

# CCC hosts pro-con nuclear speakers

Pro-nuclear power engineers spoke at Clackamas Community College. Speakers were; Wilber L. Ness, Environmental Engineer for Pacific Power and Light and Richard F. Furrer, Senior Sub-Engineer for Portland General Electric (PGE). Both companies have interests in power plants.

Turnout was minimal but the two speakers offered to dismiss the lecture and instead with an informal question and answer session.

There is a basic criteria followed in the design of nuclear fission plants called the failure criteria," said Furrer, "and it is that nuclear plants are designed so that in the event of a single failure, a whole plant will not go out." Furrer added that the concept of a total breakdown resulting from a single incident was very remote.

They have had a superb industrial accident record," said Ness, who has nine years experience as a health physicist. "The complete nuclear power industry program, from the time we started our weapons program in 1945 until the present, has seen only seven people killed from radiation," Ness said, "none of them were in a power reactor, three were in test reactors, and the remainder of the deaths happened in auxiliary situations such as testing in the laboratory."

Two nuclear advocates told of a study that showed radiation levels around the country. A study from Oregon discovered that the radiation level was different throughout the state.

The difference in level, the group believed, was due to the natural radiations on the earth, such as underground uranium and cosmic radiation from the sun.

plants, "then the radiation level you experience is no more than one-tenth of a unit per year."

"Using this comparison," said Ness, "the radiation impact upon the environment by nuclear reactors is trivial. They (people against nuclear power) should be going after the medical profession because they're almost doubling the average of radiation Americans are getting each year."

The engineers agreed plutonium was toxic and declared that although 24,000 years was the half-life (time required for a pound of plutonium to be reduced to one half-pound), a substance like uranium would take far longer, three million years to undergo the same process.

"We've done things we know about but probably shouldn't have done," said Ness, referring to the atmospheric testing of nuclear weapons in the late fifties by China, Russia, France, and the United States.

Over 6½ tons of plutonium remained in the atmosphere and, gradually, 90 percent of that came back into the earth.

We have located much of that fallout by pinpointing affected soil areas. The latency period for cancer is about 15 years, and using the Southern Hemisphere as a type of control group, our research has shown no difference as to the mass exposure of dilute amounts of radiation," declared Ness.

A final question directed to the engineers was the probability of theft or misuse of plutonium. The nuclear spokesmen agreed a bomb could be made with high-grade atomic elements but the procurement of such elements would be impossible without international approval of all countries involved with nuclear energy.

## For nuclear power

By Harry Bielskis  
News Editor

A similar exposure can be credited to television, jet planes, and the x-ray and radiation treatment used by doctors and hospitals.

"There is a mystique about radiation because we have lived thousands of years with radiation," said Ness, "and the average person is exposed to at least 100 units of natural radiation a year." A cross country jet flight alone, due to the altitude will induce five units of radiation, Ness said.

"If you live near a nuclear plant," said Furrer, who lives within 60 miles of nine

## Against nuclear power

By Barbara Dikty  
Staff Writer

"We need laws like Ballot Measure No. 9 so people can have a voice in decisions that vitally concern them," a speaker for Nuclear Safeguards said here Friday.

Robert Pollard, ex-project manager of the Nuclear Regulatory Commission, spoke at CCC last Friday about his reasons for resigning the commission and supporting Measure No. 9.

According to Pollard, there are regulations on the books that look all right on paper but are no good for practical use.

In each power plant there must be a main control room and an auxiliary control room. The reasoning here being if the main control room is destroyed, the plant will be able to be turned off in the auxiliary control room.

"However," said Pollard, "the auxiliary control room is wired into the main control room, so if the main control room is destroyed, the auxiliary control room is as good as dead also."

Another regulation on the books is that in pressurized water reactor plants like

Trojan, when the reactor core overheats, cold water is usually pumped around the core to cool it down.

"But," said Pollard, if the reactor core isn't cooled off within 30 seconds, "nothing can stop the fuel from melting."

When the internal temperature reaches 5,000 degrees Fahrenheit, the building would rupture, releasing radiation 1,000 times the strength of a Hiroshima bomb.

Another problem brought up by Pollard was that of radioactive wastes. At the moment, wastes from plants like Trojan are being stored next to the plant itself, underground, in tanks of water. This is only temporary, he points out, the storage space is almost filled up and there is as yet no safe way to dispose of the wastes.

Opposition to Measure 9 says that by building more nuclear power plants, America will use up less of its natural resources. But already America's supply of uranium is dwindling.

"America will run out of Uranium by the late 80's and 90's," said Pollard.

