Energy legislation could damage environmental efforts and standards

By Mike McNamee

The efforts of environmentalists and conservationists in reducing the environmental and stopping pollution may be dealt a serious blow if legislation now before Congress dealing with clean-air standards for power plants and automobiles is passed.

The emergency energy bill now before Congress contained provisions exempting auto manufacturers from the 1970 pollution standards, imposed during the flurry of pro-environmental legislation some years ago, for another year in an effort to cut down on gasoline use now and in the future. The legislation will also allow power plants to convert their operations from oil to coal fuel, and will relax the sulphur dioxide standards that power plants have been forced to meet in the past.

The legislation has drawn attacks from environmentalists who feel that it threatens all the program they have made in setting up environmental standards; and there are signs that the Environmental Protection Agency, the federal agency responsible for enforcing the standards, is not happy with the trend. The New York Times reported on January 23 that the EPA was "crazing down" on power plants that have been stalling on installation of equipment to control SO2.

The Times story reported that power plants that were not trying "in good faith" to meet the standards set down by the Clean Air Act of 1970 would be protocaled by EPA, and could be fined up to $25,000 for each day they remained in violation of that act. EPA Deputy Administrator John R. Quirles was quoted as saying that about 40 plants in the nation needed to instal equipment for removing SO2 from their waste gases. Quirles also stated that he did not know how many power plants could be exempted under "foot-dragging" in meeting the standards.

SO2 Controversy

According to some MIT researchers, it would be easier to install equipment to control SO2 is not as clear as the EPA actions would indicate. Professor Michael Baram of Civil Engineering told The Tech recently that the possibility of using high sulphur fuel is high, and that it could have the effect of dispersing most of the SO2 and reducing the problem with pollution from that source.

Experience, according to Baram, showed that the effects of wind dispersion of SO2 are of low enough winds, that most of the effects could be dispersed, there is little effect.

On the one hand, I know how many plants would be exempted under "foot-dragging." On the other hand, it is time we stop trying "in good faith" to get the manufacturers into meeting the standards set down by the Clean Air Act of 1970.

The actual situation might well be, if the Boston area was set up to fuel-switching on weather conditions, that most of the time we could be burning high-sulphur fuel, and only a small fraction of the fuel would have to be low-sulphur fuel. This would be a very significant improvement in fuel efficiency.

The auto standards that the emergency energy bill would modify were originally established in the Clean Air Act of 1970. They set a deadline of 1975 for auto manufacturers to meet stringent standards for pollution levels on carbon monoxide, hydrocarbons, and nitrous oxides. The deadline was delayed earlier by one year when the manufacturers argued that they could not meet the standards by the 1975 model year; the proposed legislation will delay them even more.

There are two ways to look at the delay in the standards, Baram said. "On the one hand, I have to see the initiative that has been started in environmental matters stopped or delayed, but on the other, it's time we stopped and evaluated what kind of technology we are using to carry through and meet these standards."

"Add-on" technology, such as fine-tuning of the auto combustion system and the addition of catalytic converters to existing engines, have been used to meet the federal government's standards so far, Baram said. "If this delay would mean that the manufacturers would look into some alternate forms of technology, as a by way of cutting down pollution, then it would be worth it."

Two alternate forms of engines - the diesel and the stratified-charge engine - were cited by Baram as examples of "technologies that will be of more value in the long run." He explained that these forms of engines are more stable and have better chances of doing well over the long run than add-on devices.