

U. S. Energy Policy Needs Revision

by Mary Stuart Brugh

Did you know that the United States is the largest per capita user of energy in the world? Each day, on average, every man, woman and child uses more than 230 cubic feet of natural gas, 3 gallons of oil, 17 pounds of coal, and more than 6 kilowatt hours of nuclear powered and water-powered electricity. Seventy percent of this energy is crude oil and natural gas, and most of our oil and natural gas that we use in the U.S. comes from the Middle East and North Africa. Also, in the past eight years, the federal government has slashed funding for energy conservation and research by 75%. By accelerating offshore development, the federal government has reduced fuel efficiency standards for cars, wasting 5 to 9 billion gallons of gasoline in a three year period from 1985 to 1989.

We must ask ourselves - do we really want to rely on foreign oil, or do we want to drill off the coast of the U.S.? In this article I hope to give both sides to the issue of offshore drilling and give more facts about the actual offshore drilling process.

Offshore drilling operations began in U.S. about 80 years ago off the coast of California. Since then the demand for natural gas and oil has increased; therefore, more land resources are needed. But first, it's important to talk about the drilling process.

The process of drilling is not cheap or easy. There are many steps involved. First, before a company such as Exxon, or Mobil can drill on government owned waters, a lease must be acquired through competitive bidding at "lease sales." Usually these leases extend for five years. If an area is successful with oil and natural gas quantities then the lease last an indefinite amount of time. Secondly, a company must have federal and state permits in order to drill.

Before drilling, there is an exploration plan issued which should include: proposed type and sequence of exploration activities, descriptive point of drilling vessel and platforms, type of geo-physical equipment used, location, oil spill contingency plan and air quality analysis.

All offshore drilling operations are monitored by the government

agencies, U.S. Coast Guard, U.S. Army Corps of Engineers, the E.P.A., Department of Interior, and adjourn coastal states have authority to protect the environment by exercising federal and state regulatory powers over OCS operations before operations begin. As you can see, a close eye is kept on these drilling sites and it's no wonder they're big enough.

The two common structures used for the drilling process are complaint and fixed leg structures. Also, there is drilling off of ships in deep waters called ship platforms. The complaint structures are designed for limited movement in response to wind, waves, and currents rather than resist them. It bends much like a palm tree in high winds. This structure is capable of being installed for 6,000 to 8,000 foot water depths. The fixed leg structure uses its weight and structural rigidity to resist wind and water forces. This can be installed up to 1,500 depths of water. These structures weigh thousands of tons and costs are incredible. An entire project including lease acquisition, fabrication and installation of platforms, drilling and completion of wells and pipeline systems cost around 800 million dollars. In no way is this a cheap process yet the government seems to keep allowing offshore drilling.

Another important aspect is how is the oil brought ashore? The most common way domestic oil is brought to the U.S. is through underwater pipelines. Also, tankers carry oil ashore. Two-thirds of the oil supply is carried to the U.S. on tankers and are known for polluting much of the waters.

Americans worry that if there is more exploration then there will be further damage? The environmentalist believe much pollution will exist in the water, the air, and the land. Pro-viewers of offshore drilling feel that the damages will be few if precautions and care is given to each site.

To begin, I would like to tackle the issue over domestic and foreign oil. Did you know that 1.9 billion barrels of oil are imported to the U.S. each year and 2/3 of what we use comes from the Middle East and North Africa? These countries are unstable, radical regimes who probably care only about their welfare and not ours. Do we really want our oil coming from these unstable countries?

There are reasons for why the U.S. is dependent on these countries for oil supply. Two of these reasons are political and military. These countries could easily cut off our flow of oil if these were to be problems between our government and foreign government; likewise, if military aid from the U.S. is cut off to these countries, our oil supply might get cut off. We would see the price of oil and gas rise like we saw in the '70's. These foreign countries that supply us with oil and natural gas control our flow of economy.

Next, I want to discuss the issues over oil spills which is a concern to many of us. No one wants an oil spill nor can we predict when they might happen. But unfortunately they do occur. Environmentalists believe that large oil spills can't be controlled or cleaned up in the marine environment especially in heavy seas, ice and darkness. Secondly, the rate of oil travel in the waters is unpredictable. Thirdly, the state of the art clean up equipment is inadequate even in close proximity. Spills don't disappear, toxic effects persist over long periods of time. Some organisms don't recover for more than 10 years and coral reefs suffer permanent damage. Proponents argue that hazards would be limited if drilling didn't occur in such "sensitive" areas. Also, major oil spills occur from tankers which are more common with importing oil because domestically we use pipeline systems which are more efficient and safe. There is less chance of an oil spill occurring in a pipeline system.

Environmentalists argue that the amount of oil and natural gas suspected of being underground would only supply the U.S. for 4

months. This isn't worth risking environmental damage for such a small amount of energy supply to our nation.

Greenpeace states that the air quality, water quality and commercial fishing is effected. The water quality during and after the drilling process contains toxic materials, heavy metals and radioactive material. The air quality is stated as a "major health threat." The amount of air pollution from one well being dug is equal to cars driving 50 mph every day. Also, the commercial fishing industry finds substantial losses to fish and productivity. The controversy over whether drilling platforms act as reefs for fish is unclear. Some say platforms do and that they attract fish and see an increase in fish productivity. Opposing are Environmentalists, who state there is no indication of biomass. The rigs function as aggregators which just makes fish easier to catch. Not enough is known about the real consequences both good and bad of offshore drilling, therefore it's difficult getting a good understanding of the drilling process. Alternatives need to be made.

An energy policy based on conservation and clean renewable alternatives is the only realistic and responsible answer to our energy dilemma. Our nation needs to prepare for one end of fossil fuels. Issues concerning energy conservation must be brought to the nation's attention. Energy sources such as wind, solar, and nuclear power need further examination for our nation's future stability. There are other energy resources out there but we just don't know enough about them yet!

Earth Notes

by Tricia Forbes

Get ready Salem, because Earth Day 1990 is coming up on April 22, and the members of Salem ECO (Environmental Concerns Organization) are planning lots of fun and educational activities for Earth Week, which is April 16-22. Each day will be devoted to a different theme devised to inform people of the planet's most pressing environmental problems and to offer solutions. *The Salemite* has offered us extra space for the next issue, and we will have several articles written by both students

and concerned professors, as well as an article written by the man who founded the first Earth Day in 1970.

ECO has made several successful trips to our recycling center, and we would like to thank everyone who has helped. Keep it up! I would also like to stress once again that we welcome any student to become a member of ECO. All you have to do is come to a meeting. We really need more participation if we are to accomplish everything we want to. If you have any questions about ECO, please call Kristen Miller at 723-4009.