



## MARYLAND CAN'T AFFORD A NEW NUCLEAR REACTOR

Constellation Energy has proposed building a new nuclear power plant in Maryland. Building a new reactor at Calvert Cliffs would be expensive, threaten public health, and damage the environment.

### **A third reactor at the Calvert Cliffs nuclear power plant increases the risk of an accident or terrorist attack.**



- An accident or attack at the plant—which would be the largest single reactor in the U.S.--could harm over a million residents in Washington DC, Maryland and Virginia.
- The new reactor at Calvert Cliffs could generate an estimated 1,250 metric tons of radioactive waste during its 40 years of operation. Much of this waste will be stored – at least temporarily- at the site of the reactor, where it would pose an attractive target for a potential terrorist attack.
- The two existing reactors at Calvert Cliffs have been fined for safety lapses. The Nuclear Regulatory Commission (NRC) fined the plant \$50,000 in 1996 for problems with emergency equipment that had been identified in 1992 but still had not been repaired four years later.<sup>1</sup>
- If the federal nuclear waste repository at Yucca Mountain is opened, waste from Calvert Cliffs will be transported by rail or truck to Nevada, passing within five miles of 3.1 million people in Maryland.
- Radioactive Waste Management Associates, a consulting firm working for the state of Nevada, has estimated that 100 to 450 accidents will occur as nuclear waste is transported via train and truck to Yucca Mountain.<sup>2</sup> A single serious accident could cause thousands of cancers and cost billions of dollars.<sup>3</sup>
- Nationally, 107,500 metric tons of spent nuclear fuel and 22,280 canisters of high-level radioactive waste will be moved to Yucca Mountain over the course of 38 years. The waste would be shipped in casks that would each contain as much as 240 times the amount of radioactive material released by the Hiroshima bomb.<sup>4</sup>

### **There is no long-term solution to storing the highly toxic radioactive waste that the plant generates.**

- The United States has never had a plan for safe disposal of irradiated fuel.
- Radioactive waste generated at nuclear power plants must be guarded and kept from the environment for tens of thousands of years; what amounts to financial eternity. Already, the

federal government has spent \$58 billion trying to devise a storage solution for nuclear waste from across the country.<sup>5</sup>

- The Yucca Mountain site is too small and will run out of room before it can take the irradiated fuel from the power plants already operating around the country. Adding a third unit at Calvert Cliffs means that more waste will be stored, temporarily or permanently, here in Maryland.

## **Taxpayer subsidies should not support dangerous forms of energy like nuclear power.**

- Calvert County already has granted \$300 million in tax breaks to Constellation Energy. This is equal to \$4,500 per taxpayer in Calvert County. The new plant will add 450 full-time jobs in the county, but at a cost to taxpayers of approximately \$750,000 per job.<sup>6-7</sup>
- Constellation will seek additional subsidies from the federal government and may seek additional financing from the state.
- Constellation could also potentially seek to have some of the cost of the new plant paid for by electricity ratepayers, by adding the cost of the plant to the rate base that customers pay.

## **Despite the claims by the nuclear industry, nuclear power is not an environmentally benign source of electricity.**

- Mining and processing uranium destroys land and creates toxic and radioactive waste.
- While electricity generated from nuclear reactors does not directly emit global warming pollution, the nuclear fuel chain does produce greenhouse gases. As the world demand for nuclear energy and uranium rises, the quality of uranium that will be available will decline, and require more energy intensive (and more costly) processing. Eventually, global warming pollution from nuclear energy may be higher than that from natural gas plants.
- Producing more life-threatening waste in exchange for lower warming emissions is a poor trade-off. Fortunately, it is one we do not have to make.
- Energy efficiency and renewable energy technologies, such as wind, solar, and ocean power, can compete economically with nuclear power without the negative impacts on the environment and public health and safety.

<sup>1</sup>Nuclear Regulatory Commission, Notice of Violation and Proposed Imposition of Civil Penalty (\$50,000), (NRC Inspection Report Nos. 50-317/96-05 and 50-318/96-05), 25 July 1996.

<sup>2</sup>Marvin Resnikoff, Radioactive Waste Management Associates, testimony before U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Highway and Trust, Subcommittee on Railroads, Joint Hearings on Transportation on Spent Rods to the Proposed Yucca Mountain Storage Facility, 25 April 2002.

<sup>3</sup>Marvin Resnikoff, Radioactive Waste Management Associates, testimony before U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Highway and Trust, Subcommittee on Railroads, Joint Hearings on Transportation on Spent Rods to the Proposed Yucca Mountain Storage Facility, 25 April 2002.

<sup>4</sup>Robert J. Halstead, Transportation Advisor, Agency for Nuclear Projects, State of Nevada, testimony before U.S. House of Representative Committee on Transportation and Infrastructure, Subcommittee on Highway and Trust, Subcommittee on Railroads, Joint Hearing on Transportation of Spent Rods to the Proposed Yucca Mountain Storage Facility, 25 April 2002.

<sup>5</sup>Doug Abrahms, "Yucca Mountain Push Continues," *Gannett News Service*, 2 March 2006.

<sup>6</sup>Tom Pelton, "An Energy Boom in Calvert," *Baltimore Sun*, 21 August 2005.

<sup>7</sup>\$4,500 per taxpayer in Calvert County assumes about 90,000 residents (from 87,925 in 2005), with 73.5% over the age of 18 (as of 20045): *State and County Quickfacts: Calvert County, Maryland*, US Census Bureau, downloaded from [quickfacts.census.gov/qfs/states/24/24009.html](http://quickfacts.census.gov/qfs/states/24/24009.html) 27 December 2006.