommittee** met Sept. 26 to discuss income tax recommendations . . . **Workers Compensation Study Commission** met July 17, July 24, Aug. 14, Aug. 28, and Sept. 18 to hear testimony on recommended reforms in workers compensation system . . . looked at other states' systems.

a new committee



The House Select Committee on Energy is a new Minnesota House of Representatives interim committee.

In announcing its formation, Speaker Martin Sabo said, "I have decided to appoint a Select Committee on Energy, because there are several major energy issues facing the Legislature which require more in-depth and comprehensive review.

"In my judgment, the House needs a special committee of legislators with varying backgrounds and perspectives to begin a careful, thorough review of major energy issues.

"This new, 24 member committee has representatives from 8 existing House committees. Rep. Ken Nelson is the chairman." Nelson (DFL-Mpls) said he appreciated the opportunity to chair this committee and said the committee would limit its work to three specific policy areas.

"The first is energy costs and energy pricing. The second area is alternative energy systems, and the third broad area is energy and economic development," Nelson said.

HOUSE SELECT COMMITTEE ON ENERGY

Since its formation, the full House Select Committee on Energy has held seven informational meetings. Topics members discussed were: energy forecasts, national energy legislation, public opinions on the energy shortage, energy decision making processes, energy information and education, coal policies, district heating, conservation, the societal effects of the energy situation, and comparisons with energy policy in Minnesota and Sweden.

Nelson said the purpose of the sessions was to aid members in making energy decisions. The committee will begin drafting energy policy recommendations in November.

"Our directive is to complete these by December 15," Nelson said.

Alternative Energy Systems Subcommittee

The subcommittee on Alternative Energy Systems (Chr. Rep. Russell Stanton, DFL-Arco) met on 14 different days. Members reviewed alternative energy systems (see page 14, this issue) and narrowed the list of alternatives they will study further. Stanton said the subcommittee will make recommendations on all alternatives but will do more in-depth recommendations on the top priority alternatives. These are wood, underground space, flywheels, biomass, and solar.

Subcommittee members traveled to Mankato, Lake Crystal, Blue Earth, Morton, Redwood Falls, Marshall, Detroit Lakes, Thief River Falls, and Bemidji, Minnesota and to Osage, Iowa to tour alternative energy projects and talk with citizens in those areas.

Energy Cost and Pricing Subcommittee

The Energy Cost and Pricing Subcommittee (Chr. Rep. Robert Vanasek, DFL-New Prague) heard testimony at six informational meetings concerning energy pricing.

Agencies respond

Jim Solem, Minnesota Housing Finance Agency (HFA), said the HFA home improvement loan program doesn't require energy conservation activities as a part of the loan. Solem said about 25 percent of the loans related to energy conservation, and \$7.8 million went to insulation alone.

Larry Anderson, Department of Public Service, said the department regulates 13 private gas companies, 8 investor-owned electric utilities, and 129 municipal utilities. It has limited regulatory authority over 56 electrical cooperatives.

Anderson explained the four types of rate setting processes. **General rate filing** takes place when the utility requests an increase in rates for basic services. There must be a hearing before the rate increase.

Miscellaneous adjustments

(rate changes for special services or equipment) usually don't need a hearing. In **automatic adjustments**, the utility files a request, the department investigates, and the Public Service Commission (PSC) approves or rejects the request. Under the **stipulation process** the Public Service Department, and utility staff negotiate issues, hold a public hearing, and form a proposal. The PSC approves, modifies, or rejects the proposal.

Supplemental aid programs

The Department of Public Welfare (DPW) has three energy assistance programs. —AFDC (Aid to Families with Dependent Children) provides block grants for emergency utility payments.

—Minnesota Supplemental Assistance provides special utility cost allowances for

'Cost & pricing' cont'd p.21

Energy and Economic Development Subcommittee

The subcommittee on Energy and Economic Development (Chr. Rep. Pete Petrafeso, DFL-St. Louis Park) met twice at the State Capitol and once in Minnetonka to hear testimony on how the energy situation affects business and industry. John Rausch, Rausch Manufacturing Company, said businesses are concerned about the availability of electric energy, storage for coal, nuclear energy utilization, and balance between environmental controls and benefit to man.

Rausch said, "The most important thing is for businesses to know what energy policy decisions are, and when they will be made, so plans can be made for the future."

Burlington Northern's Energy Conservation Director Dale Propp said, although Burlington Northern is a large energy user, "We are making strenuous efforts to conserve. We reduced energy consumption for lighting and heat. We recycle many fuels, and engine refinements have reduced lubricating oil consumption."

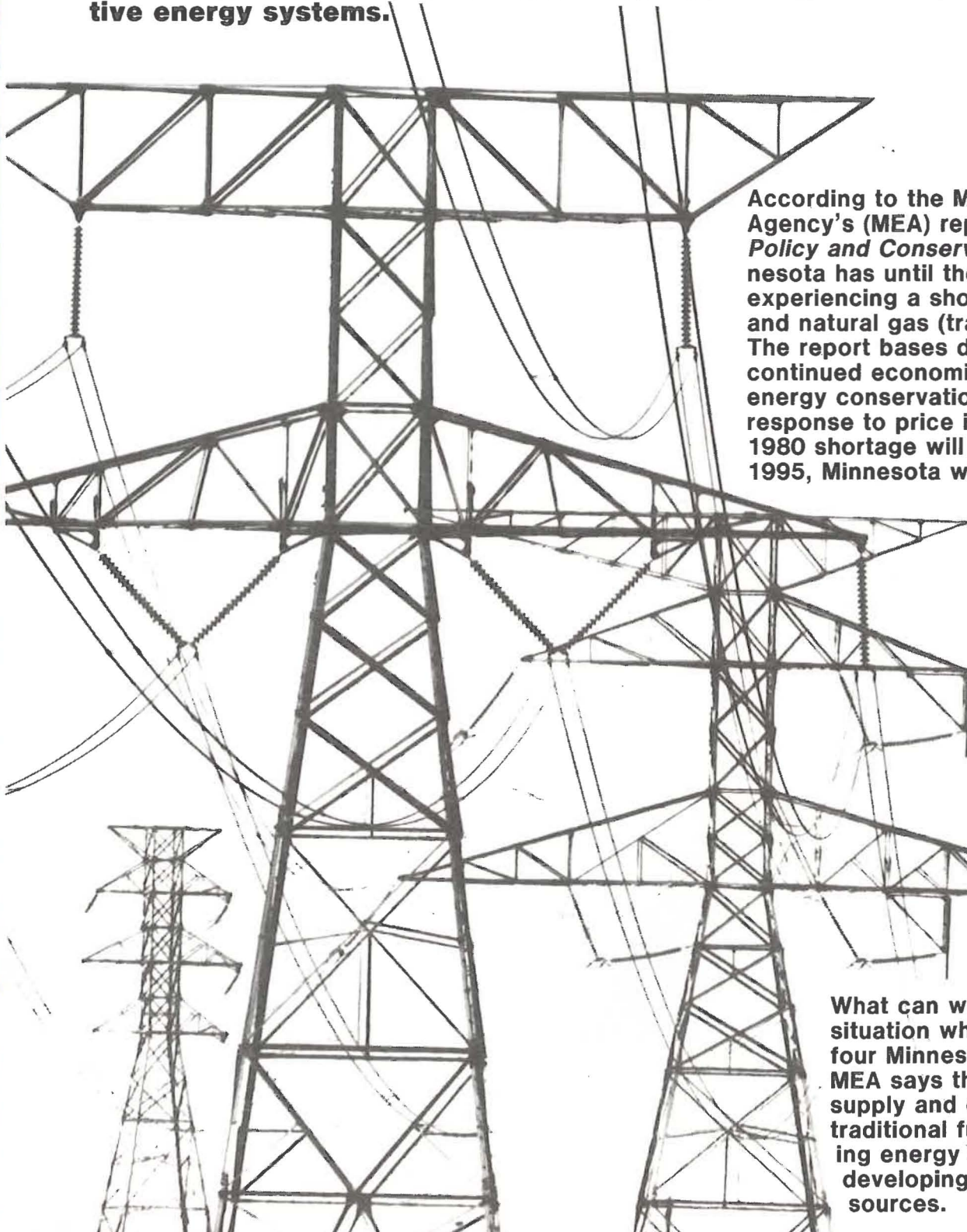
Talking about energy use in commercial buildings, Cliff Olson from the First National Bank of St. Paul said, "The most important thing is to have both a federal and a state energy policy."

Speaking for the St. Paul Chamber of Commerce Rausch said the availability of energy supplies at a competitive price is a major concern of industries. He said this availability is one of the top three criteria in industries choosing a location. Minneapolis Chamber of Commerce representative, Jay Lujan, said energy is an important, but not overriding factor, in whether industry locates in Minnesota. He said the availability, reliability, and how fast energy prices change are more

'Econ. Development' cont'd p.21

ENERGY

How long can America's supply of energy last? Some forecasters say we'll run out in five years. Optimistic predictions of possible new supplies of oil coming from Mexico and China give us a hopeful 20 years. And what about Minnesota's supply? *Interim* looks at energy studies House committees are doing on traditional sources, conservation, and alternative energy systems.



According to the Minnesota Energy Agency's (MEA) report, *State Energy Policy and Conservation — 1978*, Minnesota has until the mid-1980's before experiencing a shortage of petroleum and natural gas (traditional fossil fuels). The report bases demand for energy on continued economic growth, some energy conservation, and some response to price increases. The mid 1980 shortage will continue so that by 1995, Minnesota will not be able to

meet 13 percent of the energy demand.

The result of this shortage will be a slowdown in economic growth which could cause a five percent increase in unemployment by 1990. By 1995 unemployment rates could rise to more than 25 percent, according to MEA predictions.

What can we do to avoid a situation where one out of every four Minnesotans is out of work? MEA says the state can balance supply and demand by increasing traditional fuel supplies, increasing energy conservation, and developing alternative energy sources.

traditional fuels



Although oil companies are seeking and locating new sources of gas and oil, and some say there's an ample supply for the future, MEA foresees a deficiency.

Natural gas

Supplies of natural gas are declining while demand is increasing. Completion of the Alaskan pipeline would increase Minnesota's supply, but it's difficult to determine how much Alaskan natural gas will reach the state even with the pipeline.

The most favorable outlook still leaves Minnesota with a limited supply of natural gas. Natural gas costs will only increase.

Petroleum

Half of Minnesota's petroleum came from Canada in 1976. By 1988 Canadian supplies will drop to about six percent of the 1976 supply. New pipelines connecting Minnesota with the West Coast and the Gulf of Mexico would increase supplies for awhile. The long term outlook for petroleum shows a leveling off, followed by a decline in supplies in the 1980's.

Pipeline completion for petroleum and natural gas presents a problem. As with powerlines, there are questions over siting and concern about environmental effects.

Propane

Propane is a byproduct of crude oil refining, or it occurs naturally in deposits with natural gas. Supply depends on the availability of these products. Although propane is a very expensive fuel, demand for it is increasing, because it's a good substitute for natural gas at peak energy times.

Coal

Coal may become a widely used source of energy in Minnesota, because the U.S. has large quantities of coal in western states.

Right now, utilities and large energy industries are the main coal users. MEA predicts utilities will use 85 percent of the coal in Minnesota by 1995. With increasing costs for natural gas, coal becomes a more attractive way to go.

MEA's report, *The Minnesota Coal Study*, lists factors which limit the amount of coal Minnesota will use.

Reclamation requirements

If Western states stop leasing publicly held coal land to private mining companies and increase reclamation requirements, companies may mine less coal and increase prices. Supplies to all states will decrease.

The economics of coal use

Cost of converting a plant from natural gas or petroleum to coal is high. Companies would need to replace boilers or make expensive changes in present systems.

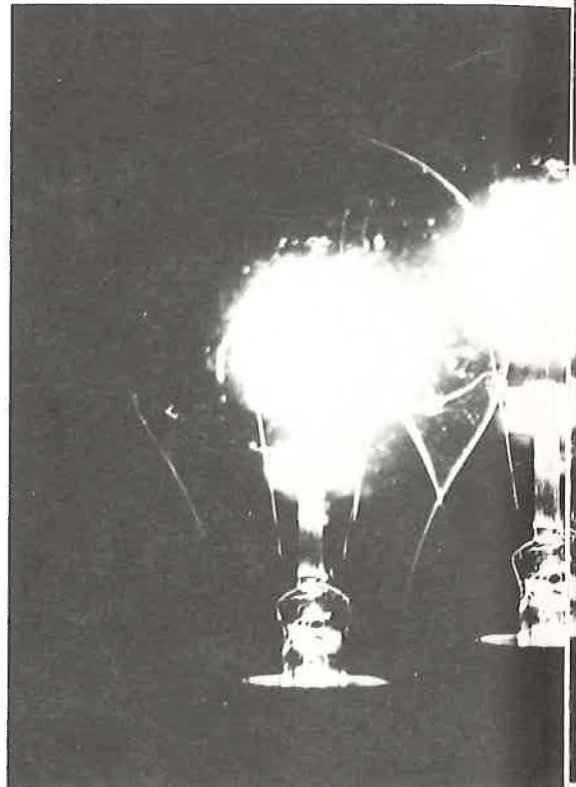
The environmental effects

Direct coal burning produces sulfur dioxide and particulates which violate air quality standards in certain areas. In treating coal before combustion, utilities use large amounts of water. This could test water quality standards.

New technology may reduce harmful environmental effects associated with coal. Some processes are under study.

Coal gasification (converting coal to a gaseous fuel) is a possibility. This process produces less air pollution. The gaseous fuel is more expensive than fuel oil, but it can compete with propane.

There are three experimental coal gasification projects in the state. These are for space heating at the University of Minnesota, Duluth campus; food processing



at the Land O'Lakes Company; and taconite pellet production at the Erie Mining Company. The Duluth project should begin operating this fall.

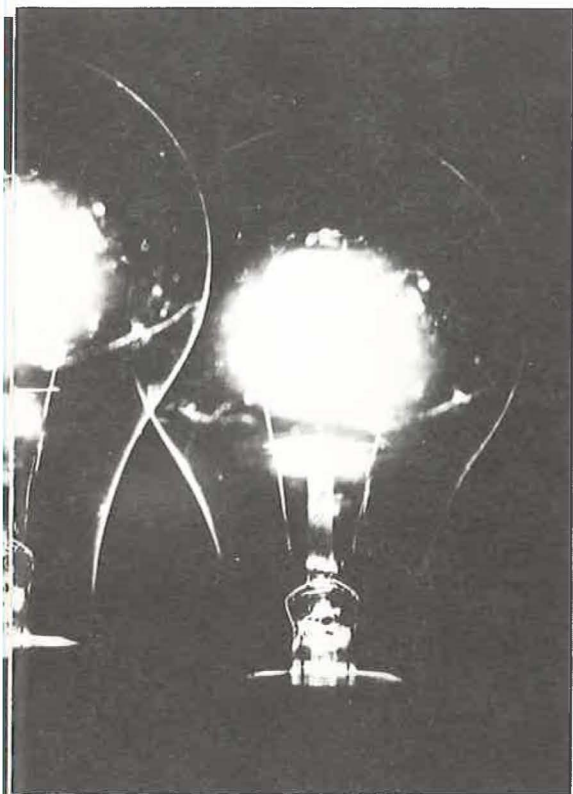
Pulverizing coal is a process some utilities use. Utilities break down (pulverize) the coal to a talc-like substance. The cost to industries to convert to pulverized coal systems would be less than converting to other coal systems, especially if a central plant prepared the coal for several users.

Coal cleaning (washing) is another process which removes sulphur and other impurities, reducing air pollution. Since no one has used this process on western coal, there are questions about economics, effectiveness, and effects on water quality.

Fluidized bed combustion is a new process of mixing pulverized coal with limestone or dolomite while forcing air over the mixture. This process also removes sulphur.

Coal transportation and distribution

These problems could also limit the amount of coal Minnesota will use. With states using more coal, transportation along rail routes will increase. This may be disruptive to communities along these routes. Cost of transportation is likely to be more than the cost of coal itself.



Coal terminals could handle the storage, processing and distribution of large amounts of coal, but physical and environmental restrictions could present difficulties. New terminals could utilize new technologies. Utilities could use existing power plants as coal distribution centers, but public resentment may make this difficult.

While MEA expects coal supplies to increase and possibly triple by 1995, it's not the total answer to Minnesota's energy problem.

Electricity

Electricity is a form of energy rather than a resource. It comes from the conversion of stored energy in oil, gas, coal, nuclear, or hydro (water).

The lack of facilities available to convert energy sources (electrical generation plants) limits Minnesota's supply of electricity. Right now, the state imports about one fourth of its electrical energy from other states.

The Upper Midwest Council's report, *Minnesota's Electrical Energy Future*, says electrical power cannot replace diminishing supplies of other forms of energy. Minnesota's supply is set until 1987. To meet electrical power needs, the state will need four large electrical generation plants before 1987, and an additional four to six before 2000.

To avoid problems with large generating plants, the state will need to resolve controversial issues, develop other sources of energy, or go to more and smaller systems.

Electrical generation

In looking at the sources of electrical generation, MEA states that, in Minnesota, 57.1 percent comes from coal, 34.9 percent from nuclear fuels, 3.5 percent from natural gas, and 1.7 percent from hydro power. As natural gas supplies decrease, and become more costly, utilities will need to go to other sources of electrical generation.

Coal is plentiful, but has limiting factors; and there is strong public feeling against nuclear power plants because of health and safety factors. The process of nuclear fission produces radioactive spent fuel which is an environmental problem. The fuel is also so hot it can melt storage containers.

Fusion, a future source?

An editorial in the *St. Paul Dispatch*, Tuesday, Aug. 29, 1978, explained a new nuclear fusion process. This is a process of heating hydrogen to 100 million degrees Celcius for a full second, producing ignition. The process is clean, without adverse environmental effects, and the hydrogen is limitless.

Although some people have said fusion could be the answer to the world's energy problems, we are in the experimental stages. The world is decades away from extensive fusion power.

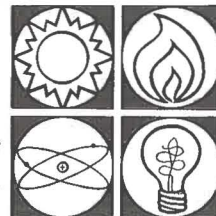
Water power

Hydro (water) power has played an extensive role in Minnesota's history. Cities grew around rivers. Minneapolis began as a milling center. Dean Tharp, Minnesota Intermediate Technology Development Group, said Minnesota has plenty of water, but there is no where for it to fall (few natural water falls). He said utilities have abandoned many hydro-electric dams because the cost of maintenance is high, and the amount of energy they produce is small.

Traditional fuels were more economical in the past, and Tharp suggests the state restore abandoned dams: "Even a small amount of electricity would take the burden off natural gas."

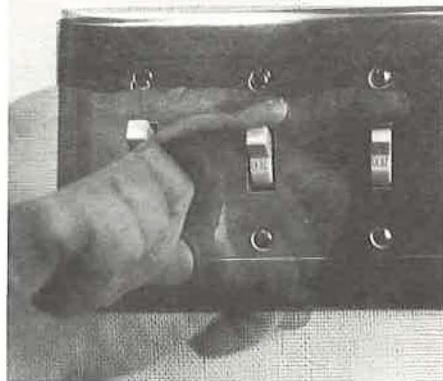
Tom Waters from the University of Minnesota said there may be some sites where hydro dams would be economical, but expressed concern over effects on game-fish and wildlife. He said the state "can't afford to lose rivers for such a small capacity of power."

Traditional sources of energy provide most of Minnesota's energy needs. Since these sources are becoming scarce, or have limiting factors, Minnesota will need to develop alternate sources and increase energy conservation to meet future energy demands.



—Contents from testimony at House Select Committee on Energy and Alternative Energy Subcommittee hearings.

energy conservation



Conserving energy "is the cleanest, cheapest, and most readily available source of energy," the MEA policy and conservation report says. "Reducing energy consumption reduces the stress on traditional energy supplies.

"It allows us to maintain our standard of living at the same time we reduce energy use. More importantly, conservation will provide valuable time for us to move from dependence on nonrenewable fossil fuels to renewable sources."

MEA feels the state should decrease energy demand by five percent by 1995. The state cannot reach this five percent savings through present conservation programs, but effective pricing, government support, and consumer cooperation would make it possible.

The main energy consumption groups in Minnesota are residential, commercial, industrial (including agriculture), and transportation. The possibilities for conservation in each of the groups varies.

Commercial

Commercial buildings use 16.8 percent of Minnesota's energy. These buildings include office buildings, retail stores, schools, hospitals, warehouses, shopping centers, hotels, motels, restaurants, and other commercial operations.

MEA suggests commercial owners can conserve energy by setting back temperatures, repairing leaking faucets, tuning-up appliances and furnaces, shutting down ventilation at night, and turning out lights in unused areas. These measures require small investments and can reduce energy needs by five to ten percent.

Building owners can make other energy saving changes such as lighting, replacing less efficient systems with energy conserving systems; maintaining systems regularly; and installing automatic controls for heating, ventilating, and air conditioning. These measures, according to MEA, produce energy savings and have short payback periods.

Businesses can save by reducing ventilation; modifying the building by installing insulation, weatherstripping, and caulking, adding storm windows and/or shutters; installing efficient heating, cooling, and heat recovery systems.

Under the energy code, which gives construction standards for new buildings, energy use in commercial buildings could decrease 61 percent.

Industrial

Minnesota's industries use 29.2 percent of the state's energy. Of that total, manufacturing accounts for 38.6 percent; mining — 30.6 percent; agriculture — 13.2 percent; other industries — 17.6 percent.

Energy savings manufacturers can achieve depend on the type of manufacturing. This could range from nine to forty-four percent.

Mining

Most mining companies have converted to coal for energy. Although this is a less efficient source, it reduces the demand for other traditional fuels.

Whether or not an industry can achieve energy savings depends on available capital, good energy management, and trained personnel. Larger industries are able to carry out energy conservation programs, but smaller ones may need technical support and financial incentives.

Energy Saver's Award

To reduce energy consumption in industry, MEA has a program of technology transfer and an Energy Saver's Award. The technology program consists of

seminars, conferences, and workshops on industrial energy conservation. The Energy Saver's Award goes to businesses, government units, and non-profit organizations with good energy conservation programs.

Farming

Farmers can save energy several ways, including till-plant and no-till cropping. They can increase irrigation efficiency by using runoff reuse systems, irrigation scheduling, and efficient pumps. They may be able to save with a new high and low temperature system of crop drying. This system is presently in the demonstration stages.

Additional savings can come from efficient operation and maintenance of farm equipment and from farm building modifications similar to those for commercial and residential buildings.

MEA and the Department of Agriculture have an advisory council to help find ways to increase agricultural energy conservation.

Transportation

Transportation accounts for 28 percent of the state's energy consumption. Autos use 59 percent of that, trucks use 27 percent, aircraft use 7 percent, rail transportation uses 4 percent; other modes of transportation use 3 percent.

Automobiles have great potential for energy savings. The federal government has required car manufacturers to increase miles per gallon (mpg) on cars to 18 mpg by 1979, 20 mpg by 1980, and 27.5 mpg by 1985. This can lead to savings of 10 percent by 1985 and 22 percent by 1995.

People

People can reduce energy use another 15 percent through better car maintenance and use and through better trip planning. A minor tune-up can improve gas mileage; fuel efficient driving can save another 15 percent.

Car pooling and mass transit can reduce auto energy use, but this depends on how well people respond to these systems.

Vehicles

Truck manufacturers say it's possible to save 14 to 17 percent by 1980, and by 1990, fuel economy could increase 20 to 25 percent. This savings is partially possible with a shift from gasoline to diesel fuel.

Energy savings for light duty vehicles such as vans, pick-ups, and four wheel drives are not as significant. Fuel conservation for buses would come from increased occupancy. Rail and air trans-

portation companies are also researching ways to conserve energy.

State efforts

State conservation efforts in transportation include vanpool programs and enforcement of the 55 mph speed limit, right-turn-on-red, and left-turn-on-red laws. MEA is working on a course for energy efficient driving in cooperation with the Department of Education and the Department of Public Safety.

Residential

Minnesota residences use 26 percent of the state's energy. Space heating and hot water heating use 80 percent of that.

In single family dwellings, homeowners can save 70 percent on space heating in homes with construction dates before 1940. They can save 72 percent on 1940 to 1960 homes, and 46 percent on 1960 to 1975 homes.

These savings are possible if homeowners set back night temperatures, increase insulation, weatherstrip and caulk, replace standard furnaces with high efficiency furnaces, add storm doors and windows, and provide fireplaces with a positive shut-off between inside and outside air.

Mobile homes

In addition to these conservation techniques, mobile homeowners could increase the energy efficiency of their homes by sealing openings in ventilation ducts and by adding skirting around the outside of the trailer.

Multiple dwellings

Additional conservation measures in multiple dwellings include reducing outside air ventilation, using shower heads with restricted flows, installing automatic shut-off faucets, reducing lighting levels, and raising settings for air conditioning.

All residence owners can save 14 to 26 percent on hot water heating costs by lowering hot water temperatures and insulating hot water tanks.

Minnesota's Energy Code took effect Jan. 30, 1976. The code, which applies to all new and remodeled buildings, puts requirements on the building envelope, heating, ventilation, air conditioning, water heating, and electrical systems. Its purpose is to reduce energy waste.

Help for homeowners

To help homeowners in their conservation efforts, MEA has pamphlets on insulation, weatherstripping and caulking, and a home energy audit. The energy audit provides tips on how homeowners can save energy:

— Light colors on walls and ceilings will

reflect light and reduce the need for artificial lighting.

- A leaky faucet can waste over 1,000 gallons of water a year.
- The average shower requires only one half as much hot water as an average bath.
- Draperies, especially lined ones, are good window insulators.
- Storm windows will cut heat loss in half.
- Opening the oven door causes a 20 percent loss of the heat inside.

Copies of the pamphlets are available through the Minnesota Energy Agency Information Center, 150 East Kellogg Boulevard, St. Paul, MN 55101. The phone number in the metropolitan area is 296-5175, or outstate, toll free 1-800-652-9028.

The Minnesota Housing Finance Agency provides grants and low interest loans to homeowners with modest incomes for energy-saving improvements. For their information, contact the agency at: First Floor Hanover Building, 480 Cedar Street, St. Paul, MN 55101, (612) 296-7515.

District heating

"District heating is a viable energy saving concept, especially in the metropolitan area," Ronald Sundberg, MEA district heating project manager, said, "The concept isn't new to Minnesota. There are presently 16 operating systems in Minnesota, but during the last two years, 10 plants have gone out of business."

District heating is a system which utilizes waste heat from central electric generating plants to space heat surrounding buildings in business districts. The waste heat is in the form of steam or water.

Almost all district heating systems use steam now, but hot water is more efficient. District heating with hot water could increase the efficiency of electric generating plants to 80 percent, Sundberg said. Plants haven't changed because of the high cost of conversion. Advantages to district heating include energy efficiency, flexibility for the future, and reduced air pollution.

The Energy Agency is studying district heating in Minnesota. They are looking at extensive district heating systems that would eventually heat most metropolitan businesses.

"We need legislation to facilitate district heating. There are federal funds, but we need state matching funds. District heating isn't regulated. The Legislature should look at this," Sundberg said.

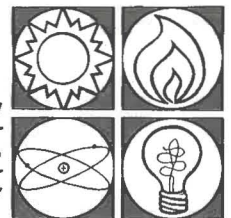
Earth Shelter

Earth shelter is a concept of using underground space. Underground space provides protection from the elements, so underground buildings remain cooler in the summer and warmer in the winter.

Although few people think Minnesota will go to extensive living underground, it is a good way to save energy for storage and parking areas.

The Minnesota Department of Natural Resources and the Minnesota Housing Finance Agency have cooperated to construct two earth shelter homes for state park managers. The homes are two-stories and have an earth-covered design to conserve heat and fuel.

For information on new legislation affecting energy conservation see New Laws Section, page 24.



Contents from testimony at Environment and Natural Resources Committee, and House Select Committee on Energy hearings.

alternative energy sources



To balance energy supply and demand, Minnesota needs to develop alternative energy sources. These sources would reduce the need for petroleum and natural gas.

MEA's report states, "a business-as-usual attitude toward development of alternative energy sources will not provide sufficient supplies to meet projected demand in 1995 even with demand reduced through energy conservation.

"On the other hand, with support for the development of alternatives, energy supplies in Minnesota could equal the projected demand."

The Energy Committee's subcommittee on Alternative Energy Systems held informational sessions on alternative energy sources.

Solar

Solar energy is one of the renewable alternatives. Using solar energy has no harmful environmental effects.

MEA says simple solar collectors have the potential of supplying half of Minnesota's space heating, cooling, and hot water needs; but we are not yet at that point.

Two types

There are two types of solar energy systems, active and passive. Passive systems utilize the building structure itself by letting the sun in during cold months and keeping it out during the summer. The structure also could store heat from the sun through using specific materials in the building.

Active systems collect the sun's heat, then use blowers and pumps to store and distribute the heat to the building.

Alexander Ritter, former coordinator of MEA's subcommittee on passive solar energy, said architects design buildings, first for maximum energy conservation, then for passive solar energy collection, and, finally, for active solar collection.

The effectiveness of passive solar systems depends on the mass of the structure, he said. Smaller buildings are more responsive to passive systems.

Three problems

There are three main problems with active solar systems—economy, standards, and experience—Darryl Thayer, a solar designer and installer, said.

The systems are costly and have a long payback period. Thayer suggested the Legislature provide low interest loans, tax breaks, and aid in bringing equipment costs down.

Thayer said the state needs specific licensing for solar system installers. Right now, it takes a licensed and bonded electrician, plumber, and general contractor to install the systems.

"Because it's a new industry there aren't many trained people to install the systems. The techniques are new, and it's hard to know which systems are best," Thayer said.

Peat

Minnesota has 7.2 million acres of peatland. MEA estimates that if, we used 10 percent of these peatlands, Minnesota could meet all of the state's energy demand for 16 years.

Professor Rouse Farnham, Department of Soil Science, University of Minnesota, explained how people use peat as a source of energy. He said people in Europe hand-dug peat and burned it directly. This led to burning peat for electrical generation. Another use that developed is gasification.

Peat uses include agricultural, some horticultural, and potential energy use. Peat as an energy source is feasible if the state goes to smaller electrical generating plants near the bogs.

Professor Eville Gorham, University of Minnesota, expressed concern about the long term effects of mining peatlands. He suggested the state do studies and surveys of the peatlands before mining. He said, "Although peat is a renewable resource, mining to considerable depths would decrease peat to the point where it would take centuries to renew the areas."

A consultant from Minnegasco said utilities haven't used peat as an energy source, because natural gas, oil, coal, and wood have been more economical.

He said Minnegasco does feel peat gasification could be economical. The gasification process converts the peat to synthetic natural gas. He said Minnegasco could have a plant in operation by 1985.

To operate a plant, Minnegasco would need to lease land from the state. (Most of the peatland in Minnesota is state-held).

Department of Natural Resources Peat Program Director Ralph Morgenweck said the department is surveying peatlands and will give a presentation on policy alternatives to the 1979 Legislature.

He said the state needs studies on how mining will affect water quality and which uses of peat are more attractive.

Wind

Because there is little data on wind availability in the state, MEA says it's difficult to know how much energy the state could get from wind. Some areas of the state, such as the northeastern corner, have ample wind supplies.

Herbert Lindquist, research assistant, Honeywell, Inc., said problems with using wind energy are high cost of equipment and dependence on wind velocity. (There are low winds in summer when there is a greater need for energy.) He said, "Wind generation would be economical if there were less depreciation on mills, lower property taxes, and lower interest rates."

Tom Griffin, Minnesota Intermediate Technology Group, said wind is a good supplementary energy supply in rural areas. Farmers could use windmills to help with electrical needs in their homes



and for irrigation. Wind energy in the metropolitan area is not as feasible, because the windmills are large structures; and many people don't want them in their neighborhoods.

A spokesman from Minnesota Power and Light (MP&L) in Duluth said the iron range is a high wind area, and the utilities there are always near peak because of the taconite industry. He said wind energy has the biggest potential in that part of the state. MP&L is doing studies on wind generation there.

Wood

Paul Stegmeir, The Energy Shed, said Minnesota has a great potential for using wood as an energy resource; because the state produces more wood than it needs for lumber, pulp, and paper. Thirty percent of the people in the state could supplement their energy needs by using wood. He said that eight acres of hardwood forest, with proper maintenance, could sustain a family indefinitely.

Dietmar Rose, Forest Resources Department, University of Minnesota, said many wood residues are good for direct combustion, wood is a renewable resource, and technology is available for immediate implementation of wood as an energy resource. He said wood is cheaper than gas or oil, and there is little negative impact on the environment.

Agricultural waste

Associate professor of Agricultural Engineering, University of Minnesota, Philip Goodrich, said it is possible to reclaim energy from animal manures. To reclaim the energy, the waste must go through a decaying process. Artificially, this is done with an air-tight digester. The digester turns the waste into bio-gas (methane) and sludge.

He said farmers could use manures from cattle, hogs, chickens, turkeys, and sheep in the digester. Advantages of the digester are that it: reduces the organic content of the manures, reduces offensive odors, and conserves fertilizer; the combustible gas byproducts are valuable.

Disadvantages to the digester are: it needs daily operation; the product requires storage in a covered container; the cost is high; the system must be air-tight; there is a low level danger of explosion.

Goodrich said, "Using the digester isn't going to solve all of Minnesota's energy problems, but it could provide 30 to 50 percent of the energy needs of farmers."

Biomass

Biomass consists of agricultural crops and residues. Cattails are one biomass crop. Doug Pratt, Botany Department, University of Minnesota, said groups became interested in biomass as a form of energy because fossil fuels are composed of biomass.

"It is possible to burn biomass products directly," he said. "We are interested in cattails because of the high total productivity. Cattail cultivation could produce from 15 to 20 tons per acre, per year, and isn't competitive with food crop land," he said.

David Kittelson, associate professor of Mechanical Engineering at the university, spoke on the conversion of biomass materials to more usable products. He said plant material consists of food, fiber, fuel, and chemicals.

alternative energy sources

The main processes for converting plants to fuel/chemicals and their properties are:

Direct combustion — primary product is heat; requires dry biomass; combustion process should take place near site.

Pyrolysis — primary product is fuel; process requires restricted amount of air.

Liquifaction — primary product is fuel; requires two step process of converting biomass to sugar and fermenting the sugar to alcohol.

Anaerobic digestion or aerobic digestion — primary product is synthetic gas.

Coordinator of the Energy Agency subcommittee on biomass, Lawrence Conroy, said problems with converting biomass to fuel include transportation, storage, and lack of concentrated amounts of biomass. Large concentrations of biomass are in sawmills, food processing plants, and feedlots; but the typical collection areas, such as farms, are relatively small.

He said the state should provide funds for biomass conversion plants and study a method of stimulating the market for biomass energy derived byproducts.

Urban Solid Waste

Tom Todd reviewed the parts of the State Planning Agency's Solid and Hazardous Waste Study Work Program which relate to energy (see update on solid and hazardous waste p. 5).

Energy research objectives are: to identify problems with developing cost effective resource recovery facilities; to identify areas of the state which could support resource recovery facilities; to estimate the number of resource recovery facilities the state could support; to identify economic or regulatory changes which would encourage development of energy resource recovery facilities.

Luther Nelson from the Hennepin County Department of Public Works said there are problems with using

energy from urban solid waste recovery systems. Other cities built these systems to get rid of waste and didn't have a market for the system byproduct.

He said this is also a problem in Minnesota. "We could use the steam from the facility for district heating, or sell it to a utility for electricity, but western coal is relatively cheap; and it's not as economical to use alternative sources," he said.

Another problem with efficient utilization of solid wastes, in most of the state, is getting enough waste to operate a plant.

Gasahol

Gasahol is a mixture of alcohol and gasoline. Minnesota's Legislative Science and Technology Project is investigating possible use of gasahol in Minnesota.

Alcohol for the gasahol mixture could come from crop residue, animal waste, or urban solid waste. Alcohol is more costly to produce than gasoline, but it would extend gasoline and help to provide power to farms.

Flywheels

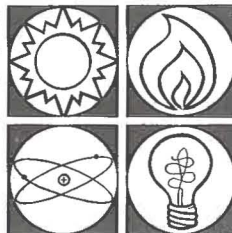
Although flywheels are not a source of energy, they provide an alternative method of storing energy.

Arthur Erdman, Department of Mechanical Engineering, University of Minnesota, said flywheel energy storage is a simple concept which involves speeding up the wheel and storing energy in it. He said flywheels can smooth out energy demands.

There are two categories of flywheel applications—the stationary application and the transportation application. The most common stationary use is to store wind generated energy. One transportation use is in subways.

Flywheels increased efficiency in subway cars in New York City by 50 percent and decreased air conditioning demands in the cars. Erdman said a Wisconsin group is studying flywheel use in Pintos.

"To avoid a situation of high unemployment and high energy costs, Minnesotans must begin now to balance energy supply and demand through increased research and development of new sources of energy, new ways to use old sources, and strict conservation efforts. Without this immediate and concentrated effort, prices and unemployment will rise; and the quality of life of every citizen will suffer as we are forced to drastically cut back our energy use."



MINNESOTA ENERGY AGENCY

Glossary of energy terms

aerobic digestion—break down of biomass or manures in the presence of oxygen.
active solar energy system—mechanical collection, storage, distribution of solar energy.
agricultural waste—animal manures; crop residues.
alternative energy system—system using energy sources other than fossil fuels.
anaerobic digestion—break down of biomass or manures to gases in absence of oxygen.
biomass—plant and forest crops and residues.
Btu—(British thermal unit) amount of energy needed to raise the temperature of one pound of water one degree Fahrenheit.
building envelope—part of a structure that separates inside air from outside air.
caulking—sealing holes or cracks in the building envelope.
char—combustible charcoal-like residue of biomass or coal heating or burning.
coal cleaning—washing coal; removes sulphur.
coal terminals—central plants for coal storage, processing and distribution.
crude oil—unprocessed oil; refined products are propane, butane, kerosene, gasoline, fuel oil, diesel fuel, asphalt, etc.
diesel fuel—byproduct of crude oil refining; used in diesel (internal-combustion) engines.
digester—system that breaks down agricultural or urban wastes to obtain methane.
direct combustion—burning of a substance.
district heating—using a facility's waste heat to heat surrounding buildings.
earth shelter—using underground space for dwellings, parking or storage.
electrical generation—conversion of gas, oil, coal, hydro, or nuclear energy to electricity.
Energy Code—1976 law which sets energy conservation standards for new buildings.
fluidized bed combustion—process of forcing air over a mixture of pulverized coal and limestone or dolomite; removes sulphur from coal.
flywheel—energy storage device; stores energy as speed increases; releases energy as speed decreases.
gasahol—mixture of alcohol and gasoline.
gasification—conversion of coal, peat, or agricultural waste to a gaseous product.
heat recovery system—recycling waste heat.
hydro power—water power
liquifaction—high temperature, high pressure process of converting biomass to oil.
MEA—Minnesota Energy Agency
methane—combustible gas found with natural gas or as byproduct of coal or waste processing.
natural gas—combustible gas found in porous rock with or near crude oil; natural gas used for home heating is usually methane.
nonrenewable resource—resource that takes centuries to renew itself.
nuclear fission—break up of heavy-weight atoms to release energy.
nuclear fusion—heating of hydrogen to produce ignition.
passive solar energy system—structure that lets in sun in winter and keeps it out in summer.
pyrolysis—conversion of coal or biomass to liquid fuel in absence of air.
payback period—time it takes a capital investment to result in savings to investor.
peat—combustible partially decomposed organic material; further decomposition would produce coal.
petroleum—crude oil
propane—byproduct of crude oil refining; used at peak energy times in place of natural gas.
pulverized coal—coal broken down to a powder.
reclamation—restoration of land to natural environmental state after mining, etc.
"R" value—measure of resistance to heat flow through a material.
renewable resource—resource that renews itself in a short period of time.
resource recovery system—system that reuses waste materials; recycles some; burns others to produce heat or steam.
space heating—area heating in a building.
traditional fossil fuels—coal, oil, natural gas.
utility—company providing electrical energy or heating fuels to consumers.
weatherstripping—stopping up air leaks around windows and doors.

An international look at energy



"Very often, and perhaps too often, state legislators forget to look at the whole picture," Rep. Mary O'Halloran, a Democratic state representative from Iowa told the annual meeting of the National Conference of State Legislatures (NCSL), in July at Denver, Colorado.

"I think in order to be effective in explaining to our own constituents why we make the decisions we do on energy, very often we've got to make reference to the whole picture," she said.

Legislators and staff from the 50 states were in Denver to attend meetings on a number of topics, including energy. Wilson Clark, California's energy advisor, talked about the international energy situation.

"We're facing two major problems in energy, not only from a national or state perspective, but a much longer range problem. We're not only having great difficulties in some areas of getting conventional energy supplies, but we're going to experience even more difficulty as we literally run out of the more abundant and cheaper

energy reserves, and return increasingly to synthetic fuels and to sources of energy that cost more to capture.

"Until we begin to look at our energy policies — more from an economic perspective — more from the idea that we need to encourage innovation in the industry — I really don't think we're going to be faced with too many real choices in energy development.

"I view the national debate, and particularly the international energy debate, with a great deal of skepticism. Recently, there have been numerous newspaper articles about a potential world glut (oversupply) of oil. And yet, when one reads beyond the first couple of paragraphs in the stories, you find that there are various forecasts of possibilities of finding new sources of oil in Mexico, China, etc., which might help our energy intensive civilization get by for another twenty years.

"But these stories do not point out that the kind of energy

crisis we are suffering from is our dependency on a technology which is very much related to nonrenewable resource fuels, such as oil, natural gas, and coal. We're not talking about having a 50, 100, 200, or 300 year supply of fuels that can continue the kinds of energy intensive systems that we have, such as our entire transportation system.

"We do not seem to have developed an understanding that almost half of our energy goes into moving things and people from place to place. Yet, we still do not have an energy policy, nationally, which calls for maximizing our rail system which is the most efficient way of moving objects and people from point to point.

"When I look at the progress we've made in energy, I think there's a great deal of good news over the last eight years; but I do not see any major changes in our attitude nationally about lowering the growth rate in energy.

"Recently, the utilities' submissions to the California Energy Commission were published, and without fail, almost every utility in the state reported that they were projecting growth rates over the next ten years that are three to six percent higher than the growth rates over the last ten years.

"How we get from here to there is going to depend very much on local situations and the application of programs, either regulatory programs or ones that will involve more cooperation with the private sector and will provide a direct stimulus to the tax structure.

"But if we do not reach that, I think our energy future is very direct. There are simply no more cheap available sources of energy. Until we change the current structure that penalizes companies, and even individuals, from making the kinds of investments that are more dramatic, in terms of conserving energy, and moving into alternatives, I don't think we will have the systems."

The tax revolt

Legislators and staff from across the country met August 3 and 4 in St. Paul to discuss the tax revolt and its impact on state and local revenue systems.

The Minnesota Legislature and the National Conference of State Legislatures (NCSL) sponsored the seminar which focused on such issues as tax and expenditure limitations; trends in, and alternatives to, state generated taxes; the causes of the "taxpayer" revolt and what reforms states should consider; and states' fiscal responsibilities to local governments in setting tax policies.

Featured speakers included Dr. Francis Boddy, University of Minnesota professor of economics, who urged a tax system with roughly equal reliance on property, income, and sales taxes. Dr. Mason Gaffney of the University of California, described the aftermath of Proposition 13 and its prevention. Richard Gabler of the Advisory Commission on Intergovernmental Relations, presented recommendations on state fiscal responsibilities to local governments in setting tax policy.

Luncheon speaker, Kevin Phillips, lawyer, publisher, and columnist, told seminar participants that "American society is reversing to smaller and smaller concerns."

He said he sees a sweeping movement occurring rather than just a taxpayers' revolt, an opposition to "politics the way it's been practiced over the past 15 years."

He expressed "a very pessimistic view" on what states can do to satisfy the discontent, saying, "The attempt to curb spending

and change the levels of taxation won't satisfy the unhappiness. It's not solving what people are really concerned about." Phillips sees "some kind of centralized power, a semi-authoritarian government" emerging unless certain reforms occur.

An aide to U.S. Senator William Roth, R-Delaware, described the Roth-Kemp bill which would reduce all individual tax rates by one third over three years. He said the bill would generate \$20 billion in new revenues for state and local governments over the next five years.

"These across-the-board tax rate reductions will increase incentives to work, save, and invest, resulting in higher economic growth, more jobs, and easing the inflationary pressures," the aide said.

Winnie Austermann of the NCSL told the lawmakers and staff that certain trends in state taxes are developing across the country, including states where there's an increasing concern for the middle income taxpayer and continuing concern for those on fixed incomes. She said states are also imposing more fiscal restraints on themselves and "rates are decreasing or not changing."

NCSL has its headquarters in Denver, Colorado. It is the official representative of the nation's 7,600 state lawmakers and their staffs. It seeks to improve the quality and effectiveness of state legislatures and to promote interstate cooperation and communication.

comment

Members of energy committees comment on energy issues:

- limiting recreational vehicle use
- controls on energy consumption
- the power line controversy
- alternative energy sources
- energy and Minnesota's economy
- state controls on fuel prices
- energy legislation

HENRY KALIS (DFL-Walters)

"I believe that short term controls on energy consumption may have some merit. Whether or not we can do it at the state level, I don't know. I think the federal government should handle that. It would have more impact at the national level.

"Better public relations between the power line companies and the property owners would resolve some power line controversies. I think there should be better explanation of the project, the need for the lines, and more public hearings.

"The alternatives the state should look into are solar energy and gasahol.

"The energy situation is affecting the state much more than we realize. Increased energy costs are one cause of inflation. I really believe that it's affecting buying power, especially for people on fixed incomes. It's also affecting government services in the areas of education and transportation.

"During the 1979 session, I'm seriously thinking about introducing legislation on gasahol as an energy alternative. There will probably be bills providing grants for experimental purposes in the areas of gasahol and wind energy.

"I am astounded at the public reaction to the energy committee. The people who testify are very concerned about Minnesota's energy problems."

Henry Kalis



Douglas Ewald



William Dean



Richard Wigley



Douglas Ewald (IR-Minnetonka)

"At this time I don't think we have sufficient facts to proceed with something like limiting recreation vehicle use. I think we should assess what energy is available and look at the whole picture. Recreation is a big attraction in our state. I wouldn't like to single it out.

"To start placing controls on energy use isn't wise. Once again, we need an adequate assessment of the problem. I'm fearful of government control. History has shown that there are a number of ways to get around controls. Until we know for sure what we've got, and where we're going, controls aren't a good idea.

"The whole power line controversy could have been avoided if some bureaucratic regulations had been changed in Washington. I think future safeguards against power line controversies would be in dealing with government.

"Certainly, I think that we must look into alternatives like solar, hydro-electric, peat, and waste product generation. Those are the big ones that need study.

"The energy shortage is making the economy kind of testy. We have a problem in Minnesota, because our winters are less than what you'd call balmy. I think that, for a number of reasons, industry is hesitant to locate in Minnesota. The tax situation is one thing, and energy supplies and costs are another. If I were thinking of locating a business in Minnesota, this would be a concern of mine.

"I think the government should be concerned about low-income people and their utility costs, but I would hesitate to say that government controls are the answer.

"I suspect that there will be legislation next session regarding the development of alternative energy sources. I would hope that there would be some legislation giving tax consideration to business owners who make energy conservation improvements."

WILLIAM DEAN (IR-Minneapolis)

"I don't think people would accept limiting the use of recreational vehicles. Rather than legally limiting their use, a better approach would be to control prices of fuel so people wouldn't use the vehicles as often. A special surcharge on gasoline for those vehicles would be another method. There has to be an approach other than outright prohibition.

"Limiting energy use through marketplace incentives and disincentives would be better than placing strict controls on people. In other words, make them pay more for usage beyond what is necessary. That doesn't mean I'm in favor of lifeline rates. Measures such as time-of-day pricing and cost base pricing would be more effective.

"I'm not sure we can prevent another power line controversy. There will always be people who object to power lines for aesthetic reasons. However, we could make better use of existing railroad rights-of-way, we could go underground, or we could move power plants closer to consumers. We should explore these prior to building power lines.

"I think coal gasification should be the state's first priority for alternative sources. Second would be a combination of solar and wind power. I think both deserve considerable attention. We should also look at peat and wood, particularly diseased elm wood.

"Fuel prices themselves shouldn't be controlled. If the state wants to alleviate hardships for low-income people, we should look at ways of rebating or subsidizing through the welfare system. I don't think it's good policy to make fuel suppliers subsidize people through artificial pricing. If we're going to help low-income people we should help them pay their bills, not control prices.

"There probably will be cost and pricing legislation next session. Lifeline rates, legislation for experimental and demonstration projects, and various measures to eliminate obvious waste are likely issues for 1979."

John Corbid



Delbert Anderson



RICHARD WIGLEY (IR-Lake Crystal)

Use of recreational vehicles is small compared to the overall energy consumption in the state. I wouldn't like to restrict something like that. I would rather see more conservation in the area of heating our big shopping centers, malls, and similar buildings.

"Energy consumption controls should be as voluntary as possible. I don't like government placed controls. Voluntary reduction in energy use is better.

"We've got to assess our electrical energy needs through the utility companies. Hopefully, they, or some bureau or committee, will come up with a forecast on what the future holds in regard to energy. With the increased energy consumption we will continue to need more power and power lines. We must look at power line problems.

"Alternative energy development should start with farm crops, because we have a surplus of corn, sugar beets, wheat, and other crops. I think this is something the Legislature could look into.

"I don't think the energy shortage is affecting the economy too much, yet. It's hard to know what the impact will be two or three years from now. Right now, I don't see any economic impact.

"I think we should do something to give low and middle-income families some consideration. Fuel prices are high and a hardship on these people.

"The Legislature should look at alternative energy sources that are available now. I would like to see the federal government and some of our oil companies give us the real story on fuel shortages. My concern is: are they holding back, trying to get an increase in prices?"

Robert Vanasek



JOHN CORBID (DFL-Oklee)

"With tourism such an important part of the economy, it would be unfair to limit recreational vehicle use.

"Controls on energy use aren't necessary. I would prefer to go in the other direction—giving incentives, encouraging those who are using alternative sources, and encouraging more people to begin using alternative sources.

"To prevent another power line controversy, I think the first thing to do is convince people that the lines are needed. Utilities should do this before they go ahead and build the lines.

"My first alternative priority is gasahol. It would give us a good alternative source of energy within the state. It would also be good for the economy because of low grain prices.

"I think the potential lack of energy sources in the state is probably the greatest problem we have. That's why we hear so much about taxes and tax revenues.

"I don't think that we've been very successful in aiding low and middle-income people with high utility costs. Trying to control these prices doesn't work. If suppliers don't get the price they hope for, they take their product somewhere else.

"During the next session. I believe the Legislature will have a bill to change regulations on gasahol blends.

"Energy is a complex problem. I think we have to be careful not to limit ourselves to investigating one alternative source of energy and ignoring the others."

Pete Petrafeso



DELBERT ANDERSON (IR-Starbuck)

"The time is coming when we will need to limit the use of recreational vehicles to conserve energy. Controls on how much energy people use should come through educational programs.

"The big thing we should do is get into district heating. We could double the Btu's (British thermal units) of coal with district heating. This would reduce the need for high voltage transmission lines. The use of these lines really is criminal.

"District heating could help meet our energy needs, but we need good conservation efforts, too. We need to work on other alternatives, like underground space where you have 55 degree temperatures year round. We also need to look at wind generators and solar energy systems. I've seen articles that suggest wind could contribute eight to ten percent of our energy needs in the future.

"Everyone needs to have fuel to heat their homes and to get to work. There are many things we can do, such as urging proximity of housing and mass transit.

"Whatever legislation comes up next session should facilitate district heating and coal terminal use. We need to refine laws concerning high voltage transmission lines so it's easier for the farmers to live with them. We also need to look at the constitutionality of the annual payments utilities give people to compensate those who have power lines crossing their land. This issue is heading for the courts."

ROBERT VANASEK (DFL-New Prague)

"I don't think we need to limit recreational vehicle use in the immediate future. However, if we run into a severe shortage that lasts for a long period of time, then I think those are the kinds of energy using vehicles that should be restricted.

"One of the problems with putting controls on energy use is that those controls are almost impossible to enforce. How are you going to monitor whether or not a person has their thermostat set at 55 or 60 degrees? I don't know how effective those controls would be.

"There's a need for better public information about the power lines — about things like why the line is needed. That has to be obvious, otherwise those who want the plant, or the line, are going to have a difficult time convincing the public it's necessary. Unless you can convince people the thing has to be built, the same problems that came up in West Central Minnesota will be repeated.

"I think the alternatives the state should concentrate on are solar energy, underground housing, and the development of biomass as an energy source.

"We've been fortunate that Minnesota hasn't had to shut down schools or industries because of the energy shortage. That's happened in other states. Our economy hasn't been hurt as much as some states. That's because our energy agency has made plans for emergencies. We've been fortunate that we haven't had any immediate economic disruption.

"I think that the state ought to get more actively involved in fuel price controls. By the state, I mean the Legislature. We should get involved in the rate setting process and provide more direction to the Public Service Commission.

"Energy legislation is going to be dominant in the 1979 session. I think there will be a variety of legislation ranging from further development of solar energy to energy in tax policy. Lifeline rates and restructuring the Public Service Commission will probably be considered.

"Later this fall the energy committee will try to put together a set of recommendations to help alleviate the problems we've had with energy consumption in the state."

PETE PETRAFESO (DFL-St. Louis Park)

"I don't think we're at the point where we need to limit recreational vehicle use. Far more important are automobiles. I think we're going to make more headway with automobiles and public transit than with recreational vehicles.

"We're probably going to have to ask people to make some sacrifices with regard to their energy use. I would hope people become aware of the energy problem and conserve energy on their own. We seem to go from crisis to crisis. Nobody really believes there's a real crisis, which is understandable because the oil companies are not a very reliable source of information.

"I'm not exactly sure what we ought to do with power line siting. I think we should try to locate power lines on existing corridors rather than across farm land. It seems reasonable for power lines to go down highways where there's already a natural corridor.

"The effect of energy on the economy is incredible. Two-thirds of the inflation in this country is related to the import of foreign oil. We're importing more and more oil at higher prices. That affects the entire economy because energy resources are what keep this country going. We have to find a way to cut back, and if we cut back substantially, we can solve some of our inflation problems.

"We should concentrate on developing solar energy as an alternative, because it's an unending, renewable resource. We ought to look at our peat situation and wood chips. Clean coal and wind are also possibilities. I think we could do some experiments with these.

"We have to do something about rising costs of utilities, particularly for fixed-income people. We either have to change rate structures to reduce energy costs for low and middle-income people, or we've got to subsidize them. We're going to have to make decisions on those things. Last year, we took the sales tax off home heating fuels which is helpful; but it doesn't really address the problem of increasing costs.

"I don't know what legislation will come up next session. The committees are involved in hearings and writing recommendations. Those recommendations should be ready within the next few months."



The Minnesota House of Representatives
invites you to
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"There Ought to be a Law"

ESSAY CONTEST Junior High School Students WRITE A BILL

Tell us why you think
"There Ought to be a Law"

Junior High students, you can become Junior Lawmakers. All you need to do is write an essay (in 100 words or less) on why you think "There Ought to be a Law." Your essay should be an idea for a bill. A bill is an idea for a new law or an idea to change or abolish an existing law. Your idea should affect one of these six areas: juvenile justice, protection for the elderly, child care, solid and hazardous waste, natural resources, or human rights.

The contest began September 1, 1978. The final day to enter is May 25, 1979. Teachers from the Council for the Social Studies will judge the essays in June.

The House of Representatives will invite the winners (one from each Legislative District) to the Capitol for an awards ceremony and mock legislative session. District winners will be lawmakers for a day, debate and vote on the top winning essay.

Enter today. You could be one of 1979's Junior Lawmakers. Write the House of Representatives Information Office, Room 8, State Capitol, St. Paul, MN 55155. Or Call (612)296-2146 for a copy of the rules.

cont'd:

Energy Cost and pricing subcommittee

the aged, blind, and disabled.

—General Assistance Program provides supplemental fuel cost payments to single adults in certain age groups.

The Department of Economic Security assists with five major federal energy programs. The programs provide:

- fuel payment assistance to low income families.
- non-cash assistance such as food, clothing, or emergency housing repairs in emergencies.
- funds to make homes more energy efficient.
- funding for weatherizing low income housing units.
- funds to train staff in delivering programs.

Public testimony

Marge Powell, Minneapolis Neighborhood Energy Alliance, said natural gas prices went up 60 percent over the last few years. There is no allowance for higher fuel prices for people on fixed incomes.

Another member of the alliance, Craig Letourneau, said, according to the Community Services Administration, low and moderate income people who spend more than five percent of their income on energy are in a financial crisis. Low and moderate income homeowners pay more than five percent, he said.

Other citizens said energy conservation measures don't save money because of increasing fuel costs; renters can't make energy conservation improvements to keep energy costs down. They encouraged implementation of lifeline rates and urged government subsidies for low income persons.

Utilities respond

Keith Sorenson, Northern States Power (NSP), said the company favors peak load pricing, time-of-day rates for residential consumers, and interruptible service for large consumers. If customers used night energy (off-peak), demand on peak time energy would decrease and could result in savings

to the customers, Sorenson said. Companies haven't used time-of-day pricing, so it's difficult to determine how much consumers would save.

Sorenson said NSP doesn't favor lifeline rates.

Those who live in apartments use less electricity, because the landlord pays electricity for washers, dryers, hot water heaters, etc. Families that use gas appliances have smaller electric bills. Large families use more electricity than small families, regardless of their income.

NSP feels lifeline rates could lead to consumers changing to gas appliances to decrease electricity use, but total energy use wouldn't change.

Sorenson said automatic adjustment clauses allow utilities to increase, or decrease, customer charges in direct response to changes in the utilities' costs. He said a full hearing, instead of the automatic adjustments, would eat up savings to consumers. ■

cont'd:

Energy and Economic Development subcommittee

important than the cost.

Peter Hutchinson from Dayton Hudson Corporation said retail use of energy amounts to about four percent of all energy consumption. He said performance building codes and standards would conserve more energy than specific codes.

John Millhone, from MEA, said Minnesota is an attractive place for business because of the reliability of price and supply of energy. He said the state is not an intensive energy user even though the winters are cold. Most Minnesota industries are product suppliers which don't use large amounts of energy. ■



We Saw You at the Fair

The Minnesota House of Representatives thanks those people who visited the House display at the State Fair. Members and staff enjoyed meeting and talking with every visitor.

This is the fourth year, we've been at the fair and the display's theme this year was "Government is for Everyone." People of all ages stopped by.

Many learned to use the automatic voting booth and voted on the "Issues of the Day." They watched "Your Visible Government," a slide show of the House in action during a legislative session.

Others took a short Citizen's Participation Course which was a quiz on state government. Those who completed the quiz received a Citizen's Participation Certificate to take home as a souvenir of their visit.

Younger Minnesota citizens watched the cartoon slides of "The Road to Minnesota Laws" and colored the "Joey's Visit to the Capitol" coloring book.

The booth also featured an electronic district finder. Visitors pressed a button which located their district (with a small red light) on the map and lighted a picture of their representative on the counter.

If you missed us this time, please stop next year. The exhibit is in the State Exhibits Building on the fairgrounds.



state fair opinion poll



At the Minnesota House of Representatives display at the state fair people could learn to use an automatic voting machine and vote on the Issues of the Day. The issue questions were suggestions from representatives, the press, and citizens.

This was not an official opinion poll. There were no age restrictions on who could vote. Each question was in the voting booth for two days.

Many people asked for the results. Here are the questions and percentages of those favoring and opposing the issues.

Would you favor requiring juveniles to pay the cost of property they damage through acts of vandalism?
yes 85% no 15%

Would you favor legislation expanding the state's gun control law to include sales between private parties? (Present state law requires a person buying a handgun from a dealer to obtain a permit and wait seven days for a background check by police.)
yes 56% no 44%

Would you favor an initiative and referendum provision in Minnesota's Constitution that would allow Minnesotans to vote directly on issues?
yes 74% no 26%

Should Minnesota create a uniform election day and hold all school board, county and municipal elections in Nov. of the odd-numbered years?
yes 44% no 56%

Should Minnesota support a national tax-supported health plan allowing free medical care to all citizens?
yes 51% no 49%

Would you favor legislation that would legally define brain death?
yes 83% no 17%

Would you favor lowering the legal age for holding public office in Minnesota from 21 to 18 years?
yes 40% no 60%



Would you favor reinstating the law requiring motorcyclists to wear helmets?

yes 73% no 27%

Would you favor legislation banning radar detection devices (fuzz busters)?

yes 48% no 52%

Should the state allow the department of transportation to put up uniform information signs, mileage and general location signs to privately owned resorts, campgrounds, etc.?

yes 36% no 64%

Do you feel Minnesota's Clean Indoor Act (no-smoking) has been effective?

yes 53% no 47%

Do you support the goals and principles of the American Agricultural Movement and their call for government price supports of 100 percent of parity? (Farmers now receive price supports amounting to 65 percent of parity from the federal government.)

yes 24% no 76%

Should Minnesota change the term of office of state House members from two to four years?

yes 70% no 30%

Would you favor legislation requiring those who purchase businesses to honor existing labor contracts?

yes 54% no 46%

Would you favor legislation requiring a deposit of at least 10 cents on all beer and soft drink containers in an effort to encourage consumers to return their beverage containers for reuse or recycling?

yes 73% no 27%

Would you favor legislation requiring the State Department of Education to establish minimum graduation requirements?

yes 74% no 26%

Do you favor an Equal Rights Amendment for the state of Minnesota?

yes 66% no 34%

Would you favor legislation requiring school districts to participate in the federal school breakfast program?

yes 61% no 39%

new laws

Each Interim issue will feature laws of general interest that came out of the 1978 legislative session.

DNR laws

During the 1978 session the Legislature made several changes in laws relating to the Department of Natural Resources (DNR).

Wild, scenic and recreational rivers

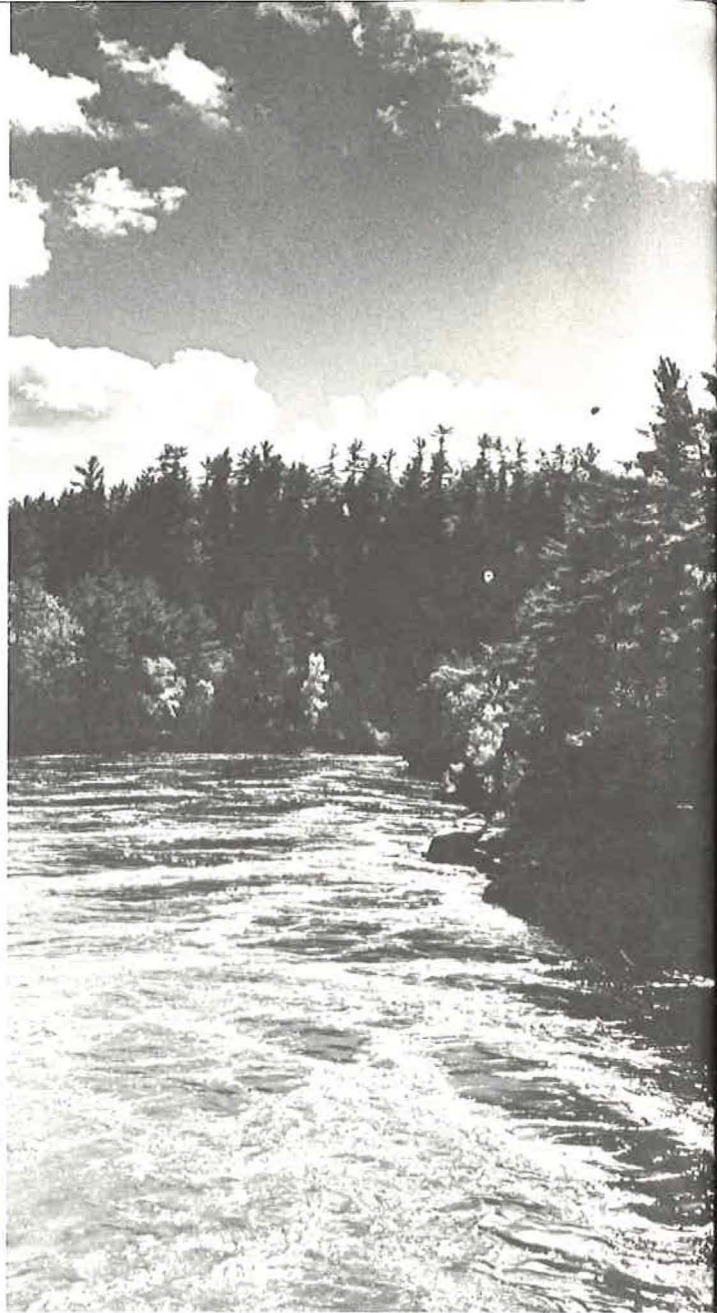
Chapter 535 requires the commissioner of DNR to make a decision on the designation of wild, scenic or recreational rivers within 60 days after receiving the hearing examiner's report. The bill was HF1939 (Sherwood, IR-Pine River). The Legislature enacted the Minnesota Wild and Scenic Rivers Act in 1971.

Leeches, two line fishing, tip-ups

A bill relating to leeches, two line fishing, and tip-ups was also among the DNR laws the Legislature passed. This was HF449 (Begich, DFL-Eveleth). It is now Chapter 594 in *Minnesota Laws*. It puts leeches into the definition of minnows and regulates non-resident minnow haulers and non-resident minnow dealers. The law allows the commissioner of DNR to authorize two line angling in designated areas of Lake Superior by other than commercial anglers, and allows tip-ups if the person fishing is within 80 feet.

Raccoons

Another law, Chapter 547 (HF1297, Reding, DFL-Austin) increases the fees for non-residents to take raccoons to \$50 in addition to the small game license fee. It also allows the commissioner of DNR to limit the number of raccoons a non-resident can take and provides an identification tagging system for raccoon carcasses. The law prohibits the sale of deer licenses during the firearms season.





Hunting Seasons for deer, raccoon, and ducks

Deer

Because of Chapter 547, Minnesota hunters had to get their hunting permits before November 4, opening day for deer hunting season. Closing dates depend on the area of the state where the hunter wants to pursue the game.

There will be four hunting zones this year instead of three. In the first zone, which covers Northeastern Minnesota, the hunting season will run through November 19. Those with antlerless permits can hunt antlerless deer on November 18 and 19. Hunters can take only one deer during the season.

The season in Zone 2, which runs diagonally from the Northwest to the East Central part of the state, and in Zone 3, the Southeast corner of the state, people can hunt from November 4 through the 19, or from November 24 through the 26. Those with antlerless permits can hunt from the 24 through the 26.

In Zone 4, the remainder of the state, the season is from November 4 to 6 for bucks only and November 11 for bucks or antlerless deer if a hunter has the antlerless permit.

The commissioner of DNR has announced, this year, there is a change in the definition of "antlered buck". Previous definition was one polished antler, but the change requires the antler to be three inches or longer.

Deer hunting regulations are available from county auditors or license agents.

Raccoon

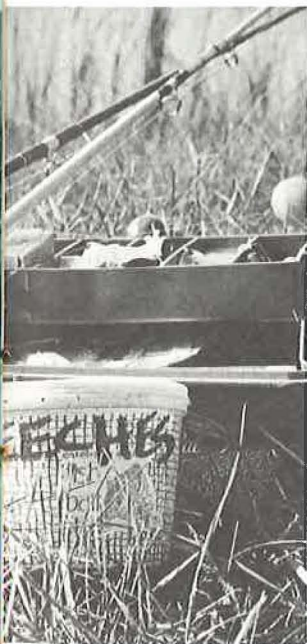
There is no limit on the number of raccoon a hunter can take. The season goes from October 21 through December 31. Persons can take raccoon day or night, provided they don't use artificial lights — unless dogs aided in treeing the raccoon. Hunters may tree raccoons—without the use of dogs—at any time during the year except from April 16 to July 14.



Ducks

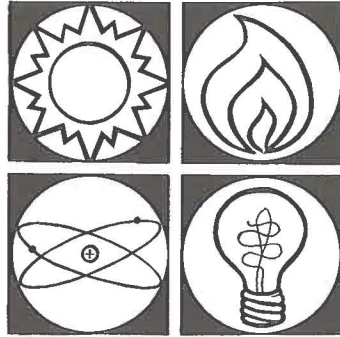
Minnesota's duck hunting season opened on October 1, and will close November 19. Bag limits this year are five daily and ten in possession. The daily limit may not include more than two mallards, or two blackducks, or one of each. Only two woodducks may be in the daily limit. The possession limit includes no more than four mallards, or four blackducks, or a combination of four, and only four woodducks.

The 4 p.m. closing time for waterfowl will be in effect until October 20. Starting October 21, hunters may shoot until sunset.



new laws

Alternative energy project



Under a section of the 1978 supplemental appropriations bill, the Legislature set up a procedure to select a project dealing with the production and marketing of industrial hydrocarbons (methane) from agricultural and forest products. The law requires the commissioners of Agriculture and Economic Development, and the directors of the Energy and Pollution Control Agencies, to select a project from proposals Minnesota organizations or groups present and submit it to the U.S. Secretary of Agriculture for funding. The legislation directs the Commission on Minnesota Resources to monitor the project. The supplemental appropriations bill was HF2527 (Norton, DFL-St. Paul) *Minnesota Laws*, Ch. 793.

Energy conservation

The omnibus energy conservation bill, HF2261 (Munger, DFL-Duluth), addressed several conservation issues. Ch. 786.

Conservation standards

The law gives MEA (Minnesota Energy Agency) and the building code division of the Department of Administration until January 1979 to develop energy efficiency standards for existing buildings. It requires landlords to comply with some of the standards by January 1980, and with all the standards, by 1983, for renter-occupied residences.

The building division has come up with proposed standards. These may change before the January deadline. The standards include:

- 1) Install storm windows on all glazed exterior window units.
- 2) Install storm doors on all exterior door openings unless a single door, enclosed porch, vestibule, etc. produces a double door effect to provide an "R" value of two or more.
- 3) Install insulation in all accessible rim joist areas to provide an "R" value of 11.
- 4) Install insulation in accessible

attics to provide an "R" value of 19.
5) Install insulation in accessible walls and/or floors to provide an "R" value of 11.

6) Caulk, gasket, or seal accessible exterior joints.

7) Install weatherstripping between operable window sash and frames and between doors and frames.

8) Install positive shut-offs for all fireplaces or fireplace stoves.

"R" value is the measure of resistance to heat flow through a material. The higher the "R" value the less heat goes through the material.

Because of concern on how these improvements would affect tenants, the bill provides funds to the Housing Finance Agency to study loan programs for landlords to rehabilitate rental units. It also calls for a study of how these changes might financially impact tenants.

Energy disclosures

Another section of the law requires homeowners to provide an energy disclosure report to the potential buyer before selling the residence, if the construction date of the home was before 1976. The buyer could waive right to this energy disclosure.

Insulation

In a 1977 study MEA did on insulation, they found that there is a shortage of insulation, there were no specifications on insulation, consumer fraud was becoming a problem; and few opportunities exist for training insulation installers.

In response to this study, the Legislature included insulation in the energy bill. The law appropriates \$26,000 to MEA to develop rules on standards for the manufacture, labeling, installation of insulation, and provides for enforcement of those standards. It also prohibits unfair or deceptive advertising of insulation products. It requires containers and wrappings to contain specific information.

"Sun rights"

Another section of the bill exempts from property tax the market value of solar, wind, or agriculturally derived methane systems if homeowners use the systems for heating, cooling, or electricity, and if they install the systems before January 1, 1984. The law provides for "sun rights". Counties or municipalities can zone for access to sunlight for solar energy systems. It also requires Regional Development Commissions and the Metro Council to plan for access to sunlight for solar energy systems.

Law enforcement

Using \$73,000 of funds the 1977 Legislature made available through Chapter 455 of *Minnesota Laws 1977*, authorities ended a nine-month investigation of criminal activity.

In what the *Minneapolis Tribune* called a "sting operation", detectives, working under cover, bought stolen goods while hidden videotape cameras filmed the action.

Results were a success story for the 1977 law — over 136 criminal arrests on charges of selling stolen property, firearms, and narcotics — and the recovery of more than \$575,000 in stolen and illegal goods.





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If you want to remain on the mailing list for this publication fill out, clip, and return this form. To save mailing costs, we are purging our mailing list. Unless we hear from you, we will remove your name. Our thanks to those who returned the survey card from the last *Interim* issue. Thanks, too, for the many fine comments. If you returned the survey card, please ignore this notice.

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almanac

Cass Gilbert, a young architect of the early 1900's is a part of history, but his vision for the Minnesota State Capitol lives on. This summer, construction began on Lief Erickson Park, the first in a series of final steps in Gilbert's plan to give the Capitol a setting worthy of its magnificence.

There has been no move toward completion of Gilbert's landscaping scheme since the finishing of the south mall more than 25 years ago. Sections of Wabasha Street and Aurora Avenue near the Capitol in St. Paul will become part of the new park which bears the name of the Viking explorer, a statue of whom has stood in the park area since 1949.

"Erickson" is the modern spelling of the authentic "Erikson" which appears in the statue's inscription. Other proper variants are Ericsson, Eriksen, or Eriksson. Cass Gilbert Memorial Park is next in landscaping plans for the Capitol area. It will be north of the Capitol where there is now a parking lot, with two new parking lots to be north of Gilbert Park.

State and federal grants will fund the park construction, cover the cost of replacing diseased elm trees, and the installation of directional signs to point out parking lots and major Capitol area buildings.

Gary Grefenberg from the Capitol Area Architectural and Planning Board said, "We hope to do more landscaping to the north of the Capitol sometime in the future. After all, this is the most important building in Minnesota." Gilbert would no doubt agree and rejoice.

interim

Minnesota House of Representatives

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other committee meetings

In addition to the committees that appear on pages four, five and six of this issue, others have met since the last *Interim* printing.

This page is not a schedule of upcoming meetings. It is a review of committees that met, the dates on which they met, and the agendas for their meetings, a followup for those readers who want that information.

Readers who would like to have advance notice of committee meetings should request *This Week in The Minnesota House of Representatives*, a weekly interim publication. It lists the committee and commission schedules for the upcoming week and a brief review of the previous week's meetings.

To get on the mailing list, send your name and address to the House Information Office, Room 8, State Capitol, St. Paul, MN, 55155, or call, (612) 296-2146.

AGRICULTURE

The **Water Supply subcommittee** conducted an inspection tour of the King Mill Dam in Faribault on Aug. 21. The subcommittee heard testimony concerning the dam's safety.

APPROPRIATIONS

The **Claims subcommittee** met July 21 and Sept. 13 to hear two claims — Daniel Peterson vs. Department of Public Safety; Stanley Rotegard vs. Minnesota Zoological Gardens and Department of Personnel.

The **Computer subcommittee** met Aug. 15 to discuss natural resources information systems.

The **State Departments Division** met in Brainerd, July 26, to hear a presentation on Department of Natural Resources's forestry organization, manning schedules during fire season, and fire crews. On July 27, members toured the Onamia Ranger Station, the Harris Fire Station, and the Forest Lake Fire Station. On Sept. 17, 18, 19 they toured Tettagouche, Gooseberry Falls State Park, Split Rock Lighthouse State Park, the coal gasification center at the University of Minnesota — Duluth campus, and a new waste recycling plant.

COMMERCE

The committee met jointly with the **Governmental Operations and Transportation Committees** on Sept. 25 to hear the Department of Transportation's proposal calling for establishment of a Transportation Regulation Board.

EDUCATION

The **Mandated Programs subcommittee** met July 18 to hear presentations on issues regarding the governance of Area-Vocational Technical Institutes. They met again on Sept. 28 to hear the Department of Human Rights's proposal, "Nineteen Terms for Conciliation" for use in dealing with schools charged with unfair discrimination in athletic programs.

GOVERNMENTAL OPERATIONS

See Commerce.

HEALTH AND WELFARE

The **Departmental Affairs subcommittee** reviewed the administration of the Work Equity Program on July 18. They met in St. Cloud Aug. 9, to conduct a discussion with the Stearns County Social Services Department and review the Work Equity Program.

The **Health Care Costs subcommittee** met jointly with the Senate Health subcommittee, July 10 to review ambulance regulations. The two subcommittees met again on Aug. 14, in Duluth, and on Sept. 13, in St. Paul, to discuss ambulance licensure.

The **Health Care subcommittee** visited the University of Minnesota Medical School July 18, to continue their study of the interrelationship between the medical and chiropractic professions, and on July 27, to discuss home care alternatives to hospitalization for the terminally ill.

The **Social Services subcommittee** met Aug. 10 to hear reports from task forces on welfare reform.

HIGHER EDUCATION

On July 20, the **Curriculum subcommittee** met at Coffman Union on the University of Minnesota campus to hear presentations on University research work.

RULES AND LEGISLATIVE ADMINISTRATION

The **Special Rules and Procedures subcommittee** met July 13 to continue discussion of organizational procedures.

TRANSPORTATION

The committee met with the Senate subcommittee on Transportation Policy July 12, to hear testimony from state and federal agencies concerning the federal Clean Air Act and strategies for Minnesota's compliance. See Commerce.

Minnesota
House of Representatives

1979-1980
MEMBERSHIP
LIST*

*UNOFFICIAL LIST
pending recounts in several districts



DISTRICT

AASNESS, Paul (IR) Wendell 56590 (218) 369-2660	11A
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AINLEY, John A (IR) 203 3rd St. E Park Rapids 56470 (218) 732-5626	4A
ALBRECHT, Raymond J (IR) Brownton 55312 (612) 328-5375	23A
ANDERSON, Bob (IR) Box 28 Ottertail 56571 (218) 495-2509	10B
ANDERSON, Bruce W (Buzz) (DFL) 3316 Maple Ave Slayton 56172 (507) 836-8660	26A
ANDERSON, Delbert F (IR) Rt 2, Box 57 Starbuck 56381 (612) 239-2700	15A
ANDERSON, Glen H (DFL) Rt 1, Box 9 Bellingham 56212 (612) 568-2573	15B
ANDERSON, Irvin N (DFL) 909 13th St International Falls 56649 (218) 283-2416	3A
BATTAGLIA, David P (DFL) 1803 7th Ave Two Harbors 55616 (218) 834-3014	6B
BEGICH, Joseph R (DFL) 1001 2nd St W Eveleth 55734 (218) 741-3873	6A
BERGLIN, Linda L (DFL) 2309 Clinton Ave S Minneapolis 55404 (612) 874-0085	59A
BERKELMAN, Thomas R (DFL) 1830 Melrose Ave E Duluth 55803 (218) 724-3675	8B
BIERSDORF, John S (IR) 422 Cedar St N Owatonna 55060 (507) 451-9077	32A

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200 96th St W
Bloomington 55420 (612) 881-4272

BRINKMAN, Bernard J (DFL)
Richmond 56368 (612) 597-2328

BYRNE, Peggy (DFL)
524 Van Buren
St Paul 55103 (612) 489-5910

CARLSON, Douglas W (IR)
Sandstone 55072 (612) 245-2946

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Brooklyn Center 55429 (612) 533-0026

CASSERLY, James R (DFL)
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Minneapolis 55411 (612) 522-7088

CLARK, Janet H (DFL)
3025 Cedar Ave S
Minneapolis 55407 (612) 724-5555

CLAWSON, John T (DFL)
1 Cedar Point
Center City 55012 (612) 257-5385

CORBID, John (DFL)
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Oklee 56742 (218) 796-5664

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Minneapolis 55417 (612) 825-4719

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Minneapolis 55410 (612) 927-4988

DEMPSEY, Terry (IR)
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New Ulm 56073 (507) 354-5435

DEN OUDEN, Gaylin (IR)
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Prinsburg 56281 (612) 978-6745

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St Paul 55116 (612) 690-0103

EKEN, Willis R (DFL)
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ENEBO, Stanley A (DFL)
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Hills 56138 (507) 962-4385

ESAU, Gilbert D (IR)
Mountain Lake 56159 (507) 427-3156

EVANS, Jim (IR)
1424 Lori Ave
Detroit Lakes 56501 (218) 847-5444

DISTRICT

38A

16B

64B

14A

44A

56A

60A

19A

1B

61A

58A

28B

21B

63B

2B

5A

45B

60B

26B

28A

10A

EWALD, Douglas R (IR)
15025 Highland Trail
Minnetonka 55343 (612) 935-5708

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St Paul 55105 (612) 699-4278

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Rt 2
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FORSYTHE, Mary M (IR)
4605 Edina Blvd
Edina 55424 (612) 927-6613

FRIEDRICH, Donald L (IR)
Rt 3
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FRITZ, M D (Mike) (IR)
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St Paul 55108 (612) 646-2169

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Minneapolis 55418 (612) 789-2582

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Minneapolis 55406 (612) 724-7549

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Burnsville 55337 (612) 890-7298

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1502 Broadway S
Albert Lea 56007 (507) 373-9087

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4537 Perry Ave N
Robbinsdale 55422 (612) 533-1831

HEINITZ, O J (Lon) (IR)
2555 Queensland Lane
Plymouth 55441 (612) 473-4763

HOBERG, Dwaine (IR)
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Moorhead 56560 (218) 236-5471

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Richfield 55423 (612) 869-1875

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Coon Rapids 55433 (612) 755-5740

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Duluth 55806 (218) 727-4077

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Truman 56088 (507) 776-8171

JOHNSON, Carl M (DFL)
Rt 3
St Peter 56082 (507) 246-5336

JOHNSON, Dean A (IR)
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Willmar 55201 (612) 235-6388

JUDE, Tad (DFL)
Box 287
Mound 55364 (612) 472-2790

DISTRICT

40A

63A

11B

39A

32B

62B

55A

57B

53B

31A

43B

43A

9A

37A

47A

7B

27B

23B

21A

42A

KAHN, Phyllis L (DFL)
100 Malcolm Ave SE
Minneapolis 55414 (612) 378-2591

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Rochester 55901 (507) 282-7187

KALIS, Henry J (DFL)
Box 55
Walters 56092 (507) 294-3147

KELLY, Randy C (DFL)
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St Paul 55119 (612) 772-1114

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Duluth 55805 (218) 724-1033

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Dellwood 55110 (612) 429-6555

LONG, Dee (DFL)
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Minneapolis 55405 (612) 374-1876

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Tracy 56175 (507) 629-3631

LUKNIC, Marnie (IR)
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Faribault 55021 (507) 334-4956

MANN, George L (DFL)
Rt 4
Windom 56101 (507) 831-1730

McCARRON, Paul (DFL)
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Fridley 55432 (612) 784-9773

McDONALD, Kenneth J (IR)
200 Carter St
Watertown 55388 (612) 955-1623

McEACHERN, Bob (DFL)
601 Walnut N
St Michael 55376 (612) 497-2572

MEHRKENS, Lyle (IR)
Rt 3
Red Wing 55066 (612) 388-5682

DISTRICT

57A

33A

30A

66B

53A

40B

50B

54A

22A

51A

8A

50A

56B

20B

24B

27A

46A

36A

18B

25B

METZEN, James P (DFL)

227 14th Ave S
South St Paul 55075 (612) 451-0174

MINNE, Lona (DFL)

Rt 1, Box 74
Hibbing 55746 (218) 263-8647

MOE, Donald M (DFL)

11 Summit Court
St Paul 55102 (612) 226-4522

MUNGER, Willard M (DFL)

1121 S 70th Ave W
Duluth 55807 (218) 624-4050

MURPHY, Mary C (DFL)

6794 Arrowhead Road
Hermantown 55811 (218) 729-6399

NELSEN, Bruce G (IR)

Rt 1
Staples 56479 (218) 894-1373

NELSEN, Marlin B (Doc) (DFL)

Fleming Route
Aitkin 56431 (218) 927-3700

NELSON, Ken G (DFL)

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Roseau 56751 (218) 463-1149

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St Louis Park 55426 (612) 933-1433

ONNEN, Tony (IR)

Rt 2
Cokato 55321 (612) 286-2095

OSTHOFF, C Thomas (DFL)

766 Maryland Ave W
St Paul 55117 (612) 489-9596

OTIS, Todd (DFL)

4152 Colfax Ave S
Minneapolis 55412 (612) 823-4591

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Sartell 56377 (612) 252-6271

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116 Belvidere St W
St Paul 55107 (612) 224-7278

PEHLER, James C (DFL)

734 14th Ave S
St Cloud 56301 (612) 251-0350

DISTRICT

52A

5B

65B

7A

14B

12A

13B

59B

16A

61B

65A

48A

1A

41A

22B

64A

58B

17A

67A

17B

PETERSON, William (IR)
8835 Penn Lake Circle
Bloomington 55431 (612) 881-2990

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Mankato 56001 (507) 625-2814

PLEASANT, Ray O (IR)
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REDALEN, Elton R (IR)
Fountain 55935 (507) 268-4461

REDING, Leo J (DFL)
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Austin 55912 (507) 437-3846

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Elko 55020 (612) 469-4190

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Roseville 55113 (612) 484-7438

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Wayzata 55391 (612) 473-8573

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Pine River 56474 (218) 587-4185

SIEBEN, Harry Jr (DFL)
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Hastings 55933 (612) 437-7388

SIEBEN, Michael (DFL)
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Newport 55055 (612) 459-5292

SIMONEAU, Wayne A (DFL)
465 57th Place NE
Fridley 55432 (612) 571-5268

STADUM, Tony (IR)
Rt 2
Ada 56510 (218) 784-4847

DISTRICT

38B

29A

39B

3B

35A

31B

49B

36B

54B

48B

41B

55B

45A

30B

42B

4B

52B

51B

46B

2A

STOA, Tom (DFL)

763 Front St E
Winona 55987

(507) 454-5229

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Lewiston 55952

(507) 523-3141

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St Paul 55119

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VALAN, Merlyn (IR)

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VALENTI, Don (IR)

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New Prague 56071

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VOSS, Gordon O (DFL)

11120 7th St NE
Blaine 55434

(612) 757-3359

WALDORF, Eugene T (DFL)

1176 Orange E
St Paul 55106

(612) 771-0919

WEAVER, John L (IR)

318 Rice St
Anoka 55303

(612) 421-7707

WELCH, Richard J (DFL)

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Cambridge 55008

(612) 689-4767

WELKER, Ray (IR)

Rt 5, Box 30AB
Montevideo 56265

(612) 269-8288

WENZEL, Stephen G (DFL)

312 3rd St SE
Little Falls 56345

(612) 632-6485

WIESER, Al W Jr (IR)

704 4th St S
LaCrescent 55947

(507) 895-2693

WIGLEY, Richard E (IR)

Rt 2
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(507) 726-2394

WYNIA, Ann (DFL)

1559 Branston
St Paul 55108

(612) 644-5283

ZUBAY, Kenneth P (IR)

1326 2nd St NW
Rochester 55901

(507) 282-8796

DISTRICT

34B

34A

25A

37B

13A

67B

9B

49A

24A

47B

66A

19B

18A

20A

12B

35B

29B

62A

33B

MEMBERSHIP

Numerically listed
by district number

1A	Nysether	34B	Stoa
1B	Corbid	35A	Redalen
2A	Stadum	35B	Wieser
2B	Eken	36A	McDonald
3A	Anderson, I.	36B	Rees
3B	Prahl	37A	Hokanson
4A	Ainley	37B	Swanson
4B	Sherwood	38A	Blatz
5A	Elioff	38B	Peterson
5B	Minne	39A	Forsythe
6A	Begich	39B	Pleasant
6B	Battaglia	40A	Ewald
7A	Munger	40B	Knickerbocker
7B	Jaros	41A	Olsen
8A	Lehto	41B	Rothenberg
8B	Berkelman	42A	Jude
9A	Hoberg	42B	Searles
9B	Valan	43A	Heinitz
10A	Evans, J.	43B	Heap
10B	Anderson, Bob	44A	Carlson, L.
11A	Aasness	44B	Adams
11B	Fjoslien	45A	Schreiber
12A	Nelsen, B.	45B	Ellingson
12B	Wenzel	46A	McCarron
13A	Thiede	46B	Simoneau
13B	Nelsen, M.	47A	Jacobs
14A	Carlson, D.	47B	Voss
14B	Murphy	48A	Novak
15A	Anderson, D.	48B	Rose
15B	Anderson, G.	49A	Valento
16A	Niehaus	49B	Reif
16B	Brinkman	50A	Levi
17A	Patton	50B	Kostohryz
17B	Pehler	51A	Laidig
18A	Welch	51B	Sieben, M.
18B	McEachern	52A	Metzen
19A	Clawson	52B	Sieben, H.
19B	Weaver	53A	Kempe
20A	Welker	53B	Halberg
20B	Ludeman	54A	Kroening
21A	Johnson, D.	54B	Rice
21B	Den Ouden	55A	Fudro
22A	Kvam	55B	Sarna
22B	Onnen	56A	Casserly
23A	Albrecht	56B	Long
23B	Johnson, C.	57A	Kahn
24A	Vanasek	57B	Greenfield
24B	Luknic	58A	Dean
25A	Sviggum	58B	Otis
25B	Mehrkens	59A	Berglin
26A	Anderson, Buzz	59B	Nelson, K.
26B	Erickson	60A	Clark
27A	Mann	60B	Enebo
27B	Jennings	61A	Crandall
28A	Esau	61B	Norman
28B	Dempsey	62A	Wynia
29A	Plepho	62B	Fritz
29B	Wigley	63A	Faricy
30A	Kalis	63B	Drew
30B	Searle	64A	Osthoff
31A	Haukoos	64B	Byrne
31B	Reding	65A	Norton
32A	Biersdorf	65B	Moe
32B	Friedrich	66A	Waldorf
33A	Kaley	66B	Kelly
33B	Zubay	67A	Pavtak
34A	Stowell	67B	Tomlinson