

Copy
The Executive Director for Operations,
U.S. N.R.C.,
Washington, D.C. 20555

June 15th, 2000

Dear Executive Director,

Further to NRC's telephone conference with me today concerning my 2.206 Petition against Southern/Georgia Power's Plant Hatch I and II, Baxley, Georgia, next to the mighty Altamaha River, the sources of some of my bases should be better clarified, so I hereby submit some additional source information to support the following bases to be included as part of my 2.206 Petition for permanent license revocation and permanent shutdown of Hatch I and II, for consideration:

Under bases 1) and 8) on effects to children etc. :

"Lens Opacities of Children of Belarus Affected by the Chernobyl Accident" by A.N. Arinchin and L.A. Ospennikova, Research Clinical Institute of Radiation Medicine and Endocrinology, Ministry of Health, Republic of Belarus, Aksakovschina, 223032, Minsk, Belarus.

"Monitoring of Cytogenetic Damages in Peripheral Lymphocytes of Children Living in Radiocontaminated Areas of Belarus" by Ludmilla S. Mikhalevich, Institute of Genetics and Cytology, Academy of Sciences of Belarus, F. Skorina st., 27, 220072, Minsk, Republic of Belarus (Fax: (0172) 68-49-17 this fax is in a 1998 document), and by the same author: "Study of Genetic Effects in Somatic Cells of Children Living on the Contaminated Territories in Belarus".

Relevant excerpts from Nov. 1, 1982 Committee on Interior and Insular Affairs, U.S. House of Representatives, Washington, DC, Subcommittee on Oversight and Investigations, "Calculation of Reactor Accident Consequences (CRAC2) for U.S. Nuclear Power Plants (Health Effects and Costs) Conditional on an SST Release".

This document is enclosed. It should be noted that the Peak Fatal Radius is 20 miles (when evacuations only go ten miles) and Peak Injury Radius is 70 Miles, for Hatch. Even taking into consideration a 50 mile ingestion pathway (current) it is all inadequate. The seven hundred dead per unit was based on the population data back then of course. The explanatory text which is part of the report is of great importance. PLEASE PROVIDE A COPY OF THIS TO THE HATCH RELICENSING STAFF AS I FORGOT TO INCLUDE IT WITH MY JUNE 4th Submittal referred to in our conversation today. (i.e. to be made part of that also) It is obvious that children would be among the dead.

Base 2) Chernobyl had a 1,000 ton steel and cement cover neutron shield over the reactor (and one below) which shot up in the air and came crashing back down at an angle on it. It has been stated that this was one of the reasons Chernobyl only lost between 4% and 10% of its radioactive core inventory. Hatch reactors have only the metal building roof above them according to NRC Inspector Skinner (now retired I believe) - and of course have no, repeat NO - huge containment dome. Chernobyl also had a "pressure suppression pond" below it, and a (due to the accident) flooded basement below that. To avoid a truly massive meltdown and explosion happening with the core breaking through into the water, while aerial runs

were being made to drop the more than five thousand tonnes of mixture of lead, boron carbide, clay and sand on the reactor, a group of three workers in wet suits struggled through dark, flooded corridors to reach the pools slide valves and prise them open, and then another five volunteer firemen split in a group of three and two, the first three got a pump truck and an armoured car, drove the pump truck into a tunnel under the reactor got to the edge of the water pool, attached hoses primed the pump and got out in the armoured car in five minutes flat, two others went in later to make sure the pump worked, and two of the first group had to go in again and restart it later. Other workers were pumping liquid nitrogen (forcing it) through lower reactor piping into spaces around the reactor vault. as soon as the water was out of the pool and basement the thousands of workers (in relays) began to tunnel under the reactor and start installing a flat heat exchanger mounted on a massive concrete platform 900 metres (about 2700 ft) square and 2.4 metres thick - the last line of defense against possible meltdown of the (main bulk of) the reactor core. These people gave their lives to save the world. Had the core melted and exploded also down into the river and groundwater, it would have reached the Black Sea ultimately and from there the worlds oceans. Some contaminants HAVE already shown up in Black Sea sediment. Obviously Hatch is smaller, however it is on the banks of the Altamaha which empties into the Atlantic and the Altamaha Sound at Darien, two counties downstream at Georgia's magnificent Golden Isles area, with its fishing fleets, thousands of tourists, incredible wildlife and birds and endangered species and areas vital to migratory birds coming from South America the West Indies etc. Hatch has already contaminated the sediment down to the coast - in part from the massive Spent fuel pool accident in 1986 - documented that the sediment is contaminated by both State and Georgia Power. Cobalt-60 is NOT a natural constituent of sediment, nor is Cesium 137, Cobalt-58, Zn-65, Mn-54, Cs-134 but now its in there thanks to Hatch. Not to mention they contaminated onsite groundwater back in 1979, and a lot more besides. Area people are on wells. The huge Ft. Stewart Army Reservation falls in the Peak Injury radius and in the fifty mile ingestion pathway. The State Prison in the radius also. And of course the school's in the 20 mile kill zone. As is the town of Baxley and some other towns. Nureg-1079 shows under certain criteria, the core (Mark I as Hatch is) can begin to uncover in 33 minutes. Notification is 45 minutes. There is no way fast evacuation could occur - which brings me to :

Base 3) Enclosed is a June 1999 photo of the Appling Co Emergency Rescue HQ, to show the size. The painted school bus is on the right. There are two ambulances and two other emergency vehicles. The fire station is not on here, its smaller and cuter. The emergency rescue in in a sort of converted gas station by the look of it. These people will die if they have to go and try and confront a nuclear disaster. It is cruel to expect them to. Of course, considering Hatch has a cracked core shroud held together with braces that could fail due to aging and vibration anyway, a serious accident would probably guarantee that. At Chernobyl the refueling platform etc. above the reactor (just like at Hatch) fell down into it of course. That would likely happen at Hatch. Any workers or rescue personell on it would die. In event of an explosion, the spent fuel pool at Hatch is shared by both Units and is UP at around fourth floor level so fuel can be moved to it, there would likely be the end of the spent fuel pool too. THAT would be the ultimate catastrophe. CRAC2 doesn't consider the spent fuel pool going too. It only has the building roof as protection.

3.

The pool is packed. An indoor high level waste dump.

There is absolutely no way emergency response from the entire State of Georgia could deal with such an accident, let alone the poor little Appling County Fire and Rescue units.

Picture it for a moment : reactor melting down, deadly hot radioactive steam everywhere, overhead crance and refueling platform crashing down onto reactor with explosions going on, spent fuel pool going, water streaming from the spent fuel pool, spent fuel rods later becoming a molten, melting blob from hell, people dying everywhere, sirens going off, panicked parents, screaming terrified children, packed dirt side roads and blacktops, an uneducated -radiologically speaking -press corps trying to fly over it for pictures , and, as people in the south in rural areas use CB radios and cell phones, the entire coast trying to leave, plus most of middle Georgia - don't forget Ft. Stewart, and at the Prison probably a riot breaking out as they try to escape too. Washington would be wringing its hands, NRC Atlanta and the State of Georgia would be looking for a Chernobyl type radiation suit none of them possess - maybe they'd ask NRC in DC for one, and they don't have one either. And the children and everything else we love would die. Then the plume would probably head up the eastern seaboard or elsewhere depending on meteorology at the time. More panic, more death, more damage. That aged dump of a facility must be shutdown, soon, forever.

Please put all this also in the Federal Register when you do publish it as people need to understand that children dying from radiation sickness with its bleeding from every orifice, hair fallout, radiation induced vomiting, is just NOT acceptable. Neither are children going blind or will genetic damage. That's what would happen.

The only way the public can be somewhat protected is to shutdown Hatch I and II. Southern should compensate the community of Appling County.

As should the co-owners Georgia Power, Oglethorpe Power and MEAG and the City of Dalton.

Please make the right decision and grant the 2.206, for the sake of the children in particular.

Thank-you.

Pamela Blockey-O'Brien

Copy to : Rita Kilpatrick, CPG, Atlanta, Sara Barczak, CPG, Savannah.