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RECOMMENDATIONS of the ETHANOL STUDY COMMITTEE

FEBRUARY 15, 1984

A Report to the Maine Legislature

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February 9, 1984

Mr. John M. Kerry Maine Office of Energy Resources State House Station #53 Augusta, ME 04330

Dear John,

On behalf of the Ethanol Steering Committee and pursuant to Chapter 54 of the Private and Special Law of 1983, we are pleased to submit our final report and accompanying legislation.

Sincerely yours,

Howard W. Gleason, Co-Chairman President, Bates Fabrics, Inc.

Ronald N. Norton, Co-Chairman Economist, University of Maine

at Augusta

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SUMMARY OF COMMITTEE FINDINGS AND RECOMMENDATIONS

Findings

- * The New England Ethanol Project would not be economically feasible without an excise tax exemption. A state gasoline exemption is necessary for the company to secure its equity financing for the plant.
- * A four cent per gallon state gasoline tax exemption which declines one cent per year and disappears after 4 years is the optimum level of exemption. A reciprocity clause and a \$5,000,000 cap on the maximum loss of revenues resulting from the exemption should be included in any legislation that is proposed. The exemption should take effect on January 1, 1986.
- * D. W. Small and Sons, an independent gasoline distributor and one of the three partners in New England Ethanol Products will not derive an unfair competitive advantage from a State gasoline tax exemption nor from their participation as a partner in the project.
- * Even though gasoline retailers carrying a "branded" product are restricted by contract from selling any product other than that sold to them by their oil company, it is best for the citizens of Maine to encourage competition and, therefore, the State gasoline exemption is in the public interest.
- * An "open supply" bill could reduce any adverse effects on competition among gasoline retailers. Such legislation should be explored more fully by the Legislature.
- * All losses resulting from a tax exemption should be reimbursed from the General Fund.
- * The long-term benefits to the State from the New England Ethanol Products project outweigh the loss of tax revenues due to the exemption. Such benefits include creation of 120 direct and 200 indirect jobs, increases in state sales and income tax revenues, the introduction of unit trains and lower freight rates, construction of a grain terminal, and production of distillers dry grain, carbon dioxide and electricity.

Recommendations

- 1. The State should provide a 4 cent per gallon gasoline tax exemption for ethanol blended gasoline which would decline one cent per year until it disappears. The exemption should be allowed for ethanol produced in another state and sold in Maine as long as the state also has a tax exemption. The exemption should begin in 1986 and continue to 1990 or until the revenue loss reaches the \$5,000,000 cap set by the legislation. (See Appendix 6 for a draft of the bill.)
- 2. The Legislature should investigate the merits of an "open supply" bill as a means of increasing competition among retailers.

Introduction

History

D.W. Small and Sons, Inc. was one of the first Maine gasoline distributors to market alcohol blended gasoline. They were a member of the Governor's Task Force on Alcohol Fuels and did research into the feasibility of producing ethanol in Maine.

This research led them to apply for a Department of Energy loan guarantee for an ethanol facility in Maine. In August of 1981, D.W. Small was granted a conditional loan guarantee of \$67.1 million for their project.

Eventually, this project evolved into the present New England Ethanol Products (NEEP) project. NEEP is a partnership, in which D.W. Small and Sons, Inc, E.C. Jordan and Cianbro Corp. are all owners.

NEEP Project Summary

The following is a summary of the NEEP project as it is proposed:

Cost of project: About \$94 million

DOE loan guarantee: \$67 million

MGA loan guarantee: \$5.5 million

Limited partnership: New England Ethanol Products

General partner: New England Ethanol, Inc.

Ownership of General Partner: -D.W. Small & Sons, Inc.

-E.C. Jordan Co. -Cianbro Corp.

Plant Site: Auburn (Lewiston Junction Road)

Acreage: 105 acres

Plant Size: 25 million gallons of ethanol/year

Feedstock: corn, 9.4 million bushels/year

potatoes, up to 10% of the feedstock

could be potatoes

By-Products: Distiller's Dried Grains (DDG) -

annual production projected at

84,500 tons

Carbon dioxide (CO₂) - annual production projected at 73,000 tons

Electricityannual production 38.4 million kwh.

Markets for the By-Products: DDG - output is sold.

CO₂ - output is sold.

Electricity -contract with CMP.

Federal gasoline tax exemption: 5 cents/gallon.

Jobs at the Plant: roughly 120 (Includes about 74 NEEP and about 45 at the Carbon Dioxide Plant).

Energy fuel source for plant: coal (about 46,000 tons/yr.)

MGA Involvement

In early 1983, NEEP applied to the Maine Guarantee Authority (MGA) for a \$6.5 million loan guarantee for the approximately \$94 million project. Because the MGA had reached the ceiling on their financing ability (\$50,000,000), emergency legislation was introduced to increase their limit to \$60,000,000 (L.D. 178). This legislation passed and allowed NEEP to negotiate with the MGA for a loan guarantee.

After a number of meetings and deliberations, the MGA approved a \$5.5 million loan guarantee. Conditions on the MGA loan guarantee included: banks would be required to increase their direct interest in the project from \$1 million to \$2 million; a consultant would review the marketing plan and the economic feasibility of the plant; the MGA would be able to approve the company's construction management contract and all terms of the bank financing; the MGA would be able to approve any ownership changes in the project; and NEEP would encourage Maine farmers to grow corn that would meet the plant's specifications.

Tax Credit Legislation

L.D. 418, "AN ACT Temporarily Reducing the Excise Tax on Internal Combustion Engine Fuel Enhanced with Ethanol," was presented to the first session of the 111th Legislature. The bill would have given a 4 cents/gallon State gasoline tax exemption to alcohol blended gasoline that contained at least 10% ethanol distilled in the State. The 4 cents/gallon exemption was for the period January 1, 1985 - January 1, 1986. Each subsequent year the exemption would decrease 1 cent/gallon, until January 1, 1989, when the exemption would expire. (See Appendix 1.)

This legislation did not pass as originally drafted. However new legislation, L.D. 1699, "An Act Relating to Ethanol Production in the State," was enacted. The bill required the Office of Energy Resources to conduct "an evaluation of our excise tax exemption on ethanol fuels to determine the economic feasibility of ethanol fuel production in the State, with and without an exemption, the benefits of ethanol production and use to the State and other related issues." A steering committee comprised of 2 legislative members appointed by the President of the Senate, 2 legislative members appointed by the Speaker of the House and 3 public members appointed by the Governor was required to oversee the evaluation and report to the Legislature.

The five questions the Committee was asked to address are as follows:

- 1. Would the New England ethanol project be economically feasible without an excise tax exemption?
- 2. If the project is not feasible without an exemption, what is the optimum level of exemption?
- 3. Is an exemption unfair to competitors?
- 4. Which fund should bear the cost of an exemption, the General Fund or the Highway Fund?
- 5. Do the benefits to the State of allowing an exemption outweigh the loss of revenues?

The full text of L.D. 1699 appears in Appendix 1. Committee members are listed in Appendix 2.

The Committee met 9 times. Information was received from NEEP, Pine Tree Gasoline Retailers Association, the Maine Petroleum Association, the Maine Oil Dealers Association, the Maine Departments of Agriculture and Transportation, the State Planning Office and the Bureau of Taxation. OER hired Frederick S. Potter from Information Resources, Inc. to answer Committee questions during one meeting. In addition, OER staff compiled information from other states and companies. The following is a summary of the Committee's research and findings.

Question #1. Would the New England ethanol project be economically feasible without an excise tax exemption?

Ethanol was promoted originally as a means of supplementing gasoline supplies, but because of the current abundance of gasoline, lower gasoline prices and the cost of producing ethanol, it is not currently used for this purpose. However, it appears that EPA's program aimed at reducing lead levels in the atmosphere is providing a substantial market for ethanol as an octane enhancer because lead is used in gasoline to boost octane ratings. This will probably remain true for the forseeable future.

Gasoline tax exemptions are a marketing tool that allows alcohol blended fuels to be sold at prices competitive or below unleaded gasoline prices. The tax exemption spurs consumer acceptance of alcohol blended fuels by allowing the sale of a similar product at a reduced price or a better product at the same price.

Economic feasibility of the project is directly linked to the price of gasoline. Given current gasoline prices, the feasibility of the project without the state exemption is uncertain. If oil prices rise, the project would be feasible without the state tax credit. Despite the current slack in the oil market, long term projections by the Department of Energy, OER and many analysts point to higher oil prices by 1990. If oil prices increase to \$40 per barrel, ethanol could easily compete without any state excise tax exemptions and therefore a ceiling could be set on the price of oil which would eliminate the tax exemption when prices reach that level. At the same time if oil prices drop below present levels of \$29 per barrel in the short term, the feasibility of the project without state and federal tax exemptions would be seriously jeopardized.

In comparing NEEP's proposed cost per gallon of ethanol with other plant's figures, it appears that NEEP's figures are in the same range as other plants. It should be noted that ethanol production is traditionally very sensitive to the raw feedstock price, in this case, the price of corn. The NEEP project appears to benefit from favorable prices for DDG, CO, and electricity in comparison to other ethanol plants. These products will account for approximately 40% of project revenues.

Ethanol from the NEEP project will compete most effectively in those states with tax exemptions given present oil prices. Due to the lack of tax exemptions in the Northeast, these markets are primarily along the east coast south of New York City and in the midwest. NEEP believes it can compete effectively against Brazilian ethanol in the east coast markets.

Although markets for NEEP ethanol exist in other states with tax exemptions, passage of an exemption in Maine would be an important asset to the project. Sales of a significant share of the plant output in Maine can be expected if the exemption is passed.

A significant marketing opportunity appears to exist if NEEP or marketers purchasing NEEP ethanol can arrange for the purchase of inexpensive blending stock (unfinished gasoline) at a price which would allow the ethanol blend to compete with regular unleaded gasoline. Frederick Potter stated that unfinished or "first run" gasoline can be purchased and that this type of blending would be technically feasible in Maine.

Water transportation is the most economical means of transporting the ethanol. NEEP is exploring plans to install a small diameter pipeline from its Auburn plant to Portland Harbor, along the Canadian National Railroad's existing right of way. This would provide NEEP water access to ports along the East Coast.

It has been the experience in other states, that a gasoline tax exemption is very helpful in securing the needed financial backing for ethanol plants and for ensuring their viability. Frederick Potter, an alcohol fuels consultant hired by OER, stated that all existing commercial scale plants had state incentives in place before the plants were built. Therefore, it is difficult to know whether the NEEP project would be built if it did not have a state gasoline tax exemption.

Figures presented by NEEP to the Department of Energy (DOE) in their application for a Federal loan guarantee did not assume the availability of a state gasoline tax exemption. DOE granted NEEP a conditional loan guarantee, suggesting that they feel that the project is viable without a state gasoline tax exemption.

The Maine Guarantee Authority (MGA) conditional loan guarantee was based on the following facts: the principals are all strong Maine companies; the MGA's exposure was very limited in relationship to the total project cost; and the information the MGA obtained from 2 consultants was favorable toward the marketability of ethanol.

Reaction to the project in the financial markets has been disappointing thus far. However, the market for most alternative energy projects was down in 1983 due to lower oil prices. Federal tax changes have also had an adverse impact on the ability of NEEP to market its equity. Passage of the Maine tax exemption would be a useful selling point in marketing the remaining equity shares.

No commercial scale ethanol plants are currently operating in New England. The only proposed plant is the New England Ethanol Products plant. New Hampshire and Connecticut are the only 2 New England states that have ever had a state gasoline tax exemption. New Hampshire's exemption was established at a time when there was interest in building alcohol fuel plants in the state. When the tax exemption expired, however, there was no interest in renewing it.

Connecticut has a 1 cent per gallon state tax exemption that is on the books indefinitely. To receive the credit the alcohol blended fuel must be marketed and sold as "gasohol". Although alcohol blended fuels are being sold in Connecticut, no revenues are being lost because the fuel is being added as an octane enhancer and is not being sold as "gasohol".

Connecticut does not foresee any changes in their law. The other New England states do not contemplate the passage of state gasoline tax exemptions, even if Maine were to pass an exemption. Factors that might change this picture would be a substantial gasoline supply reduction and a subsequent rise in the price of gasoline, or the construction of an ethanol plant elsewhere in New England.

The largest gasoline markets in New England are in Connecticut and Massachusetts. Unleaded gasolines are gaining a larger market share as compared to regular gasoline in New England and the country because of EPA's lead phasedown.

Committee Findings

The Committee finds that the New England Ethanol Project would not be economically feasible without an excise tax exemption. There are 32 states which have decided that enacting a fuel ethanol exemption is good public policy since it promotes economic development, benefits the agricultural community and reduces dependence on foreign oil. States where plants exist are pleased with the positive effect the plants have on their state's economy.

Under current economic conditions, ethanol plants are probably not feasible without a state tax exemption. Tax credits improve the marketability of ethanol. No plant has been built in a state that does not have a tax exemption.

In addition, the Committee finds that a state gasoline tax exemption is necessary for New England Ethanol Products Inc. to secure their equity financing for the plant. Peter DeAngelis, the General Manager of New England Ethanol Products, presented testimony to the Committee that NEEP originally felt that the necessary equity could be raised without a state tax exemption. This, however, was before NEEP tried to secure the necessary equity. When NEEP went into the marketplace, it became obvious to them that the state tax exemption is crucial to securing the necessary equity financing for the plant.

Minority Findings

One member of the committee is not convinced that an excise tax exemption is needed to provide incentive to motor fuel marketers to push the sale of ethanol-blended gasoline or to enable a lower price at the pump which stimulates market acceptance.

Since 80-90% of ethanol from NEEP is to be blended into and sold as ethanol-blended gasoline outside of Maine, this excise tax exemption in Maine will not provide incentives to gasoline marketers and consumers in other states. Since the committee member does not feel that restrictive legislation (e.g. reciprocity or "home-grown") will hold up; and that it is in effect in a limited number of market areas anyway, he feels that a Maine exemption is not required to open-up the export markets.

An exemption may be the best method to create an ethanol blended gasoline market in Maine. However, there may be other methods (e.g. a direct subsidy to Maine-based marketers who blend ethanol blended gasoline). Moreover, is it worth perhaps \$5 million to produce a market for 10-20% of the total output? This is all questionable to the committee member.

The committee member assumes an excise tax exemption may be needed to induce certain equity participation, for reasons unclear to the member. If the plant decision might be "no go" because the equity participation was not induced, it isn't worth the gamble (i.e., even with the exemption, benefits of the project exceed costs) implicit in rejecting an excise tax exemption.

Question #2. If the project is not feasible without an exemption, what is the optimum level of exemption?

Thirty two states have some state gasoline tax exemption in place. (See Appendix 3). Exemptions range from 1 cent to 11 cents per gallon with the most common being 4 cents and 5 cents a gallon. The average exemption is slightly over 4 cents per gallon.

There are several different types of state gasoline tax exemptions, "Home grown" exemptions have been passed in some states whereby only ethanol produced from feedstock grown in the state are exempt. Some of these statutes have been ruled unconstitutional because they restrain commerce between states. "Open" exemptions allow alcohol produced anywhere to qualify for that state's gasoline tax exemption. "Reciprocity" exemptions are allowed on alcohol produced in the originating state and on alcohol produced in other states with tax exemptions, as long as those exemptions are equal to or greater than that in the originating state.

Committee Findings

The Committee finds that a 4 cent per gallon state gasoline tax exemption which declines 1 cent per year and disappears after 4 years is the optimum level of exemption. Such an exemption is fair and reasonable since it will allow NEEP to penetrate the gasoline market in their first few years of operation.

The Committee also finds that a reciprocity clause and a \$5,000,000 cap on the maximum loss of revenues resulting from the exemption should be included in any legislation that is proposed. The reciprocity clause will limit the availability of the exemption for ethanol produced out of state to those states that also have an exemption equal to or greater than that in Maine. The cap will set a maximum liability on loss of State funds. It would provide that once the limit set in the cap is reached, the tax exemption would no longer be allowed. Finally, the Committee recommends that the exemption become effective on January 1, 1986.

Question #3. Is an exemption unfair to competitors?

The competition issue revolves around contractual arrangements among the major oil companies, distributors and gasoline retailers. This is a very complex area that requires an understanding of gasoline marketing in Maine.

Gas station owners and operators who sell branded gasoline are generally required to sell only the brand of their contractual supplier (e.g. a Gulf station can sell only Gulf gasoline). Franchise arrangements governing the use of branded gasoline are covered under the Petroleum Marketing Practices Act.

Major oil company contracts do not allow unbranded gas to be pumped at their stations. Maine has more branded rural stations than unbranded ones. Figure 1 depicts gasoline supply and distribution in Maine.

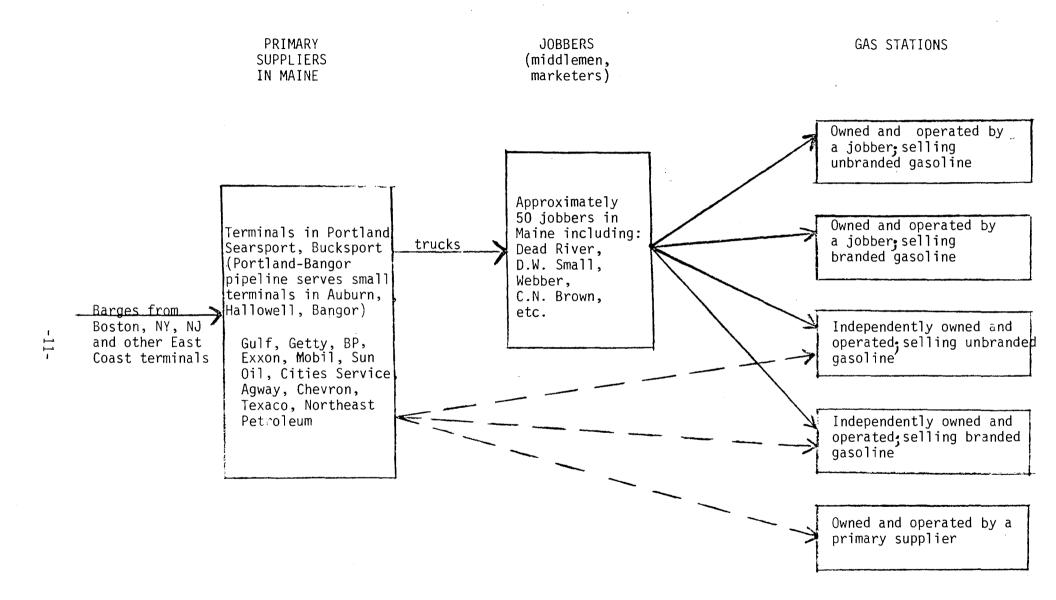
Generally gasoline supply contracts are for a term of 1-3 years. Station owners or operators do have the flexibility to sell unbranded gasoline once their contracts expire. However, this switch may not be an attractive prospect to many station owners currently selling branded products due to station name recognition, brand reputation, the cost of the change to the owner and other business considerations.

According to discussions with other states, the majority of alcohol produced in the U.S. is sold by independent distributors. Only a few major oil companies are active in the alcohol fuels area. This situation is evolving rapidly, however, and several major oil companies are moving forward with ethanol projects.

Fred Potter stated that the major oil companies opposing alcohol blended gasoline are those that are not now blending alcohol with gasoline and see blends as a threat to their sales of gasoline. Alcohol blended fuels require 10% less gasoline and as much as 15% less crude oil at the refinery.

Many branded retail dealers claim that alcohol blended fuels provide an unfair competitive price advantage for the stations selling it because the tax breaks afforded ethanol allow the blender and/or dealer to sell alcohol blended fuels under the

GASOLINE SUPPLY AND DISTRIBUTION IN MAINE



price of unleaded fuels. By blending alcohol with first run gasoline, the refiner can also increase his/her profit margin.

In order to get people using alcohol blended fuels, the price must be cheaper than unleaded gas or the quality of the product must be greater than unleaded gasoline, but cost the same as unleaded. Generally speaking, market acceptance of alcohol blended fuels has been good wherever they have been introduced. Some states are currently having problems with too much alcohol being blended with gasoline, but labelling laws seem to be solving this problem.

An open supply bill might be one way of increasing competition to the benefit of the consumer. An open supply bill would provide that any time a dealer received a bona fide bid lower than that from his/her current supplier, the dealer could ask the supplier to match it. If the supplier would not or could not match the price, the dealer could purchase the lower priced product. An open supply bill is currently under consideration by Congress. California had a bill introduced last session, but it was not approved.

A table of "Selected Gasoline and Alcohol Blended Gasoline Figures for the Major Alcohol Blended Gasoline Consumption States for August, 1983" follows. It gives the penetration of alcohol blended gasoline in the major consuming states and other information. These are the latest figures available and probably do not reflect year round conditions.

Committee Findings

The Committee finds that D.W. Small and Sons, Inc., an independent gasoline distributor and one of the three partners in the New England Ethanol Products, Inc. plant, will not derive an unfair competitive advantage from any State gasoline tax exemption nor from their participation as a partner in the project. The Committee has heard testimony that any transactions between the partners and the plant must be done "at arms length."

The Committee also finds that substantial competition exists in the retail gasoline market in Maine and that independent retailers have aggressively marketed their product. A tax credit will not effect competition among independent retailers since all of them will have the opportunity to market ethanol blended gasoline. However, it may have some effect on competition between "branded" retailers and independent retailers. Branded gasoline retailers may not have access to ethanol blended gasoline since their contracts with distributors or major oil companies may prohibit the sale of other products.

The independent stations have undercut the majors with lower prices which have benefitted the Maine consumer. Even though gasoline retailers carrying a "branded" product are restricted by contract from selling any product other than that sold to them by

TABLE 1 Selected Gasoline and Alcohol Blended Gasoline Figures for the Major Alcohol Blended Gasoline Consumption States

August, 1983

| | Potal Gasoline Fuel (Thousands of Gals.) | % Change From Aug.1982 | % of Unleaded Gasoline Aug.1983 | Alcohol Blended Fuel (Thousands of Gals.) | % Alcoh Blend of Total Gaso |
|--------|---|---------------------------|---------------------------------------|--|-----------------------------------|
| | <u>.</u> | | | | |
| Ariz. | 110,001 | 8.8 | 48.6 | 12 | <1 |
| Ark. | 88,510 | 4.5 | 43.4 | 1,419 | 1.6 |
| Calif. | 934,098 | 9.7 | 59.4 | 45,017 | 4.8 |
| Flo. | 383,711 | 7.9 | 59.3 | 35,027 | 9.1 |
| Geo. | 224,784 | .3 | 55.8 | 5 | <1 |
| Ill. | 192,642 | -1.6 | 50.4 | 20,164 | 10.5 |
| Ken. | 139,979 | 1.9 | 47.1 | 10,538 | 7.5 |
| Mass. | 186,046 | 16.6 | 69.7 | 5 | <1 |
| Mich. | 312,517 | 3 | 58.3 | 63,614 | 20.4 |
| Mont. | 38,589 | -6.5 | 31.0 | 952 | 2.5 |
| Neb. | 64,577 | 4.5 | 41.1 | 17,867 | 27.7 |
| N.C. | 191,529 | -2.4 | 52.0 | 107 | <1 |
| N.D. | 26,983 | -8.2 | 35.5 | 364 | 1.3 |
| Ohio | 374,816 | 3.9 | 56.9 | 40,538 | 10.8 |
| Okla. | 148,996 | -8.6 | 42.0 | 4,274 | 2.9 |
| S.C. | 108,624 | 2.8 | 52.5 | 24 | <1 |
| S.D. | 34,792 | 1.6 | 32.6 | 2,962 | 8.5 |
| Texas | 848,802 | 25.9 | 51.5 | 17,846 | 2.1 |
| Vir. | 214,366 | 8.2 | 56.6 | 3,394 | 1.6 |
| Wash. | 170,889 | 10.1 | 42.4 | 543 | <1 |
| TOTAL | 4,795,251 | | | 264,672 | 5,5 |

Source: Ethyl, Monthly Report of Gasoline Sales, August, 1983.

their oil company, the Committee finds that it is best for the citizens of Maine to encourage competition and therefore, the state gasoline exemption is in the public interest.

The Committee also finds an "open supply" bill could reduce any adverse effects on competition among gasoline retailers and that such legislation should be explored more fully by the Legislature.

Question #4 Which fund should bear the cost of an exemption, the General Fund or the Highway Fund?

Only two of the 32 states with incentives for alcohol blended fuels have the funds taken from their General fund. Revenue losses in other 30 states occur in their Highway Fund. No state currently reimburses their Highway Fund from their General Fund.

Maine's Department of Transportation is supportive of the NEEP project. However, they are quite concerned over the impact any state gasoline tax exemption would have on State Highway revenues and Maine's ability to match Federal funds.

In a letter to the Ethanol Steering Committee Daniel Webster, Jr., the Acting Commissioner of Maine's Department of Transportation states:

"The Department periodically conducts intensive needs studies. The last such study was conducted in 1982. This study demonstrated that, to keep Maine's highways in about the same overall condition, it would be necessary to increase state highway revenues, and to match all available federal funds. Accordingly, the Legislature approved a state fuel tax increase and made adjustments in registration and other truck fees. Thus, for the 1984-85 biennium we will be able to match all federal funds made available to us under the Surface Transportation Assistance Act of 1982. In spite of a pressing need, however, the Department may not have the resources in the future to match all available federal funds due to various competing budgetary needs. Surface Transportation Assistance Act of 1982, when fully implemented, will substantially increase the amount of trust fund revenue available to be matched by the states. The State of Maine needs to match every federal dollar possible, yet at projected State Highway Trust Fund levels, we will not be able to match all of the federal funds allocated to us."

Table 2 describes the amount of federal funds Maine receives and how it is used.

Table 2

FISCAL YEARS 1984 AND 1985 PROGRAM FUNDING SUMMARY

| Program | Federal | State | Local/Other | |
|----------|---------|-------|-------------|-------|
| Category | Funds | Funds | Funds | Total |

FEDERAL/STATE PROGRAM

| Interstate Construction \$ | 16,037,510 | \$ 2,131,945 | \$ | 18,169,455 |
|----------------------------|-------------|--------------|-------------|-------------|
| Interstate 4R | 11,882,100 | 1,361,900 | | 13,244,000 |
| Bridge Replace./Rehab. | 15,740,000 | 4,340,000 | | 20,080,000 |
| Primary | 50,038,025 | 14,884,505 | \$ 383,850 | 65,306,380 |
| Secondary | 20,834,550 | 7,449,850 | 235,000 | 28,519,400 |
| Urban | 12,117,500 | 952,900 | 2,825,600 | 15,896,000 |
| Hazard Elimination | 2,600,000 | 338,900 | | 2,938,900 |
| Rail-Highway Crossings | 2,500,000 | 140,000 | 140,000 | 2,780,000 |
| Industrial/Commercial | 225,000 | | 75,000 | 300,000 |
| Total | 131,974,685 | \$31,600,000 | \$3,659,450 | 167,234,135 |

Different program categories require different matching ratios. Interstate, for instance, is 90% federal- 10% non-federal, federal and primary - Highways like USl and US2 - are 75% federal, 25% non-federal.

The money Maine receives from the federal government is our money — we send it to Washington in the form of user taxes — the federal gas tax is the prominent form. As a matter of fact, Maine can get back about \$1.20 for every \$1.00 sent to them, as long as it is used according to federal guidelines and the required matching funds are provided.

Webster continues, "As you can see from the Table, federal highway money may only be used for specific purposes, primarily construction and reconstruction. There is no federal money for maintenance, and very little for local programs....

"As stated in earlier testimony, state highway dollars are used to lever about four times as many federal dollars. State highway funds and local funds together match about three and three-quarters times as many federal funds.

"For these reasons, we would respectfully request that if your Committee should see fit to recommend a gas tax exemption for gasohol, that the exemption be fully reimbursed from the General Fund; the fund that stands to benefit from the proposed ethanol project." (See Appendix 4 for the entire text of the letter.)

Michigan is an example of a state where the Highway Fund has lost substantial revenues. Not only has Michigan lost state revenues, but is has lost Federal matching funds, because of decreased state monies. The Michigan legislature is currently reviewing their state's exemption for possible changes.

Committee Findings:

The Committee finds that the General Fund should ultimately bear the cost of a gasoline tax exemption in Maine. Since benefits from income taxes and sales taxes generated by the project will accrue to the General Fund. Any loss in the Highway Fund should be reimbursed by the General Fund, particularly in light of the fact that for every \$1 lost in State Highway funds, roughly \$4 in Federal Highway Funds dollars would be lost. The Maine DOT presented testimony that outlined the various highway programs, their Federal match and the impact any loss in revenues would have on highway programs in Maine. At projected State Highway Trust Fund levels, Maine will not be able to match all of the federal funds allocated to it. Therefore, the Committee finds that all losses from the Highway Fund should be reimbursed from the General Fund.

Question #5 Do the benefits to the State of allowing an exemption outweigh the loss of revenues?

If the NEEP project can be built without the tax exemption, the State is better off by not passing the exemption because the positive aspects of the project will accrue to the State without the negative revenue impact associated with the exemption.

Much of the testimony and evidence received by the Committee suggests that the tax exemption is necessary to get the project built. This is discussed in detail in the first section of this report. The following section of the report discusses the cost and benefits of the exemption assuming that the benefits of the project will not be achieved without the tax exemption.

In response to a request by the Committee, the Office of Energy Resources, in conjunction with the State Planning Office and the Department of Finance and Administration, provided an analysis of the economic development impact and state tax revenue impact of the project and the exemption. Memos from each agency are included in Appendix 5.

The initial analysis was performed by the State Planning Office. Using the number of jobs that would be created in Maine by the construction and operation of the ethanol plant, the associated carbon dioxide plant, and transportation/handling of the plant's corn and coal feedstocks, the State Planning Office estimated the number of jobs created throughout the local ecomony by the so-called multiplier effects. This was accomplished using an input/output computer model of the Maine economy. The results of this computer model indicate that for every job created at the ethanol plant, the CO₂ plant and in the transportation industries, one additional job will be created in the Maine economy. These additional jobs result primarily from the respending of income earned by employees at the ethanol and CO₂ plants and in the transportation industries, as well as the effect on industries supplying goods and services to the plants.

Construction of the ethanol and CO₂ plants would create more than 200 jobs the first year and more than 300 jobs in the second year. Once the plants are in operation, there would be 120 full time jobs at the plant and 75 jobs in trucking and railroads. The State Planning Office analysis indicates that an additional 200-300 jobs would be created in the local economy, primarily in businesses which provide consumer goods and services.

Total income earned by employees at the plants, associated industries and the consumer sectors of the local economy would be in excess of \$10 million per year. Based on this estimate of increased personal income, the increases in state tax revenues will average more than \$700,000/per year. This includes personal income taxes paid by employees, corporate income taxes and sales/use taxes.

This estimate of a \$700,000 increase in tax revenues was calculated by OER and the Bureau of Taxation and is based on information generated by the State Planning Office computer model. It is the view of many economists that results derived from input/output computer models such as this tend to be overstated for a variety of reasons. Some of these are discussed in Appendix 5. There is no method for improving the computer model at this time; therefore, it is suggested that the \$700,000 figure be accepted as an upper bound on the positive tax impact of the project.

Weighing against this positive tax impact is the loss of revenues that would result from the tax exemption. Revenue losses from the tax exemption are a direct function of the amount of ethanol blended gasoline sold in Maine. The plant output will be 25 million gallons per year. If 20% of the plant output is sold in Maine the total revenue loss would be \$5 million. This appears to be a conservative estimate of ethanol sales in Maine, although there is some risk that revenue losses could be greater if more than 20% of the output is sold in Maine and/or other ethanol producers market ethanol blended gasoline in Maine. This latter risk could be protected against through the use of a cap on the total tax exemption.

A comparison of the annual \$700,000 tax revenue gain and the \$5 million tax revenue loss shows that it will take approximately 7-8 years for the total tax revenue gains to outweigh the tax revenue losses. The plant is expected to have an operating life of more than 20 years, therefore, it is likely that tax revenue gains over the life of the plant will outweigh the tax revenue losses.

Tax revenue impacts are only one component of cost/benefit analysis. Less tangible impacts some of which cannot be quantified, may be more important in the long run than the narrow question of tax revenue impacts. On the benefit side, development of the plant has the following attributes:

Jobs:

A total of approximately 400 jobs including 120 at the ethanol and CO₂ plants, 75 in transportation and 200 in consumer goods and services and local industries supplying the plants with goods and services.

Unit Trains:

A unit train arrangement (the first to serve Maine) has been worked out to transport corn and perhaps back haul ethanol to and from the Midwest. A unit train is a train dedicated to one route, going back and forth continually. This concept in railroad transport has been used successfully in many regions to lower freight charges on a variety of bulk commodities. This development could have important benefits to Maine's other industries by lowering freight rates to the large Northeast-Midwest markets. NEEP's unit train could have other cars attached to it and backhaul other Maine products to the Midwest at reduced rates. The Bureau of Taxation cited this possibility as an important benefit of the project.

Freight Rates:

New England Ethanol has successfully negotiated a lower rate on corn shipments due to its bulk needs. This has direct benefits for Maine agriculture.

Grain

Storage: New England Ethanol will provide grain storage facilities, eliminating the need for a \$3.5 million state facility.

Animal Feed:

An important by-product of the ethanol plant is distillers dried grain, which is used as animal feed. Local availability of feed will tend to lower market prices for this product in Maine and benefit Maine agriculture.

Potatoes: New England Ethanol may be able to use starch made from potatoes as a feedstock thus providing a market for cull potatoes.

Gasoline

Supplies: Maine currently consumes 500,000,000 gallons of gasoline per year. Ethanol could be valuable in extending the State's gasoline supplies during times of shortages.

Committee Findings

The Committee finds that the long-term benefits to the State from the New England Ethanol Products project outweigh the loss of tax revenues due to the exemption. Roughly 120 jobs will be created at the ethanol and carbon dioxide plants, approximately 75 jobs will be created in rail and trucking industries, and 200 jobs in

the consumer goods and services sector. Construction jobs would range from 200-300 over the construction period.

A positive economic benefit of roughly \$10 million per year in increased personal income will be obtained by the local economy. State tax revenues will increase roughly \$700,000 per year. If 20% of the plant's output were sold in Maine, the loss of State revenue would be about \$5 million over the four year exemption period. It would take approximately 7-8 years for the total tax revenue gains to outweigh the tax revenue losses. There is, however, uncertainty as to how much ethanol would be sold in Maine. If only 10% of the plant's output were sold in Maine, revenue losses would also be cut in half.

Another less quantifiable benefit will be unit trains hauling grain to the plant and possibly backhauling other Maine products to the Midwest. This concept, if implemented, would enable Maine farmers to achieve cheaper grain freight rates. Also, the willingness of NEEP to serve as a grain terminal for Maine poultry farmers is an important benefit, eliminating the need for a \$3.5 million grain facility.

Several by-products of the plant will also prove very beneficial. The high protein distillers dry grain will go into feed grains sold in the northeast. In addition, the plant will be selling electric power to Central Maine Power Company and the carbon dioxide will be used by a plant that would be constructed next to New England Ethanol.

Committee Recommendations

In light of the Committee's finding, the Committee recommends the following:

- 1. The State should provide a 4 cent per gallon gasoline tax exemption for ethanol blended gasoline which would decline one cent per year until it disappears. The exemption should be allowed for ethanol produced in another state and sold in Maine as long as that state also has a tax exemption. The exemption should begin in 1987 and continue through 1990 or until the revenue loss reaches a cap set by the legislation.
- 2. The Legislature should investigate the merits of an "open supply" bill as a means of increasing competition among retailers.

APPENDIX 1

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| H.P. 360 House of Representatives, February On Motion of Representative Higgins of Portland referred to the Committee on Taxation. Sent up for concurrence and ordered printed. EDWIN H. PER Presented by Representative Higgins of Portland. Cosponsors: Representative Michael of Auburn, Senator Trafton of Androscoggin and Representative Murray of Bangor. STATE OF MAINE IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-THREE | |
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| Committee on Taxation. Sent up for concurrence and ordered printed. EDWIN H. PER Presented by Representative Higgins of Portland. Cosponsors: Representative Michael of Auburn, Senator Trafton of Androscoggin and Representative Murray of Bangor. STATE OF MAINE IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-THREE | 1, 1983 |
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| Cosponsors: Representative Michael of Auburn, Senator Trafton of Androscoggin and Representative Murray of Bangor. STATE OF MAINE IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-THREE | , Clerl |
| IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-THREE | f |
| NINETEEN HUNDRED AND EIGHTY-THREE | |
| N AGE Towns and I have been a like Free to | |
| AN ACT Temporarily Reducing the Excise Tax on Internal Combustion Engine Fuel Enhanced with Ethanol. | |
| Be it enacted by the People of the State of Main follows: | as |
| Sec. 1. 36 MRSA §2903, as amended by PL 198 702, Pt. V, §2, is repealed and the foll enacted in its place: | |
| §2903. Tax levied; rebates | |
| 1. Excise tax levied. Except as provided in section 2, an excise tax is levied and imposed a rate of 9¢ per gallon upon internal combustion e fuel sold or used within this State, including when made to the State or any political subdiv | the gine ales |
| thereof, for any purpose whatsoever, except int combustion engine fuel sold or used in such form | rnal |

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under such circumstances as shall preclude the col-
      lection of this tax by reason of the laws of the United States, or sold wholly for exportation from
 3
      the State, or brought into the State in the ordinary
      standardized equipment fuel tank attached to and
 6
      forming a part of a motor vehicle and used in the
 7
      operation of the vehicle within the State, except
 8
      that no tax may be levied upon internal combustion
 9
      engine fuel as defined in section 2902, bought or
      used by any person, association of persons, firm or
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      corporation for the purpose of propelling jet or turbojet engine aircraft, or sold wholly for exporta-
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      tion from the State, or brought into the State in the
      fuel tanks of an aircraft. On the same fuel, only
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15
      one tax shall be paid to the State, for which tax the
16
      distributor first receiving the fuel in the State
17
      shall be primarily liable to the State, except when
      the fuel has been sold and delivered to a licensed
18
      exporter wholly for exportation from the State, or to another distributor in the State, in which case the
19
20
21
      purchasing distributor shall be primarily liable to
      the State for the tax.
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- 23 2. Internal combustion engine fuel; distilled in the State. Notwithstanding subsection 1, beginning January 1, 1985, internal combustion engine fuel blended in the State containing at least 10% ethanol distilled in the State shall be subject to tax as set forth in this subsection:
- A. From January 1, 1985, to January 1, 1986, the tax shall be at the rate prescribed in subsection 1, less 4¢;
- B. From January 1, 1986, to January 1, 1987, the tax shall be at the rate prescribed in subsection 1, less 3¢;
- 35 C. From January 1, 1987, to January 1, 1988, the tax shall be at the rate prescribed in subsection 1, less 2¢;
- D. From January 1, 1988, to January 1, 1989, the tax shall be at the rate prescribed in subsection 1, less 1¢; and
- E. On and after January 1, 1989, the tax shall be at the rate prescribed in subsection 1.

Page 2-L.D. 418

3. Internal combustion engine fuel; distilled in another state. The tax prescribed in subsection 2 shall apply to internal combustion engine fuel, sold or used in Maine, containing at least 10% ethanol distilled in another New England state, provided that the New England state affords equal tax subsidies for internal combustion engine fuel, sold or used in that state, containing at least 10% ethanol distilled in Maine.

10 Sec. 2. 36 MRSA §2905, as amended by PL 1971, c. 11 529, §2, is further amended to read:

12 §2905. Distributor or importer collects 9¢ addition-13 al

Each distributor or importer paying or becoming liable to pay the tax imposed by this chapter section 2903, subsection 1, shall be entitled to charge and collect 9¢ per gallon only as a part of the selling price of the internal combustion engine fuels subject to the tax.

Each distributor or importer paying or becoming liable to pay the tax imposed by section 2903, subsection 2, shall be entitled to charge and collect the amount of tax per gallon set forth in section 2903, subsection 2, only as a part of the selling price of the internal combustion engine fuels subject to the tax.

27 Sec. 3. 36 MRSA §2906, first ¶, as amended by PL 1981, c. 364, §33, is further amended to read:

Every distributor, importer or exporter, holding a valid certificate as such, shall on or before the last day of each month render a report to the State Tax Assessor stating the number of gallons of internal combustion engine fuel received, sold and used in the State by him during the preceding calendar month, on forms to be furnished by the State Tax Assessor. Such reports shall contain such further information pertinent thereto as the State Tax Assessor shall prescribe and the State Tax Assessor may make such other reasonable rules and regulations regarding the administration and enforcement of the Gasoline Tax Act as he may deem necessary or expedi-

Page 3-L.D. 418

ent, copies of which shall be sent to such certificate holders. He or his duly authorized agent shall 3 have access during reasonable business hours to the books, invoices and vouchers of such certificate holders which may show the fuel handled by the certificate holder. At the time of the filing of the 6 7 report, each distributor and importer shall pay to the State Tax Assessor a tax of 9¢ or the amount of 8 9 tax set forth in section 2903, subsection 2, which-10 ever is applicable, upon each gallon so reported as 11 sold, distributed or used. An allowance of not more than 1% from the amount of fuel received by the distributor, plus 1% on all transfers in vessels, tank 12 13 cars or full tank truck loads by a distributor in the 14 regular course of his business from one of his places 15 16 of business to another within the State, may be 17 allowed by the State Tax Assessor to cover the loss 18 through shrinkage, evaporation or handling sustained by the distributor. The total allowance for such 19 losses shall not exceed 2% of the receipts by such 20 21 distributor and no further deduction shall be allowed 22 unless the State Tax Assessor is satisfied on definite proof submitted to him that a further deduction 23 24 should be allowed by him for a loss sustained through 25 fire, accident or some unavoidable calamity.

Sec. 4. 36 MRSA §2908, as amended by PL 1979, c. 549, is further amended by adding at the end a new paragraph to read:

- No refund allowed under this section for internal combustion engine fuel containing at least 10% ethanol may exceed the amount of tax imposed on the fuel, reduced by 1¢.
- 33 Sec. 5. 36 MRSA §2910, as amended by PL 1971, c. 34 529, §6, is further amended by adding at the end a new paragraph to read:
- No refund allowed under this section for internal combustion engine fuel containing at least 10% ethanol may exceed the amount of tax imposed on the fuel, reduced by 4¢.
- 40 Sec. 6. 36 MRSA §2914 is enacted to read:
- 41 §2914. Finding of fact

Page 4-L.D. 418

The Legislature makes a finding of fact that the distillation of ethanol, in the State, for use in internal combustion engine fuel to be in the economic interest of all the citizens of the State. In addition, the process will also produce a high protein animal feed, carbon dioxide and electric power. The enonomic subsidy provided under section 2903, subsection 2, should be provided ultimately from the General Fund. Based on this legislative finding of fact, the Highway Fund shall be reimbursed from the General Fund each month for the loss of revenue due to the economic subsidy. The State Tax Assessor shall certify to the State Controller on or before the 15th day of each month the amount to be reimbursed as of the close of the State Controller's records for the previous month.

STATEMENT OF FACT

This bill provides for a 4-year phased-out exemption from the gasoline tax on alcohol blended gasoline. This exemption is consistent with the final report of the Maine Alcohol Fuels Task Force. The task force was established by Governor Brennan in the fall of 1979 and was coordinated by the Office of Energy Resources. Highway Fund revenue losses resulting from this phased-out exemption shall be reimbursed from the General Fund. Because of revenue to the General Fund due to this project, the net impact on the General Fund will be positive. The experience of 24 states which have enacted similar provisions indicates that these exemptions are the cornerstone of viability for an ethanol manufacturing plant, as they enable the facility to stimulate local market demand for alcohol blended fuel during the critical first few years of the plant's operation.

New England Ethanol, Inc., proposes to build a \$100,000,000 production plant in Maine, to be operational in 1985, the effective date for these exemptions. During construction, approximately 450 construction jobs will be created and approximately 100 permanent jobs will be created upon completion. In addition, as many as 200 indirect jobs for suppliers are contemplated. The total direct and indirect annual impact of the project on the Maine economy is projected to be \$11,030,000.

Page 5-L.D. 418

Once in operation, the facility will produce 25,000,000 gallons of ethanol a year, some of which will be marketed in the State. By encouraging consumers to purchase the plant's output through use of the exemptions proposed, an important step will have been made toward the state's goal of self-sufficiency in energy. A valuable by-product of the plant, distillers' dried grains, will be made available to the local dairy and poultry industries, thereby considerably lowering their transportation costs for feed. Carbon dioxide and electricity will also be produced by the facility.

Without the assistance provided by these exemptions, the ability of an ethanol plant to succeed in Maine is in jeopardy. Unless assistance is provided to Maine's young ethanol industry, potentially sizable long term economic and energy benefits to the State may well be lost.

Federal figures indicate that, nationally, penetration into the market for alcohol blended fuel is approximately 3 1/2%. If an economic subsidy on this fuel produced and sold in Maine is provided, and the fuel should become price competitive with unleaded gas, then sales figures approaching 3 1/2% of the market can be expected in Maine.

Based on the above assumptions, it is estimated that the loss in tax revenue to the Highway Fund, to be reimbursed by the General Fund, as a result of the economic subsidy provided by this bill, amounts to approximately \$700,000 in 1985; \$525,000 in 1986; \$350,000 in 1987 and \$175,000 in 1988 for a total of \$1,750,000 for the 4-year period. The projected revenue to the General Fund for the years 1983 to 1988 would be \$2,496,000, thus producing a net gain of \$746,000 to the General Fund.

It has been estimated that the direct annual impact on the Maine economy as a result of the proposed New England Ethanol facility will amount to \$6,830,000. The total direct and indirect annual impact of the project on the Maine economy is projected to be \$11,030,000.

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Page 6-L.D. 418

APPROVED

CHAPTER

STATE OF MAINE

JUN 30.83

54

BY GOVERNOR

P. & S. L'AV

IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-THREE

H.P. 1282 - L.D. 1699

AN ACT Relating to Ethanol Production in the State.

Be it enacted by the People of the State of Maine as follows:

Sec. 1. Evaluation of excise tax exemption on ethanol fuels. The Office of Energy Resources shall make an evaluation of an excise tax exemption on ethanol fuels to determine the economic feasibility of ethanol fuel production in the State, with and without an exemption, the benefits of ethanol production and use to the State and other related issues.

The Office of Energy Resources shall conduct the evaluation within the oversight of a steering committee of 7 members. Two legislative members shall be appointed by the President of the Senate; 2 legislative members by the Speaker of the House of Representatives; and 3 public members by the Governor. The Office of Energy Resources shall provide or retain staff support for the steering committee as well as pay for all other expenses of the evaluation. The Office of Energy Resources shall allocate up to \$15,000, from existing resources, for this evaluation. The steering committee shall prepare a final report and recommendations by January 15, 1984.

The evaluation shall address at least the following questions.

- 1. Would the New England ethanol project be economically feasible without an excise tax exemption?
- 2. If the project is not feasible without an exemption, what is the optimum level of exemption?
 - 3. Is an exemption unfair to competitors?
- 4. Which fund should bear the cost of an exemption, the General Fund or the Highway Fund?
- 5. Do the benefits to the State of allowing an exemption outweigh the loss of revenues?

The Office of Energy Resources shall prepare legislation, if necessary, to implement the majority recommendations of the steering committee.

No funds allocated for the purposes of this study may be expended without the approval of a majority of the steering committee.

No funds appropriated for the purposes of this study may be expended without the approval of a majority of the steering committee.

| In House of Representatives, 1983 |
|--------------------------------------|
| Read twice and passed to be enacted. |
| Speaker |
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| In Senate, 1983 |
| Read twice and passed to be enacted. |
| , President |
| · |
| Approved 1983 |
| Governor |

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APPENDIX 2

ETHANOL STUDY COMMITTEE MEMBERS

Senator Richard L. Trafton R#3, Box #548 Dillingham Hill Road Auburn, ME 04210

Senator Michael D. Pearson Box #454 Old Town, ME 04468

Rep. Donald M. Hall RFD 1, Box 211 Dover Foxcroft, ME 04426

Rep. H. Craig Higgins 281 Harvard Street Portland, ME 04103

Howard W. Gleason, Co-Chairman Bates Fabrics, Inc. Canal Street Lewiston, ME 04240

Ronald N. Norton, Co-Chairman 8 Hill Street So. Portland, ME 04106

Jay Lacke New Enterprise Institute 246 Deering Ave. Portland, ME 04102

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APPENDIX 3

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INFORMATION RESOURCES INCORPORATED

WASHINGTON OFFICE

499 SOUTH CAPITOL STREET • **SUITE 420** • **WASHINGTON, D.C. 20003 202-554-0614**

Net State Tax Exemptions for Ethanol/Gasoline Blends in the United States

(September, 1983)
Expressed in cents per gallon

| STATE | 19 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 |
|-----------------|--------------|----------------|------|----------|------------|-----|-----------|----------|--------------|----------|-------------|
| ALABAMA | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ALASKA | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 88 | 8 |
| ARIZONA | | | | | | | | | | | |
| ARKANSAS* | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5/0 | - |
| CALIFORNIA+ | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | | |
| COLORADO #+ | 5 | 5 | 5 | 5 | - | | | ••• | - | | |
| CONNECTICUT | 1 | 1 | 1 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| DELAWARE | - | _ | | _ | _ | _= | - | - | - | | - |
| FLORIDA | 5 | 5 % /4¢ | 4 | 4/2 | 2 | 2/0 | | | | | |
| GEORGIA + | | - | - | | - | - | | _ | | <u>-</u> | _ |
| HAWAII * | 4 | 4 | 4 | 14. | Д# | 4# | <u>4#</u> | 14# | 4# | 4# | 4*/0 |
| IDAHO * | 4 | 4 | 4 | 4 | 4/0 | - | | <u>-</u> | - | - | |
| ILLINOIS + | 3\$ | 2% | 2/1% | 1/0% | - <u>-</u> | | | tyer . | | - | - |
| INDIANA | 45 | 3% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| IOWA + | 5 | 5/3 | 3/2 | 2/1 | 1/0 | | | | _ | | |
| KANSAS *+ | 2 | 2/4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 55 | 5 |
| KENTUCKY * | 3.5 | 3.5 | 3.5 | 3.5 | 3.5/ | 0 - | _ | _ | | _ | - |
| LOUISIANA + | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8/0 | | | |
| MAINE + | - | | | - | | _ | _ | _ | | - | _ |
| WRYLAND . | | 0/3 | 3 | 3 | 3/0 | | | - | - | | |
| MACC CHUSETTS + | | | | <u> </u> | | | | | | | a |
| MICHIGAN +* | 5 | 5/4 | 4 | 2 | 1 | ** | - | | | _ | |
| MINNESOTA + | 0 | 0/2 | 22 | 2/4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | | | | | | | | | | |

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| MISSISSIPPI + | | | <u> </u> | | | | · _ | _ | | | |
|------------------|----------|-------|----------|----------|-----|------|-----|---------------|--------------|-----|-----|
| MISSOURI + | | | - | | | _ | | | _ | - | |
| MONTANA * | 77 | 7 | 7 | 7/5 | 5 | 5/3 | 3 | 3 | - | | |
| NEBRASKA + | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| NEVADA | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 11 | 1 | 1 |
| NEW HAMPSHIRE *+ | 5 | 5/0 | | | - | | - | - | | | |
| NEW JERSEY | | | | | - | - | _ | | | | |
| NEW MEXICO * | 10 | 10/11 | 11 | 11 | 11 | 10/8 | 8/5 | 5/3 | 3/2 | 2/0 | |
| NEW YORK + | <u> </u> | •• | | | _ | | | | _ | | |
| NORTH CAROLINA+ | 2 | 2/1 | 1/0 | - | | - | | ** | | | |
| NORTH DAKOTA+ | 4 | 4 | 5 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| OHIO | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| OKLAHOMA + | 6.5 | | _ | <u>-</u> | | | - | | | - | _= |
| OREGON | | | - | | - | | | - | | | |
| PENNSYLVANIA + | - | - | _ | | - | | | | | | - |
| RHODE ISLAND | - | | _ | | | - | _ | | | | |
| SOUTH CAROLINA + | 7 | | - | - | | - | _ | _ | | | |
| SOUTH DAKOTA + | 4 | 4 | 4 | 4 | - | - | | | | | |
| TENNESSEE * | - | 4 | 4 | . 4 | 4 | 14 | 4 | | | _ | |
| TEXAS * | 5 | 5/2.7 | 2.5 | _ | | • | - | | - | | |
| UTAH * | 5 | 5 | 5 | 5/0 | | _ | | | | - | |
| VERMONT | | | | | | | • | | | | |
| VIRGINIA + | 8 | 8 | 8/6 | 6 | 6/4 | 4 | 4/2 | 2 | 2/0 | 0 | 0 |
| WASHINGTON, D.C. | | - | | | | _ | | | - | | |
| WASHINGTON STATE | + 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | - | | | - | *** | |
| WEST VIRGINIA+ | 4 | | _ | | | | | | | _ | |
| WISCONSIN + | | _ | _ | | | _ | | . | | - | - |
| WYOMING+ | 4 | 4 | 4/0 | _ | | | | | - | | |

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* Qualifications apply
+ New Legislation Possible in 1983
Source: Information Resources Incorporated

October 1, 1983 Gasohol

Gasoline Exemption Diesel Sales Tax Local Tax

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|-------------------------------|---------------|--------------|------------|--------------------------|-----------------|
| A T A D A M A | 1 1 ¢ | 2 4 | 124 | 0 | • |
| ALABAMA | 8 | 3¢ 8 | 12¢ 8 | -0- | <u>L</u> _0_ |
| ALASKA | 12 | -0- | 12 | -0- | -0- |
| ARIZONA ARKANSAS | 9.5 | 6.5 | 10.5 | -0- | -0- |
| CALIFORNIA | 9 9 9 | 3 | 9 | 63 | L |
| COLORADO | 12 | <u> </u> | 13 | -0- | -0- |
| CONNECTICUT | 14 | 1 | 14 | -0- | -0- |
| | 11 | -0- | 11 | -0- | -0- |
| DELAWARE DIST. OF COLUMBIA | | -0- | 14.8 | -0- | -0- |
| | 9.7 | 4 | | . 5% | |
| FLORIDA | 7.5 | -0- | 9.7 7.5 | 3% | L 0 |
| GEORGIA | 8.5 | 4 | 8.5 | <u> </u> | L |
| HAWAII | | 4 | | | <u>L</u> |
| IDAHO | 14.5 | | 14.5 | <u>-0-</u> 4 % | |
| ILLINOIS | 11 | 2% | 13.5 | 5% | <u>L</u> |
| INDIANA | 11.1 | 3% | 11.1 | | -0- |
| IOWA | 13 | 34 | 15.5 | -0- | -0- |
| KANSAS | 10 | | 12 | -0- | -0- |
| KENTUCKY | # 10 | 3.5 | 10 | -0- | |
| LOUISIANA | 8 | 8 | 8 | -0- | -0- |
| MAINE | 14 | -0- | 14 | -0- | -0- |
| MARYLAND | 13.5 | 3 | 13.5 | -0- | -0- |
| MASSACHUSETTS | * 1 1 | -0- | 11 | -0- | -0- |
| MICHIGAN | * 13 | 4 | 1 3 | 4% | -0- |
| MINNESOTA | 16 | 2 | 16 | -0- | -0- |
| MISSISSIPPI | 9 | -0- | 10 | 5 % | L |
| MISSOURI | 7 | -0- | 7 | -0- | -0- |
| MONTANA | 15 | 7 | 17 | -0- | -0- |
| NEBRASKA | * 15.5 | 5 | 15.5 | -0- | -0- |
| NEVADA | 12 | 1 | 12 | -0- | L |
| NEW HAMPSHIRE | 14. | 5 | 1 4 | -0- | 0- |
| NEW JERSEY | 8 | -0- | 8 | -0- | -0- |
| NEW MEXICO | *11 | 1 1 | 11 | -0- | -0 |
| NEW YORK | 8 | -0- | 10 | 4% | L |
| NORTH CAROLINA | 12.25 | 5 | 12.25 | -0- | -0- |
| NORTH DAKOTA | 13 | 4 | 1 3 | -0- 1964 | -0- |
| OHIO | 1 2 | 3.5 | 12 | -0- | -0- |
| OKLAHOMA | 6.58 | -0- | 6.58 | -0- | -0- |
| OREGON | 8 | -0- | 8 | -0- | L |
| PENNSYLVANIA | * 12+ | -0- | 12 | -0- | -0- |
| RHODE ISLAND | *13 | -0- | 13 | -0- | -0- |
| SOUTH CAROLINA | 1 3 | -0- | 1 3 | <u>-0-</u> | -0- |
| SOUTH DAKOTA | 1 3 | 4 | 1 3 | -0- | L |
| TENNESSEE | 10 | 4 | 1 3 | -0- | L |
| TEXAS | 5 | 5/2.1 | 6.5 | - 0 - | -0- |
| UTAH | 11 | 5 | 11 | -0- | -0- |
| VERMONT | 13 | -0- | 1 4 | -0- | -0- |
| VIRGINIA | *14% | 8 | 15.35 | -0- | L |
| WASHINGTON | # 16 | 1.6 | 12 | -0- | -0- |
| WEST VIRGINIA | 15.35 | | 15.35 | -0- | -0- |
| WISCONSIN | 15 | -0- | 15 | -0- | -0- |
| WYOMING | 8 | 4 | 0 | -0- | -0- |
| | | | | | |

^{9¢} tax per gallon changed on gasoline and diesel effective April 1, 1983

and Community of the last of

^{*} Variable tax rate/+ 6% Wholesale franchise Tax on distributors

Source: Informa' on Resources, Inc., Highway Users Federation

APPENDIX 4

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DANIEL WEBSTER, JR.
Acting Commissioner

January 9, 1984

Members of the Ethanol Study Committee Office of Energy Resources State House Station #53 Augusta, Maine 04333

Dear Chairman Gleason and Chairman Norton:

On behalf of the Department of Transportation, I would like to take this opportunity to thank the Committee for allowing us to have access and input into your meetings. I would like to reiterate our willingness to assist the Committee in any way.

During your meeting of December 30, Representative Hall asked Walter Verrill, of my staff, for information on federal highway expenditures in Maine. I would like to preface my answer to Rep. Hall's question by noting that the Department periodically conducts intensive needs studies. The last such study was conducted in 1982. This study demonstrated that, to keep Maine's highways in about the same overall condition, it would be necessary to increase state highway revenues, and to match all available federal funds. Accordingly, the Legislature approved a state fuel tax increase and made adjustments in registration and other truck fees. Thus, for the 1984-85 biennium we will be able to match all federal funds made available to us under the Surface Transportation Assistance Act of 1982. In spite of a pressing need, however, the Department may not have the resources in the future to match all available federal funds due to various competing budgetary needs. The Surface Transportation Assistance Act of 1982, when fully implemented, will substantially increase the amount of trust fund revenue available to be matched by the states. The State of Maine needs to match every federal dollar possible, yet at projected State Highway Trust Fund levels, we will not be able to match all of the federal funds allocated to us.

The above noted, I believe that the attached Table answers Rep. Hall's question regarding how much federal highway money we received, and how it is used. The Table was excerpted from testimony previously given before the Transportation Committee, and the numbers have been slightly changed; however, the magnitude is quite accurate.

As you can see from the Table, federal highway money may only be used for specific purposes, primarily construction and reconstruction. There is no federal money for maintenance, and very little for local programs. The largest category of federal highway funds available is for primary highway construction and reconstruction. This class of highway includes restes such as Rte. 1 and Rte. 202. While there is more flexibility today than in the past, the Department is fairly well locked into these funding categories, as determined by federal mandate.

When we discuss the Department's budget, we often talk of matching federal funds. In fact, the way the Federal Highway Trust Fund is set up, state Departments of Transportation are reimbursed from a trust fund for expenditures that have already occurred. Thus, tracking and maintaining a steady cash flow is very important to the departments. Any policy that infringes upon a department's cash flow is very detrimental to its overall highway program.

As stated in earlier testimony, state highway dollars are used to lever about four times as many federal dollars. State highway funds and local funds together match about three and three-quarters times as many federal funds.

For these reasons, we would respectfully request that if your Committee should see fit to recommend a gas tax exemption for gasohol, that the exemption be fully reimbursed from the General Fund; the fund that stands to benefit from the proposed ethanol project.

Again, thank you for allowing the Department of Transportation to have input into your Committee's deliberations. Please share this letter with Rep. Hall and the other members of the Committee.

Sincerely, Williams Williams

Daniel Webster, Jr. Acting Commissioner

DWJr:GRH/jq

Attachment

FISCAL YEARS 1984 AND 1985 PROGRAM FUNDING SUMMARY

| Program Category | Funds | State Funds | Local/Other Funds | fotel |
|--|--|--|---|--|
| | FEDERAL/ | STATE PROGRAM | 1 | |
| Interstate Construction Interstate 4R Bridge Replace./Rehab. Primary Secondary Urban Hazard Elimination Rail-Highway Crossings Industrial/Commercial | \$ 16,037,510 11,882,100 15,740,000 50,038,025 20,834,550 12,117,500 2,600,000 2,500,000 225,000 | \$ 2,131,945 1,361,900 4,340,000 14,884,505 7,449,850 952,900 338,900 140,000 | \$ 383,850 235,000 2,825,600 140,000 75,000 | \$ 18,169,455 13,244,000 20,080,000 65,306,380 28,519,400 15,896,000 2,938,900 2,780,000 300,000 |
| | | \$31,600,000 | 75,000 | |

DIFFERENT PROGRAM CATEGORIES REQUIRE DIFFERENT MATCHING RATIOS.

INTERSTATE, FOR INSTANCE, IS 90% FEDERAL-10% NON-FEDERAL, FEDERAL

AID PRIMARY - HIGHWAYS LIKE US1 AND US2 - ARE 75% FEDERAL, 25% NON-FEDERAL.

THE MONEY WE GET FROM THE FEDERAL GOVERNMENT IS CUR MONEY - WE SEND IT TO WASHINGTON IN THE FORM OF USER TAXES - THE FEDERAL GAS TAX IS THE PROMINENT FORM. AS A MATTER OF FACT, WE CAN GET BACK ABOUT \$1.20 FOR EVERY \$1.00 WE SEND THEM, AS LONG AS WE USE IT ACCORDING TO THEIR PROGRAMS AND ALSO PROVIDE THE REQUIRED MATCHING FUNDS.

APPENDIX 5

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STATE OF MAINE

| | | | In | itet-1 | Depa | artmental I | Memorano | dum | Date De Ce | mber 20, | 1903 |
|---------|-------|-----------|-----------|----------|------|-------------|----------|------|------------|----------|------|
| То | Ethan | iol Sub-c | committee | ? | | | Dept | | | | |
| From_ | Steve | Buchsba | um | <u> </u> | | | | | f Energy | Resourc | e s |
| Subject | Tax | revenue | impacts | o f | the | proposed | ethanol | plan | t | | |
| | | | | | | | | | | | |

Further work has been done to analyze the impact of the proposed ethanol plant and gas tax exemption on state tax revenues. Results of this analysis indicate that state tax revenue losses due to the proposed exemption would be off-set by revenue gains in the scenario in which 20% of the plant output is sold in Maine and no other ethanol fuel is sold in the state.

The State Planning Office used the Maine Economic Policy Analysis model and inputs obtained from NEPP to derive indirect and induced effects of construction and operation of the plant in the Maine economy. This computer model calculates total employment and personal income resulting from the project. I used these personal income figures to estimate state tax revenues related to the project. This was done by creating a ratio of state tax revenues per dollar of personal income in Maine using figures from the Financial Report (FY'1982) provided by the State Controller's Office. Corporate income tax and sales/use taxes had been reviewed previously by the Department of Finance and Administration. Essentially, the new analysis by the OER and the SPO incorporates the revenue gains included in the prior analysis and includes additional state revenue gains which can be expected as wages and salaries of construction workers, plant personnel and transport workers are spent in the economy. Estimated state tax revenues are shown on a yearly basis in Table 1. Table 2 incorporates those results into the table presented at the last meeting.

It is interesting to note that the results of the SPO/OER analysis are close to what one would have predicted using the Michigan study reviewed at the last meeting. The DOE study, which was also reviewed at the last meeting, appears to have overstated the tax revenue gains from an ethanol plant built and operated in Maine

SB/myg

Table 1

State Tax Revenue Gains from the Proposed Ethanol Plant (Thousands of dollars)

| REVENUE | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | TOTAL |
|---------------------------------|------|------------|------|------|------|-------|-------|
| Direct1 | | | | | | | |
| Personal Income Taxes | 360 | 418 | 84 | 88 | 93 | 97 | 1,140 |
| Corporate Income Taxes | s 79 | 7 9 | 198 | 42 | 90 | 249 | 737 |
| Sales/Use Taxes | 140 | 220 | 60 | 64 | 65 | 70 | 619 |
| Indirect & Induced ² | 110 | 400 | 570 | 590 | 620 | 640 | 3,030 |
| | 689 | 1,817 | 912 | 784 | 868 | 1,056 | 5,526 |

¹ Direct revenue effects calculaed by NEPP

² Indirect and induced revenue effects calculated by SPO/OER.

Table 2
State and Local Revenue Impacts of the Proposed Ethanol Plant

Millions of Gallons of Ethanol Sold in Maine per Year

| | 0 | 5 | 10 | 15 | 20 | 25 | |
|----------------------------|-----|------|-------|-------|-------|-------|--|
| State tax loss | 0 | -5.0 | -10.0 | -15.0 | -20.0 | -25.0 | |
| Property tax gain | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| State tax gain | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | |
| Net change in tax revenues | | | | | | , | |
| State | 5.5 | 0.5 | -4.5 | -9.5 | -14.5 | -19.5 | |
| Local | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |

Notes: All tax revenue impacts calculated for 1984-1989 in millions of dollars.

State tax gain includes state income and sales taxes on direct, indirect and induced multiplier effects.

Positive tax revenues of approximately \$1 million per year would continue after four year tax exemption period.



STATE OF MAINE EXECUTIVE DEPARTMENT STATE PLANNING OFFICE

IOSEPHE BRENNAN GOVERNOR RICHARD E. BARRINGER

December 20, 1983

TO: Ethanol Study Committee

FROM: Charles S. Colgan, Senior Economist

SUBJECT: Economic impacts of proposed Ethanol plant.

At the request of the Office of Energy Recurces, I examined the economic impact of the proposed New England Ethanol project using the State Planning Office's Forecasting and Simulation model of the State's economy.

Table 1 shows the employment that NEEP estimates will be generated by the project during both construction and operation. Construction employment was based on estimated man-hours to complete the construction, and assumed that 40% of the work would take place during the first year of construction and 60% the second year. Construction is assumed to begin in 1984. Operating employment was directly estimated by the company.

TABLE 1 ESTIMATED NEW DIRECT JOBS

| Sector | 1984 | 1985 | 1986-end |
|---------------|------|------|----------|
| Construction | 218 | 327 | n |
| Operation: | | | |
| Ethanol Plant | 0 | 0 | 120 |
| Railroad | n | Ũ | 40 |
| Trucking | n | Ú | 3.5 |
| TOTAL | 218 | 327 | 195 |

Table 2 shows the indirect and induced employment effects and the growth in personal income estimated by the model for four years: the two construction years, the first year of operation, and the fourth operating year (1990), which is typical of the operating years.

-2-

TABLE 2
ESTIANTED EMPLOYMENT AND INCOME EFFECTS

| | 1984 | 1985 | 1986 | 1990 |
|--|-------------------|-------------------|-------------------|-------------------|
| Direct employment Indirect employment Total new employment | 218 148 366 | 327 261 588 | 195 238 433 | 195 219 414 |
| Implied multiplier | 1.68 | 1.80 | 2.22 | 2.12 |
| Additional Personal Income | `\$8 mill. | \$14 mill. | \$11 mill. | \$13 mill. |

The output from the model rests on the following assumptions:

- 1. That the estimates of employment supplied by the company are essentially correct.
 - 2. A stable, moderate U.S. economic growth over the period.

The revenue estimates derived from this model utilize the assumptions that the rates and basic structure of the Maine tax system are the same as in FY 1982.

STATE OF MAINE

| | norandum Date January 17, 1984 |
|--|--------------------------------|
| | ot. Office of Energy Resources |
| From Edgar Miller - G. N. Lesperance Dep | ot. Taxation |
| Subject New England Ethanol Project | |

The measurement of the economic impact of a new source of employment is imprecise at the national level and more imprecise at the local level even though the economic theory is well developed. The Forecasting and Simulation Model developed by the State Planning Office and Dr. Treyz is a well developed state of the art tool to compute consistent economic impacts. However, the model is limited by inadequate detailed data of the Maine economy.

This type of model is the best tool we have to <u>consistently</u> measure the impact of new employment projects, tax policy changes or other economic development possibilities. This model will measure the impacts of potential developments with the same analysis procedure so that development alternatives with the greatest benefits and the least cost can be determined. Due to the limited economic data available we can more easily measure the positive impacts, direct employment gain, money flows, than the negative impacts with each development possibility. Thus we must carefully evaluate the reasonableness of the impacts produced by this model and carefully judge the qualitative benefits before making a decision.

The primary immediate benefit to the state of the ethanol plant is the increase in the general fund revenue and an increase in the highway fund revenue due to the extra fuel consumed because this plant is in operation.

General Fund Growth

Because of inflation and the rapidly increasing personal income tax rates the annual dollar value of the general fund has increased each month during the seventies in spite of the recessions, tax exemptions, closing textile mills, closing shoe shops, closing auto dealers and others. Thus if we promote the ethanol plant and accept an excise tax exemption, no matter how we measure the gain or loss the G.F. revenue will continue to increase.

If the ethanol plant were to employ 195 people, some large proportion, possibly 75%, would come from currently employed people looking for a better or different employment opportunity. The remaining 25% would come from the unemployed and the managerial and technical employees moving into the area. The 75% or about 150 employees that change jobs will create little additional general fund revenue since they are already employed. The jobs that these 150 employees leave will probably not all be refilled unless these firms are all at their capacity limits.

In the real world it simply does not happen that this ethanol plant will find 195 employees with the correct skills and work experience among the unemployed.

Any new operation or an expansion of an existing operation will find the majority of their new employees from employed workers looking for a new opportunity. Because this career skill ladder process is what actually takes place, it is very difficult to accurately measure the impacts that result.

In a similar manner the indirect and induced employment is difficult to measure because of the skill ladder process, the capacity limits of the indirect and induced firms, and the degree of geographic dispersion. The more the dispersion the greater is the possibility that the additional business could result in an increased number of hours worked rather than new employees.

The Lewiston-Auburn area has a current labor force of 38,500 and employment of 35,600. The 200 new jobs due to this new plant could reasonably be absorbed with out any easily measurable change in the economic data.

However, we must make some careful attempt to measure the benefits to the general fund and the potential costs in excise tax revenue exemptions.

Other Benefits

As stated earlier it is difficult to measure the more direct benefits and costs of this ethanol plant in the short term of several years. However, we should give careful thought to some of the qualitative benefits that could be very important in our long term employment growth.

1. Low cost unit trains.

Since Maine is in the corner of the U.S. high transportation costs of both raw materials and products ready for market have been blamed for limited economic development. Railroad deregulation and work rule changes are becoming a reality with the potential powerful benefit of lower cost transportation. The obvious benefit is to reduce the cost of raw materials shipped to Maine for processing and to increase the distance from Maine our products can be competatively sold. If a unit train makes regular trips to Ohio for corn it could back haul at very favorable rates, Maine lumber, paper, ethanol, potatoes, blueberries and possibly many other products. The ethanol plant could very well be the catalyst that makes the potential unit train concept an operational reality and economic benefit to a much larger section of Maine industry.

2. The start of a new industry base.

The fermentation of corn is the start of a new industry in Maine. We will be forced to develop new business relationships, employment skills, transportation links, etc., that if well promoted and skillfully developed could lead to a new employment source for Maine citizens, similar to the electronic firms like Data General and Digital.

The fact that we have a fermentation industry established could possibly become a nucleus for other biochemical processing firms that could take advantage of unit trains, Maine ports and hopefully the required labor force skills.

3. Raw material sales to existing Maine industry.

Maine manufacturers purchase raw materials from a wide range of suppliers. In the longer term the establishment of lower cost transportation via unit trains and piggy back trains and the beginnings of a biochemistry processing industry would support additional employment of firms selling to or buying from this biochemistry processing industry.

A related example has happened in Maine. The growing computer production has created increased employment in metal fabrication. These firms manufacture metal cabinets for the computer manufacturers.

EM:lsc

AN ACT to Promote the Distillation of Ethanol for Use as an Internal Combustion Engine Fuel.

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 36 MRSA section 2914 is enacted to read:

Section 2914. Reimbursement from General Fund to the Highway Fund

The Legislature makes a finding of fact that the distillation of ethanol, in the State, for use in internal combustion engine fuel to be in the economic interest of all the citizens of the State. In addition, the process will produce a high protein animal feed, carbon dioxide and electric power. The economic subsidy provided under section 2903, subsection 2, should be provided ultimately from the General Fund and should not exceed a total of \$5,000,000 between 1986 and 1990. Further, the economic subsidy may not exceed \$1,250,000 annually, except that, if the subsidy for a given year is not fully used during that year, the unused portion may be added to the subsidy for the next year or years. If the subsidy reaches the amount available as provided in this section at any time during a year as determined by the State Tax Assessor, the rate set forth in section 2903, subsection 2, for that year shall no longer be in effect for the following month.

Based on this legislative finding of fact, the Highway Fund shall be reimbursed from the General Fund each month for the loss of revenue due to the economic subsidy. The State Tax Assessor shall certify to the State Controller on or before the 15th day of each month the amount to be reimbursed as of the close of the State Controller's records for the previous month.

Sec. 2. 36 MRSA section 2903 as last amended by PL 1983, c. 438 is repealed and the following enacted in its place:

Section 2903. Tax levied; rebates

Excise tax levied. Except as provided in subsection 2, an excise tax is levied and imposed at the rate of 14 cents per gallon upon internal combustion engine fuel sold or used within this State, including these sales when made to the State or any political subdivision thereof, for any purpose whatsoever, except the internal combustion engine fuel sold or used in such form and under such circumstances as shall preclude the collection of this tax by reason of the laws of the United States, or sold wholly for exportation from the State, or brought into the State in the ordinary standard-

ized equipment fuel tank attached to and forming a part of a motor vehicle and used in the operation of that vehicle within the State, except that no tax may be levied upon internal combustion engine fuel as defined in section 2902 bought or used by any person, association of persons, firm or corporation for the purpose of propelling jet or turbojet engine aircraft, or sold wholly for exportation from the State, or brought into the State in the fuel tanks of an aircraft, or on or after July 1, 1983, sold in bulk to any political subdivision of the State. On the same fuel only one tax shall be paid to the State, for which tax the distributor first receiving the fuel in the State shall be primarily liable to the State, except when that fuel has been sold and delivered to a licensed exporter wholly for exportation from the State, or to another distributor in the State, in which case the purchasing distributor shall be primarily liable to the State for the tax.

Internal combustion fuel, as defined in section 2902, which is held by retailers at the close of March 31, 1983, shall be subject to the 14 cents per gallon tax rate. Retailers, as defined in section 1752, subsection 10, shall be liable for the difference between the 14 cents per gallon tax rate and the 9 cents per gallon tax rate in effect prior to April 1, 1983. Payment shall be made to the State Tax Assessor before May 15, 1983, and it shall be accompanied by the appropriate completed form described by the State Tax Assessor.

- Internal combustion engine fuel; distilled in the State.

 Notwithstanding subsection 1, beginning January 1, 1986,
 internal combustion engine fuel blended in the State
 containing at least 10% ethanol distilled in the State shall
 be subject to tax as set forth in this subsection, except as
 provided in section 2914:
 - A. From January 1, 1986, to December 31, 1986, the tax shall be at the rate prescribed in subsection 1, less 4 cents;
 - B. From January 1, 1987, to December 31, 1987, the tax shall be at the rate prescribed in subsection 1, less 3 cents;
 - C. From January 1, 1988, to December 31, 1988, the tax shall be at the rate prescribed in subsection 1, less 2 cents;
 - D. From January 1, 1989, to December 31, 1989, the tax shall be at the rate prescribed in subsection 1, less 1 cent; and
 - E. On and after January 1, 1990, the tax shall be at the rate prescribed in subsection 1.

The tax prescribed in this section shall apply to internal combustion engine fuel, sold in Maine, containing at least 10%

enthanol distilled in another state, provided that the State affords at least equal tax subsidies for internal combustion engine fuel, sold or used in that state, containing at least 10% ethanol distilled in Maine.

Sec. 3 36 MRSA Section 1760, subsection 8 as last amended by P.L. 1981, c. 702, is further amended by adding a new paragraph:

C. Internal combustion engine fuel containing at least 10% ethanol and taxed at the rate provided in section 2903, subsection 2.

Sec. 4 36 MRSA section 2915 is enacted to read:

Section 2915. Report to the Legislature.

The State Tax Assessor shall report to the Legislature by January 31, 1987 and each subsequent year until 1990 on the amount of revenue losses due to the economic subsidy provided in section 2903, subsection 2. The report shall also include information provided by the Office of Energy Resources on ethanol sales in other states, revenue losses to those states from similar economic subsidies and any other relevant information on the market for ethanol blended gasoline requested by the Legislature.

STATEMENT OF FACT

This bill is the result of the findings and recommendations of the Ethanol Study Committee that was established by the First Session of the 111th Legislature to evaluate the costs and benefits of an ethanol tax exemption.

New England Ethanol, Inc., proposes to build a \$94 million plant in Maine that would produce 25 million gallons of ethanol per year. The committee found that the project would not be economically feasible without an excise tax exemption and that the long-term benefits to the State from the project outweigh the loss of revenues due to the exemption.

Roughly 120 jobs will be created at the ethanol and carbon dioxide plants, approximately 75 jobs will be created in rail and trucking industries, and 200 jobs in the consumer goods and services sector. Construction jobs would range from 200-300 over the construction period.

A positive economic benefit of roughly \$10 million per year in increased personal income will be obtained by the local economy. State tax revenues will increase roughly \$700,000 per year. If 20% of the plant's output were sold in Maine, the loss of State revenue would be about \$5 million over the four year exemption period. It would take approximately 7-8 years for the total tax revenue gains to outweigh the tax revenue losses. There is, however, uncertainty as to how much ethanol would be sold in Maine. If only 10% of the plant's output were sold in Maine, revenue losses would also be cut in half.

Another less quantifiable benefit will be unit trains hauling grain to the plant and possibly backhauling other Maine products to the Midwest. This concept, if implemented, would enable Maine farmers to achieve cheaper grain freight rates. Also, the willingness of NEEP to serve as a grain terminal for Maine poultry farmers is an important benefit, eliminating the need for a \$3.5 million grain facility.

Several by-products of the plant will also prove very beneficial. The high protein distillers dry grain will go into feed grains sold in the northeast. In addition, the plant will be selling electric power to Central Maine Power Company and the carbon dioxide will be used by a plant that would be constructed next to New England Ethanol.

This bill provides a 4-year phased-put exemption from the gasoline tax on alcohol blended gasoline. Highway Fund revenue losses resulting from the exemption will be reimbursed from the General Fund and may not exceed \$5,000,000 over the four year period. The exemption will assist the project in marketing its product and in obtaining the necessary financing for construction.