

Civil Liability for Nuclear Claims Bill, 2010: is life cheap in India?¹

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Before the Indian Parliament votes on limiting the liability of nuclear operators due to accidents, it should carefully consider the much higher limits that the United States has set for itself about \$11 billion per incident industry maximum (under the Price-Anderson Act). The liability of the operator of the plant would be just Rs. 500 crores, about \$110 million, which is just one percent of the U.S. limit, and about \$450 million per accident. The proposed law allows an adjustment of this upwards or downwards to a possible lower limit of just Rs. 300 crores, or about \$65 million. But more than that, Parliament should consider that the actual damages could be far greater than the U.S. liability limit.

A 1997 study by the U.S. government's own Brookhaven National Laboratory, on Long Island, New York, found that the severe spent fuel pool accidents could result in damages from somewhat under \$1 billion of up to \$566 billion, depending on how full and hot the pool is at the time of the accident and the intensity of the postulated fire. The high-end figure would amount to over \$700 billion in 2009 dollars. Vast amounts of land --- up to about 7,000 square kilometers in the worst case would have to be condemned. Large numbers of people would have to be evacuated. Further, the maximum estimated monetary damages do not take into account some critical elements. For instance, the Brookhaven amount does not include excess cancer deaths, estimated to range from 1,500 to more than 100,000. Worst case nuclear reactor accident cancers and condemned area were estimated to be generally comparable to the upper end of the spent fuel accident estimates.²

Both the U.S. and Indian governments seem to be secure in the idea that such a severe nuclear power plant disaster is so unlikely that it can be disregarded. For instance, that is the response of the United States Nuclear Regulatory Commission in response to the Brookhaven study. Like the proposed Indian bill, the United States government is supposed to cover the excess damages above the corporate limit. Yet, neither country has any practical financial provision to cover damages in anything like the amount of estimated damages.

The ongoing disaster of the petroleum volcano caused by blowout of the BP oil well in the Gulf of Mexico should provide a sobering object lesson. Thinking that does not consider high-consequence but low-probability events borders on folly. BP also considered an uncontrolled blowout to be very low probability. As it turns out, BP, as one of the world's largest corporations, can provide the tens of billions

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² 1. R.J. Travis, R.E. Davis, E.J. Grove, M.A. Azarm, *A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants*, Brookhaven National Laboratory, 1997 (NUREG/CR-6451). See Tables 4.1, 4.2, and 4.3.

of dollars of damages. But no nuclear company in the United States has the financial muscle to compensate a significant fraction of the maximum officially estimated damages.

India would be ignoring its own tragic history of the 1984 Bhopal disaster, still unfolding with the health and lives of tens of thousands of people ruined, as well the ghastly BP drama that has reduced the United States to a heap of frustration in the face of a powerful oil industry. The Price-Anderson Act in the United States limiting liability to \$11 billion is bad enough. But the Civil Liability Nuclear Claims Bill of 2010 is much worse for two reasons. First, \$110 million cap for the operator, or even higher \$450 million total cap, would not cover even one-tenth of one paisa per rupee of damage in a worst case accident. Second, by setting a liability limit that is so far below even the unsatisfactory U.S. level, the Indian government would be proclaiming its agreement with the lamentable long-held imperialist view that life is cheap in India.

The bill should be amended to include an explicit provision that says there would be no operator liability cap, and that an initial payment of \$20 billion (about Rs. 92,000 crores) would have to be put in escrow in a worst case accident. That is approximately the arrangement that BP has agreed to (with no cap) in the United States in the case of the Gulf of Mexico oil disaster. Worst case nuclear accident damages are likely to be more severe and long-lasting. If the Civil Liability Nuclear Claims Bill of 2010 it is not amended as above, it should be withdrawn; if it is not withdrawn, it should be soundly defeated.