Approved On:_____

Minutes of the House Committee on Assessment and Taxation. The meeting was called to order by E. C. Rolfs, Chairman, at 9:00 a.m. on February 6, 1986 in room 519 South at the Capitol of the State of Kansas.

The following members were absent (excused):

Representatives Jarchow

Committee staff present:

Tom Severn, Legislative Research
Melinda Hanson, Legislative Research
Don Hayward, Reviser of Statutes
Millie Foose, Committee Secretary

Dr. Tom Severn presented an overview on HB-2642, an act imposing an excise tax upon the severance and production of hydrogen. He then answered questions from committee members.

Representative Bill Brady, substituting for Representative Marvin Barkis who is attending a meeting in Washington, spoke as a proponent for HB-2745, an act relating to income taxation, providing a credit therefrom for expenditures relating to research and development of the extraction, development and utilization of hydrogen. He then answered questions from members of the committee. (Attachment 1)

Dr. Phillips Bradford, of the Advanced Technology Commission, Department of Economic Development, outlined four points that Hydrogen is:

1. A chemical fuel with the highest energy value per unit mass.
2. The cleanest of all chemical fuels.
3. The costliest fuel to produce.
4. Purchased and consumed by industry in large quantities.

Dr. Bradford said that the production of hydrogen has just scratched the surface and two to three years will be required to demonstrate the technology. (Attachment 2)

Mr. Mason Ashby, Director of Geary County Development Commission, spoke as a proponent of HB-2745. He said there are many potential uses for hydrogen, including the production of fertilizer and cleaning fuel.

This concluded the public hearing on HB-2745.

There being no further business, the chairman adjourned the meeting.

E C Rolfs

Ed C. Rolfs, Chairman

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STATE OF KANSAS

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HOUSE OF
REPRESENTATIVES

COMMITTEE ASSIGNMENTS
MEMBER: EDUCATION
FEDERAL AND STATE AFFAIRS
LEGISLATIVE EDUCATIONAL PLANNING COMMITTEE
MINORITY AGENDA CHAIRMAN

February 6, 1986

Mr. Chairman and members of the committee.

I appear before you as a substitute for Representative Barkis who is attending the NCSL meeting in Washington, D.C.

Representative Barkis asked me to convey his interest in legislation this session which might stimulate interest in the development of natural hydrogen in Kansas. We have all read the Redwood report, we have all been made aware of the revenue shortfalls; the time is right to send a positive message to all those interested in the hydrogen field that the Kansas Legislature wants to encourage exploration and development.

House Bill 2745 would allow for a income tax credit of $100 for each $10,000 expended. The whole issue of hydrogen in Kansas is shrouded with uncertainty. We really have no idea of what we have but we do know that there are several very positive signs that we feel cannot be ignored.

Hydrogen is:

1. A chemical fuel with the highest energy value per unit mass.

2. The cleanest of all chemical fuels.

3. The costliest fuel to produce .

4. Purchased and consumed by industry in large quantities; greater than 3 trillion ft^3/yr.

Hydrogen is used for:

1. Production of Ammonia for fertilizers.
2. Hydrogenation in food processing.
3. Chemical processes in fuels, plastics, and pharmaceuticals.
4. Rocket fuel for defense and space.
5. Fuel cells to produce electricity.
6. Internal combustion engines.
7. Numerous specialty applications.

Natural Hydrogen in Kansas Can Attract Industry Because:

1. It may be the world's largest source.

2. It may be the lowest cost source.

3. It is not easy to transport.

   A. It diffuses through pipelines, and
   B. requires larger pipes per unit mass.
   C. Must be liquified to move by truck or railcar.

Therefore:

It is economically advantageous to locate the process plants at the production sites.

4. There are large agricultural based markets in the Midwest to which Kansas is central.

Natural Hydrogen Research

1. Geology: Locating more concentrated sources underground.

2. Engineering: Improved cement for well casings.

3. Separation and Purification.

4. Storage and Handling.

5. Economics and Markets: New Applications

6. Safety.