"Energy and Economics in the Future of Minnesota"

I. A period of rapid change, and adversity.

A. Limits to Growth -
   1. Finite resources, infinitely growing demand (Lily pond).
   2. Role of prices; Role of technology.
   3. Malthus - plagues and famine = population control (a parson!)
      b. American - 24,000 lbs. of coal p.a., Swede 14,000,
         Nigerian 71.
      c. Growing consumption per capita = real problem (3:1)
         1) Energy 2) Other resources 3) Pollution

II. Differing reactions to "shortages".

A. Moralist vs. Economist
   1. Repent! Voluntarily change lifestyle; give up profligacy; 
      harmony with nature. (Good guys vs. cheaters)
   2. Changing relative prices will force us to change lifestyle, 
      willy-nilly; rising food and energy costs; housing.
      a. End result the same; attitude different.
      b. Rising standard of living = rising labor productivity = 
         rising energy/man hour. Relatively more costly energy = 
         slower growth in standard of living.
B. Economists - two views.

1. Rationing with price controls.
2. Free prices to do the rationing.

Choice depends on -

a. Degree of imbalance, its expected duration, social and economic costs of rapid change in prices vs. rationing (income redistribution).

b. Whether you think market prices accurately reflect true economic costs.
   1) Depletion, i.e., appropriate provision for diminishing resources in future.
   2) Monopoly practices.
   3) External costs (e.g., pollution)

c. Incentives/disincentives, i.e., rationing encourages cheating, no incentive to new resources, new technology (ex. govt. sponsored).

C. Inward looking vs. outward looking.

Inward: grain export embargo
   let the bastards freeze in the dark.
   energy self-sufficiency

Outward: invitation to LDC's as well as developed to users' conference on energy.
   share U.S. energy resources, and technology.

1. Are Arabs our brothers?

   Deliberate action that threatens world recession (i.e., a tax of tribute) and possibly starvation in LDC's.
   a. U.S. no longer policeman of world, but still only country with possibility of world view.
III. Energy and economic outlook in Minnesota.

A. U.S. headed for "slowdown" anyway; energy crisis compounded likelihood and potential severity.

B. Minnesota -

Adverse: Climate Jan. MN = 12° Wash. = 37°
End of supply lines - closing unprofitable stations.
No fossil fuels; little refinery capacity.
Distance from markets vs. rising transport costs.
Dependence on natural gas for residential and commercial heating.

Beneficial: Less dependent on energy for industry:
(ind. = 25% of energy vs. 40% nationally.)
Generally diversified employment -
Agricultural base especially important.
Links to major western coal resources.

1. Short-run - suffer less (cite New England)
2. Long-run - slower growth than nation by conventional measures.
Higher value to non-goods.

IV. Commission on Minnesota's Future.

Purpose, structure.