## EIRScience & Technology

## Chernobyl: The political fallout three years later

The Soviets ignore the basics of nuclear power, and that's even clearer today. An interview with Dr. David Marples by Marjorie Hecht.

Three years after the Chernobyl disaster, scare stories about radiation are spreading through the Soviet Union. And in the Ukraine, the nationalist movement has taken up the same irrational anti-nuclear polemic that Soviet leader Gorbachov has promoted for export to the West.

Interviewed here is David Marples, research associate at the Canadian Institute for Ukrainian Studies, University of Alberta, Edmonton. Marples is the author of two books on the Chernobyl disaster, both published by St. Martins Press, Chernobyl and Nuclear Power in the USSR (1986) and The Social Impact of the Chernobyl Disaster (1989). Marples began his research on Soviet nuclear power in 1984, while working at Radio Liberty in Munich. Often quoted in the press is his October 1985 prediction that if steps were not taken to improve safety operations and construction procedures, there would soon be a serious nuclear accident in the Soviet Union.

Marples was interviewed March 22 by Marjorie Mazel Hecht, managing editor of 21st Century magazine.

EIR: There are three main areas I'd like to address. First, is the information that you are stressing from your personal and private investigations in the Ukraine that are not generally known in the West; second, is the Soviet policy on nuclear power; and third concerns the reaction in the Ukraine and Byelorussia, what you call the "patriotic opposition movement."

I'd like to start with the last topic: Here we are three years after the Chernobyl accident and they are just now, in February 1989, evacuating 20 new villages in Byelorussia because of radiation contamination. Then, you have a *Moscow News* reporter coming in, exposing the incompetence of the local authorities, the local party officials, in dealing with this

situation and the radiation effects, which really is on the level of scare stories—but scare stories based on reality. . . .

My question is, why is this all happening now? Why three years later do you have a reporter from Moscow News coming in and exposing something, and almost simultaneously, as you put it, there are demonstrations of 10,000 people, meetings, protests? I can't imagine that the Moscow News reporter was not unknown to the government authorities. Why did they let him do this? What really is going on here?

Marples: I think first of all, the scientific authorities in the Soviet Union were fairly well respected immediately after the accident. There's been a long tradition in the Soviet Union and in the Ukraine in particular of simply accepting official information, not necessarily believing it, but of accepting it without question. This has been monitored, in fact, by the Ukrainian physician Yurii Shcherbak. Shcherbak described a "technocratic mafia" sitting in Moscow in armchairs making all the decisions on nuclear power in distant regions in the Soviet Union or in various republics in the European part of the Soviet Union.

Public opinion as such was in its infancy in 1986. It simply didn't exist as we know it today in the Soviet Union. So the Soviet public was much slower to react to Chernobyl. And it is only now when the first real health effects are beginning to take shape. Because one should remember that the leukemias would take three or four years and the first cancers would now be starting to develop. So one couldn't really look for long-term effects until now; this is really the first time that they would be appearing.

In terms of what Moscow News did: I think the Moscow News article reflected the frustration at the local level with the amount of information provided by the Soviet Ministry of Health. The Soviet Ministry of Health and its Republic

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counterpart, the Ukrainian Ministry of Health, which has overall authority over the monitoring of the victims of Chernobyl, and the Center for Radiation Medicine in Kiev, which is doing on the spot monitoring, until very recently had produced no information whatsoever about the effects of the Chernobyl disaster.

EIR: Well, then, what do they do, if not that?

Marples: That is their job. They must have information but they are simply not publicizing it. Last year I had a discussion at External Affairs Canada and brought this question up, asking them what they had heard from the Center for Radiation Medicine. An official said, "Oh, the Soviets will tell us in their good time, but at the moment we have nothing." And I told them that really they should have something by now. I think in the case of the *Moscow News* reporter, he simply decided to go and find out for himself.

Usually when a journalist does this, he would approach either the Center for Radiation Medicine, or he would go to the government commission cleaning up after Chernobyl, or he would go to the Kombinat Production Association. He ignored all the official groups and went directly to the population.

The Soviet response to that report has been quite furious. The Center for Radiation Medicine collected a team of scientists together and published a response in a Kiev newspaper, which said that his report was nonsense and unfit for export abroad, that they had also sent a team there after he had been to Narodichi, and they had discovered that all his figures were greatly exaggerated. For example, they said there were not 62 deformities, but there were actually only 8, that the number had not risen since before the accident. They also maintained that the problems among the livestock that had arisen were the result of the state of the soil—nitrates and other elements within the soil, not radiation.

But after this report had been published, the editors of the newspaper, *Pravda Ukraini*, commented underneath their breath that the reasons for the problem were not the reporters' incompetence, but rather the secrecy of the Ministry of Health that was forcing him to go and ask the public, rather than official bodies, what the situation was.

I think that the same problem is the cause of what I call the patriotic opposition movement in the Ukraine today, which does not accept official information on Chernobyl and has made it part of a general ecological movement, which has now turned quite strongly against nuclear power. And this movement has been fueled by glasnost, because in the Ukrainian press today, it is perfectly possible to read about demonstrations that are taking place against the Lithuanian nuclear power plant, or the shutting down of the Armenian nuclear power plant last week, and there in the Ukraine, on the face of it, nothing is happening. The Chernobyl plant itself is still in operation. So, I think that the Ukrainians feel that although other areas are making progress in terms of glasnost and in terms of how the authorities are reacting to

public views, in the Ukraine the opposite is the case.

The party hierarchy in particular, was almost nonexistent after the Chernobyl disaster, and today has tried its utmost to ignore the growing demonstrations and the protests. There was a recent interview in *Radyans'ka Ukraina* with the Ukrainian Politburo member Boris Kachura, and he tried to introduce a new aspect to this, namely, that the Ukrainian party leadership was very much involved in Chernobyl, in fact, took part in the cleanup campaign. The interview said, "How come we never heard this before? You know, we had all kinds of people on television and radio and on the spot, but we never saw a Ukrainian Politburo member." And he said, "Well, it was because we were too busy to talk to the press."

So the party hierarchy now in the Ukraine is trying to change the interpretation of Chernobyl, and this also is regarded as an act of great cynicism.

EIR: At the time of the accident, it seemed very clear to me in reporting and writing on the accident that the Soviet nuclear program reflected the Soviet disregard for human life. In other words, it's not nuclear power that is "bad," it's the way that the Soviets went about it. They needed the power so badly, that they took shortcuts, in terms of getting their war economy going. And their shortcuts reflected a total disregard for what would happen to people, safety concerns, etc. And they were very arrogant about this and quite public about it. So, what you are saying about how they are continuing to treat the situation certainly fits with this initial analysis.

Marples: It fits with that, although there is another point I should have mentioned. There is a genuine fear that if the real situation is revealed in terms of radioactive fallout—although I guess that it's more or less been revealed now by *Pravda* a couple of days ago—then it would cause widespread panic among the population. And panic is not a healthy situation. It's not a justifiable thing to say at all, because the public has a right to know.

But the Soviet nuclear program was established in the 1970s, and it was obviously very carelessly conceived. You have the example of the Crimea, where you have a plant not only in a zone of high earthquake activity, but a zone where volcanoes have erupted as recently as four months ago.

EIR: A war push was driving them, and the other kinds of safety considerations that are taken up routinely in every other nuclear country were not followed.

Marples: No, they were not followed; it was simply a means of getting energy by the quickest possible means. Reactors were coming on line in annual intervals just like in a planning period. Nuclear power was simply adapted to a regular five-year plan program, just like any other industry. The other part of it, of course, is the lack of qualifications of the people working on the plants. Chernobyl was the classic example, but you could look at virtually any nuclear power plant.

Also, I read quite recently in the Ukrainian press of about

10 days ago, that there is no fixed solution for the radioactive waste from the Chernobyl disaster. And this is a matter of great debate, and of course, this applies to the entire industry, not just Chernobyl. The low-level waste is being buried beneath the ground in the clay soil in what they call a coffin. But the high-level waste is simply being stored in concrete containers above ground, within the 30-kilometer zone around the plant. This is not a really viable long-term solution.

EIR: No, and certainly viable long-term solutions exist. The other nuclear countries reprocess nuclear waste or vitrify it for burial. The technologies are known, but they do cost money.

Marples: The Soviets are planning to build a reprocessing enterprise by the year 1991, for this waste, so it is still a couple of years down the road, and they are trying to get the specialists with the right sort of know-how together in order to man it. This is obviously not an easy process for them. It will have taken them five years since the Chernobyl disaster.

EIR: But since they need the energy so badly, what I don't understand really, getting back to the protest movement, is what is behind this? What do the Soviets hope to get out of this? They cannot shut down all the nuclear plants in the Ukraine—it represents a hefty proportion of their total energy.

Marples: The Ukraine at the moment makes up about onethird of their nuclear capacity, and if their plan for the year 2000 had been completed, it would have made up 50% of Soviet capacity.

EIR: That's enormous considering, as you point out, that the Ukraine is only 3% of Soviet territory and 18.5% of the population. Yet, the Ukraine was to have 50% of their nuclear energy. Why, as you pointed out in your report, is Gorbachov supporting this movement of anti-nuclear activists. Obviously, they could not afford to shut down these reactors, nor could the Ukrainians afford to shut them down if—to take some wild example—they come to independent power. Are they going to shut down all these plants and have nothing, no industry.

Marples: I don't think Gorbachov ever condemned the Ukrainian nuclear program per se. What he has condemned is the lack of openness on the whole nuclear power issue. In this particular aspect, he has sided with the Ukrainians against what they see as the bureaucrats in the Ministry of Nuclear Power. Because none of these nuclear power plants were every planned or discussed in the Ukraine. This is the main argument put forward by the protesters, that they have had no say in the matter. Somebody in Moscow tells them where they have to put the plants, and then they just go and build it.

In an interview with the Kiev newspaper *Molod' Ukrainy*, Academician F.Ya. Shipunov said on this that the Ukraine today, with the current amount of nuclear capacity, which is about 11,000 megawatts, has enough electricity not only to

feed Ukrainians but even to export it. That is, Ukrainians don't need more electricity from nuclear power plants. So they are asking, what is the point of this program? What is it going to be? Where is it going to? And could they not conserve electric power consumption and simply not build any more nuclear power plants.

In addition to that, there is the question of Eastern Europe, because at least three Ukrainian nuclear power plants are now feeding the East European grid.

**EIR:** Where specifically does that power go?

Marples: Electricity from the plant at Khmelnitsky in western Ukraine goes to Poland. The one in south Ukraine is feeding Romania and Bulgaria. And part of the electricity from the Chernobyl plant is going directly to Hungary. Czechoslovakia even gets some, but I'm not sure because it depends on how it dips into the grid. Czechoslovakia is very dependent on nuclear energy anyway and does have its own nuclear plant, whereas the Romanians and the Poles have started to build plants but have never finished them.

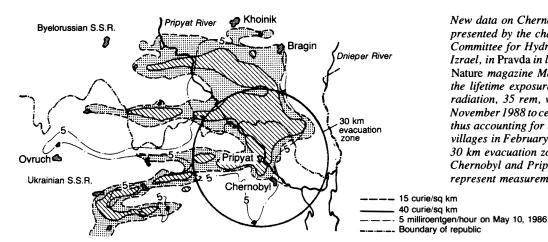
EIR: Are you saying then that you think that this movement, the patriotic movement, is against new plants, but would consider holding the line and keeping those 11,000 megawatts?

Marples: I couldn't exactly say that. The person who said that was an Academician called Shipunov, who actually, although he was interviewed by the Ukrainian press, came down from Moscow. The Ukrainian opposition is basically made up of writers and intellectuals, with the addition of a few, hardline nationalists from western Ukraine, who have sort of joined in. In fact, the attitude of the authorities has been to listen to the writers and intellectuals and to arrest the hard-line nationalists, in almost every case.

But the writers and intellectuals don't like nuclear power. And at the demonstration in Kiev last November, the demands were to simply stop the nuclear power program in the Ukraine altogether. And having said this, no foreseeable energy alternatives were put forward, other than a "cleaner form of thermal power." This Shipunov himself said that the hydroelectric stations should be closed down, too. He maintains that they also, for the amount of power they are producing in the Ukraine, which is probably about 15%, could be done away with, too.

**EIR:** What does he want—a return to the Dark Ages, when people read and wrote by candlelight?

Marples: Well, first of all, his article was on solar and wind energy, so that gives you an idea of where he is looking in the future. But as for the present, I think he foresees the future more in terms of thermal plants using natural gas, or a cleaner form of coal. In at least two cases in Ukraine, the nuclear plants that have been closed down have been transferred to exactly this: thermal power plants based on natural gas.



New data on Chernobyl radiation was presented by the chairman of the State Committee for Hydrometeorology, Dr. Yurii Izrael, in Pravda in late March. As reported by Nature magazine March 30, Izrael said that the lifetime exposure limit for external radiation, 35 rem, was applied only in November 1988 to cesium-contaminated areas, thus accounting for the evacuation of 20 more villages in February 1989. The map shows the 30 km evacuation zone, which includes Chernobyl and Pripyat. The shaded areas represent measurements of radiation.

Source: Adapted from Nature, Vol. 338, March 30, 1989, p. 367.

EIR: Which two plants are these? Are these new plants?

Marples: Yes. One was almost completed in Odessa, and the other one was in Kiev. These were to have been cogeneration, with the use of power also to heat the major cities. Because these plants had to be located relatively close to the city, it was decided to shut them down. The same thing happened in Minsk last September, where the Minsk plant, which was the same design, was also closed down.

EIR: So, these are nuclear plants that are being transformed into gas-fired thermal plants. But if you look at the overall ecological situation, the Soviet Union is a mess. It really hasn't had any regard for pollution at all. Yet, nuclear would be the cleanest form of power-generation, compared to coal and gas.

Marples: Well, it's a cleaner form than coal. . . . The complaints have been that in the area of the Ukraine, the nuclear power plants are consuming too much water, and that many of the rivers in the areas around them have now dried up. In addition, some of the reservoirs into which the cooling water runs off, have overheated, and as a result, the form of animal life within them is changing.

EIR: It's amazing to me that the Soviets ignore the basics of nuclear power. When you look at a textbook on nuclear power, it tells you exactly what conditions have to be met—water flow level, rate of flow, temperature, and so on. No one would ever do what you say they have done in the Soviet Union. . . . You can go through a list of requirements for siting a nuclear plant. That the Soviets don't do this is mind-boggling.

Marples: It's not only with nuclear power. Until recently, the general attitude seems to be that, for example, the water supply is there to be tampered with, one way or another. And if you simply want to divert the Dnieper River, so that it runs

all the way across to the Danube, you can do this. This scheme was bitterly attacked in the Ukraine, and now it has been finally abandoned.

But the other point that I should mention is that the complaints have been that when there is a public protest—say, in the Crimea, where 350,000 signatures were collected against building the Crimean nuclear plant, or when the Academy of Sciences sends down a team to investigate and make a report on the state of that nuclear power plant—that it has no binding authority. In fact, the Ministry of Nuclear Power can still go ahead, and has done that, in the case of the Crimea. That plant is still being built today in the Crimea. Nothing has changed.

In January, 10 scientists wrote a letter to *Pravda*, publicizing the situation in the Crimea in order that it could not be ignored by the Ministry in Moscow. They said in the past that we make these recommendations and then nothing happens. Officially, there has to be a decision of the Council of Ministers, but the Ministry of Nuclear Power is within that same governmental structure, as is the Ministry of Power itself.

**EIR:** Isn't it militarized?

Marples: Yes, it is. Well, I wouldn't say militarized but it's very secretive. There is another ministry that is militarized that is used in the nuclear power development, which is called Medium Machine Building. That certainly had a big part to play in the Chernobyl cleanup, which immediately aroused suspicions that Chernobyl was used for military production.

**EIR:** All of those reactors, all 24 of the RMBK graphite-moderated design like Chernobyl, could be used for military production.

Marples: Yes, and in fact, they were designed for military production. Chernobyl seems to me to be one of the possibil-

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ities for military use, because the Leningrad plant, which was the first one of that design, is used for public tours. When there are foreigners who want to see a nuclear plant, they usually take them to either Novovoronezh or Leningrad. And it seems to me that the military plants are probably elsewhere, maybe Smolensk or Kursk, or someplace like that.

EIR: The question I have is that here you have this terrible ecological problem. You have Gorbachov and the Soviets who have supported a green movement, an anti-industrial ecology movement for the West, for export, not for themselves. If the Soviets actually go with a green program, there's going to be mass starvation in the Soviet Union. Chaos will reign. So, the question I still have is, why are they tolerating and perhaps even encouraging this kind of movement in the Ukraine? Is this part of a larger faction fight? Do you see it as that?

Marples: Yes, I sure do. I think that within Ukrainian society, it's divided now, more or less down the middle. Except that the opposition movement is greater in size. It simply doesn't have the same kind of power. But there are also elements within this movement that the Moscow party sees as quite healthy. For example, the movement for greater openness, or the greater use of the Ukrainian language in state institutions as a state language, publishing literature that was formally banned, revising history. There are various aspects, because Ukraine has a probably more tragic history than most republics. On the other hand, the anti-nuclear is simply a component that has arisen. It was never encouraged. It simply developed spontaneously.

**EIR:** But can anything develop "spontaneously" in the Soviet Union?

Marples: Well, I think this did. When I was in Moscow in 1987, I could see the ecological movement being directed from above. It was quite clear. But what has happened in the Ukraine is that the general fears produced by Chernobyl have changed the direction of this opposition. It's quite different to listen generally speaking to an ecological movement in Moscow and an ecological movement in Kiev. In Kiev it's more of a populist form.

Now, I think if the Ukrainian party had reacted to this and had tried to direct the movement, and had at least listened more openly to what was happening after Chernobyl, there would be no threat to the nuclear power industry in the Soviet Union. It may have had to be modified in terms of being a stupid program, but it would still be acceptable on a certain level.

**EIR:** Is that because there would be more trust?

Marples: Yes. But now because of the attitude of the authorities, and also because of the ministries in Moscow, the attitude of the public now is we either shut these power plants down or we're going to have a demonstration, or we're going to do something more drastic. I don't know where the line is

going to be drawn. I think Gorbachov made the point by going to Chernobyl and maintaining that it was quite safe. He did actually say that the important thing is the safer development of nuclear power. [Nuclear physicist Y.E.] Velikhov also said, we affirm that nuclear power is the only solution for the Soviet Union.

But it's a little bit late now. I don't see the public as being convinced at all. I just read a huge article on this Khmelnitsky plant in western Ukraine, which now has one reactor and is scheduled to rise to four reactors—at least it was in the original plan—and now the plan is suddenly being doubled so it's going to be eight reactors, 8,000 megawatts. And again you've got the same thing happening. The public is saying, "We can't possibly build this. This is ridiculous."

So the lessons have not been learned. I guess that's the main point.

EIR: To me, I look at the anti-nuclear part of the situation and that would be suicide for them. Yet, the way the Soviets have dealt with the radiation and the cleanup, to get back to my first question and the point that you described in your talk at Wayne State University, is also, not suicide, but homicide. However you look at it, it's killing people not to deal with the safety question.

Marples: Yes, the attitude is incredibly callous. I read a report that came out today as a matter of fact in the Associated Press, where a member of the Center for Radiation Medicine has said well, the public in this area is only getting 2.5 rems of radiation per year, why are they worried? This may not seem like a lot, but it is an awful lot more than the public is expected to suffer. And I believe the figure in Canada is something like 0.05 rems a year on average.

**EIR:** I would have to look it up. . . . But the fact that 20 villages were just evacuated in February of this year. . . .

Marples: Yes, and even though Kolenko's report is out, there are new reports that just came out today on more villages, where deformities are just there. People have taken photographs of them.

**EIR:** Deformities in the livestock?

Marples: In the livestock.

EIR: Are these in Byelorussia?

Marples: Yes, Byelorussia and the Ukraine, and, I believe, parts of Russia were evacuated. This must still be the same area that they are looking at.

**EIR:** Is this within 30 kilometers of Chernobyl?

**Marples:** No, it's farther, it's between 50 and 80 kilometers from the reactor. Of course, this is the problem, in the 30-kilometer zone they did look more carefully, but outside it, the problems have been ignored for a long, long time.

EIR: What is your best estimate from what you have read

and the information sources you have on the actual increase in cancer levels in the Ukraine and Byelorussia?

Marples: I'm not even sure I can do that.

**EIR:** Have they put out anything on this?

Marples: The Soviets certainly haven't. The only figures are estimates by Western specialists who have tabulated the cancer rates in places like Scandinavia or Eastern Europe and then estimated from that what the levels are in the Soviet Union and then come up with figures. But I found that even if I was capable of doing that—I'm not a medical specialist—I still wouldn't do it.

For example, the figures that have been given don't take into account many factors, such as what happened immediately after the accident, what protective measures were taken, how many people were outside, how many were indoors, what sort of health levels were in those villages to begin with, and, especially, how many people were involved in the clean-up work. The figure of people involved in the clean-up is not 50,000, as originally announced, but 260,000. So that's a vast number of people who have to be taken into consideration.

**EIR:** These people were not necessarily from the immediate area around Chernobyl?

Marples: No, no, in fact, many of them were not from the immediate area.

**EIR:** Were they there voluntarily?

**Marples:** Initially there were volunteers, but there were also a large number of army conscripts, from various parts of the Soviet Union, from the European part of the Soviet Union, the Baltic republics.

**EIR:** In the local press, from what you had said, I got the impression that cancers were beginning to show up.

Marples: Oh yes, that's true. But officially, from the official figures, we don't have any evidence of that. It's only from reports of the inhabitants themselves, or little raion (county) medical services. The "experts," from the Center for Radiation Medicine, said that these figures are not to be relied upon. So that the figures that would be given to the IAEA or international bodies generally would not include whatever is being tabulated at the raion level. This is why it's nearly impossible to make estimates.

EIR: Of course, you also have the panic factor, where people tend to attribute anything, any illness, to the accident.

Marples: I can give you an example of that. After the accident in 1986, the number of illnesses, things like stomach illnesses, pneumonia, problems with the throat, thyroid, increased throughout the areas under investigation. This was revealed by the Ukrainian information section from the Ukrainian government. They have also said that some 260,000 people were investigated in the fallout area, and of these

260,000, 38% were declared to be in need of medical attention. But of this figure of 104,000, most of these were elderly people who did not have medical checkups earlier. . . . No matter what the situation had been, they were going to look worse than was the case because they had gone years without medical attention. So I questioned whether you could have 104,000 people who were simply subjected to illnesses regardless of the radiation fallout. Some of this must have been due to radiation. . . . But it has been documented that illnesses increased considerably. That is the case, but we just don't know how many future cancers there are likely to be.

**EIR:** When you mentioned before that this is nothing new for the Ukraine, you just have to look at the famine in 1933 and this kind of brutality. Millions of people were killed then; this brutality is not new and it's not new in this area.

Marples: No, it isn't, and I think that the peasants, if I can use that word, the peasants' conception is also quite different. You know, you cannot see radiation and they simply don't have the means to measure it, and they have had to be living with the problem for three years. In my view, Narodichi is the tip of the iceberg, because there must be huge areas in Byelorussia in particular, which have simply never been examined. Only last year, it was pointed out in *Novy Mir* that some of the doctors examining patients in certain villages were only allowed to go into these villages on a shift basis. That is, they could only stay for one week and then they had to leave, because the background radiation was so high. But the families living there had never moved. They were there the whole time.

There is a basic, almost callousness in the lack of precautions.

Now, there's one other aspect that I wanted to mention. The Western perspective, the view of Western scientists in particular, on Chernobyl has contributed directly to the lack of understanding here about Chernobyl. . . . They simply accepted everything they were told, in the main.

EIR: You mean—in my paraphrase—they said, "Isn't it nice that they have told us so much for the first time?" This is what many of the Western observers said.

Marples: That's exactly right. Without mentioning names, I feel that some of the Western scientists or doctors who went to Chernobyl . . . really should have kept us better informed or should have asked more questions, or should have demanded to go to different areas. Instead of simply thinking, well, we're being treated like royalty, I'll just go along with this.

**EIR:** Do you think that any of them were trying to cover up and make things easier for the Soviets by putting forward that kind of a view?

Marples: I think there's a possibility that some of the people who went there had an interest in, let's say, not highlighting the larger problems. There may have been a desire simply to

go back and have access to the data of the Center for Radiation Medicine, or it may simply have been, with all due respect to the nuclear power industry, that people from the International Atomic Energy Agency did not want to issue a report that might be negative for the industry worldwide. I thought that too.

EIR: Do you mean that they thought it would make the Soviets more secretive and not want to participate in the international body?

Marples: Yes, because the IAEA really has very little authority. In fact, until 1985, it was never even allowed in the Soviet Union. So, this was a major breakthrough for this agency. And I've talked to people in the Canadian industry who literally have laughed at it [the IAEA] and said, well, it's just a joke; we don't take it seriously. We certainly wouldn't have them come looking in our plants. This is like an insult. So I do feel rather strongly about it and I guess it's one reason that I've written two books on the topic. . . .

EIR: If I look at Three Mile Island, which happened 10 years ago, and a population in Pennsylvania, that was not a peasant population, certainly much more educated, there was panic after TMI, and that accident in no way resembled Chernobyl—there's no comparison in terms of the severity and in terms of the immediate response and precautions taken. Yet, there was generally a panic, including especially in the media. People are afraid, they can't see the radiation, they don't have a scientific approach to it. So I can imagine in the Ukraine as more of this information on radiation comes out that the situation is very volatile.

Marples: Yes it is. Also, of course, the political situation in the United States is stable. It's not a society in transition, in major change. Chernobyl just happened to coincide with Gorbachov's coming into office, and the combination of the two is the biggest single factor. Really, if it had happened under Brezhnev, I don't think we would have found out very much. I think they would have had to have said something—because of the Swedes complaining—but they certainly wouldn't have said anything very much. It's a fact that although I'm complaining and complaining bitterly, we do know more about Chernobyl than about just about any other major nuclear accident. . . .

EIR: In looking at Gorbachov's speech at the United Nations, which focused very much on environmental concerns, and his calling for, in effect, a global environmental force—you could even call it a police force—to see that the sources of pollution were stopped, I think that the movement you've described in the Ukraine, especially the Writers Union, fits very much with what Gorbachov wants. To me, Gorbachov's program would destroy the West, it would shut down industry and progress here, but I don't see any indication that the Soviets would shut down anything in the Soviet Union. So for them to have this environmentalist or green movement

springing up doesn't seem to me to be the kind of problem for them that it would be in the West. I would think that Gorbachov would be happy to see this. I'd like you to comment on this.

Marples: I think it would work better in the Soviet Union. The problem really is that in the Soviet Union these movements have generally been directed from above. In the West they are more or less anti-establishment in nature. In Canada, for example, we have Energy Probe, which is very antinuclear power. They see nuclear power as something that is being put forward by the government. Well, in the Soviet Union, it's almost like an attempt to direct something that's not really any more under the government or party's control. If it can be directed, then it can be controlled—it goes without saying. But at the moment, there are so many different ecological movements—you know the Greens are just one. . . . In the Soviet Union, and they have already succeeded in stopping a lot of programs. For example, a chemical factory built in Odessa has just been abandoned after widespread protest. So I don't think that it's something in the West that governments would necessarily control, but in the Soviet Union, they would prefer to direct it from above.

EIR: When I look at this situation and I see the agenda of the green movement—I'm lumping them all together, all of the various different groups, Worldwatch, Friends of the Earth, etc.—their programs in general are Malthusian and anti-industry. For all of the world, and also for the Ukraine, I don't see this as a solution . . . that will allow future generations to live better than the current generation. I think that the only way to do that is to have a positive program for development.

My question is that as you've described this group in the Ukraine, their demands are all negative ones that will only bring disaster, by cutting off any real possibility for development. If they really wanted to have their population thrive, they would have to advocate modernization, industry, and the kind of American System methods that built this country, not the methods that we are using right now, but the methods that built this country under Alexander Hamilton, for example. . . . That would be self-preservation for the Ukraine, and I don't see any hint of that, and I certainly don't see it in the green movements of the West.

Marples: No, the difference between the West and the Soviet Union, and the Soviets and Ukrainians point this out, is that development has been imbalanced in the Soviet period. It was pointed out in one newspaper article recently that in the 19th century the Soviet Union, for example, was a major exporter of grain, and now 25% of its grain is imported.

EIR: It's a real testament to the Communist system, isn't it?

Marples: Yes. The person who wrote the article saw this as an example of what has been done wrong before in agriculture and he was describing the lack of attention to forests, river systems. It should be stressed that the same article could have

been equated with the same populist movement. It was more or less like let's get back to the land, and when we're developing industry, let's take steps not to destroy the agricultural environment. It mentioned, for example, that the development of the coal industry destroyed vast tracts of arable land, which is irreplaceable.

So, the development for the future, I don't think is necessarily of nihilism, or wanting to deprive themselves of modernization. It's just that traditionally that that part of the Soviet Union—I shouldn't even say that; the Ukrainians would lynch me for saying that—that area, has been an agricultural breadbasket and it is no longer. So, what applies to the Ukraine is not necessarily the case elsewhere in the Soviet Union. You could say some of the more industrial cities have traditionally supplied industrial goods, whereas the Ukraine has had crash development, particularly in the Stalin period, which has destroyed it as an agricultural nation. . . .

EIR: And killed millions, in the meanwhile. . . .

Marples: Yes. The nuclear power issue has been more or less appended to this, just one more example of what's gone wrong. I've not seen any in-depth analysis of the pros and cons of the development of nuclear power plants from the populist movement. What I've seen is: "Look at Chernobyl, look at what's happened in the Crimea, this is the same idea as in the '30s when they industrialized all this area and ruined our farmland. It's the same system that's operating. Nothing has changed." So I see it more as a movement that wants greater control over its own development.

EIR: But in order to have your land be productive, you need energy, and some of the most productive farmland is in Europe, where they don't have vast tracts, but they have very advanced agricultural methods. It's the same in this country: Your productivity is related to your input. You need the power for irrigation, for example.

Marples: But I think that in the Soviet Union, the amount of power usage is two or three times greater than in the West. It's effectively wasted in many areas.

**EIR:** Power usage for . . .

Marples: Well, for industry, for example, and maybe even for agriculture. It's simply not used economically. That is why for a while it's been a question of having more and more power, without sort of thinking, well, maybe we can conserve the power we're already using in different ways. . . .

It's an interesting question, and one that I don't really have an answer to. I have noticed colleagues of mine actually going so far as to use the pronoun "we" when talking about the Ukraine, "We want this" and "We want that." I don't equate myself with any movement over there. I'm simply observing it, trying to see where it is going. I see it first and foremost as something with a political end in mind, which is a removal of the current leadership of the party in the Ukraine.

EIR: . . . I also have a political aim. The LaRouche movement is concerned to see that people don't die of hunger, and what we see coming, fueled by the Greens, no matter what their individual motivations may be—many of them are not Malthusians; they are in there for what they think are positive reasons—the result of their programs will actually be responsible for the deaths of millions, many more millions than died in the Ukrainian famine. . . .

My interest therefore is to suggest what kinds of development programs people should pursue. . . . There are ways to develop that will be compatible with a healthy environment, and in fact, that advanced technology is the only way to guarantee that. So that's my interest. . . . What worries me about this movement is that in thinking that they are going after the party leadership, they pick up really the worst of the Malthusian demands of the Western green movement, which have their roots in Bertrand Russell, H.G. Wells, and the continuation of that line of thinking, which was very much anti-people. They thought that the world would be better off with fewer people.

Marples: I don't even know if there is a tradition over there. That's the problem. I mean you can't silence a people for 70 years and then expect them to suddenly start talking rationally.

EIR: But you have to hope that there are those among them who have some larger vision, who are real leaders in that sense.

Marples: But they are not in a position to make decisions. They are only in a position to protest against what happens. So I don't know. It's in its infancy, and there are a whole lot of other facets too. The whole language issue is one of the new things that has developed that is linked very closely with this new movement . . . to get the Ukrainian language as the state language in the Ukraine. It sounds strange. . . . The party has organized a letter-writing campaign against this movement on a variety of grounds but everyday the papers there are full of letters opposing Ukrainian as a state language. Somebody must support it, because there were thousands at the inaugural meeting.

EIR: I would think that one positive demand they could make is for a health exam for the whole area, to see that everyone is examined. Of course, the implications of that for the health system are staggering, for if you bring everyone up to a modern standard of health care, it's costly.

Marples: The Soviet health system is notoriously bad. That is something that's been pointed out in these reports. They are quite self-critical now, which hasn't always been the case.

EIR: It makes the area really ripe for the spread of AIDS. Marples: The AIDS epidemic is really taking off. In fact, I'm sorry I can't give you some figures—I don't have them right in front of me—but it really has gone up astronomically. . . .

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