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10 MS. SUPKO: Good afternoon. My name is Eileen
11 Supko. I'm a nuclear engineer and a senior
12 consultant with Energy Resources International, an
13 energy consulting company. I provide consulting
14 services to nuclear utilities on used-nuclear-fuel
15 storage, transportation/disposal issues and also
16 nuclear industry organizations.
17 I'd like to address two issues this
18 afternoon. One is the need for a viable federal
19 deep geologic repository, and the second is the
20 environmental impact of nuclear fuel
21 4... transportation. Talking about the need for a
22 viable federal waste management system, there are
23 103 operating nuclear power plants in the United
24 States today, as we've heard from several speakers
25 earlier, that supply approximately 20 percent of

1 4 cont. our electricity. Nuclear-generated electricity
2 avoids 155 million metric tons of carbon
3 equivalent every year; and without the emissions
4 avoidance from nuclear generation, required
5 reductions in greenhouse gas emissions would
6 increase by more than 50 percent. Nuclear
7 generation also avoids 2.4 million tons of
8 nitrogen oxide and 5.1 million tons of sulfur
9 dioxide annually. Increased nuclear capacity and
10 improved efficiency at nuclear power plants since
11 1993 represents one third of the voluntary carbon
12 reductions from U.S. electric companies in the
13 United States. In the acid rain program, 21
14 states showed that between 1990 and 1995 a 16.4-
15 percent increase of nuclear generation helped to
16 avoid 480,000 tons of sulfur dioxide or 37 percent
17 of the required emissions reduction. According to
18 the Department of Energy and Energy Information
19 Administration report on voluntary reporting of
20 greenhouse gases, the single most effective
21 emissions-control strategy for utilities was to
22 increase nuclear generation.
23 Why am I telling you all of this? Because if
24 the United States wants to ensure the continued
25 benefits of nuclear power to providing clean air

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1 4 cont. and offset greenhouse gas emissions and air
2 pollutants such as sulfur dioxide and nitrous
3 oxide -- nitrous oxides, we must have a viable
4 federal waste management system in place.
5 The publication of this draft environmental
6 impact study for Yucca Mountain is a major step by
7 the Department of Energy in assessing the
8 environmental impacts of a permanent repository at
9 Yucca Mountain, and it is a much-needed action to
10 ensure the future viability of nuclear energy.
11 1... The DEIS findings demonstrate that proposed
12 actions of constructing and operating a repository
13 at Yucca Mountain result in relatively small and
14 acceptable environmental impacts when compared to
15 the no-action alternatives evaluated. Leaving used
16 nuclear fuel at reactor sites on an indefinite
17 basis is not an alternative, and it is not sound
18 national policy. We must take responsibility for
19 disposing of used nuclear fuel and not leave it
20 for other generations to deal with. The conclusion
21 that the impact of the proposed actions are small
22 was reached by DOE without taking into account
23 that there are additional benefits associated with
24 the continued viability of nuclear power and in
25 spite of DOE's overestimation, in my opinion, of a

1 1 cont. number of environmental consequences associated
2 with the proposed action.
3 2 DOE admits within the environmental impact
4 settlement that it's underpredicted the
5 consequences of the no-action alternative. I can
6 quote to you; it says, "The EIS provides a
7 comparison of the probable costs and risks
8 associated with continuing the present temporary
9 storage of spent nuclear fuel and high-level
10 radioactive waste with the costs and risks of the
11 proposed action at Yucca Mountain. In order not
12 to influence the results of the EIS to favor the
13 repository, DOE used assumptions that generally
14 resulted in lower predicted impacts for the no-
15 action alternative. Using comparable assumptions
16 as they used in the proposed action would have
17 resulted in even higher doses in the no-action
18 alternative."
19 5... Talking about used-nuclear-fuel safety, as
20 mentioned by many others today, the U.S. has
21 transported 3,000 cask shipments over the past 30
22 years from nuclear reactors and commercial
23 reactors around the country. During that same
24 time there have been approximately 300 shipments
25 of Navy spent nuclear fuel traveling in the U.S.

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1 5 cont. without incident. Internationally there have been
2 approximately 30,000 cask shipments of used
3 nuclear fuel in the past 30 years. Let's put that
4 into perspective. What we're talking about with
5 this program under the most probable scenario are
6 between 10 and 15,000 shipments of spent nuclear
7 fuel over the next 30 to 40 years. That's already
8 been done and doubled internationally.
9 MR. LAWSON: Thirty seconds.
10 3 MS. SUPKO: I'd also like to state that the
11 EIS overestimates the impact of spent fuel
12 transportation. Just as an example, the NEPA
13 analysis requires that DOE assume accident events
14 with probabilities of greater than one in ten
15 million, whereas other public policy requires
16 accidents to be considered with probabilities of
17 greater than one in one million, which basically
18 results in a conservatism and an overestimation of
19 the consequences of a severe accident.
20 In concluding, the EIS demonstrates that the
21 impacts of spent fuel transportation are small,
22 even considering DOE's overestimation of the
23 transportation impacts. This is a positive step
24 in the direction of moving forward with the
25 6... federal waste management program. And I think the

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6 cont. public comment period is very helpful in stating everyone's concerns, and I hope that DOE addresses them in the final environmental impact statement. Thank you.

MR. LAWSON: thank you. Our next speaker is Ed Arnold, to be followed by Pat Ortmeyer and Bobbie Wrenn Banks.

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