

LEGISLATIVE REFERENCE LIBRARY
J87 .M62 1977 Fe.18

Minnesota. Gov. - Energy message to the 70th Session



3 0307 00036 0456

RL 76-1767



GOVERNOR RUDY PERPICH

Energy Message

To The 70th Session
Of The Minnesota State Legislature

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA

J
87
.M62
1977
Fe.18

February 18, 1977

P119.45
13173

GOVERNOR RUDY PERPICH
ENERGY MESSAGE
FEBRUARY 18, 1977

CONTENTS

INTRODUCTION	1
ENERGY SUPPLIES	4
CRUDE OIL	4
NATURAL GAS	5
COAL	6
PEAT	9
SOLAR	10
ENERGY CONSERVATION	12
STATE & LOCAL GOVERNMENTS ENERGY EFFICIENCY	13
HOMES	16
TRANSPORTATION	21
WASTEFUL PRACTICES IN COMMERCE AND INDUSTRY	24
ENERGY RATES AND PRICES	26
INFORMATION & EDUCATION	29
CONCLUSION	32

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA

ENERGY MESSAGE

GOVERNOR RUDY PERPICH

FEBRUARY 18, 1977

ONE MONTH AGO TODAY THE EXECUTIVE COUNCIL WAS FORCED TO DECLARE THE FIRST OFFICIAL "ENERGY EMERGENCY" IN MINNESOTA'S HISTORY.

SINCE THEN, ALL MINNESOTANS HAVE BEEN CALLED UPON TO MAKE PERSONAL SACRIFICES, BUT COMPARED WITH OTHER STATES, WE HAVE SURVIVED THIS NATIONAL CRISIS REMARKABLY WELL.

OUR ACHIEVEMENTS - IN AVOIDING INDUSTRIAL AND BUSINESS SHUTDOWNS, MASSIVE LAYOFFS AND SCHOOL CLOSINGS - SHOULD MAKE MINNESOTANS PROUD. THANKS TO THEM OUR CONSERVATION MEASURES ARE WORKING.

THE CHRISTIAN SCIENCE MONITOR SINGLED OUT MINNESOTA AS THE STATE BEST PREPARED FOR THE EMERGENCY. IT SAID:

ENERGY MESSAGE

PAGE TWO

MINNESOTA HAS A PREVENTIVE SYSTEM. AN IMPENDING FUEL SHORTAGE CAN BE DETECTED AS MUCH AS 30 DAYS IN ADVANCE BY THE STATE, TRIGGERING A SET OF EMERGENCY CONSERVATION STEPS. IN CONTRAST, MOST STATES THIS WINTER DID NOT KNOW THEY WERE IN A FUEL BIND UNTIL SHORTAGES WERE ALREADY TOO SEVERE TO FORESTALL.

THE FORESIGHT OF THE LEGISLATURE IN CREATING THE MINNESOTA ENERGY AGENCY IS APPARENT. THE STATE'S INVESTMENT PAID FOR ITSELF MANY TIMES OVER THIS WINTER. AND WE ARE VERY FORTUNATE TO HAVE JOHN MILLHONE AS ITS DIRECTOR. HIS LEADERSHIP HAS BEEN OUTSTANDING.

THE LESSON IN THIS WINTER'S CRISIS MUST NOT BE FORGOTTEN NOW, AS THE DAYS TURN WARMER.

THAT LESSON IS CLEAR.

THE WASTE OF OUR LIMITED ENERGY RESOURCES HAS PLACED US ON A COLLISION COURSE WITH DISASTER.

ENERGY MESSAGE

PAGE THREE

WE MUST FACE THE COLD, HARD FACT THAT SUPPLIES OF OUR MAJOR ENERGY RESOURCES ARE DECLINING.

THE NATION'S PRODUCTION OF CRUDE OIL PEAKED IN 1970. NATURAL GAS PRODUCTION PEAKED IN 1973.

WE PRESENTLY GET THREE-FOURTHS OF OUR ENERGY FROM OIL AND GAS IN MINNESOTA -- ABOUT THE NATIONAL AVERAGE.

BUT WITHIN OUR LIFETIMES, OIL AND GAS WILL NO LONGER BE OUR MAJOR ENERGY RESOURCES. WE WILL HAVE TO FIND NEW FORMS OF ENERGY.

THE IMPLICATIONS OF THIS FACT ARE STAGGERING.

ADJUSTING TO A NEW WORLD OF ENERGY SCARCITIES MAY BE THE GREATEST CHALLENGE WE FACE.

ENERGY MESSAGE

PAGE FOUR

WE IN MINNESOTA MUST CONTINUE THE LEADERSHIP WE SHOWED DURING THIS WINTER'S EMERGENCY BY FINDING SOLUTIONS TO OUR LONG-TERM ENERGY PROBLEMS.

ENERGY SUPPLIES

TO MEET THIS CHALLENGE, MINNESOTA NEEDS A BALANCED POLICY THAT DEALS WITH BOTH ENERGY SUPPLIES AND ENERGY USES.

CRUDE OIL

THE STATE'S MOST SERIOUS SUPPLY PROBLEM IS THE RAPID CURTAILMENT BY CANADA OF ITS CRUDE OIL EXPORTS. THIS JEOPARDIZES CONTINUED OPERATION OF THE MINNESOTA-AREA REFINERIES. THEY PROVIDE NEARLY ONE-FOURTH OF THE STATE'S TOTAL ENERGY RESOURCES.

I AM SUPPORTING EFFORTS TO CONSTRUCT NEW PIPELINES TO BRING CRUDE OIL TO THESE REFINERIES.

ENERGY MESSAGE

PAGE FIVE

THE MOST AMBITIOUS PIPELINE PROPOSAL WOULD EXTEND FROM THE KITIMAT RIVER ON THE WEST COAST OF CANADA TO EDMONTON WHERE IT CONNECTS WITH EXISTING PIPELINES THAT SUPPLY THE UPPER MIDWEST.

THE 753-MILE PIPELINE WOULD COST NEARLY HALF A BILLION DOLLARS. IT WOULD BRING CRUDE OIL ORIGINATING FROM ALASKA, INDONESIA AND THE PACIFIC INTO THE MIDWEST.

NATURAL GAS

THE NATURAL GAS UNDER ALASKA'S NORTH SLOPE ALSO MAY EASE THIS REGION'S ENERGY PROBLEMS.

THE SELECTION OF A PIPELINE ROUTE FROM ALASKA IS NOW BEFORE THE FEDERAL POWER COMMISSION.

AN FPC JUDGE EARLIER THIS MONTH RECOMMENDED A ROUTE THAT WOULD CROSS CANADA AND PASS THROUGH MINNESOTA.

ENERGY MESSAGE

PAGE SIX

THE ECONOMIC, ENVIRONMENTAL AND PUBLIC BENEFIT ARGUMENTS CLEARLY FAVOR THIS ROUTE. IT WOULD PROVIDE GAS IN THE EARLY 1980'S TO THOSE STATES HARDEST HIT BY THIS WINTER'S GAS SHORTAGE.

I WILL WORK WITH MINNESOTA'S CONGRESSIONAL DELEGATION AND OTHER MIDWESTERN GOVERNORS FOR APPROVAL OF THIS ROUTE.

IN BOTH OIL AND GAS, MINNESOTA'S FUTURE IS TIED CLOSELY TO CANADA'S DECISIONS.

A TRADITION OF FRIENDSHIP HAS LONG EXISTED BETWEEN MINNESOTANS AND CANADIANS. I PLAN TO VISIT CANADA THIS SPRING TO MEET WITH NATIONAL AND PROVINCIAL LEADERS. WHILE THERE I WILL DISCUSS THE IMPORTANCE OF COOPERATION IN ENERGY MATTERS.

COAL

MINNESOTA HAS AN ADVANTAGE IN BEING CLOSE TO THE RICH, LOW-SULFUR COAL DEPOSITS OF THE NORTHERN GREAT PLAINS.

ENERGY MESSAGE

PAGE SEVEN

BUT COAL IS NO PANACEA.

THERE ARE PROBLEMS FROM THE MINE TO THE FURNACE. STRIPMINED LAND MUST BE REHABILITATED. COAL TRAINS SNARL CITY TRAFFIC. NO ONE WANTS COAL PILES AND TERMINALS NEXT DOOR. BURNING COAL CAUSES AIR POLLUTION.

HOWEVER, THE POTENTIAL OF COAL IS IMMENSE. IT MUST BE USED, IF WE ARE TO MEET OUR ENERGY NEEDS.

I SUPPORT THE ENVIRONMENTAL QUALITY COUNCIL'S PLAN FOR A \$300,000 COAL STUDY. THE STUDY WILL BALANCE THE ENVIRONMENT, ECONOMIC AND ENERGY ISSUES.

WE NEED TO ENCOURAGE NEW WAYS OF USING COAL THAT CAUSE LESS POLLUTION. THE FEDERAL GOVERNMENT HAS FUNDED SUCH PROJECTS AT THE UNIVERSITY OF MINNESOTA AT DULUTH, THE OWATONNA TOOL COMPANY, AND A LAND 'O LAKES CHEESE PLANT AT PERHAM. THE ERIE MINING COMPANY IS SEEKING FEDERAL FUNDS FOR A COAL GAS PROJECT THAT COULD BE THE LONG-TERM ANSWER TO THE HEAVY ENERGY DEMANDS OF THE TACONITE COMPANIES.

ENERGY MESSAGE

PAGE EIGHT

UNFORTUNATELY, FOUR OUT OF EVERY FIVE TONS OF COAL IS USED FOR ELECTRICAL GENERATION. ONLY ONE-THIRD OF THE ENERGY IN THIS COAL IS CAPTURED AS A USEFUL RESOURCE. THE REST IS DISCHARGED INTO THE AIR OR WATER AS WASTE HEAT.

THERE ARE SOME EXCEPTIONS. MINNESOTA STILL HAS 26 COMMUNITY ENERGY SYSTEMS WHICH SELL THIS HEAT AS STEAM TO HEAT BUILDINGS. SEVERAL OF THESE ENERGY SYSTEMS ARE OLD AND ARE IN DANGER OF BEING ABANDONED.

I AM ASKING THE ENERGY AGENCY TO ANALYZE THESE DISTRICT HEATING SYSTEMS AND RECOMMEND WAYS TO CONTINUE AND UPGRADE THEM.

COMMUNITY ENERGY SYSTEMS MAY MAKE A COMEBACK. MODERN SYSTEMS USE 80 PERCENT OR MORE OF THE ENERGY IN COAL. I AM ASKING THE ENERGY AGENCY TO TELL US HOW WE CAN INTRODUCE MORE OF THESE ENERGY SYSTEMS IN MINNESOTA.

ENERGY MESSAGE

PAGE NINE

PEAT

MINNESOTA HAS A POTENTIAL ENERGY RESOURCE OF ITS OWN IN PEAT. EXCLUDING ALASKA, WE HAVE MORE THAN HALF THE NATION'S PEAT RESERVES.

THERE ARE ENVIRONMENTAL AND RESOURCE QUESTIONS TO BE ANSWERED. BUT IF PEAT CAN BE GASIFIED, OUR POTENTIAL GAS RESERVES WOULD BE DOUBLE THE ENORMOUS RESERVES IN ALASKA.

MINNEGASCO HAS A \$1 MILLION FEDERAL GRANT FOR A PILOT PROJECT THAT WILL CONVERT PEAT TO NATURAL GAS.

WE SHOULD INCREASE THIS RESEARCH EFFORT THROUGH A MAJOR NEW ENERGY RESEARCH CENTER AT THE DULUTH CAMPUS OF THE UNIVERSITY OF MINNESOTA. MY GENERAL BUDGET MESSAGE PROPOSED FUNDS FOR THIS PROJECT. BESIDES PEAT, THE CENTER SHOULD ENCOURAGE THE DEVELOPMENT OF OTHER NORTHERN MINNESOTA ENERGY RESOURCES -- TIMBER, FOREST BY-PRODUCTS, WIND AND SOLAR.

ENERGY MESSAGE

PAGE TEN

SOLAR

RENEWABLE ENERGY RESOURCES ARE THE ULTIMATE ANSWER
TO OUR ENERGY PROBLEMS.

MINNESOTA HAS SHOWN GREAT IMAGINATION IN THE DEVELOPMENT
OF NEW ENERGY RESOURCES.

THE LEGISLATURE LAST YEAR INITIATED A RESEARCH GRANT
PROGRAM THAT IS FUNDING 19 PROJECTS. THEY ARE
EXPLORING NEW WAYS OF USING ENERGY FROM THE SUN, WIND,
AND ANIMAL WASTES.

THE LEGISLATIVE COMMISSION ON MINNESOTA RESOURCES IS
FINANCING RESEARCH ON THE COMMERCIAL USE OF SOLAR
ENERGY, PEAT AS A POWER PLANT FUEL, ENERGY FROM A
TREE PLANTATION, EARTH-SHELTERED BUILDINGS AND ICE
AIR CONDITIONERS.

I COMMEND THE LEGISLATURE FOR THIS LEADERSHIP. I
ENCOURAGE THE COMMISSION TO CONTINUE TO FUND THESE
KINDS OF ENERGY RESEARCH PROJECTS.

ENERGY MESSAGE

PAGE ELEVEN

MINNESOTA IS A FINALIST IN THE COMPETITION FOR THE SOLAR ENERGY RESEARCH INSTITUTE, A MAJOR FEDERAL LABORATORY DEVOTED TO SOLAR RESEARCH, DEVELOPMENT AND DEMONSTRATIONS.

I AM CONTINUING THE STRONG STATE EFFORT TO OBTAIN THIS INSTITUTE THAT WAS STARTED BY SENATOR HUBERT H. HUMPHREY, AUTHOR OF THE BILL ESTABLISHING THE INSTITUTE, VICE PRESIDENT WALTER F. MONDALE, WHEN HE WAS SENATOR, AND SENATOR WENDELL ANDERSON, WHEN HE WAS GOVERNOR.

WE MUST CONTINUE THESE EFFORTS TO PROMOTE NEW ENERGY SOURCES. TO DO THIS, I AM PROPOSING THREE NEW INITIATIVES.

FIRST, I AM ASKING THE COMMISSIONER OF ADMINISTRATION TO MAXIMIZE THE USE OF SOLAR ENERGY, OTHER NEW ENERGY FORMS AND ENERGY-SAVING DESIGNS SUCH AS UNDERGROUND CONSTRUCTION IN ALL FUTURE STATE BUILDINGS. I RECOMMEND THAT SCHOOL DISTRICTS, CITIES AND COUNTIES FOLLOW THIS EXAMPLE.

SECOND, I AM ASKING FOR A \$130,000 APPROPRIATION TO COLLECT SOLAR AND WIND DATA AT COLLECTION STATIONS TO BE LOCATED THROUGHOUT THE STATE.

ENERGY MESSAGE

PAGE TWELVE

THIRD, I AM ASKING FOR A \$400,000 APPROPRIATION TO FINANCE AN ENERGY DESIGN COMPETITION. THE FUNDS WILL BE USED TO PAY A PORTION OF THE COST OF INNOVATIVE ENERGY SYSTEMS. EMPHASIS SHOULD BE ON LOW-COST APPROACHES THAT ARE ECONOMICALLY FEASIBLE NOW.

ENERGY CONSERVATION

THE FASTEST, CHEAPEST, AND CLEANEST SOURCE OF ENERGY IS THE ENERGY THAT CAN BE SAVED THROUGH CONSERVATION.

MINNESOTA ALREADY HAS SOME OF THE MOST FARSIGHTED ENERGY CONSERVATION LAWS IN THE NATION.

THESE INCLUDE THE ENERGY BUILDING CODE, INFRA-RED FLYOVERS THAT SHOW HEAT LOSSES FROM BUILDINGS, STATE-FUNDED ENERGY RESEARCH, STATE-FINANCED WINTERIZATION OF HOMES, ENERGY INFORMATION SYSTEMS.

ENERGY MESSAGE

PAGE THIRTEEN

A COMMUTER VAN PROGRAM FOR STATE EMPLOYEES, SOLAR EQUIPMENT STANDARDS AND MANY MORE.

BUT WE CAN STILL DO MORE.

TO CONTINUE MINNESOTA'S ENERGY CONSERVATION LEADERSHIP, I AM ASKING THE LEGISLATURE TO APPROVE ADDITIONAL MEASURES IN 6 AREAS:

1. STATE AND LOCAL GOVERNMENT ENERGY EFFICIENCY.

A 15 PERCENT REDUCTION IN ENERGY USE BY STATE BUILDINGS.

I AM DIRECTING THE COMMISSIONER OF ADMINISTRATION TO ACHIEVE AN ADDITIONAL 15 PERCENT ENERGY SAVING IN THE 2,600 STATE-OWNED BUILDINGS, ENOUGH TO HEAT 3,400 HOMES.

STATE SERVICE CENTERS WILL BE CONSOLIDATED. UN-NEEDED BUILDINGS WILL BE CLOSED AND THAT INCLUDES SOME MAJOR INSTITUTIONS. DEPARTMENT HEADS ARE DIRECTED TO COOPERATE FULLY IN THIS EFFORT.

ENERGY MESSAGE

PAGE FOURTEEN

THE LEGISLATURE LAST YEAR INITIATED AN ENGINEERING SURVEY OF STATE BUILDINGS TO FIND OUT WHERE SAVINGS SHOULD BE MADE. I AM ASKING THE LEGISLATURE FOR \$500,000 TO COMPLETE THESE STUDIES.

PLANS FOR CONVERTING MAJOR STATE INSTITUTIONS FROM OIL AND GAS TO COAL ALSO WERE ORDERED LAST YEAR BY THE LEGISLATURE. THE COMMISSIONER OF ADMINISTRATION WILL COMPLETE THESE SURVEYS THIS SPRING.

THE RESULTS WILL BE USED TO DEVELOP A MULTI-YEAR PLAN FOR RETROFITTING AND CONVERTING STATE BUILDINGS. LATER IN THIS SESSION, I WILL ASK THE LEGISLATURE TO APPROVE THE FIRST PHASE OF THIS PLAN.

A 10 PERCENT REDUCTION IN THE ENERGY USED
BY STATE VEHICLES.

GASOLINE WILL BE SAVED THROUGH MORE EFFICIENT VEHICLES, DRIVER TRAINING AND ELIMINATING UNNECESSARY TRAVEL.

ENERGY MESSAGE

PAGE FIFTEEN

THE STATE WILL ONLY PURCHASE CARS THAT GET AT LEAST
18 MILES PER GALLON EXCEPT IN CASES OF SPECIAL NEED.

UPGRADING OF SCHOOL BUILDING ENERGY
EFFICIENCY.

THE 1976 ENERGY BILL PROVIDES FOR ENERGY SURVEYS
OF SCHOOL BUILDINGS. I AM ASKING THE DEPARTMENT
OF EDUCATION AND ENERGY AGENCY TO INITIATE A COMPUTER
PROGRAM THAT ANALYZES THIS DATA AND DETERMINES WHAT
CONSERVATION MEASURES ARE NEEDED IN EACH BUILDING.

TO FINANCE ENERGY IMPROVEMENTS, SOME SCHOOL DISTRICTS
AND OTHER POLITICAL SUBDIVISIONS MAY NEED TO EXCEED
THEIR CAPITAL OUTLAY LEVY LIMITS. I PROPOSE THEY
BE ALLOWED TO DO SO. THESE CONSERVATION MEASURES
WILL PAY FOR THEMSELVES IN FUTURE FUEL SAVINGS.

ENERGY MESSAGE

PAGE SIXTEEN

PURCHASE OF ENERGY EFFICIENT EQUIPMENT
BY STATE AND LOCAL GOVERNMENTS.

THE 1974 ENERGY LAW DIRECTS THE STATE TO AVOID PURCHASING PRODUCTS THAT WASTE ENERGY. WE ALREADY HAVE STANDARDS FOR STORM WINDOWS AND AIR CONDITIONERS.

I AM ASKING THAT THIS REQUIREMENT BE EXTENDED TO LOCAL UNITS OF GOVERNMENT AS WELL.

ENERGY USE SHOULD BE CONSIDERED IN ALL AREAS OF GOVERNMENT PURCHASES - - AUTOMOBILES, TIRES, LIGHT BULBS, ELECTRIC OFFICE EQUIPMENT, AND MORE. ENERGY SAVINGS OF AT LEAST 5 PERCENT IN THESE AREAS CAN BE ACHIEVED.

2. HOMES

MINIMUM ENERGY STANDARDS FOR HOMES AT
THE TIME THEY ARE SOLD.

THE STATE'S ENERGY CODE ASSURES ENERGY SAVINGS IN

ENERGY MESSAGE

PAGE SEVENTEEN

NEW CONSTRUCTION. THIS IS NOT ENOUGH. SIXTY PERCENT OF THE HOMES THAT WILL BE STANDING IN THE YEAR 2,000 HAVE BEEN BUILT ALREADY.

WE MUST WINTER-PROOF OUR EXISTING HOMES.

I AM ASKING FOR LEGISLATION THAT SETS MINIMUM STANDARDS FOR ATTIC INSULATION, STORM WINDOWS, WEATHERSTRIPPING AND FURNACE EFFICIENCY. THESE STANDARDS WILL HAVE TO BE MET AT THE TIME OF SALE.

THE MEASURE CAN BE SELF-ENFORCING BY REQUIRING THE SELLER TO CERTIFY TO THE BUYER THAT THE REQUIREMENTS HAVE BEEN MET.

MOST HOMEOWNERS REALIZE A FINANCIAL GAIN WHEN THEY SELL THEIR HOMES. INSULATING SHOULD NOT BE DIFFICULT. IF THEY'RE SMART, THOUGH, THEY WILL INSULATE AHEAD OF TIME AND ENJOY THE ENERGY AND DOLLAR SAVINGS.

ENERGY MESSAGE

PAGE EIGHTEEN

BUYERS WILL BE PROTECTED FROM EXPENSIVE-TO-HEAT HOMES.

MANY HOMEOWNERS WILL QUALIFY FOR STATE ASSISTANCE IN MEETING THIS REQUIREMENT. IN MY BUDGET MESSAGE, I REQUESTED \$30 MILLION FOR THE HOUSING FINANCE AGENCY, WITH \$6 MILLION OF THIS EARMARKED FOR ENERGY IMPROVEMENTS.

THIS IS A STRONG MEASURE, BUT AN IMPORTANT ONE. RESIDENTIAL SPACE HEATING IS A MAJOR USE OF OUR MOST THREATENED RESOURCES. THE ENERGY SAVED IN HOMES WILL PROTECT BUSINESSES AND JOBS.

STATEWIDE ENFORCEMENT OF THE ENERGY
CODE ON NEW BUILDINGS.

MINNESOTA WAS A LEADER IN ADOPTING A STATEWIDE ENERGY CODE FOR ALL NEW BUILDINGS. BUT WHILE THE ENERGY CODE IS STATEWIDE, THE BUILDING CODE IS NOT. TWENTY PERCENT OF ALL MINNESOTANS LIVE IN AREAS WHERE THERE ARE NO LOCAL BUILDING INSPECTORS. BOTH THE ENERGY CODE AND THE PHYSICALLY HANDICAPPED CODE SUFFER FROM LACK OF ENFORCEMENT IN THESE AREAS.

ENERGY MESSAGE

PAGE NINETEEN

TO CORRECT THIS, I WILL PROPOSE LEGISLATION MAKING
THE BUILDING CODE APPLY STATEWIDE.

BAN ON PILOT LIGHTS ON GAS FURNACES,
STOVES AND CLOTHES DRYERS.

NO NEW GAS FURNACES, STOVES OR CLOTHES DRYERS
EQUIPPED WITH PILOT LIGHTS SHOULD BE SOLD OR
INSTALLED IN MINNESOTA AFTER JANUARY 1, 1979.

ELECTRICAL IGNITION DEVICES PROVIDE A SAFE, RELIABLE
ALTERNATIVE TO PILOT LIGHTS. MOST GAS DRYERS ALREADY
USE SUCH DEVICES. WITH THESE DEVICES AVAILABLE, IT
IS A MISTAKE TO ALLOW THIS CONTINUED WASTE OF NATURAL
GAS.

THESE PILOT LIGHTS WASTE 1.5 BILLION CUBIC FEET OF
NATURAL GAS PER YEAR, ENOUGH TO HEAT 12,000 HOMES.

BY DELAYING THE BAN TO 1979, RETAILERS HAVE AMPLE
TIME TO SELL EXISTING INVENTORIES.

ENERGY MESSAGE

PAGE TWENTY

THE COST OF IGNITION DEVICES WILL BE MORE THAN
OFFSET IN FUEL SAVINGS.

MINIMUM EFFICIENCY STANDARDS FOR AIR
CONDITIONERS.

AIR CONDITIONERS SOLD IN MINNESOTA AFTER JANUARY 1,
1978 SHOULD MEET MINIMUM ENERGY EFFICIENCY STANDARDS.

INEFFICIENT AIR CONDITIONERS DRIVE UP THE PEAK DEMAND
FOR ELECTRICITY.

THESE STANDARDS WILL ELIMINATE THE NEED FOR 160
MEGAWATTS OF ELECTRICAL GENERATING CAPACITY. THEY
WILL SAVE 1.3 MILLION GALLONS OF FUEL OIL EACH YEAR.
RATEPAYERS WILL SAVE \$114 MILLION IN THE CAPITAL
COSTS OF NEW POWER FACILITIES.

MORE EFFICIENT AIR CONDITIONERS WILL COST ABOUT
20 PERCENT MORE BUT CONSUMERS WILL RECOVER THIS
COST IN FUEL SAVINGS.

ENERGY MESSAGE

PAGE TWENTY-ONE

THESE PILOT LIGHT AND AIR CONDITIONER STANDARDS ARE SIMILAR TO THOSE ADOPTED IN CALIFORNIA. MANUFACTURERS THEREFORE HAVE A LARGE MARKET FOR ENERGY-EFFICIENT APPLIANCES.

3. TRANSPORTATION

IMPROVED AUTOMOBILE EFFICIENCIES

FEDERAL STANDARDS REQUIRE AN AVERAGE OF 18 MILES PER GALLON FOR NEW CARS SOLD NEXT YEAR. THIS REQUIRED AVERAGE WILL INCREASE TO 27.5 MILES PER GALLON BY 1985.

PRESIDENT CARTER'S ENERGY PROGRAM MAY ADD MINIMUM GAS MILEAGE REQUIREMENTS.

ENERGY MESSAGE

PAGE TWENTY-TWO

IN LIGHT OF THESE FEDERAL ACTIONS, I AM NOT NOW PROPOSING NEW CONSERVATION REQUIREMENTS FOR AUTOMOBILES. HOWEVER, I AM DIRECTING THE ENERGY AGENCY TO DEVELOP STANDBY PROPOSALS FOR A HEAVY TAX ON GAS-GUZZLING CARS, IF FEDERAL ACTION PROVES INADEQUATE.

ENERGY MESSAGE

PAGE TWENTY-THREE

MORE THAN ANYTHING ELSE, GAS-GUZZLING CARS SYMBOLIZE A WANTON DISREGARD FOR OUR LIMITED ENERGY RESOURCES. NO OTHER SOCIETY WOULD CONSIDER USING A TWO-TON VEHICLE TO GO TO THE STORE FOR AN 11 OUNCE BOX OF CEREAL.

GOOD PUBLIC TRANSPORTATION

REDUCED CAR TRAVEL IS THE KEY TO ENERGY SAVINGS IN TRANSPORTATION. MY BUDGET CONTAINS \$32.9 MILLION TO SUBSIDIZE URBAN BUS SYSTEMS, PLUS \$1.3 MILLION FOR AMTRAK SERVICE BETWEEN DULUTH AND THE TWIN CITIES.

ENERGY-EFFICIENT FREIGHT MOVEMENT

MY BUDGET REQUEST INCLUDES \$3 MILLION FOR UPGRADING RAILROAD BRANCH LINES. BESIDES AIDING AGRICULTURE, THIS PROGRAM HOLDS DOWN ENERGY REQUIREMENTS FOR THE MOVEMENT OF BULK COMMODITIES.

ENERGY MESSAGE
PAGE TWENTY-FOUR

ENCOURAGEMENT OF NON-MOTORIZED RECREATION.

MY \$26 MILLION TRAILS PROPOSAL WILL PROVIDE THOUSANDS OF MILES OF NEW TRAILS FOR SKIING, HIKING AND BICYCLING.

4. WASTEFUL PRACTICES IN COMMERCE AND INDUSTRY

MANDATORY LIGHTING STANDARDS FOR LARGE
PUBLIC BUILDINGS.

MANY PUBLIC BUILDINGS ARE OVER-LIGHTED. THIS WASTES ENERGY DIRECTLY. THE HEAT FROM SUCH LIGHTS ALSO INCREASES THE LOAD ON AIR CONDITIONERS IN THE SUMMER.

THIS EXTRA LIGHTING SHOULD BE ELIMINATED AS SOON AS POSSIBLE. I AM RECOMMENDING AN EFFECTIVE DATE OF JANUARY 1, 1978.

BUILDING OWNERS AND MANAGERS WILL BE ABLE TO MEET THIS REQUIREMENT LARGELY BY REMOVING UNNECESSARY LAMPS.

ENERGY MESSAGE
PAGE TWENTY-FIVE

THE PROPOSED STANDARD CAN REDUCE ENERGY CONSUMPTION FOR LIGHTING BY AT LEAST 10 PERCENT, OR 130 MILLION KILOWATT HOURS.

DIRECT AND INDIRECT ENERGY SAVINGS WILL REDUCE THE SUMMER DAYTIME PEAK BY 40 MEGAWATTS. BY 1985 THIS COULD REACH 70 MEGAWATTS, THE SIZE OF A LARGE PEAK GENERATING PLANT.

REDUCED VENTILATION REQUIREMENTS.

VENTILATION STANDARDS FOR COMMERCIAL BUILDINGS REQUIRE AN EXCESSIVE INTAKE OF OUTSIDE AIR, RESULTING IN THE UNNECESSARY USE OF ENERGY FOR HEATING. I AM ASKING THE DEPARTMENTS OF HEALTH AND ADMINISTRATION TO RECOMMEND CHANGES THAT ELIMINATE THIS AREA OF ENERGY WASTE.

BAN ON HEATING COMMERCIAL PARKING GARAGES.

WHILE WE ARE HAVING DIFFICULTY SECURING ADEQUATE ENERGY TO KEEP OUR HOMES HEATED AND FACTORIES RUNNING, ENERGY IS BEING SQUANDERED TO HEAT SUCH UNNECESSARY AREAS AS PARKING GARAGES.

ENERGY MESSAGE
PAGE TWENTY-SIX

I SUPPORT REVISION OF THE ENERGY CODE TO PROHIBIT THE HEATING OF PARKING AREAS IN NEW CONSTRUCTION, A POLICY WE NOW HAVE IN STATE GOVERNMENT.

RESTRICTIONS ON OUTDOOR DISPLAY LIGHTING.

FOR MANY PEOPLE, OUTDOOR DISPLAY LIGHTING IS A HIGHLY VISIBLE SYMBOL OF SOCIETY'S LACK OF COMMITMENT TO ENERGY CONSERVATION. I AM ASKING THE LEGISLATURE TO GIVE THE ENERGY AGENCY AUTHORITY TO REGULATE THIS LIGHTING. THERE IS NO NEED TO HAVE LIGHTED BILLBOARDS FROM 11 P.M. TO 6 A.M. THIS WASTES MONEY AS WELL AS ENERGY.

5. ENERGY RATES AND PRICES

RATE STRUCTURES WHICH PROMOTE ENERGY CONSERVATION.

THERE HAS BEEN MUCH CRITICISM OF CURRENT UTILITY RATE STRUCTURES, WHICH SEEM TO ENCOURAGE ENERGY CONSUMPTION. THE MORE ENERGY A CUSTOMER USES THE LOWER THE PER-UNIT COST. WE NEED TO CHANGE THIS SO THAT THOSE WHO USE ENERGY MORE EFFICIENTLY ARE NOT PENALIZED. I SUPPORT LEGISLATION THAT MAKES ENERGY CONSERVATION A MAJOR FACTOR IN DETERMINING RATE DESIGNS.

ENERGY MESSAGE

PAGE TWENTY-SEVEN

RATE STRUCTURES WHICH ALLOCATE UTILITY
COSTS FAIRLY.

WE NEED TO LOOK CAREFULLY AT NEW RATE DESIGNS WHICH ALLOCATE ENERGY COSTS MORE FAIRLY AMONG CONSUMERS ACCORDING TO THEIR USE. THE TIME-OF-DAY PRICING STUDY NOW BEING CARRIED OUT BY THE PUBLIC SERVICE COMMISSION AND NORTHERN STATES POWER SHOULD BE EXPEDITED.

SALES TAX ON FUELS.

TO INSURE THAT MINNESOTA GOES INTO THE HEATING SEASON WITH MAXIMUM FUEL INVENTORIES, WE NEED TO ENCOURAGE CONSUMERS TO FILL THEIR TANKS EARLY. I SUPPORT LEGISLATION REMOVING THE SALES TAX ON FUEL OIL AND PROPANE DURING JULY, AUGUST, AND SEPTEMBER. I ALSO ENCOURAGE CONSUMERS TO INCREASE THEIR FUEL STORAGE CAPACITY.

ENERGY MESSAGE

PAGE TWENTY-EIGHT

EMERGENCY ENERGY COST RELIEF.

IT IS A HARD FACT OF LIFE THAT ENERGY PRICES ARE MUCH HIGHER NOW THAN THEY WERE A FEW SHORT YEARS AGO.

AVERAGE ENERGY COSTS IN JANUARY WERE 60 PERCENT HIGHER THAN A YEAR AGO BECAUSE OF COLDER WEATHER AND HIGHER PRICES.

THIS PROBLEM IS COMMON TO OTHER STATES HARD-HIT THIS WINTER. I HAVE TWICE CONTACTED PRESIDENT CARTER URGING EMERGENCY RELIEF FOR VICTIMS OF HARSH ENERGY COSTS.

THERE IS LEGISLATION PENDING IN CONGRESS TO PROVIDE ENERGY FINANCIAL ASSISTANCE. IF THIS AID DOESN'T COME QUICKLY, I WILL ASK THE LEGISLATURE TO PROVIDE EMERGENCY STATE FUNDS.

ENERGY MESSAGE

PAGE TWENTY-NINE

THE STATE CAN HELP REDUCE FUTURE ENERGY COSTS THROUGH THE HOME WINTERIZATION PROGRAM.

IN THE PAST YEAR, THE HOUSING FINANCE AGENCY AND COMMUNITY ACTION PROGRAM HAVE ASSISTED THOUSANDS OF MINNESOTA FAMILIES IN WINTERIZING THEIR HOMES.

I AM ASKING THESE AGENCIES TO MAKE A SPECIAL EFFORT TO ASSIST THOSE WHO HAVE HAD THE GREATEST DIFFICULTY MEETING THIS WINTER'S HEATING COSTS.

6. INFORMATION AND EDUCATION

EXPANDED ENERGY INFORMATION AND EDUCATION
PROGRAMS

THE MOST EFFECTIVE WEAPON IN ACHIEVING WISE ENERGY DECISIONS IS AN INFORMED CITIZEN.

ENERGY MESSAGE

PAGE THIRTY

THE MINNESOTA POLL SHOWS THAT THE PERCENTAGE OF CITIZENS WHO BELIEVE WE FACE SERIOUS ENERGY PROBLEMS HAS INCREASED FROM 19 PERCENT IN EARLY 1974 - SHORTLY AFTER THE OPEC OIL EMBARGO - TO 58 PERCENT LAST MONTH. THIS IS A SIGNIFICANT GAIN IN PUBLIC UNDERSTANDING.

BUT WE NEED TO EXPAND OUR EDUCATION EFFORTS FURTHER.

I AM ASKING THE ENERGY AGENCY TO PLACE SPECIAL EMPHASIS ON:

- CONDUCTING SELF-HELP CLINICS THAT SHOW HOMEOWNERS WHAT THEY CAN DO TO SAVE ENERGY AND MONEY.
- ESTABLISHING ENERGY AWARENESS COMMITTEES IN LOCAL COMMUNITIES.
- INFORMING FARMERS OF PRACTICES THEY CAN FOLLOW TO SAVE ENERGY AND MONEY.
- ENCOURAGING LARGE COMMERCIAL AND INDUSTRIAL FIRMS TO PASS ALONG THEIR ENERGY-SAVING TECHNIQUES TO SMALLER BUSINESSES.

ENERGY MESSAGE
PAGE THIRTY-ONE

- EXPANDING ENERGY EDUCATION.

I AM ALSO DIRECTING THE DEPARTMENT OF EDUCATION TO DEVELOP STUDENT CURRICULUM AND TEACHER TRAINING MATERIALS ON ENERGY.

OUR YOUNG PEOPLE WILL NEED A COMPREHENSIVE KNOWLEDGE OF ENERGY SOURCES, USES, AND CONSERVATION TO DEAL WITH THE WORLD THEY WILL FACE IN THE FUTURE.

DEMONSTRATION OF COMMUNITY ENERGY EFFICIENCY.

AMERICANS USE FAR MORE ENERGY THAN SWEDES OR GERMANS TO ACHIEVE THE SAME STANDARD OF LIVING. THIS DOES NOT HAVE TO BE THE CASE.

THE PEOPLE OF NEW ULM WANT TO MAKE THEIR COMMUNITY AS ENERGY-EFFICIENT AS ONE IN GERMANY OF SWEDEN. THEY HAVE ASKED THE ENERGY AGENCY FOR HELP IN DEVELOPING AN APPLICATION FOR FEDERAL RESEARCH FUNDS.

ENERGY MESSAGE
PAGE THIRTY-TWO

THEIR PROGRAM WOULD INCLUDE UPGRADING THE COMMUNITY'S DISTRICT HEATING AND TRANSPORTATION SYSTEMS, A MASSIVE INSULATION PROGRAM, AND INTENSIVE PROMOTION OF MORE EFFICIENT AUTOMOBILES AND APPLIANCES.

I SUPPORT FUNDS FOR THIS PROJECT AS PART OF MINNESOTA'S STATE ENERGY CONSERVATION PLAN.

CONCLUSION

HOW MUCH ENERGY WOULD THESE CONSERVATION RECOMMENDATIONS SAVE?

THEY WOULD SAVE ENOUGH HEATING FUEL FOR 30,000 HOMES OR A CITY THE SIZE OF DULUTH.

THEY WOULD SAVE ENOUGH ELECTRICITY TO AVOID THE NEED FOR A MODERATE-SIZED POWER PLANT.

ENERGY MESSAGE

PAGE THIRTY-THREE

THEY WOULD SAVE ENOUGH ENERGY TO SUPPORT 11,000 JOBS
IN MINNESOTA INDUSTRIES.

THE ENACTMENT OF THIS LEGISLATION WILL NOT BE EASY.
WE ARE BREAKING NEW GROUND. IT IS EASIER TO DO
NOTHING THAN TO MOVE AHEAD.

I ASK FOR A NEW SPIRIT OF UNITY FOR THESE PROPOSALS.

ENERGY SHOULD NOT BE A PARTISAN ISSUE. IF WE DON'T
SOLVE OUR ENERGY PROBLEMS, DEMOCRATS, REPUBLICANS,
AND INDEPENDENTS ALL SUFFER. IF AN ENERGY CRISIS
CLOSES A FACTORY, THE OWNERS AND THE WORKERS ARE BOTH
LOSERS. IF AGRICULTURE'S ENERGY NEEDS AREN'T MET,
FARMERS SUFFER BUT SO DO CONSUMERS THROUGH HIGHER
FOOD COSTS.

I HAVE OUTLINED WHAT WE MUST DO TO OBTAIN ADEQUATE
ENERGY SUPPLIES. AND I HAVE MADE NEW RECOMMENDATIONS
TO INCREASE ENERGY CONSERVATION.

ENERGY MESSAGE

PAGE THIRTY-FOUR

IN BOTH THESE AREAS, WE MUST CHANGE SOME OF OUR OLD PATTERNS.

FOR THE FIRST TIME, WE ARE FORCED TO RECOGNIZE THE IMPOSSIBILITY OF UNRESTRAINED GROWTH. WE DON'T HAVE THE OPTION OF CONSUMING MORE AND MORE.

WE ARE GOING TO HAVE TO LOOK MORE CAREFULLY AT WHAT WE DO, AT HOW WE USE OUR ENERGY, AT WHAT WE WANT TO ACHIEVE.

HOWEVER, THESE CHALLENGES PRESENT OPPORTUNITIES AS WELL AS PROBLEMS. AND I HAVE GREAT CONFIDENCE IN MINNESOTANS' ABILITY TO TAKE ADVANTAGE OF THEM.

OUR ENERGY PROGRAM WILL AFFECT NOT ONLY OUR OWN LIVES, BUT ALSO THE QUALITY OF LIFE FOR FUTURE GENERATIONS. OUR DECISIONS MUST BE THE RIGHT ONES, NOT THE EASY ONES.

THE TIME TO ACT IS NOW.