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Maryland Conservation Council

Protecting Maryland's Natural Heritage Since 1969

Comments on Contention 10C presented to the Atomic Safety and Licensing Board, Solomon's Maryland, January 25, 2012

My name is Dr. Norman Meadow. I was a Principal Research Scientist in the Biology Dept. at the Johns Hopkins University, now retired. I'm also the first Vice President of the Maryland Conservation Council, one of the oldest environmental organizations in the State, and perhaps the only such organization in Maryland to support nuclear power. We believe that nuclear power is essential for eliminating climate change, and also that nuclear plants have a much less harmful impact on biological habitat than industrial scale wind or solar installations

The rationale behind Contention 10C is flawed. Studies of the electricity industry in Maryland, the Levitan reports from the Public Service Commission and the Long Term Electricity Report from the Power Plant Research Program of the DNR show that the renewables suggested by the interveners will not prevent a fraction of the carbon dioxide emissions that the reactor will; and will be more expensive.

As shown in Fig. 1 in the written handout, the Levitan report shows that the combination of 200 MW of land based wind, 500 MW of offshore wind and 1100 MW of solar will prevent emission of about 2 million tons of carbon dioxide per year, whereas CC3 will prevent 12 million tons per year. Further, CC3 will save the ratepayer about $3 billion whereas the renewables will cost the ratepayer about $2.5 billion. The mix of renewables evaluated in the Levitan report is larger than any now contemplated by the legislature, and it fails to help the environment as much as the reactor will.

The Long Term Report is more recent and much more detailed. Its purpose was to "... provide a comprehensive assessment of approaches to meet Maryland's long-term electricity needs..."

The report analyzed 38 Alternative Scenarios for supplying electricity when existing generators must be removed because of age, and as demand increases, as it surely will, because the recession will certainly end and population growth is inevitable.

Several of these 38 scenarios are based on the construction of CC3. Others–called the High Renewables Scenarios-- increase Maryland's RPS by 50%, from 20% to 30% of electricity sales.

The High Renewables Scenario assumes the construction of much more renewable capacity than

hinted in the original Contention 10C.

The heart of the Long Term Report is a comparison of the Alternative Scenarios to a Reference Case which assumes the continuation of the present generation mix into the future.

The most important conclusion of the Long Term Report, on page ES-13, is that CC3 will reduce carbon dioxide emissions in Maryland by 10%. But the High Renewables mix will reduce them by only 3%.

It warrants repeating that reduction of greenhouse gas emissions is a critical goal of any group purporting to care for the environment and biological diversity, and this weakness of renewables is reason alone to reject the Contention.

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Cost to the Ratepayer and Amount of CO_2 Prevented by Five Alternative Scenarios for Maryland's Electricity Future

(analysis by Levitan and Associates for the MD PSC)

	Electric Power	Savings (loss) by year [1]	CO_2 emissions prevented [1,2]
Nuclear - Calvert Cliffs #3	1600 MW	$2.9 Billion by 2027	12 million tons per year
EmPower Maryland	NA	$2.3 Billion by 2027	3 million tons per year
Land-based Wind	200 MW	$0.3 Billion by 2038	0.4 million tons per year
Offshore Wind	500 MW	(-$0.2 Billion) by 2038	0.9 million tons per year
Rooftop Solar Photovoltaic	1,100 MW	(-$2.8 Billion) by 2038	0.7 million tons per year

[1] Data are from the Levitan Reports requested by the Maryland Public Service Commission (www.levitan.com). "Electric Power" is that which would be produced by installations of the size now being planned for Maryland, assuming that they function at 100% of full capacity.

[2] By replacing coal plants ; replacing natural gas fired turbines will prevemt about one-half the emissions..