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1 {York Stenographic Services, Inc.}
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- 2 RPTS BURDETTE
- 3 HIF212.180
- 4 OVERSIGHT OF DOE'S STRATEGY FOR THE MANAGEMENT AND DISPOSAL
- 5 OF USED NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE
- 6 WEDNESDAY, JULY 31, 2013
- 7 House of Representatives
- 8 Subcommittee on Environment and the Economy
- 9 Committee on Energy and Commerce
- 10 Washington, D.C.

- 11 The Subcommittee met, pursuant to call, at 2:04 p.m., in
- 12 Room 2123 of the Rayburn House Office Building, Hon. John
- 13 Shimkus [Chairman of the Subcommittee] presiding.
- 14 Members present: Representatives Shimkus, Hall,
- 15 Whitfield, Murphy, Latta, Harper, McKinley, Bilirakis,
- 16 Johnson, Barton, Upton (ex officio), Tonko, Green, Capps,

McNerney, Dingell, Barrow, Matsui, and Waxman (ex officio). 17 18 Staff present: Nick Abraham, Legislative Clerk; Gary 19 Andres, Staff Director; Charlotte Baker, Press Secretary; 20 David Bell, Staff Assistant; Sean Bonyun, Communications Director; Allison Busbee, Policy Coordinator, Energy & Power; 21 22 Annie Caputo, Professional Staff Member; David McCarthy, 23 Chief Counsel, Environment & Economy; Brandon Mooney, 24 Professional Staff Member; Chris Sarley, Policy Coordinator, Environment & Economy; Peter Spencer, Professional Staff 25 Member, Oversight; Tom Wilbur, Digital Media Advisor; Jeff 26 27 Baran, Democratic Senior Counsel; Alison Cassady, Democratic

Senior Professional Staff Member; and Caitlin Haberman,

Democratic Policy Analyst.

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30 Mr. {Shimkus.} I would like to call this hearing to 31 order. I want to thank the Secretary for coming. I would 32 like to recognize myself for the 5-minute opening statement. 33 Today, we review the ``Department of Energy's Strategy 34 for the Management and Disposal of Used Nuclear Fuel and 35 High-level Radioactive Waste.'' We are pleased to have 36 Secretary Moniz with us, looking forward to hearing his 37 testimony. In 2008, after decades of research, DOE filed an 8,700-38 page license application at the Nuclear Regulatory Commission 39 40 for permission to construct a repository at Yucca Mountain. 41 In 2009, the Administration unilaterally decided to cancel 42 the Yucca Mountain program and sought to withdraw the license 43 application. The NRC, which is mandated under the Nuclear 44 Waste Policy Act to review the license, denied DOE's request 45 but not before the then-NRC chairman directed the staff to 46 cease its review, an affair this committee investigated at 47 The matter of whether the NRC should resume its review, of course, has now been pending for quite some time 48

before the D.C. Circuit Court of Appeals.

49

50 Three weeks ago, 335 Members of the House, including more than half my Democrats, voted to preserve funding for 51 52 the NRC's Yucca Mountain license review in the Energy and Water appropriations bill. This vote showed a remarkable 53 54 bipartisan agreement that the NRC should continue its work as 55 an independent safety regulator and issue a decision on 56 whether or not Yucca Mountain would be a safe repository. 57 After over 30 years and \$15 billion, the American people 58 deserve to know the NRC's independent, objective conclusion. 59 And, Mr. Secretary, I would also just add that regardless of what the results are, this scientific research 60 61 at the conclusion would be helpful for any reason, any future repository. The research developed on Yucca Mountain and 62 63 finalizing the scientific research would be helpful as we 64 move in other directions if we were to do that. So it is 65 very important to finish the scientific report. In light of all this, DOE's new waste strategy very much 66 67 represents the Administration's effort to start from scratch 68 as if the Nuclear Waste Policy Act doesn't exist or at least as if most of it doesn't exist. 69 70 At the end of June, I sent a letter to the agency asking

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basic questions about the legal authority and funding for the
actions DOE is currently undertaking. At this time, I would
like to ask that my letter, together with DOE's response and
attachment, be included in the hearing record.
Without objection, so ordered.

[The information follows:]
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******* COMMITTEE INSERT *********

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         Mr. {Shimkus.} DOE's response cited a few convenient
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    sections of the Nuclear Waste Policy Act as providing the
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    authority for the Department to conduct certain work. But,
    and I want to underscore this, the agency did not cite
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    Section 302(d) regarding the use of the Nuclear Waste Fund
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    which states: ``No amount may be expended by the Secretary
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    under this subtitle for the construction or expansion of any
    facility unless such construction or expansion is expressly
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    authorized by this or subsequent legislation. The Secretary
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87
    hereby is authorized to construct one repository and one test
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    and evaluation facility, '' which, of course, with the law is
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    Yucca Mountain.
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         DOE estimates the cost of starting over to be $5.6
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    billion for just the first 10 years. At the end of those 10
92
    years, DOE projects to have only a pilot facility operating
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    with a repository not expected to be operational until 2048.
94
    Ladies and gentlemen, that is 65 years after Congress first
95
    passed the Nuclear Waste Policy Act and after the reactors we
    have operating today have most likely closed.
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         DOE's Strategy would require legislation but Secretary
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    Moniz indicated in our hearing last month that the
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    Administration does not intend to propose legislation. DOE
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     is in this situation because the White House decided not to
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    follow the law that Congress has already passed. With this
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     Strategy, DOE expects to simply write off $15 billion in
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     favor of a pilot facility that might or may not get sited
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    after this Administration ends. I firmly believe the public
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    deserves to know the truth about Yucca Mountain. We all need
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     to know about all the money that has been spent and the
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     science behind it not just for ourselves but for our children
    and our grandchildren. We deserve a permanent solution, not
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     just the hope of a temporary fix.
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          [The prepared statement of Mr. Shimkus follows:]
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******** COMMITTEE INSERT *********

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Mr. {Shimkus.} And with this, I would like to yield now
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     to my colleague, Mr. Tonko, the ranking member of the
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    subcommittee, for 5 minutes.
          Mr. {Tonko.} Thank you, Mr. Chair. And welcome,
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     Secretary Moniz. Thank you for appearing before this
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     subcommittee on a very important topic this afternoon.
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          For decades, nuclear power plants have provided
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     electricity through the fleet of reactors located across our
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     country. Over the same period, we have generated substantial
    amounts of waste that have yet to be secured in a long-term
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122
     storage facility. We have debated this issue. We have
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    funded research and development. We have passed laws
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    designating a storage facility and have held numerous
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    oversight hearings over the years. There have been reports
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    by the National Academy of Sciences, the Government
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    Accountability Office, industry and nongovernmental groups,
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    and then most recently, as we all know, the President's Blue
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    Ribbon Commission. But we still have not solved the nuclear
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    waste problem.
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We have a long-term storage facility and yet we do not.

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We do not have interim storage facilities or a policy of 132 establishing them, and yet we do. I don't know what else you 133 134 would call the storage facilities at each power plant site 135 around the country. They are now de facto interim storage 136 facilities. If nuclear power is going to continue to play a 137 significant role in delivering baseload electrical power, we 138 need a resolution to this situation. It will not be easy and 139 it will be most likely expensive. But the alternative is 140 also expensive and provides less safety, less security than a 141 functioning, ordered process for dealing with spent fuel. I realize that many people feel this resolution is to 142 143 complete the process to open Yucca Mountain. Well, the Yucca 144 Mountain facility is not open at this time and it does not 145 appear it will be open in the near future. In the meantime, 146 spent fuel continues to accumulate and penalty fees continue to accrue. It appears to me that it is worth examining 147 148 alternatives to current law and the current situation. 149 Partisan bickering will not solve this situation and strictly 150 adhering to past or current positions will not solve this 151 problem either. The Administration's strategy, based on the work done by the Blue Ribbon Commission in 2012, also has its 152

challenges and its unknowns. 153 154 If we are to pursue a system that includes both interim 155 and long-term storage of waste, how do we proceed? How many 156 interim sites will be needed? How much waste can or should be stored there? And what time period qualifies as interim? 157 158 Where will they be located? How do we ensure the 159 transportation to these sites is done and done safely? Are 160 there States and localities willing to host repositories, 161 either interim or permanent? What are the costs and can we access the necessary funds to the fund established to deal 162 with this problem? 163 164 I do not expect to hear definitive answers to all of these questions here this afternoon. Today's hearing does, 165 however, give us an opportunity to examine all options for 166 167 moving forward. In any case, it appears congressional action 168 is needed, and I am willing to work with my colleagues to address this issue. I do not see much future for nuclear 169 170 power if we do not find a way to deal with this issue. 171 Again, Mr. Secretary, I thank you for being here this afternoon and I thank you, Chairman Shimkus, for holding this 172 very important hearing. 173

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          Mr. {Shimkus.} The gentleman yields back his time.
          The chair now recognizes the chairman of the full
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     committee, Mr. Upton, for 5 minutes.
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          The {Chairman.} Thank you, Mr. Chairman, for holding
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     this hearing and certainly for your leadership on the issue.
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    And, Secretary Moniz, we certainly appreciate you being here
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     as well this afternoon.
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          During your tenure as Secretary, you and I will work
     together on a wide array of issues, and I certainly
185
     appreciate the time that we have spent since you have been
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187
     Secretary and look forward down the road as well. I
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     appreciate that dialogue on a number of issues. But
     certainly the nuclear waste disposal is a great concern for
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190
    me and one that I sank my teeth into early on when I came
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     onto this committee and myself and Mr. Towns, with Mr.
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    Dingell's help, we were able to broker a pretty good deal
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    back in the '90s.
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          You know, the Nuclear Waste Policy Act is the law on the
     subject, and as Chairman Shimkus stated, that means Yucca
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    Mountain. Shutting down the repository program, the
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     Administration did not elaborate on a technical or safety
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     concern, merely that it was ``unworkable.'' This was
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     followed by the former Nuclear Regulatory Commission
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     chairman, who unilaterally ceased the staff's review of the
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     license application one month--one month--before a key safety
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     evaluation report was to be publicly released with the
203
     agency's conclusion about the safety of Yucca.
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          Electricity consumers pay for the disposal of civilian
205
     spent nuclear fuel and taxpayers pay for disposal of nuclear
     waste from the Atomic Energy Defense program. In Michigan,
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     our consumers alone have paid nearly $600 million into the
207
208
     fund. Fifteen billion was invested in this repository
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     program and got us within just a month of knowing whether we
     have a scientifically safe and sound location. And after
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211
     spending that 15 billion, the public certainly should have
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     the right to know what the NRC concluded. Instead, the
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     strategy unfortunately abandoned that investment, expecting
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     consumers and taxpayers to foot the bill for another 5.6
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     billion for the first 10 years to start really back at square
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     one.
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217 By the end of this fiscal year, DOE will have spent

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nearly \$80 million in support of that strategy. And I 219 realize that is is the result of an omnibus appropriation for 220 fiscal year 2012 and a continuing resolution for '13 and I 221 strongly support the efforts of the House Appropriations 222 Committee to correct this situation. 223 The House Energy and Water appropriation bill did 224 clarify that the Nuclear Waste Fund is only to be used for 225 its intended purpose: Yucca Mountain. The bill also 226 eliminated the burden currently shouldered by the taxpayer 227 for the Administration's decision to start over. So questions also have arisen about whether the Nuclear 228 229 Waste Fund would be adequate under DOE's new approach. GAO 230 doesn't believe it is. Previous cost estimates indicated the 231 fund would be adequate to finish building and operating 232 Yucca, but GAO questions whether the fund would be adequate 233 to cover the costs of pursuing an alternate repository, in 234 addition to two interim storage facilities and multiple 235 transportation campaigns. 236 The Administration touts its strategy as saving taxpayer money by mitigating DOE liability for failure to accept and 237 dispose of spent fuel, and we have asked the GAO to analyze 238

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that. Last August, a year ago, GAO said that Yucca could be
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240
     completed faster than a new effort to build interim storage,
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     thus making Yucca the best option for mitigating taxpayer
242
     liability.
243
          I certainly remain committed to ensuring that consumers
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     get the repository that they have paid for and that the costs
245
     to the taxpayers are minimized. And right now, it seems as
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     though Yucca does remain the clear answer to both of those
247
     problems. And it is the law.
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          So, Mr. Secretary, I look forward to our continued
     dialogue in the weeks and months ahead to solve a long-term
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250
     nuclear waste disposal issue.
251
          I yield back my time.
252
          [The prepared statement of Mr. Upton follows:]
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******** COMMITTEE INSERT *********

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Mr. {Shimkus.} The gentleman yields back his time.
254
     chair now recognizes the ranking member of the full
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256
     committee, Mr. Waxman, for 5 minutes.
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          Mr. {Waxman.} Mr. Chairman, in 1982 Congress passed the
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     Nuclear Waste Policy Act. The Act sought to establish a fair
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     and science-based process for selecting two repository sites
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     for spent nuclear fuel and high-level radioactive waste.
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     Under this approach, no one State or locality would bear the
     entire burden of the Nation's nuclear waste.
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          In the years that followed, the Department of Energy
     began evaluating a number of potential repository sites.
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     Then, just 5 years later, in 1987, Congress made the decision
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     to designate Yucca Mountain in Nevada as the sole site to be
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     considered for a permanent geologic repository. There was no
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     plan B. This decision was widely viewed as political and
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     provoked strong opposition in Nevada. Ever since Congress
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     decided to short-circuit the site selection process, the
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     State of Nevada and a majority of its citizens have opposed
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     the Yucca Mountain project.
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          In 2002, President Bush recommended the Yucca Mountain
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274 site to Congress. Using the State veto procedures set forth in the Nuclear Waste Policy Act, Nevada then filed an 275 official Notice of Disapproval of the site. Congress 276 proceeded to override Nevada's veto by enacting a resolution 277 278 that was reported by this committee. Twenty-five years after 279 the 1987 amendments to the Nuclear Waste Policy Act, it is 280 clear that this Washington-knows-best approach has not 281 worked. The Department of Energy has terminated its Yucca 282 Mountain activities. President Obama wisely sought a new approach. He 283 directed Secretary Chu to charter a Blue Ribbon Commission to 284 285 perform a comprehensive review of U.S. policies for managing nuclear waste and to recommend a new strategy. Last year, we 286 287 heard testimony from the co-chairs of the Blue Ribbon 288 Commission on the recommendations that resulted from their 2-289 year effort. Since then, the Department of Energy has 290 released a strategy for implementing many of those 291 recommendations. 292 The Commission recommendations and the DOE's strategy deserve our serious consideration. They raise a number of 293 294 important policy questions such as whether a new organization

295 should be established to address the nuclear waste problem, 296 how nuclear waste fees should be used, and whether one or 297 more centralized storage facilities should be developed in 298 addition to one or more geologic repositories. 299 These are policy questions that require a legislative 300 response. Answering these questions requires an open mind 301 and a willingness to move past a narrow obsession with Yucca 302 Mountain. The Senate appears to be moving forward. Four 303 Senators recently introduced bipartisan nuclear waste 304 legislation. The bill may not have the final answer to every question, but it represents a genuine effort to get past 305 306 ideology and begin grappling with these tough issues. We 307 should seek a similar constructive approach in the House. Ιf 308 we pound the same old drumbeat on Yucca Mountain, all we will 309 get is more gridlock, which serves no one well. 310 Secretary Moniz, you do us a great service by appearing 311 before us today before this subcommittee. It is unusual to 312 have a Department Secretary testify before this subcommittee. 313 We have had Cabinet officials who testify before the full 314 committee. It is a testament to your commitment on this 315 issue.

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          Mr. {Shimkus.} And I thank my colleague. The gentleman
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     yields back his time.
          And I just want to reiterate I agree with the ranking
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     member that we do appreciate you coming here. We know it is
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327
     extraordinary for a Secretary to come to a lowly
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     subcommittee, but we are pleased to have you.
          And with that, I would like to recognize you for 5
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330
     minutes for your opening statement.
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331
     ^STATEMENT OF ERNEST MONIZ, SECRETARY, U.S. DEPARTMENT OF
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    ENERGY
          Secretary {Moniz.} Thank you, Mr. Chairman, but I will
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     start by disputing your characterization as lowly. I think
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     and actually I would say, as you both have said, it may be a
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    bit unusual but I really appreciate the chance to come here
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    and to start a dialogue on this important issue. As you
    know, I have been working on this issue, thinking about this
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     issue for a long time, and I come here in a sense of
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    hopefully we can pragmatically find a path forward.
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          So, Chairman Shimkus and Upton and Ranking Members Tonko
     and Waxman, members of the committee, thank you again for
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343
     inviting me here to discuss nuclear waste issues and the
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     activities at the Administration is ongoing to meet the
345
     challenge of managing and disposing of used nuclear fuel and
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    high-level radioactive waste.
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          As was stated in January of this year, the
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    Administration, Department of Energy released its strategy
     for the management and disposal of used nuclear fuel and
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high-level radioactive waste based on the recommendations of 350 the Blue Ribbon Commission on which, again, I did have the 351 352 pleasure of serving under the leadership of Lee Hamilton and 353 Brent Scowcroft. 354 The Administration clearly embraces the principles of 355 the Commission's core recommendations, supports the goal of 356 establishing a new, workable, long-term solution for nuclear 357 waste management. I would also like to observe, as was 358 noted, that a bipartisan group of Senators has introduced a bill adopting the principles of the Blue Ribbon Commission. 359 I testified before that Senate Energy Committee yesterday and 360 361 was encouraged by the progress they had made towards addressing the most complex of issues. And I appear today 362 before this committee to reinforce that the Administration is 363 364 ready and willing to engage with both Chambers of Congress to 365 move forward. 366 Any workable solution for the final disposition of used 367 fuel and nuclear waste must be based not only on sound 368 science but also on achieving public acceptance at the local, state, and tribal levels. When this Administration took 369 370 office, the timeline for opening Yucca Mountain had already

been pushed back by 2 decades, stalled by public protest and 371 legal opposition with no end in sight. It was clear the 372 373 stalemate couldn't continue indefinitely. 374 Rather than continuing to spend billions of dollars more 375 on a project that faces such strong opposition, the 376 Administration believes a pathway similar to that the Blue 377 Ribbon Commission laid out, a consent-based solution for the 378 long-term management of our used fuel and nuclear waste is 379 one that meets the country's national energy security needs, has the potential to gain the necessary public acceptance, 380 and can scale to accommodate the increased needs for future 381 382 that includes expanding nuclear power and deployment. 383 The strategy lays out plans to implement with the 384 appropriate authorizations from Congress--and we do need 385 those authorizations -- a long-term program that begins 386 operations of a pilot interim storage facility, advances 387 toward the siting and licensing of a larger interim storage 388 facility, and makes demonstrable progress of the siting and 389 characterization of repository sites to facilitate the availability of one or more geological repositories. 390 391 Certainly, consolidated storage is a critical component

392 of an overall used fuel and waste management system and offers a number of benefits such as offering an opportunity 393 394 to remove fuel from shutdown reactors, meeting waste 395 acceptance obligations of the Federal Government sooner, and 396 reducing the government's liabilities caused by delayed waste 397 acceptance. 398 No matter how many facilities or what specific form they 399 take, we believe a consent-based approach to siting is 400 critical to success. The Administration supports working 401 with Congress to develop a consent-based process that is 402 transparent, adaptive, and technically sound, as recommended 403 by the Commission. The Commission emphasized that 404 flexibility, patience, responsiveness, and a heavy emphasis 405 on consultation and cooperation will all be necessary in the 406 siting process and in all aspects of implementation. 407 The strategy also highlights the need for a new waste 408 management and disposal organization to provide the 409 stability, focus, and credibility to build public trust and 410 confidence. Again, there are multiple models that exist along a continuum from a government program to federal 411 412 corporations. But whatever form the new entity takes,

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organizational stability and appropriate level of autonomy,
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     leadership continuity, oversight and accountability, and
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     public credibility are all critical attributes for future
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     success.
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          Finally, the Department has also initiated the Blue
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     Ribbon Commission recommended revisiting of the decision to
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     co-mingle commercial used fuel and defense waste.
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          So we are facing a unique opportunity to address the
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     needs of the back end of the nuclear fuel cycle by setting it
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     on a sustainable path and providing the flexibility needed to
     engage potential host communities and anticipated
423
424
     advancements in technology. We need to move forward with
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     tangible progress toward used fuel acceptance initially from
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     closed reactor sites and providing more certainty for the
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     nuclear industry. This process is critical to assure the
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     benefits of nuclear power are available to current and future
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     generations.
430
          And I will be happy to answer any questions that you
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[The prepared statement of Secretary Moniz follows:]

Thank you.

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have, Mr. Chairman.

433 ************** INSERT 1 **********

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Mr. {Shimkus.} Thank you, Mr. Secretary. Now, I would
434
     like to recognize myself for 5 minutes for the first round of
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     questions.
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437
          Mr. Secretary, DOE's strategy is built on the premise
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     that States will volunteer to host interim storage or a
439
     repository facility. Your testimony mentions reports that
440
     ``a number of communities are exploring the possibility of
441
    hosting a consolidated storage facility.'' So the question
442
     is what States have indicated interest in hosting a facility?
          Secretary {Moniz.} First, I want to clarify, Mr.
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444
     Chairman, that of course at this stage we are not engaging in
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     any kind of negotiations or anything of that type. However,
     there have been a number of public reports, and in fact, one
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     county has in fact passed a resolution expressing interest.
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     Based also upon the experiences in Europe, we believe there
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     are reasons for optimism that that can happen.
450
          Mr. {Shimkus.} So we don't have States that are showing
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     interest right now nor do we have Governors or U.S. Senators
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     who are making a pitch for their State to be considered?
          Secretary {Moniz.} Well, it is certainly premature for
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any so-called pitch because right now we don't even have the 454 455 authorities to move forward. 456 Mr. {Shimkus.} Well, no, it is not unlikely with the Blue Ribbon Commission and with the statements by this 457 Administration for States to have come forward and tried to 458 459 organize their own political support with the Governor's 460 office and their sitting Senators to be making this pitch 461 that we would consider it. I mean there is nothing in law 462 that says they can't start trying to mobilize public support in their State for following up on this proposal, is there? 463 Secretary {Moniz.} Well, no. And again, as I have 464 465 said, there have been certainly reports in the media--Mr. {Shimkus.} But you can't tell us of any States 466 which have done that initial work other than this one county 467 468 in some State? 469 Secretary {Moniz.} Well, one county that is in Texas, I 470 mean, it was in public. A public resolution was passed. 471 Recently, there were media reports which I have not attempted 472 in any way to confirm, but there were statements made in Mississippi. There have been a number of statements made. 473 474 But again, until we have the authorities, can put out a

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request for proposals, then I think frankly our position to
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     provide some technical support for developing the information
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     for potential communities I think would be premature frankly.
          Mr. {Shimkus.} Well, it seems to me that a majority of
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     these siting efforts and up with local community supporting a
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     facility, maybe this county, and state-level officials
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     opposing it. In fact, if I remember, the history of Yucca
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     Mountain was the State General Assembly passed a resolution
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     in support of the initial siting of Yucca Mountain.
          We also have, you know, Nye County v. Nevada, Private
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     Fuel Storage v. Utah, and your written testimony mentions
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     consent-based areas that might be successful, i.e., Sweden
     and Finland, but you fail to mention England, a consent-based
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     approach that the Commission touted, and what happened to
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     that consent-based approach?
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490
          Secretary {Moniz.} These are tortuous paths so--
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          Mr. {Shimkus.} So it was not successful as an--
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          Secretary {Moniz.} Yes, we will--
          Mr. {Shimkus.} So, I mean, my point is what makes you
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     believe that another consent-based approach somewhere in this
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     country is not going to end up 30 years later and $15 billion
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in the hole just like we have right now at Yucca Mountain?
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497
          Secretary {Moniz.} Well, look, we all know all of these
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     issues around nuclear waste take time. One example that, you
    know, it is not a high-level waste repository but--
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          Mr. {Shimkus.} Which is a lot different than what we
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501
     are talking about.
502
          Secretary {Moniz.} But in WIPP with the transuranic
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     facility we did have a similar situation with the State and
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    now we have a very successful--
505
          Mr. {Shimkus.} But I have personal knowledge of a U.S.
     Senator who fought against that as the Attorney General who
506
507
     is now a sitting U.S. Senator from that State. So--
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          Secretary {Moniz.} Yes.
          Mr. {Shimkus.} --we better be careful. I think this
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     illusion that this consent-based approach is going to be
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    panacea I am not sure is supported by the facts.
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          Another thing that the Blue Ribbon Commission that you
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     are also promoting is that incentives are a key to success.
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    And the estimated cost of this effort from the beginning is
     5.6 billion over 10 years. Why not offer this money to
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516
    Nevada?
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Secretary {Moniz.} Again, the recommendation is around
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     a consent-based approach. Any State and community can come
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519
     forward.
          Mr. {Shimkus.} Part of the problem with the State of
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    Nevada is they say show me the money. We don't believe you
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522
    will follow through and there are not going to be any
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     additional benefits. Wouldn't $5.6 billion to a State that
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    has a struggling economy, they could rebuild its roads, bring
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     in rail lines, and probably continue to do what we have and
     the Department of Energy has done with UNLV, continue to
526
     support their advanced nuclear energy technology, don't you
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528
     think that would be a good lure?
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          Secretary {Moniz.} Again, we are advocating a consent-
530
    based approach. Any State can come forward, and we do
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    believe that research, materials testing, characterization
     facilities are an important part of the storage program and
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533
     it presumably would be part of a possible ``incentive''
534
    program.
535
          Mr. {Shimkus.}
                          Thank you, Mr. Secretary. And I yield
     to Mr. Tonko for 5 minutes for questions.
536
          Mr. {Tonko.} Thank you, Mr. Chair.
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For the last few decades, the nuclear waste problem has 538 been intractable. I think the Blue Ribbon Commission 539 540 recommendations and the Department of Energy strategy document are helping to strike up conversation about where we 541 542 go from here. Congress has an important role to play in 543 finding solutions along with the Departments and the 544 Commission. 545 Secretary Moniz, the Blue Ribbon Commission recommended 546 a consent-based siting process for one or more centralized interim storage facilities and one or more permanent 547 repositories. My understanding is that under current law the 548 549 only repository site that can legally be considered is Yucca Mountain, and interim centralized storage is not an option in 550 551 the absence of Yucca. Is that correct? 552 Secretary {Moniz.} I believe that is a correct reading 553 of the--554 Mr. {Tonko.} So legislation would be necessary to 555 establish a new siting process that ensures a project has the 556 consent of the state and local governments? Secretary {Moniz.} Yes, sir. In fact, the Blue Ribbon 557 Commission noted that almost all of the major steps required 558

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new statutory authorities.
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          Mr. {Tonko.} Okay. Thank you. The Blue Ribbon
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561
    Commission recommended that a new organization be created to
562
    manage and dispose of the Nation's nuclear waste. That is
     contemplated in the DOE's strategy, too. Would congressional
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564
     action be needed to establish an independent agency and
565
     transfer the necessary functions and resources to that
566
     agency?
          Secretary {Moniz.} Yes, sir. It would be.
567
          Mr. {Tonko.} There are also tricky funding and
568
     appropriations issues that need to be addressed to make sure
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570
     that the funds put aside for constructing a repository or
571
     storage facility can actually be used for that purpose.
     Congress would need to address those issues through
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573
     legislation, I believe. Is that correct?
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          Secretary {Moniz.} Yes, sir. And again, if I may
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     comment, we emphasized in the Commission and it is also true
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     in the Administration's strategy, that is what is most
577
     important is that whatever form the organization takes, it
    has the proper authorities. Key among those is a proper
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579
    access to the funds.
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Mr. {Tonko.} Thank you. And it sounds to me like DOE
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    has taken an important step in developing a strategy that you
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582
     can't solve this problem alone, can you?
583
          Secretary {Moniz.} Correct, sir.
584
          Mr. {Tonko.} So there is a bipartisan effort in the
585
     Senate to develop legislation to begin addressing these very
586
     tough issues. We haven't seen any effort on the House side,
587
     though. House Republicans seem unwilling to move past their
588
     fixation on Yucca Mountain. So my question would be while
     the Republicans seem to be waiting for a resolution to a
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590
    pending lawsuit seeking to require the Nuclear Regulatory
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     Commission to continue its work on its withdrawn DOE license
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     application for Yucca, but a court opinion can't fix the
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     funding problems or establish a new organization to handle
594
     the waste or and the staunch opposition to Yucca in Nevada,
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     can it?
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          Secretary {Moniz.} That is correct. And I would just
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     add that, again, our view is that quite independent of the
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     court decision, we should have these parallel tracks, the
     storage and repository development, and for that we will need
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600
     the new authorities.
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          Mr. {Tonko.} Mr. Secretary, what message would you
     share with members of the Subcommittee and the broader
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603
     Committee who remain focused exclusively on Yucca Mountain?
          Secretary {Moniz.} Well, again, our view is that we
604
     have obviously been having this stalemate over Yucca
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606
     Mountain.
                There is a very good chance this may continue for
607
     some time. There are many steps needed. Even if the court
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     were to rule for the NRC to proceed, there are still other
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     actions of Congress, many actions in the State, et cetera.
     And again, our main message is that it will work out one way
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     or the other but let's move together on taking some practical
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     steps that require new authorities that will move the ball
     forward, provide more confidence to industry, and start
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     getting the government accepting waste in the earliest
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615
     possible time.
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          Mr. {Tonko.} What is the perceived timeline here if we
617
     are to move forward and with the ultimate goal of having a
618
     new repository available? Is there a certain given timeline
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     that you can imagine would be required at a minimum?
          Secretary {Moniz.} Well, again, the Administration
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621
     strategy noted that we feel that we can certainly move if we
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- 622 have authority, let's say, this year, then we can move on the
- 623 first interim storage site within a decade. That would allow
- 624 us, for example, to move fuel away from the closed reactor
- 625 sites, which would be, I think, an important step, but that a
- 626 repository is likely to take decades to actually get
- 627 functioning.
- 628 Mr. {Tonko.} Thank you. Thank you, Mr. Secretary.
- 629 And, Mr. Chair, I yield back.
- 630 Mr. {Shimkus.} I thank my colleague. I would just
- 631 remind him of the vote on the Floor, 335 voting for Yucca,
- 632 118 Democrat, so it is just not a Republican fixation.
- Now, I would like to yield to the chairman of the full
- 634 committee, Mr. Upton, for 5 minutes.
- The {Chairman.} Well, thank you, Mr. Chairman.
- And, again, I really appreciate, Mr. Secretary, you
- 637 being here and sharing your comments. This is such an
- 638 important issue for the country and you are right, we don't
- 639 want gridlock on this. I would note it has been bipartisan
- 640 in terms of trying to move a path forward for a couple of
- 641 decades actually. And certainly your willingness to engage
- 642 and to move the ball forward is very much appreciated.

And as Mr. Shimkus just said, and the votes we have had 643 the last couple of years, not only this year but last year, 644 645 the votes--326 to 81, 335 to 81, 337 to 87--is a pretty clear 646 indication that the House at least has a very strong 647 bipartisan majority towards trying to get this issue 648 resolved. I would note that Mr. Dingell and myself wrote an 649 op-ed piece about a month ago or so again urging the court to 650 try and help resolve this and allow the NRC to move forward. 651 But let me go back. When you testified before our committee in June, Chairman Shimkus asked if you were aware 652 of any technical or scientific issues that would prevent 653 654 Yucca from being a safe repository, and you responded at that time, ``this is an NRC decision ultimately to be taken.'' 655 656 And I certainly agree. And the public debate would clearly 657 benefit from the NRC completing the independent assessment of 658 Yucca. 659 Fortunately, we know that both the NRC and DOE do have 660 the funds to support the completion of the NRC's safety evaluation report. However, we are all waiting for that D.C. 661 Circuit Court of Appeals -- maybe it will be coming this 662 663 afternoon; who knows--which seems to be taking an inordinate

amount of time compared to a number of other cases that they 664 665 have had. One of the issues that concerns me is what the ultimate 666 667 cost of DOE's new strategy would be to the consumers and the taxpayers. We know that in '09, the Fee Adequacy Assessment 668 669 showed that the fee was adequate to fund Yucca Mountain. 670 However, I am going to quote from DOE's Secretarial 671 Determination of the adequacy of the Nuclear Waste Fund fees 672 in January of this year before you are there. It said, ``the consent-based approach to facility siting set forth in the 673 strategy makes it impossible to assign meaningful 674 675 probabilities to any geologic medium, and by extension, any cost estimate.'' Those were their words. So do you know 676 677 whether the Nuclear Waste Fund today will be adequate to pay 678 for all the facilities contained in the DOE strategy? 679 Secretary {Moniz.} Mr. Chairman, certainly my 680 understanding of the revised analysis that was done in 681 response to the court, it looked at -- I may get this not 682 quite--I think it was something like 42 different scenarios into the future and found that with continuation of the one-683 mill-per-kilowatt-hour fee, that kind of rested kind of in 684

the middle of the various scenarios. And so the argument was 685 that at this stage the one-mill-per-kilowatt-hour fee would 686 seem to be an appropriate place to go but there is 687 considerable uncertainty of the lifetime costs depending upon 688 which of those scenarios ends up being followed. 689 690 The {Chairman.} Do you know whether the Nuclear Waste 691 Fund could absorb the \$9 billion write-off for abandoning 692 Yucca? 693 Secretary {Moniz.} Well, if one looks at the ensemble of the scenarios in that Fee Adequacy Reassessment, the 694 uncertainties of the spread was much, much larger than the 695 696 amount that you have said. So that would again be in the uncertainties that we have today to be realized only over 697 decades. 698 699 The {Chairman.} Yes. So for us in Michigan, that 1/10-700 of-a-mill fee has meant \$600 million in essence collected 701 from Michigan ratepayers. And so if you know Michigan at 702 all, we have got one plant no longer operating, the Big Rock plant. I have two in my district, two facilities that are 703 704 currently operating, and they have both run out of room so they are doing dry storage. I know Mr. Dingell has got a 705

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facility in his district as well.
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          So ultimately, we really do need this to be resolved and
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     get on a glide path that can assure that there will be one
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     safe place, at least one safe place for the high-level
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     nuclear waste. And I appreciate your willingness to work
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     with us and with our committee to ultimately get this thing
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     done.
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          Secretary {Moniz.} If I may comment, I think the
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     situations that you have described are exactly what motivated
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     the Blue Ribbon Commission discussions that we feel, and the
     Administration has agreed with this, that moving to an
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717
     initial kind of fast track pilot interim storage facility
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     could handle the fuel from those shutdown reactors, and that
     would allow, you know, restoration of that site to other
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720
     activities.
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          And of course we know that a substantial fraction of
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     plants are running out of space and that is where the
723
     consolidated storage site--the issue is fuel acceptance. I
724
     mean that is the key issue for the plants. And this would
     allow us to start to move the fuel and both alleviate the
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     issues at the plants and lower the liabilities for the
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government by beginning to move the fuel. So that is why I 727 mean, again, we think that a parallel track of the storage 728 729 and repository or repositories will give us the flexibility and the adaptability to start moving and except fuel in the 730 731 next decade. The {Chairman.} I yield back. 732 733 Mr. {Shimkus.} The chairman's time is expired. 734 The chair now recognizes the ranking member, Mr. Waxman, 735 for 5 minutes. 736 Mr. {Waxman.} Thank you, Mr. Chairman. 737 Secretary Moniz, I thank you again for being here today 738 to discuss the Administration's strategy for managing the 739 country's nuclear waste. 740 Over the last 2 years, this not lowly but very important 741 subcommittee has heard testimony from a number of witnesses on the nuclear waste issue, including testimony from the 742 743 State of Nevada about why many Nevadans oppose Yucca Mountain 744 nuclear waste depository. Martin Malsch, testifying on behalf of the State of Nevada, told the Committee

``opposition to the Yucca Mountain project in Nevada was not

always a given.'' But Congress and federal agencies took

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several actions that destroyed the State's trust in the
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749
     process and locked in opposition.
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          I would like to ask you a few questions about how to
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     move beyond the Yucca Mountain stalemate and learn from our
     mistakes in Nevada. In your testimony you say, ``any
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753
     workable solution for the final disposition of used fuel and
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     nuclear waste must be based not only on sound science and
755
     also on achieving public acceptance at the local, state, and
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     tribal levels.'' Let's start with sound science you say is
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     necessary. What are the key scientific questions that need
     to be answered to satisfy concerns about the safety of
758
759
     nuclear waste disposal?
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          Secretary {Moniz.} Well, there are a number of
     scientific questions. Ultimately, it comes down to
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762
     understanding the form of the waste package, its interaction
     with the host environment, and the potential for having some
763
764
     elements go into the environment and propagate over long
     periods of time. That is what is a very detailed analysis
765
     looking at both geology, hydrology, and the materials issues
766
     around integrity of the package.
767
          Mr. {Waxman.} The State of Nevada and Clark County
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769 raised particular concerns about how EPA and other federal 770 agencies set safety standards for Yucca Mountain alleging 771 that these standards were tailored to make sure Yucca met 772 The State of Nevada told our committee that these changes ``utterly destroy the credibility of the program.'' 773 774 How should EPA and other federal agencies approach the 775 regulatory process to ensure that any safety standards are 776 both sufficient and credible with concerned stakeholders? 777 Secretary {Moniz.} Well, again, if I go back to the Blue Ribbon Commission recommendations, the Commission 778 emphasized that what really needs to be set first are kind of 779 780 generic safety standards before one starts tailoring to an 781 individual site. So again, we think that the way that the Yucca Mountain decision was made, A) raises this problem, as 782 783 you have referred to many times, in terms of it was not a 784 consent-based process and that in itself created conditions. 785 It also had the effects of highly restricting what the 786 Department could do over many years in terms of exploring 787 different geologies and it basically did not have this approach, as I mentioned, where one such generic safety 788 standards that one then applies to various characterized 789

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     local sites.
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          Mr. {Waxman.} So it could apply to a number of multiple
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     sites?
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          Secretary {Moniz.} Yes.
          Mr. {Waxman.} Having updated generic standards will
794
     also support the efficient consideration as you look at--
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          Secretary {Moniz.} Yes. And then that would inform the
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797
     regulatory process. And as we have all said, particularly
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     when you look also, you know, the Nuclear Waste Policy Act
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     also had a cap of 70,000 tons and we know very well that even
     if there were no nuclear reactors built, we would be way, way
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801
     past that amount. We have to look at the questions of other
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     repositories, certainly be prepared for that possibility.
          Mr. {Waxman.} Now, no project will ever enjoy universal
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804
     support so how do you envision defining consent? In the case
805
     of Nevada, the Yucca Mountain project enjoys some local
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     support but faces strong opposition from the State and key
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     counties.
                What can the Federal Government do to win support
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     of a whole State that is wary of hosting a repository or
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     interim storage facility even if the facility enjoys local
     support?
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          Secretary {Moniz.} Well, again, we believe or at least
     I should say I believe that ultimately it is a very iterative
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    process based upon, as I said in my testimony, continuous
     open cooperation and consultation at all levels. As we said
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     earlier, and I think it is an example again--I will concede
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816
     to the chairman's point that clearly the WIPP facility in New
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    Mexico is a transuranic waste facility, not high-level waste,
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    but the fact is that was a case where it took many, many
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    years. There was litigation involved to win the confidence
    and trust all along the chain of responsibility. And now, as
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    a result, well, I think we are into now our second decade of
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822
     a highly successful operation there.
823
          Mr. {Waxman.} So for the Congress, the take-home
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    message should be that we tackle this problem by ensuring the
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     federal agencies or any new organization that has the
826
     authority it needs to implement a consent-based process that
827
     is transparent and rooted in science. With that--
828
          Secretary {Moniz.} That ultimately is the overarching,
829
    most important recommendation of the Commission.
          Mr. {Waxman.} Thank you. Thank you, Mr. Chairman.
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         Mr. {Shimkus.} The gentleman's time is expired.
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          The chair now recognizes the chairman emeritus, Mr.
    Barton, for 5 minutes.
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          Mr. {Barton.} Thank you, Mr. Chairman.
          You know we are having another hearing on high-level
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    nuclear waste when members of the audience are already
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837
     asleep.
838
          Mr. {Shimkus.} Wake up.
839
          Mr. {Barton.} I am not going to name names but his
840
     initials are D. G.
841
          But, Mr. Secretary, thank you for being here. And when
     I was a young man, some members of the audience have heard me
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843
     tell the story, but it was my job to brief the then-Secretary
844
     of Energy on a proposed piece of legislation at the
845
    Department of Energy that came to be known as the Nuclear
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     Waste Policy Act of 1982. And they felt that if an Aggie
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     engineer could explain a bill to an oral surgeon, that we
848
     ought to be able to get it through the Congress. And we did,
849
     and who would have dreamed that in 2013 we would have the
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     current Secretary of Energy debating yet again another way to
851
     find a path forward on the storage of high-level nuclear
852
    waste?
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My good friend from Illinois, the subcommittee chairman, 853 asked you a question about what States might compete if we 854 855 adopted your consent-based approach or the Department's consent-based approach? I would postulate that my State of 856 Texas might actually offer to compete. The county in West 857 858 Texas, Loving County, has already passed a resolution at the 859 county level and has been engaged in Austin with the Governor 860 and the Texas legislature. While it is never a given, 861 certainly I think the State of Texas might adopt an approach where, on a local option basis, a county or an entity could 862 compete for an interim storage facility. 863 864 I also know that at Yucca Mountain, we have spent \$15 billion and I think the subcommittee and the full committee 865 866 chairman are absolutely correct in trying to get value for 867 the taxpayer dollars and the ratepayer dollars that have been 868 spent on that facility. 869 Again, I would ask as a question if we were to adopt 870 through legislation, as you have at least suggested we might, 871 a dual-track approach of an interim storage facility while we are waiting to license a permanent repository, that would not 872 preclude Yucca Mountain being chosen as either the interim 873

facility and/or possibly the permanent repository. Is that 874 875 not correct? Secretary {Moniz.} Yes, I would agree. We view these 876 as two linked but independent pathways. 877 Mr. {Barton.} Okay. And I believe I am correct, too, 878 879 that under current law Yucca Mountain has been legally 880 empowered to be an interim facility for storage. Is that not 881 correct? 882 Secretary {Moniz.} I would have to clarify that, Mr. Chairman Emeritus. 883 Mr. {Barton.} Well, I think I am correct. 884 Secretary {Moniz.} Okay. Well, I will take, you know--885 886 Mr. {Barton.} I think lots of things, not all of them 887 are correct, so maybe I am wrong on that. But I believe--888 Secretary {Moniz.} When you were a practicing engineer 889 and I was a practicing scientist, we were always correct. Mr. {Barton.} Yes. You have talked in your testimony 890 891 about a pending court case, and I think it is fair to say 892 that the majority of the Committee is very frustrated that the court should have ruled, has yet to rule. Do you have 893 any indication of when we might get a ruling on the legality 894

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     of what the Obama Administration did in shutting down the
896
     Yucca facility?
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          Secretary {Moniz.} No, sir. I have no insight
     whatsoever to as when a ruling would come, but I assure the
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899
     Committee, and as the Administration has spoken, that
900
     whatever the ruling is, we will act appropriately and help to
901
     carry it out.
902
          Mr. {Barton.} Well, Mr. Chairman, I want to say in
903
     closing that I am a strong supporter of Yucca.
904
     absence, I went to the Floor a week before last and opposed
     several amendments against Yucca. So I am pro-Yucca. But I
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906
     don't want to have to serve as long as John Dingell has
907
     already served to finally find an answer to the high-level
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     waste issue. And if we can adopt some sort of a dual
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     approach were we push forward on licensing Yucca as a final
910
     repository while also letting States compete on an interim
911
     storage basis, I for one on the majority side would be
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     supportive of that approach with the appropriate safeguard
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     and caveats about the money and the effort that has already
914
     been spent at Yucca Mountain.
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So I thank the Secretary and his department for their

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916 efforts, and I hope that since we, this morning, passed an 917 SGR fix that nobody thought could happen, this could be two 918 in a row if we can pass a high-level waste bill out of this 919 committee. That would be a tremendous accomplishment on your 920 watch and Mr. Upton's watch and Mr. Tonko's and Mr. Waxman's 921 watch. And with that, I yield back. 922 Mr. {Shimkus.} The gentleman yields back his time. 923 And I can assure my colleague that as long as Yucca 924 Mountain is still in the mix, we can move forward. But I have no indication that the Administration wants to move 925 forward on Yucca Mountain. 926 927 So now, I recognize the gentleman from Michigan, Mr. 928 Dingell, for 5 minutes. Mr. {Dingell.} Mr. Chairman, thank you for your 929 930 courtesy, and I commend you for having this hearing. 931 Welcome, Mr. Secretary, to the committee. I note here 932 in 2006 you wrote an article supporting Yucca Mountain. 933 2011 you wrote another article saying there needs to be an 934 alternative. So to assist the committee with our judgments

here, you now believe that Yucca Mountain is no longer an

option as a permanent repository? Please answer yes or no.

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          Secretary {Moniz.} Congressman Dingell, with all due
     respect, it is a little bit more than yes or no. I would
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939
    note that the article you referred to actually it is an op-
     ed, I think, in 2006, did say that DOE had to take a fresh
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     look at assessing the suitability of Yucca Mountain, and it
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942
    was not a complete--
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          Mr. {Dingell.} What does that mean, Mr. Secretary?
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     That you think it is still a viable thing--
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          Secretary {Moniz.} Well, again, we--
          Mr. {Dingell.} --or that it is not?
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          Secretary {Moniz.} The view is that it needs both
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948
     science and public acceptance. The latter is not there and
949
    we are not seeing an end to the stalemate.
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          Mr. {Dingell.} With all respect, Mr. Secretary, you
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    have taken both sides of this issue. We have shot about $12
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    billion as near as I can figure, maybe 13 now, and the hole
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     is still there and people are digging and doing things but
954
    nothing is happening. And we don't have any idea of when we
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     are going to complete this problem or anything else.
          Now, Mr. Secretary, would you please provide additional
956
     information for the record regarding the viability of Yucca
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Mountain as a permanent repository? And I will let you come 958 959 up with whatever it is you feel you should like to say on 960 that particular matter. 961 Secretary {Moniz.} Yes, sir. We will. Mr. {Dingell.} Now, Mr. Secretary, do you have any 962 963 plans to reinitiate DOE's license application to the NRC for 964 review and final decision on Yucca Mountain? Yes or no? 965 Secretary {Moniz.} No, but again if the court 966 reinstates the NRC licensing process, then we will support it as needed, assuming we have the funds to do so. 967 Mr. {Dingell.} Now, Mr. Secretary, the Blue Ribbon 968 969 Commission of which you were a member was not allowed to examine Yucca Mountain is a part of its study. Do you 970 971 believe that doing a similar study again but including Yucca 972 Mountain would be useful to the Administration is a 973 determinant of a path forward regarding nuclear waste 974 storage? Please answer yes or no. 975 Secretary {Moniz.} No, sir, I don't think that would be 976 useful at this time. A commission like the Blue Ribbon 977 Commission was very important to address the generic, nonsite-specific issues, as we discussed. For example, one of 978

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979
     the problems is the need to get generic safety criteria
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     before one starts moving into the consent--
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          Mr. {Dingell.} So is the answer, Mr. Secretary, yes or
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     no?
          Secretary {Moniz.} It was no. It was no, yes.
983
          Mr. {Dingell.} Yes or no?
984
985
          Secretary {Moniz.} It was a no, yes.
986
          Mr. {Dingell.} Okay. Now, Mr. Secretary, most of BRC's
987
     recommendation is a consent-based approach where localities
988
     across the country could volunteer to be the site of a new
     repository. Under the best case scenario where all the units
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990
     of government from local to state to federal agree that there
991
     is a site that meets the needs of a repository of this kind,
992
     how long approximately would it take to create such a
993
     repository and how much would it cost?
          Secretary {Moniz.} Well, I think the estimate based
994
995
     upon the Fee Adequacy Assessment were approximately $3
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     billion for preselection, site evaluation for a repository,
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     and approximately 8 to 9 for site characterization and
998
     licensing. So altogether in the 10 billion, $11 billion
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     range.
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          Mr. {Dingell.} Would you submit for the record your
1001
     further comments on both of those two matters--
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           Secretary {Moniz.} Yes, we would be pleased--
1003
          Mr. {Dingell.} --how long and how much?
1004
           Secretary {Moniz.} We would be pleased to.
1005
          Mr. {Dingell.} Now, Mr. Secretary, the BRC report
1006
     recommends, ``access to the funds nuclear utility ratepayers
1007
     are providing for the purpose of nuclear waste management, ''
1008
     and you propose nonlegislative as well as legislative changes
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     to achieve this goal. Can access to the funds be gained
1010
      through nonlegislative means? Yes or no?
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           Secretary {Moniz.} I would say yes and no. We strongly
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      feel that legislation really is the appropriate way to go. I
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      think the principle Administration's proposal and really the
1014
     Commission's is somehow we need to have the funds and the
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      expenditures either mandatory or discretionary but in a way
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     that does not have these funds competing with the other
1017
     government priorities.
          Mr. {Dingell.} Would you submit further comments for
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1019
      the record?
          Now, Mr. Secretary, would nonlegislative proposals
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1021
     recommend ways in which we could protect funds being
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     deposited into the Nuclear Waste Fund? As you know, we have
1023
     dissipated large sums of money. Can you answer yes or no to
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     that, please?
1025
           Secretary {Moniz.} Again, we feel legislation is the
1026
      appropriate route.
1027
          Mr. {Shimkus.}
                           The gentleman's--
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          Mr. {Dingell.} Mr. Secretary, in the 2011 article I
1029
     mentioned earlier, you note that you were a strong supporter
1030
     of nuclear energy developing new nuclear technologies and
1031
      investing in other energy technologies. Based on recent
1032
     appropriations and the recently passed Energy and Water
1033
     appropriations from the House, do you believe that your
1034
     department now has the resources to invest in these new
      technologies to prevent, as you put it, ``America being less
1035
      competitive in the global technology market?'' Please answer
1036
1037
     yes or no.
           Secretary {Moniz.} Well, if the President's request is
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1039
     respected, then the Nuclear Energy Office has a very good
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     plan in place to both support advanced reactor technology and
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      the technology development for waste disposal. I would add
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to that, of course, beyond the appropriated amounts, the
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1043
     Department has made the conditional loan guarantee of $8
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     billion roughly to build ``first-mover'' new nuclear plants,
1045
     which is a critical issue for the future of nuclear power in
1046
      this country.
1047
          Mr. {Shimkus.}
                           The gentleman's time is expired.
1048
          Mr. {Dingell.} Mr. Chair, I am over my time and I thank
1049
     you, Mr. Chairman.
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          Mr. {Shimkus.} The chair now recognizes the gentleman
1051
      from Texas, Mr. Hall, for 5 minutes.
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          Mr. {Hall.} Thank you, Mr. Chairman.
1053
           And, Mr. Secretary, I thank you for being here.
1054
      Sometimes it is not good to have been here before like you
1055
     have, the questions that you get put to you, but I will
1056
     remember you on my Section 999. You were very knowledgeable
1057
      on that. That is still up and you remember it was when you
1058
     had energy at a certain level but we couldn't get it to the
1059
      top of the water and we traded for technology from
1060
     universities and others and paid them with the energy that we
1061
     did get to the top of the water. So we didn't get it if they
     didn't get it to the top. They got it to the top and it is
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working and they are still trying to kill 999. I hope you
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1064
     will remember your position on that.
1065
           Secretary {Moniz.} I remember your efforts very, very
     well leading that charge and I would say that as a fact I
1066
      think the result has been some excellent, excellent research.
1067
          Mr. {Hall.} It is still working.
1068
1069
           Secretary {Moniz.} Especially on the environmental
1070
      footprint of unconventional oil and gas production.
1071
          Mr. {Hall.} Yes, and thank you. And it is a pleasure
1072
     to see you. I have a copy of a DOE presentation here from
1073
      late June that indicates the size for the ``larger interim
1074
     storage facility,'' the one slated to be open in 2025 and the
1075
     DOE strategy is 70,000 metric tons. Is that right? That is
1076
     your--
1077
           Secretary {Moniz.} Yes, sir. And that would be
1078
     preceded by the pilot plant.
1079
          Mr. {Hall.} That is the entire inventory of what the
1080
     nuclear industry is currently storing and the statutory size
1081
     of Yucca Mountain, right?
1082
           Secretary {Moniz.} Um-hum.
          Mr. {Hall.} Mr. Secretary, how hard is the
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Administration going to answer or how are they going to make
1084
1085
     people believe when you say that that facility is going to be
1086
      temporary?
1087
           Secretary {Moniz.} Well, I think this is, again, the
     so-called linkage issue and we think it is very important --
1088
           Mr. {Hall.} Right.
1089
1090
           Secretary {Moniz.} --that the action on the storage
1091
      side is accompanied in parallel by adequate expenditures to
1092
      establish one or more repositories.
1093
           Mr. {Hall.} How will DOE overcome concerns that a lot
     of people are going to have on the part of communities that
1094
1095
     an interim site could become a de facto permanent site if no
1096
     other community could be found to host a permanent disposal
1097
     facility area?
1098
           Secretary {Moniz.} You know, again, as I have said, I
1099
      think this is going to be a long discussion, and we also
1100
     noted that there should be flexibility into the system so
1101
      that the individual communities and States who are stepping
1102
      forward as potential hosts can negotiate the linkages that
1103
      they feel are appropriate to lend them confidence.
           Mr. {Hall.} Well, the presentation--I don't know where
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1105
      it is there but I think we have seen it somewhere -- estimates
1106
      transporting the spent fuel to this larger interim storage
1107
      facility at a rate of 3,000 tons a year, and that means that
1108
      it would take over 23 years just to transport the spent fuel
1109
      to the site. By the time the 70,000 tons was all
1110
      transported, it would be 2048. That is a hard figure for me
1111
      to think about being here and being sure that it happens just
1112
     that way.
1113
           Secretary {Moniz.} Yes, well, it is a major logistical
1114
      challenge and I think no matter what repository, what storage
1115
     sites one has, it is a major transportation campaign. I also
1116
     served on a National Academy committee several years ago
1117
      looking at transportation and a couple of things of note
1118
     perhaps. One is that we felt that for the large campaign, a
1119
     heavy reliance on trains would be a good thing. That is a
1120
     big planning project. Secondly, we also noted that the
1121
     number of used fuel movements in Europe already is
1122
      approximately equal to all the movements we would need for
1123
      70,000 tons, and that has been handled in a pretty safe way.
1124
           Mr. {Hall.} But 2048 is the projected date for opening
1125
      a repository under DOE's strategy.
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1126
           Secretary {Moniz.} It is approximate.
1127
          Mr. {Hall.} Okay. Well, let me ask you, does that
1128
     really make sense?
           Secretary {Moniz.} Well, I think, you know--
1129
1130
           Mr. {Hall.} I think you have been around a long time
1131
      and you are very knowledgeable.
1132
           Secretary {Moniz.} To be honest, the Department has had
1133
     an issue of perhaps too often providing optimistic dates for
1134
     big projects and maybe to be a little more conservative is a
1135
     good idea.
1136
          Mr. {Hall.} It is going to be hard to explain how they
1137
     are going to spend 23 years transporting just to turn around
1138
     and ship it all again. Is that going to cause some problems?
           Secretary {Moniz.} Well, of course, we are in no way
1139
1140
     precluding the possibility of--
          Mr. {Hall.} DOE estimated--
1141
1142
          Mr. {Shimkus.} The gentleman's time is expired.
1143
           Mr. {Hall.} DOE estimated the transportation costs for
      70,000 metric tons to go to Yucca at 19 billion. I am
1144
1145
      anxious to watch what the analyzation is going to be on that.
1146
     And my time really is up.
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1147
          Mr. {Shimkus.} The gentleman's time is expired. I
1148
     would remind him that if everything would have gone upon
1149
     plan, Yucca would have been open in 1998. Had the
1150
     Administration not pulled the plug when it did, we would be
1151
     under construction right now.
1152
           The chair now recognizes the gentleman from Texas, Mr.
     Green, for 5 minutes.
1153
1154
           Mr. {Green.} Thank you, Mr. Chairman, for holding the
1155
     hearing. I want to thank Secretary Moniz for joining us.
1156
           The Subcommittee examined the issue of nuclear waste
     storage in numerous hearings for the past several years.
1157
                                                                 In
1158
      2011 as ranking member of the subcommittee, I had the
1159
      opportunity to visit Yucca Mountain with Chairman Shimkus,
1160
      and I supported the use of Yucca Mountain in the past and
1161
     still believe it is a terrible waste of taxpayer dollars to
1162
     have this $12 billion facility sitting unused in the desert,
     although in all honesty, we are not going to sell that desert
1163
1164
      land for condos. And so I assume it will stay in our federal
1165
      land inventory. So maybe someday we have this hole
     underground, it can be used for long-term nuclear storage.
1166
           The termination of the project, though, has postponed
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our Nation's efforts and delayed efforts to permanently
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1169
     dispose of used nuclear fuel. It is now envisioned it will
1170
     be storing these materials and dry casks for decades, not
1171
     much longer than the original intended purpose. What is DOE
1172
     doing to support the long-term storage of used nuclear fuel
1173
      in these dry cask storage systems? And I will go forward
1174
     after that. Is there any program at DOE to be able to deal
1175
     with the amount of nuclear waste we are seeing?
1176
           Secretary {Moniz.} Yes, sir. There is work going on
1177
     and also historically we have seen collaboration with EPRI in
1178
      terms of looking at the dry cask storage longevity and a
1179
     particular focus right now is on the materials issues and
1180
     really whether we can confidently expect century-scale
1181
      storage.
1182
          Mr. {Green.} Between the 1980s and 2010 when Yucca
1183
     Mountain was terminated, the Nation had invested billions of
1184
     dollars in a scientific study at that site. The scope of
1185
      this work spanned our entire national lab complex and many of
1186
      our leading universities, a number of other respected
1187
      institutions. What is the understanding and result of this
1188
      study and what did we learn? How can we best apply the
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results of this work before going forward so that our
1189
1190
      investment is not wasted? You know, we know that at least
1191
     politically in the foreseeable future, Yucca Mountain is not
1192
     available, but we still need to plan for long-term storage,
1193
     and I think that is what the Blue Ribbon Commission said.
1194
           Secretary {Moniz.} Well, may I answer? Oh, yes. So,
1195
      for example, I would pick out a couple of areas. One, it
1196
     would be that I think the methodology was developed for
1197
     developing large-scale reservoir and, if you like, a water
1198
     basin modeling technique that one will need in any geology to
1199
     go forward.
           Another, I would say, is understanding how the form of
1200
1201
     waste package interacts with the environment. So I think the
1202
     methodology for how one does characterization and waste
1203
     package geochemistry interactions has been advanced.
1204
           Mr. {Green.} So we have learned something from the
      effort. And, as you know, and you served on it--and thank
1205
1206
     you for your service--the Blue Ribbon Commission recommended
1207
     a consent-based approach to repository siting. With respect
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      to Yucca Mountain project, there appears to be a division of
      the opinion. And having been out there, and I think we met
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with about every county official from around that area who 1210 1211 very much supported it. Obviously, the State of Nevada and 1212 Clark County doesn't. And that may have been different back 1213 years ago when it was selected. 1214 How can we keep from having something, because these 1215 things take so long, getting permission? And there may be consent but a decade later all of a sudden the political will 1216 1217 is not there. And, you know, I know there is a proposal for 1218 Pecos of Texas and New Mexico. There may be other locations 1219 but, you know, if we make a decision and the political will 1220 then changes, which is what seemed to happen out in Yucca 1221 Mountain, how did the Blue Ribbon Commission address that 1222 issue if we are going to look for consent now and expect that 1223 contract to last for decades? 1224 Secretary {Moniz.} Well, I think the Commission 1225 recognized that -- well, first of all, again let me repeat that 1226 in the case, again, of a transuranic repository in New 1227 Mexico, little bit different animal, but that case where 1228 again it took an evolution of the community/state 1229 interaction. Secondly, the Commission recognized that each of these negotiations will be somewhat different, but in a 1230

- 1231 generic sense, recommended a process that would have various
- 1232 steps and commitments to continue, which kind of ratcheted up
- 1233 at each step of the negotiation.
- 1234 Mr. {Green.} I know I am almost out of time and I won't
- 1235 have time for all my questions, Mr. Chairman. I know of no
- 1236 country in the world that has long-term storage but our
- 1237 country is producing a lot of it and I would think it would
- 1238 be redundant to create a separate agency. I think we might
- 1239 need to fix the one we have so we don't add that bureaucratic
- 1240 delay in to getting forward with it.
- 1241 But I thank you for the time.
- 1242 Mr. {Shimkus.} The gentleman's time is expired.
- The chair now recognizes the gentleman from Mississippi,
- 1244 Mr. Harper, for 5 minutes.
- 1245 Mr. {Harper.} Thank you, Mr. Chairman.
- 1246 And, Mr. Secretary, thank you for taking your time to
- 1247 come visit with us on what is a very important and long-going
- 1248 issue.
- 1249 In 1980, Congress passed the Low-Level Waste Policy Act
- 1250 providing a framework for States to voluntarily join compacts
- 1251 and then work within the compact to site a low-level waste

1252 disposal facility. While this merely addressed low-level 1253 waste, it provides relevant experience about a consent-based 1254 process for nuclear waste disposal. After the Act was passed 1255 in 1980, it wasn't until 1985 that Congress approved the 1256 compacts and then it was 1990 before a disposal facility 1257 opened in Utah but only for Class A waste, the lowest class 1258 of low-level waste. 1259 Congress didn't approve the Texas/Vermont compact until 1260 1988, 18 years after the Act passed, and the disposal 1261 facility in Texas didn't open until 2011 after a 7-year licensing process. To date, 33 years after Congress passed 1262 1263 the 1980 Act, 34 States still remain without access to low-1264 level waste Classes B and C disposal. 1265 So my question is in light of the limited success and 1266 lengthy process for consent-based siting for low-level waste, 1267 what gives you confidence that DOE will find an interim 1268 storage site for used nuclear fuel and have them operating 8 1269 years from now? 1270 Secretary {Moniz.} Well, first, I would note that, 1271 first of all, there is some success, and again I go back to the WIPP example in New Mexico which is for transuranic 1272

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waste. And again, it took a long time. This goes back to
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1274
     Mr. Hall's question. We prefer to be conservative and set
1275
      2048 because these things take time. And I think we just
1276
     have to start on that path. I personally remain optimistic
1277
      that we will have communities coming forward and then provide
1278
      technical assistance so that they can be certain that they
1279
     have the technology base to move forward.
1280
          Mr. {Harper.} Well, given your role on the Blue Ribbon
1281
     Commission, are you familiar with the private fuel storage
1282
     project in Utah which is the only interim storage facility
     ever licensed?
1283
           Secretary {Moniz.} Am I familiar with it?
1284
          Mr. {Harper.} Are you familiar with that?
1285
           Secretary {Moniz.} Yes. Yes. Um-hum.
1286
1287
          Mr. {Harper.} Do you know how long the NRC took to
1288
      issue that license?
           Secretary {Moniz.} No, I do not, sir.
1289
1290
           Mr. {Harper.} Okay. If I told you 8 years, would that
1291
      surprise you?
1292
           Secretary {Moniz.} No.
          Mr. {Harper.} Okay. All right. Do you know the status
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1294
     of that license now?
1295
           Secretary {Moniz.} No, I do not.
1296
           Mr. {Harper.} Okay. It is my understanding the
1297
      consortium asked to the NRC to terminate the license late
1298
      last year.
1299
           Secretary {Moniz.} I see. Um-hum.
1300
           Mr. {Harper.} So I think PFS is an example of how a
1301
      local community, in this case the Goshute Indians, initially
1302
      supported a project but state officials opposed it, just like
1303
     the situation with Yucca Mountain. It is also an example of
     how licensing such a project is not as expedient as sometimes
1304
1305
      the DOE strategy suggests.
1306
           So, you know, what we have here is a very serious issue.
      It is something that we have dealt with for now decades. I
1307
1308
     don't believe that the formation of a new federal agency to
      oversee management of nuclear waste is the answer. I believe
1309
1310
     that that would just create additional delays. So I would
1311
     hope that we could continue to work on this issue and I
1312
      certainly want to thank you for your time today to come share
1313
      this with us.
1314
           And with that, I yield back.
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1315
          Mr. {Shimkus.} If the gentleman would yield.
1316
          Mr. {Harper.} Yes, I will yield to the chair.
1317
           Mr. {Shimkus.} And I would just highlight we did this
1318
     when the Blue Ribbon Commission testified before us, and
1319
      there is a map of Nevada. We talk about local interests.
1320
     Two points of this is that all of the counties minus Clark
1321
     have resolutions on record supporting Yucca Mountain. And
1322
      then we talk about local issues and you use even in your
1323
      testimony Finland and Sweden. A land base of that siting
1324
     proposal which you would call local, do you know what would
     be local for Yucca Mountain? Who would be considered the
1325
1326
      local landowners? It would be the Federal Government.
1327
      is how far away and expansive the federal property as Yucca.
     Who is local would be us. We are the local interest of
1328
1329
     concern, and if we are not, the local communities that all
1330
     have gone on resolutions in support of Yucca, they are on
1331
     record.
1332
           So, you know, I am kind of getting tired of this bashing
1333
      of Nevadans that they are all one side when there is a strong
1334
     vocal group of Nevadans who want this, hence going back to
      the $5.6 billion that I think you should put on the table to
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help convince maybe the other folks from Nevada.
1336
1337
           So with that, I would like to recognize my colleague
1338
     from California, Mrs. Capps, for 5 minutes.
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          Mrs. {Capps.} Thank you, Mr. Chairman for it and thank
     you, Secretary, for being here today and participating.
1340
1341
           And, as you know, like it or not, nuclear waste is a
1342
     reality. Part of that reality is that nuclear waste is going
1343
      to be around for a long, long time, far beyond the lifetimes
1344
     of our children and our grandchildren. But as the creators
1345
     of this waste, I believe that we have a responsibility to put
      in place a long-term plan to store it safely. And in the
1346
     absence of such a plan, however, spent nuclear fuel will
1347
1348
      continue to be stored for the foreseeable future onsite right
1349
     at nuclear power plants like Diablo Canyon, which is in my
1350
     Congressional District.
1351
           I have been pleased to see more spent fuel being moved
1352
      out of high density pools and into dry cask storage at Diablo
1353
      Canyon and also across the country. These casks are more
1354
      stable and safer, but they are not a permanent solution for
1355
      spent fuel storage in my opinion. Do you agree?
           Secretary {Moniz.} Yes. As I said--
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Mrs. {Capps.} They are not a permanent--
1357
           Secretary {Moniz.} --century-scale looks to be the kind
1358
1359
     of scale.
1360
          Mrs. {Capps.} Pardon?
           Secretary {Moniz.} We think the dry cask storage for
1361
1362
      the order of one century--
1363
          Mrs. {Capps.} One century they will work but not a
1364
     permanent--I mean we can't--
1365
           Secretary {Moniz.} Not a millennium.
1366
          Mrs. {Capps.} Not a millennium?
           Secretary {Moniz.} Right.
1367
          Mrs. {Capps.} As we all know, implementing a permanent
1368
1369
      storage solution has proven to be quite difficult. I commend
1370
     the Administration for moving the ball forward with the Blue
1371
     Ribbon Commission report and the strategy released earlier
1372
      this year, but given the serious challenges that still lie
1373
     ahead, my constituents and I remain concerned that Diablo
1374
     Canyon could become a de facto long-term storage site.
1375
     has already been over 30 years since Congress first directed
1376
      the Department of Energy to remove and store spent nuclear
     fuel from power plants. So, Mr. Secretary, what happens if
1377
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it takes another 30 years or even longer to implement a 1378 1379 permanent storage plan? Does DOE have a contingency plan to 1380 handle long-term onsite storage of spent nuclear fuel? 1381 Secretary {Moniz.} Well, first, I think the general technical judgment is that continued onsite storage moving in 1382 1383 from pools to dry casks is a reasonably safe approach but it 1384 is not a system that we want at all. And that is exactly why 1385 we feel that the strategy put out following the Commission's 1386 recommendations to aggressively pursue the parallel paths of 1387 consolidated storage and repositories is the right one and it gives flexibility, adaptability, and it won't be immediate. 1388 1389 We think we have a chance to start moving some fuel in about 1390 10 years but only if we start now. 1391 Mrs. {Capps.} Right. So I will just move ahead. 1392 of the most important elements of the Blue Ribbon Commission 1393 report and the DOE strategy is the consent-based approach for 1394 locating the permanent storage facility. Engaging local 1395 communities in this process is critical, especially for the 1396 consolidated facility, but it is also crucial to engage with 1397 the communities where the fuel is currently being stored and could be traveling through. I am very concerned about the 1398

transportation. Once a permanent site is found, how do we 1399 1400 move this, you know, spent fuel safely? This is a top 1401 priority for my constituents in San Luis Obispo. They have 1402 serious concerns about the risks involved in moving the spent 1403 fuel safely through their communities and they want their 1404 voices heard in this process. So to what extent is DOE 1405 engaging with communities where there is this storage now 1406 occurring and so many constituents who are worried about how 1407 that transporting is going to happen through their 1408 communities? Secretary {Moniz.} So the Department has recently done 1409 1410 a number of transportation studies, and again, I refer to the 1411 National Academy report of -- 6 or 7 years ago I was a member 1412 of that group as well. Again, I think two points, maybe one 1413 to reiterate is that the amount of fuel movement called for 1414 for all of the fuel we have today is very comparable to what 1415 Europe has already done with a very, very good safety record. 1416 However, clearly, we have to A) do it very well, but B) the 1417 report emphasized strongly the same thing as you have 1418 emphasized, the need to early on work with the communities 1419 along transit pathways, instruct in emergency response kinds

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of activities, communicate, know what is happening.
1420
1421
     very, very important.
1422
           So I think as soon as we understand that we are moving
      towards a system to begin moving that fuel, we need to get
1423
     very aggressive in that community outreach.
1424
1425
          Mrs. {Capps.} Well, I appreciate knowing that. I share
1426
     your concerns about it and I yield back.
1427
          Mr. {Shimkus.} The gentlelady's time is expired. And
1428
      on her point, though, that I think in testimony yesterday the
1429
     Secretary said Plan B is to leave on site. That was
      testimony yesterday. Is the Plan B right now--
1430
           Secretary {Moniz.} Well, as I--
1431
          Mr. {Shimkus.} --if all else fails--
1432
           Secretary {Moniz.} When I said it, it is the ground
1433
1434
      truth. If we can't move it--
1435
           Mr. {Shimkus.} Well, I am just trying to lay out the
1436
      facts as was testified yesterday that Plan B would be to keep
1437
     onsite.
1438
          Mrs. {Capps.} Is it permanent? Are you--
          Mr. {Shimkus.} That is their Plan B.
1439
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Secretary {Moniz.} If I may clarify, what I said again

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the ground truth is if we can't move it, it stays where it
1441
1442
      is. It is a totality. That is why we have to have the
1443
     ability to move it.
1444
          Mr. {Shimkus.} Just trying to get some transparency
1445
     here, Mr. Secretary.
           Secretary {Moniz.} For that, we need the authorities
1446
1447
     from Congress.
1448
           Mr. {Shimkus.} The chair now recognizes the gentleman
1449
     from Ohio, Mr. Johnson, for 5 minutes.
1450
          Mr. {Johnson.} Thank you, Mr. Chairman. And, Mr.
     Secretary, it is good to talk with you again. Thank you for
1451
1452
     being here with us today.
1453
          Most of DOE's current nuclear waste management
     activities rely on taxpayer funding appropriated in 2012 and
1454
1455
     under the Continuing Resolution for 2013. This means that
1456
      the taxpayer is currently funding the costs of DOE's effort
1457
     to start over, breaking the historic possibility that the
1458
     beneficiaries of the electricity, the consumers, pay the
1459
     costs of disposal. For how long and for what cost does the
1460
     Administration support continuing the policy of having the
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1461

taxpayer foot the bill?

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Secretary {Moniz.} Well, sir, I think, first of all,
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1463
      let me refer to the letter to Mr. Shimkus that he had read
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      into the record looking at all of the activities and the
1465
     authorities, et cetera. This, by the way, has been reviewed
     by our general counsel and by the Department of Justice to
1466
1467
     make sure all the authorities were proper in terms of what
1468
     was used for appropriated funds and what was used by waste
1469
     fund.
1470
           But I think, as you referred it, to the 2012
1471
     Consolidated Appropriations Act, there was explicit language
      to look at fuel management and disposal activities. In my
1472
1473
     view, those are very generic activities. Frankly, those are
1474
      some of the activities that the Department was proscribed
1475
      from doing by the 1987 action, and my view, to be honest,
1476
     very mistakenly, that this research on the back end of the
1477
      fuel cycle was always important and it is very important that
1478
     we continue to do it now.
1479
           Mr. {Johnson.} Okay. Changing subjects a little bit,
1480
      there have been inaccurate statements how Yucca Mountain can
1481
      only hold 70,000 metric tons, so even if we build Yucca, we
     will still need more than one repository. I would like to
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clarify for the record that is a statutory not a scientific
1483
1484
     limit.
1485
          Secretary {Moniz.} Um-hum.
1486
          Mr. {Johnson.} In the Yucca Mountain EIS, DOE analyzed,
      ``the total project did inventory of commercial spent nuclear
1487
1488
      fuel and high-level radioactive waste plus the inventories of
1489
     commercial greater than Class C waste and DOE special
     performance assessment required waste.'' In DOE's 2008
1490
1491
     report to Congress on the need for a second repository, DOE
1492
     referenced studies of repository designs three times the area
     of the design used to accommodate the 70,000 metric tons and
1493
1494
     an independent study that concluded Yucca Mountain could
1495
     accommodate from 4 to 9 times the statutory limit. Mr.
1496
     Chairman, I would like to insert DOE's 2008 report to the
1497
     hearing record.
1498
          Mr. {Shimkus.} Is there objection? Hearing none, so
1499
     ordered.
1500
           [The information follows:]
1501
      ******* COMMITTEE INSERT *********
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1502 Mr. {Johnson.} Mr. Chairman, DOE's July 22 response to 1503 Chairman Shimkus, I think, as you indicated, indicates that 1504 ongoing transportation activities are authorized under 1505 Section 180 of the Nuclear Waste Policy Act and eligible to 1506 be paid for from the Nuclear Waste Fund. However, Section 1507 302 of the Nuclear Waste Policy Act regarding use of the 1508 Nuclear Waste Fund stipulates no amount may be expended by 1509 the Secretary under this subtitle for the construction or 1510 expansion of any facility unless such construction or 1511 expansion is expressly authorized by this or subsequent 1512 legislation. The Secretary is hereby authorized to construct 1513 one repository and one test-and-evaluation facility, which of 1514 course, as we know, is Yucca Mountain. So my question is how 1515 does the Department justify Nuclear Waste Fund expenditures 1516 on transportation for destinations other than Yucca Mountain? Secretary {Moniz.} Well, sir, first of all, I am not a 1517 1518 lawyer and I think I may have to get back to you for the 1519 recommendation. Mr. {Johnson.} Neither am I so--1520 Secretary {Moniz.} Okay. We talk the same language. 1521

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Mr. {Johnson.} We do.
1522
1523
           Secretary {Moniz.} But I think again all of the entries
1524
      in those three tables that was sent were reviewed by general
1525
     counsel at DOE. Secondly, I would note that it was my
1526
     understanding those transportation studies were very generic.
1527
     They would be applicable anywhere, and they certainly are not
1528
     applied to the construction or expansion of any facility. So
1529
      I can check on that with the lawyers but that would be my
1530
     first reaction.
1531
           Mr. {Johnson.} Yes, I would ask you to go back and
     check, Mr. Secretary--
1532
           Secretary {Moniz.} Okay.
1533
           Mr. {Johnson.} --because as I understand Section 302,
1534
      it seems pretty emphatic and pretty specific what the shalls
1535
1536
     and the shall nots pertain to.
1537
           Secretary {Moniz.} Okay.
1538
           Mr. {Johnson.} Okay. With that, Mr. Chairman, I yield
1539
     back.
1540
           Mr. {Shimkus.} The gentleman yields back the time.
1541
           The chair now recognizes the gentleman from California,
     Mr. McNerney, for 5 minutes.
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1543
           Mr. {McNerney.} Thank you, Mr. Chairman.
1544
           Mr. Secretary, first, I want to thank you for bringing
1545
     your technical expertise and your human communication skills
1546
     to this difficult problem.
1547
           My first question would be do you believe in your
1548
      opinion that the technology exists for safe transportation
1549
      and long-term storage of high-level nuclear waste?
1550
           Secretary {Moniz.} In the National Academy study that I
1551
     referred to earlier certainly concluded that one has to
1552
      execute but, yes, that it could be safe.
           Mr. {McNerney.} So what you have said is that we need
1553
1554
     both the science and we need the public acceptance for a
1555
      local -- so clearly, in Yucca Mountain, the public acceptance
     part of this has failed. Would you be a critic and tell me
1556
1557
     what you think went wrong in that process in getting that
1558
     project to be acceptable in Nevada at Yucca Mountain?
           Secretary {Moniz.} Well, I am neither a lawyer nor a
1559
1560
     psychologist but I think, as was said earlier, I think the
1561
     very prescriptive nature and frankly the change of process
1562
      that led to the singling out of Yucca Mountain I think just
      inherently raised some opposition.
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1564
          Mr. {McNerney.} Do you think that that can be repaired,
1565
      the damage that was done?
1566
           Secretary {Moniz.} Well, we feel that consent-based
     process has a very good chance of being successful with the
1567
      time taken to communicate, cooperate, and assistant technical
1568
1569
     analysis.
1570
          Mr. {McNerney.} But at the very least, the Department
1571
     has learned from that experience and probably won't make
1572
      those same mistakes again?
1573
           Secretary {Moniz.} I think we have all learned a hard
      lesson, yes.
1574
           Mr. {McNerney.} Thank you. I have another question.
1575
     Do you believe that high-level waste has enough potential
1576
1577
     future value to design repositories that the waste could be
1578
     retrieved in the future if appropriate?
1579
           Secretary {Moniz.} Well, if I may just kind of make
1580
      sure we have our definitions in the same line, we are using
1581
     high-level waste generally to apply to things like the
1582
     defense waste where the things like plutonium have already
1583
     been removed so they do not have energy value. But in the
      spent fuel or used fuel, as it is sometimes called from the
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commercial power reactors, they still contain plutonium,
1585
1586
     which certainly could be used for power production here and
1587
      that is what is done in France, for example. I want to make
1588
     very clear I am not advocating that, but technically, that is
1589
     correct.
           Retrievability, however, independent of that, is
1590
1591
     probably something that will be important for public
1592
     acceptance, at least over some time period.
1593
          Mr. {McNerney.} Well, if you look at what is happening
1594
     at the NIF program in Livermore, in order to use the NIF as a
1595
     gateway to hybrid fusion reaction or commercial reactor, they
1596
     would use spent fuel and use neutrons created in little
1597
     fusion explosions to accelerate a heat-driven process. Do
     you know what I am talking about?
1598
1599
           Secretary {Moniz.} Yes, there are many--
1600
           Mr. {McNerney.} There are values in this material.
          Secretary {Moniz.} Yes, there are many alternatives.
1601
1602
     You are referring to a process called spallation typically--
1603
          Mr. {McNerney.} I didn't know the word.
           Secretary {Moniz.} --to make--well, to make neutrons
1604
     and that you then do something else with. There is fusion,
1605
```

there is conventional fusion, there is inertial-confined 1606 1607 These are all, shall we say, well into the future as 1608 possible energy sources but they are being researched. 1609 Another thing I just maybe mention is that there is a concept that is interesting potentially which one uses fusion 1610 1611 for the purpose of making neutrons that then makes more 1612 nuclear fuel--1613 Mr. {McNerney.} Right. 1614 Secretary {Moniz.} --using depleted fuel, and I think 1615 that is the thing that you are probably referring to. 1616 Mr. {McNerney.} So the other question I have has to do 1617 with the concern about comingling of military versus civilian nuclear waste. What is the issue there? I don't understand 1618 1619 why that is a concern or an issue. 1620 Secretary {Moniz.} Oh, well, in the 1980s that decision 1621 was made to combine them. That wasn't made in the context of 1622 the 1998 date, and so it was viewed that the defense programs 1623 could then be relieved of the need to independently develop a 1624 repository. Well, now, it is a different world. 1998 is past as far as I can recall. Also, since then, we have 1625 1626 developed specific agreements with States like Idaho, for

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example, in terms of removal of not only spent fuel but of
1627
1628
     high-level waste.
1629
           And so the Blue Ribbon Commission was not saying that
      technically one could not combine them but it does note that
1630
1631
      there are very different issues, different agreements. Also,
1632
      the high-level waste for the defense waste so-called, as I
1633
      said earlier, does not have energy value. Number two, it has
1634
     different packaging. Number three, it typically was very low
1635
     burn-up fuel. So it is typically much cooler than commercial
1636
     waste and so, there is no judgment made, but we are going to
     reopen that, relook at the decision, and see if it would make
1637
1638
     more sense to keep them separate or keep them on the same
1639
     track.
1640
           Mr. {McNerney.} Thank you.
1641
           Mr. {Shimkus.} The gentleman's time is expired. I
1642
     would ask him to talk to me about Hanford on background.
                                                                 Wе
1643
     can talk about it.
1644
           The chair now recognizes the gentleman from Ohio, Mr.
1645
     Latta, for 5 minutes.
           Mr. {Latta.} Thank you very much, Mr. Chairman. And,
1646
     Mr. Secretary, again thank you very much for being with us
1647
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this afternoon. 1648 1649 And if I could go back to Chairman Shimkus' June 28 1650 letter that he had written to the Department of Energy, the 1651 chairman raised questions about the legal authority under 1652 which DOE is conducting the various nuclear waste activities. 1653 It looks to me that DOE is picking and choosing which laws 1654 are convenient to follow. In the nuclear fuel storage and 1655 transportation section of DOE's response, I noticed that DOE 1656 sites the Nuclear Waste Policy Act Monitored Retrieval 1657 Storage, the MRS, provisions as the authority for pursuing interim storage activities. However, DOE's 2008 report to 1658 1659 Congress on the demonstration of the interim storage of spent 1660 nuclear fuel from decommissioned nuclear power reactor sites state, ``in Section 141 of the NWPA authorized the Department 1661 1662 to site, construct, and operate a Monitored Retrievable 1663 Storage, MRS, facility but restricted the ability of the 1664 Department to pursue this option by linking any activity 1665 under the section to milestones tied to progress in the 1666 development of the Yucca Mountain repository.'' I guess the question I have is, given that the DOE has 1667 shut down the Yucca mountain program, how can DOE justify its 1668

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activities on interim storage under the MRS provision? It is
1669
1670
     kind of a long question.
1671
           Secretary {Moniz.} Well, again, sir, ultimately I am
1672
     relying on the judgment of our general counsel in the
     Department of Justice and the spelling out the authorities
1673
1674
      that were in there. And I am also happy to respond more
1675
      fully upon further research there. But again, in my view,
1676
      the issues of researching for the whole back end of the fuel
1677
     cycle, no matter what we pursue in terms of storage and
1678
     repository program, we need to do that work that frankly was
     suspended for so long because of the 1987 decision. But I
1679
1680
     will get a response--
1681
           Mr. {Latta.} If I could ask if you could respond to the
     Committee in writing on that, I would greatly appreciate it--
1682
1683
           Secretary {Moniz.} Yes.
1684
           Mr. {Latta.} --because I think it is very important
1685
     point out there that needs to be--
1686
           Secretary {Moniz.} I would be happy to.
1687
          Mr. {Latta.} --considered and responded to.
           Now, if I could follow up on another point in regard to
1688
      the chairman's letter, DOE also indicated that the used fuel
1689
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research and development activities are authorized under the 1690 1691 Atomic Energy Act of 1954. And it is clear, however, that in 1692 the Nuclear Waste Policy Act and amendments enacted into the 1693 1987 law, Congress directed DOE not to conduct further 1694 repository research on sites other than Yucca Mountain. 1695 In its decision in the United States v. Estate of 1696 Romani, the United States Supreme Court stated, ``a specific 1697 policy embodied in a later statute should control our 1698 construction of the earlier statute even though it has not 1699 been expressly amended.'' And then the question I have then, 1700 Mr. Secretary, is how do you and the DOE justify ignoring the 1701 sections of the Nuclear Waste Policy Act while claiming to 1702 follow the others and then falling back to the Atomic Energy 1703 Act which so clearly has been superseded by the Nuclear Waste Policy Act? 1704 Secretary {Moniz.} Again, sir, I will include that in 1705 1706 the detailed response because I am just not the person--1707 Mr. {Latta.} Well, and again, you know, in reading your 1708 testimony, you know, I think it is very important because 1709 especially as we have known that we are looking at about \$15 billion have been spent at Yucca and, you know, I think if I 1710

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1711
     remember right in your testimony, we are talking that it is
1712
      looking like maybe another $19 billion is going to have to be
1713
      expended because of having to find other places to deposit
1714
     the nuclear waste. So if I am reading that correctly, is
1715
      that 15 billion and then another 19 billion on top of that?
           Secretary {Moniz.} Certainly north of 10, that is for
1716
1717
     sure.
1718
          Mr. {Latta.} So we are talking $34 billion out there
1719
      that is going to be expended when we already had a site
1720
     Yucca, is that correct?
1721
           Secretary {Moniz.} Well, again, going back to the waste
1722
     fee adequacy analysis, it is consistent that a mill per
     kilowatt hour would cover all of these costs. So it is
1723
1724
      essentially nuclear power, you know, pay-as-you-go. And I
1725
     think the exact cost will become sharper only as the future
1726
      trajectory becomes more clear. But the one mill per kilowatt
1727
     hour in the revised assessment is certainly consistent with
1728
     covering the costs.
1729
          Mr. {Latta.} Mr. Chairman, if I could ask for
1730
      indulgence to ask one more question?
          Mr. {Shimkus.} It depends on how long.
1731
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1732
          Mr. {Latta.} Short.
1733
          Mr. {Shimkus.} I have got colleagues who would like to
1734
     ask--
1735
          Mr. {Latta.} When you say when it becomes sharper in
      looking at that, could I just ask what your definition of
1736
1737
      sharper when it comes to--you said when those numbers become
1738
     sharper?
1739
           Secretary {Moniz.} First of all, the trajectory of
1740
     nuclear power, which clearly is an unknown today, will it
1741
     grow substantially? Will it not? Are we going to have
1742
     multiple repositories? Are going to have multiple storage
1743
     sites and repositories at the same time? I think those are
1744
     all the issues that that will have to be resolved to get the
1745
     full lifecycle cost understood.
1746
          Mr. {Shimkus.} The gentleman's time is expired.
1747
     chair now recognizes --
          Mr. {Latta.} I yield back. Thank you very much.
1748
1749
           Mr. {Shimkus.} -- the gentleman from Georgia. Your time
1750
      is expired, no time to yield back.
1751
           The chair recognizes the gentleman from Georgia, Mr.
     Barrow, for 5 minutes.
1752
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1753
          Mr. {Barrow.} Thank you, Mr. Chairman.
1754
          Mr. Secretary, thank you for joining us today. And I
1755
      can't help but feel like you have been put in an incredibly
1756
     difficult position. You didn't really get us here but it is
     good to have a friend in nuclear in your position even though
1757
1758
     you have got an impossible set of circumstances to deal with.
1759
      I just want to ask you, explain it so an old county
1760
     commissioner can understand it. What is it going to take,
1761
     what is going to have to happen, and who is going to have to
1762
     do what before we decide whether to go forward with Yucca or
1763
     not?
           Secretary {Moniz.} Well, I think the initial issue will
1764
1765
     be the results of the current litigation with the NRC.
1766
           Mr. {Barrow.} That has got to be decided.
1767
           Secretary {Moniz.} That has to be decided and, as we
1768
     have said, we will--
1769
           Mr. {Barrow.} And you need some legislative authority
1770
      to do anything different than what is being litigated in the
1771
      lawsuit right now.
1772
           Secretary {Moniz.} Again, we feel we should be pursuing
      these dual tracks in any event and that will require new
1773
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- 1774 authorities. Should the licensing go forward, the evaluation 1775 go forward at the NRC, again, a caution that there are still 1776 many, many other steps that need to be taken by the Congress 1777 and the State to move that project forward. 1778 Mr. {Barrow.} So what should those steps look like to 1779 mark what should we be doing? Secretary {Moniz.} Well, the first thing that I am 1780 1781 really asking for and the Administration asks for us to have 1782 the authorities to move forward on this parallel track. 1783 Mr. {Barrow.} Here is a concern I have got with that because I am representing a whole lot of taxpayers who gave 1784 1785 their consent to this overall structure when they have been 1786 paying their utility bills and paying into a fund that was 1787 supposed to get them something. I remember it was the 1788 generators who gave their consent to this process when they 1789 gave their political assent to the laws that impose this 1790 burden on them and they also entered into these contracts. 1791 When they turn all this ratepayer money over to you all, they 1792 were supposed to get something in return. 1793 Now, my point is you talk about this is a pay-as-you-go
 - 91

system. We have been going pretty far down the road and we

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1795
     haven't gotten anywhere yet. So one guestion I would ask
1796
     along those lines what do we do to reimburse those folks who
1797
     paid a sum if we decide to abandon Yucca? What do we do to
1798
     the ratepayers and the generators that extracted the money
1799
     for that solution? What is going to happen to those
1800
     ratepayers? How are they going to be made whole if we decide
1801
      to go in another direction?
1802
           Secretary {Moniz.} The one mill per kilowatt hour is to
1803
     remove fuel from those sites, put it into federal control
1804
     where then the Federal Government has the responsibility--
1805
          Mr. {Barrow.} That is for money that hasn't been
1806
     collected yet.
1807
           Secretary {Moniz.} But I am saying--
           Mr. {Barrow.} What about the money that has already
1808
1809
     been collected?
           Secretary {Moniz.} And, yes, sure, but the--
1810
          Mr. {Barrow.} You say sure, but. It is--
1811
1812
           Secretary {Moniz.} Each kilowatt hour will ultimately
1813
     bear a cost which is currently best estimate of one mill to
1814
     manage disposal. There is no backing away from the federal
     commitment to manage that process.
1815
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1816
          Mr. {Barrow.} My question what about the stranded asset
1817
     of the investment that ratepayers have paid for years now if
1818
      it is determined that that asset is going to be upended?
1819
     about covering their loss?
1820
           Secretary {Moniz.} The Federal Government, the
1821
     Administration remains committed to moving that fuel as soon
1822
     as possible. That is why we believe that this dual track
1823
      strategy is the fastest way--
1824
           Mr. {Barrow.} But if you move it to someplace other
1825
      than what has been bought and paid for, you are going to add
      the cost of this other repository system, either this
1826
1827
      intermediate and permanent or this new permanent. My point
1828
      is how do we compensate the folks who have paid for the
      facility that we are going to be walking away from if that is
1829
1830
     what we decide to do?
1831
           Secretary {Moniz.} The estimate remains that the one
1832
     mill per kilowatt hour is a very credible expectation for the
1833
     cost of getting that fuel accepted and moved.
1834
          Mr. {Barrow.} That is future revenues for future
     projects. I am talking about what you want to do about the
1835
1836
      issue--
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1837
           Secretary {Moniz.} All the way from the beginning, the
1838
      current waste fund with its nearly $30 billion sitting in
1839
      there--
1840
           Mr. {Barrow.} How about money that has been collected
1841
      that hasn't been spent yet? What are we going to do about
1842
      that?
           Secretary {Moniz.} Well, I mean currently it is
1843
1844
      collecting interest and it is sitting there to be deployed.
1845
      In fact, then the request for legislation would be to
1846
     determine how a new waste organization has access to whatever
     combination of discretionary and mandatory funds required.
1847
1848
     But that $30 billion or almost $30 billion is there for this
1849
     purpose.
1850
           Mr. {Barrow.} Well, I can speak for every county
1851
      commissioner and city councilman who has got any zoning
      authority anywhere in the country that there is a problem
1852
1853
     here that I recognize a mile away, and again, you didn't
1854
      invent this problem, but if you have got to zone a socially
1855
     necessary use into an area that has got some controversy or
1856
      some undesirable effects, you are going to have some problems
     with folks who don't want it in their backyard.
1857
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1858
           And the problem with a consent-based basis that we are
1859
      talking about here, one challenge that I see just as an old
1860
      county commissioner is you have got folks who have got
1861
     different ideas about what their backyard is. You might have
     a local government, the local community that is just dying to
1862
1863
     get the jobs and the infrastructure and the opportunities.
1864
     You have got a state government that doesn't want it in their
1865
     backyard. Or you might have a state government that wants it
1866
     but a local government that doesn't want it in their
1867
     backyard. Or you might have the state and local government
1868
     on the same page and you have got some interest group
1869
     somewhere that says it regards the whole country is their
1870
     backyard or the planet as their backyard.
1871
           So I don't want us to be looking to something that has
1872
     never been found and it won't be found. I don't want to be
1873
      looking for a unicorn in this picture. Thank you for your--
1874
           Mr. {Shimkus.} I thank my colleague from Georgia and I
1875
     would like to yield 5 minutes to the gentleman from
1876
     Pennsylvania, Mr. Murphy, for 5 minutes.
1877
           Mr. {Murphy.} Mr. Secretary, great to see you again,
     and thanks for coming to Pittsburgh this week.
1878
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1879
           Secretary {Moniz.} Thank you.
1880
           Mr. {Murphy.} One of the comments that was made in that
1881
     roundtable you had was an energy company leader said it was
1882
      important to have regulations that were science-based and
      enforced consistently so that they could predict our future.
1883
1884
      I worry about a consent-based approach because I am not
1885
     always sure that it is based in science. I believe that pure
1886
      science is best done without politics, and unfortunately,
1887
     politics is often done without science.
1888
           And we had some hearings prior to today where we learned
1889
      the story of what happened when a new director of NRC came
1890
      in, basically shut down the facility, got rid of employees,
     disposed of records, and sent us back in time. And it
1891
1892
      concerns me that that was politically driven and not
1893
     scientifically driven.
1894
           Now, help us, as I appreciate your commitment to wanting
     to move forward in this, but in March, Nye County,
1895
1896
     California, last year they notified DOE of their consent to
1897
     have repository Yucca Mountain. DOE responded saying that
1898
     Nevada doesn't consent. And, Mr. Secretary, your testimony
     refers to reports that a number of communities are exploring
1899
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the possibility of hosting a consolidated storage facility
1900
1901
     and NRC staff has indicated four industries have expressed
1902
      some level of interest. Has DOE or the representatives met
1903
     with these entities? Can you give me a yes or no on that?
1904
           Secretary {Moniz.} No, we are not and we don't have the
      authorities to begin any kind of a negotiation with these
1905
1906
     communities.
1907
          Mr. {Murphy.} So isn't it fair that DOE meet with
1908
     representatives from Nye County, Pennsylvania, or somewhere
1909
     else if you are going to use a consent-based approach?
1910
           Secretary {Moniz.} Oh, I am sorry. I believe some
1911
      other officials have met with people from Nye County--
           Mr. {Murphy.} But people within DOE are not?
1912
1913
           Secretary {Moniz.} I am sorry?
1914
          Mr. {Murphy.} But people from DOE are not meeting with
1915
      folks in these other communities?
           Secretary {Moniz.} No, no, again, it is my
1916
1917
     understanding--I can clarify this later. It is my
1918
     understanding that certainly some members of the Nuclear
1919
     Energy Office have had discussions but nothing that I would
      call certainly a negotiation. We have no authorities to do
1920
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1921
     that.
1922
          Mr. {Murphy.} Well, regarding the interested entities,
1923
      these four that were mentioned, have the Senators and
1924
     Governors in the States where they are located endorsed
     hosting a consolidated interim storage facility?
1925
1926
           Secretary {Moniz.} No, sir, as far as my knowledge
1927
     goes. But earlier, as Mr. Barton said, there is an example
1928
     where a county in Texas has a public resolution--
1929
          Mr. {Murphy.} Sure.
1930
           Secretary {Moniz.} --of interest and he said are
      engaged in discussions with the Governor and the state
1931
1932
      legislature. So that is an example where it is beginning and
1933
      that is all--I think until we have a process in place--
1934
          Mr. {Murphy.} Well, let me ask about this process.
1935
     Have you done any analysis on the adequacy of the Nuclear
1936
     Waste Fund to pay for both interim storage and final disposal
1937
     facilities assuming the fund could be used for both purposes?
1938
           Secretary {Moniz.} Again, the waste adequacy assessment
1939
      looks at multiple scenarios and finds that there is a very,
1940
     very wide range of lifecycle costs. The one mill per
     kilowatt hour--
1941
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1942
          Mr. {Murphy.} But my point is are you using the Nuclear
1943
     Waste Fund to pay for interim and final disposal facilities?
1944
           Secretary {Moniz.} That is again something that will
1945
     have to be decided in Congress.
1946
           Mr. {Murphy.} But is that something you would support?
           Secretary {Moniz.} The Blue Ribbon Commission supported
1947
1948
      it.
1949
          Mr. {Murphy.} Okay. And most of DOE's current nuclear
1950
     waste management activities rely on taxpayer-funded
1951
     appropriations in 2012 and under the Continuing Resolution
      2013. This means that taxpayers are currently funding the
1952
1953
      costs of DOE's efforts to start over, breaking the historic
1954
     possibility that the beneficiaries of electricity, the
1955
      consumers, pay the cost of disposal. So for how long and for
1956
     what cost does the Administration support continuing the
1957
     policy of having the taxpayers foot the bill? Is that part
1958
     of your discussion?
1959
           Secretary {Moniz.} Again, that is a very important part
1960
      of Congress' discussion in terms of how it has chosen to do
1961
      appropriations, discretionary appropriations or waste fund
1962
     allocations.
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1963 Mr. {Murphy.} Sure. Well, in that context, though, our 1964 concern is we have already spent 15 billion that we 1965 appropriated and then someone, for consent reasons or 1966 political reasons, decided to pull the plug on that. So our concern is if we put more money into this, we want to know 1967 1968 there is a commitment from you and the Department of Energy 1969 to move forward. 1970 I was impressed with the article you wrote in Foreign 1971 Affairs 2011 where you talk about the importance of nuclear 1972 power and you also acknowledge the sensitivity you have to the government paying billions of dollars in damages to 1973 energy companies and that the uncertainty of cost is a big 1974 1975 problem with building more nuclear power plants. So in this 1976 context, you see the uncertainty of cost remains if we are 1977 ambiguous of where we are moving forward. So your commitment 1978 to move forward is so important. 1979 You mentioned the Blue Ribbon Commission with regard to 1980 moving forward, and you also said that we are in a stalemate 1981 and we have to be moving the ball forward. You said that 1982 today. So help this committee understand or build confidence 1983 in DOE's commitment to move forward on using Yucca Mountain

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as a permanent storage facility or, and what you have also
1984
1985
     talked about, a temporary one made for the next 100 years.
1986
     There is land out there to do that as well. Are you
1987
      committed to continue to move forward personally on this? Is
      the Department? Or are we going to see more holdups in this
1988
1989
     process?
1990
           Secretary {Moniz.} Certainly I am committed. In fact,
1991
     that is why I am here today. The Administration is
1992
     committed. The Department is committed. Of course, there is
1993
     this recommendation about a new organization to be formed,
1994
     and if that is done, then presumably a lot of those
1995
     responsibilities would move to this new organization. But I
1996
     think the point is the Administration and the government must
1997
     be committed to executing this responsibility.
1998
          Mr. {Murphy.} Well, we have been committed to a plan so
1999
     far and it is frustrating to have the rug pulled out from
     under us. Thank you.
2000
2001
           Mr. {Shimkus.} The gentleman's time is expired.
2002
           The chair now recognizes the gentlelady from California,
2003
     Ms. Matsui, for 5 minutes.
2004
          Ms. {Matsui.} Thank you, Mr. Chairman, and thank you
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for holding a hearing on this important issue. And thank 2005 2006 you, Mr. Secretary, for joining us once again. I commend 2007 your work with the Blue Ribbon Commission and I appreciate 2008 the Department of Energy's continued work on this matter. 2009 The Administration's strategy for the management and 2010 disposal of used nuclear fuel and high-level radioactive 2011 waste makes significant contributions to this debate and I 2012 look forward to continuing this open dialogue with you on how 2013 best to address the safe deposit of our country's nuclear 2014 waste. 2015 My district of Sacramento, the Sacramento Municipal 2016 Utility District, otherwise known as SMUD, owns a 2017 decommissioned Rancho Seco nuclear power plant so I have an 2018 interest in issues with spent fuel management posed by 2019 permanently shutdown reactors for some time. I was heartened 2020 to see that the Administration's strategy includes a pilot 2021 interim storage facility with an initial focus on moving fuel 2022 from shutdown reactors. Shutdown reactors represent a unique 2023 component in overall nuclear waste policy. As is the case 2024 with SMUD, removal of the spent fuel is many times the last 2025 major hurdle in the way of putting the land to a more

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beneficial use.
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           The Blue Ribbon Commission and the Administration both
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     advocate that it should be a priority to move spent fuel from
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      sites with permanently shutdown reactors and without an
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      operating nuclear generating Station. Do you agree that
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      spent fuel from these sites should be prioritized?
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           Secretary {Moniz.} That is certainly the
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     Administration's strategy's position.
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           Ms. {Matsui.} I strongly support a pilot interim
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      storage facility that removes all spent fuel from permanently
      shutdown sites. It seems to me that a successful pilot
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     project could help repair public confidence in the
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     government's ability to manage the Nation's public waste.
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           Secretary {Moniz.} Yes.
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           Ms. {Matsui.} And what other benefits would a pilot
     project achieve?
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           Secretary {Moniz.} Well, again, first and foremost, it
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2043
     would of course remove the fuel from those sites. I think it
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     would have, as you have indicated, an enormous impact on
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      saying that there is this commitment to accepting fuel by the
     Federal Government. We are accepting fuel. We are moving
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fuel. We are moving it safely and I think that would really
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     add a big jolt of confidence to getting this whole program
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     moving, not talking about it, but moving, moving fuel.
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      is the issue.
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           Ms. {Matsui.} Now, in your testimony, you mentioned
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      that DOE would conduct an analysis of initial used field
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      shipments from shutdown reactors sites. Can you elaborate on
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     what specific aspects this analysis will consider?
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           Secretary {Moniz.} Well, I think the analysis at this
      stage, it has to be quite generic because of course what the
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     geography would be of such a pilot facility will determine
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      specific travel routes, et cetera, but I would say--and this
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      is now my own personal speculation if you would like--I think
      for a first pilot facility in terms of modal issues, we
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     probably will be talking, you know, trucking of casks on the
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     highway. As the Academy report many years ago suggested,
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      once we get into a very, very large-scale transportation of
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      thousands of tons per year, then using trains as a major mode
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     will be important.
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           Ms. {Matsui.} So it is my understanding that the
     Federal Government has been transporting this nuclear waste
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and spent nuclear fuel in this country for some time now?
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           Secretary {Moniz.} Um-hum.
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           Ms. {Matsui.} That is right?
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           Secretary {Moniz.} Yes, we have had thousands of
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     shipments.
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          Ms. {Matsui.} Yes. So can you tell us about that
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     record and whether you are satisfied with the level of safety
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     that has been achieved?
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           Secretary {Moniz.} Certainly my understanding is that
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     there has been a very, very safe record, and as I said, the
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     similar record in Europe where more than 10 times as many
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     movements have occurred has also been very good, at least
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     that was the case a few years ago when I was on that Academy
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     committee. To be honest, I haven't looked personally in the
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     last 5 or 6 years.
           Ms. {Matsui.} Okay. Well, I believe moving spent
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     nuclear fuel from decommissioned sites first should be a
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     priority and that a pilot interim storage facility is a
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     necessary step in the right direction in the overall
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     management of our Nation's nuclear waste. And I do look
     forward to working with you, Mr. Secretary, and my colleagues
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on this committee to make real progress in this area.
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                                                              And I
2090
     thank you very much--
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           Mr. {Shimkus.} Can I have your last 35 seconds?
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          Ms. {Matsui.} Yes, you may.
           Mr. {Shimkus.} Mr. Secretary, what is a crystalline
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      formation, cutting the rock?
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           Secretary {Moniz.} Granite, for example.
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          Mr. {Shimkus.} And wasn't that exempted under the '87
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     amendments to the Nuclear Waste Policy Act?
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           Secretary {Moniz.} As I recall, I believe that--
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          Mr. {Shimkus.} And there are 25 States that have this
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     formation?
           Secretary {Moniz.} I don't--
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           Mr. {Shimkus.} So if we go to obviously a second
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     repository, those sites, based upon your testimony, or those
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     States would still be then open and accessible for granite
     formations during high-level nuclear waste? Wouldn't that be
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2106
     correct?
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           Secretary {Moniz.} Well, I think again that would be--
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           Mr. {Shimkus.} States like Washington, Massachusetts,
     New Hampshire, Vermont, New York, Connecticut, Delaware,
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Maryland, and Virginia all could be considered--
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           Secretary {Moniz.} I mean, again, as has been
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     demonstrated internationally, there is a wide range of
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     geologies that can be suitable for a repository.
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           Mr. {Shimkus.} Thank you, Mr. Secretary.
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           I now recognize the gentleman from West Virginia, Mr.
     McKinley, for 5 minutes.
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           Mr. {McKinley.} Thank you, Mr. Chairman. And, Mr.
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      Secretary, thank you for going to Morgantown to visit the --
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           Secretary {Moniz.} It was fun.
           Mr. {McKinley.} --National Energy Technology
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     Laboratory.
           I wasn't here in Congress in '08 or '09. I didn't come
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     until '11 so I am trying to get up to speed with all of this
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     debate that is taking place, but I do have a fact-finding
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      from the Nuclear Energy Institute that indicates that in 2008
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      there were some 3,000 scientists across five laboratories and
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     various major universities were involved in filing this
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     application with the DOE for the permit. And then within a
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     year's time, that permit was reversed. The application was
     reversed. Mr. Secretary, other than an election being taken
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place during that period of time, what happened? Was there a 2131 2132 change in science or technology that DOE hadn't taken into 2133 consideration or was this decision to cancel the application 2134 merely political? 2135 Secretary {Moniz.} Well, in a similar vein, of course I 2136 was not here as well. However, I would note that, as we have 2137 stressed, that there are two essential conditions in our 2138 view. I mean one is good science and number two is consent. 2139 Mr. {McKinley.} Well, Mr. Secretary, what I am saying 2140 is what science changed between '08 and '09? 2141 Secretary {Moniz.} And there are two issues, science 2142 and consent, and the Administration felt that on the consent 2143 basis this was simply not a workable project. 2144 Mr. {McKinley.} Was consent part of the law in '08? 2145 Secretary {Moniz.} It is a question of the ground 2146 truth, and the reality is the project moving forward? Does 2147 the project have the ability to capture all of the permits 2148 that it needs, which includes state permits? And so the 2149 project was deemed and declared not workable. 2150 Mr. {McKinley.} Engineers or contractors, it feels political. It doesn't feel like it has anything to do with 2151

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      science or technology. So the question you were asked
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      several times now, the gentleman from Georgia was asking it;
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      I heard Chairman Upton from Michigan raise the same question
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     and using his numbers because I don't know what they are for
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     West Virginia, but when he said Michigan again has taken away
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      from the taxpayers and businesses, everyone using the power,
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      they have extracted $600 million from the residents of
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     Michigan to pay for this facility. What have they gotten for
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      that $600 million?
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           Secretary {Moniz.} Well, first of all, the question--
           Mr. {McKinley.} And I heard your answer, well, the
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      amount that is being extracted is fair. It will pay for the
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      facility, but that is not the question they we are asking.
      What did we get for it? If we wind up ultimately abandoning
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      the facility, what did they get for $600 million in Michigan?
           Secretary {Moniz.} The one mill per kilowatt hour has
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     been paid in the rate base for all nuclear utilities for the
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     Federal Government commitment to accept the fuel and move it
      from those sites. That commitment remains.
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           Mr. {McKinley.} But they have spent 600 million and it
     hasn't happened yet, so what happens with the amount of money
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that has already been expended? Are we going to refund it to
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      the individuals if we abandon and go to a different site?
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           Secretary {Moniz.} As I think--
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           Mr. {McKinley.} Because I believe you are trying to
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     answer--if I can put words into your mouth--that whenever the
      site is determined, that mill per kilowatt hour will be
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     adequate to be able to facilitate this, but that is not the
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      question. The question is what happens to the $600 million
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      in Michigan that has already been expended? They don't have
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      anything. There is nothing to show for it.
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           Secretary {Moniz.} Again, the one mill per kilowatt
     hour is not to buy a facility. It is to buy a service.
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      service, as far as the utility concerned, is spent fuel
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     removal. The failure to begin removing that fuel on February
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      1, 1998, has led to the payment of damages. Those damages
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      are currently projected to go north of $20 billion back to
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      the utilities because the service is not being provided.
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      service will be provided. That remains the commitment. And
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      the funds in the meantime are, as I said earlier, accruing
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      interest. In fact, I think in the current waste fund--I
     maybe not quite right on this--but I think something like $6
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billion of it is interest that has accrued over the time. So
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      it is a service being purchased. There was a decision a long
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      time ago by this Congress in terms of how nuclear waste
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     disposal would be paid for. The commitment remains. It is
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     no different.
           Mr. {McKinley.} In closing, I know my time is almost
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     up. Are you telling me that if this decision goes in our
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      favor or it goes in the favor of Yucca Mountain, all of the
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      investment we have made, will the President uphold that or is
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      this going to be another DOMA, Immigration, and the Employer
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     Mandate? Will he enforce this or would he waive this--
           Secretary {Moniz.} We have made very clear we follow
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2206
               If the court directs--
      the law.
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           Mr. {McKinley.} He hasn't followed the law. That is
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      the problem. He hasn't followed the law in other--
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           Secretary {Moniz.} The law will be determined by this
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      court decision that we are all awaiting, and if it directs
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      the NRC to pick up the license, we will do our job to support
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      that, given appropriations. It will be up to the funds to be
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      supplied from discretionary or mandatory by this body and
      there will be many other conditions that have to be met,
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- including by the government, land withdrawals, there will be 2215 2216 state permits, many, many issues. And again the judgment 2217 remains. When we put all of this together, it doesn't seem 2218 very workable. 2219 Mr. {McKinley.} Mr. Chairman, I apologize for running 2220 over. 2221 Mr. {Shimkus.} No, you did fine. Thank you. The 2222 gentleman yields back his time. 2223 And, Secretary, you have been great. We have got one 2224 more member here who is actually the chairman of the Energy and Air Quality Committee, so he does have part of the big 2225 2226 nuclear portfolio up here and I am glad that he stayed 2227 around. And I would like to recognize him for 5 minutes. Secretary {Moniz.} I am aware of his portfolio. 2228 2229 Mr. {Whitfield.} Well, thank you, Chairman Shimkus. 2230 Mr. Secretary, we appreciate your being with us today 2231 and I just have to say honestly that I don't envy you trying 2232 to defend the Administration on this issue. 2233 I was reading the testimony and it said the
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Administration supports working with Congress to develop the

consent-based process that is transparent, adoptive, and

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technically sound. And it is my argument that we already 2236 2237 have the law on the books, the Nuclear Waste Policy Act, 2238 1982, 1987. Democrats and Republicans made the decision to 2239 do it. And now this Administration in 2009 made the decision to pull the plug after the Department of Energy had submitted 2240 2241 its application in 2008 at the NRC. 2242 And then Mr. Jaczko, who--so in my view, Harry Reid, 2243 President Barack Obama, and the chairman of the Nuclear 2244 Regulatory Commission basically made the decision they don't 2245 care what the Congress things, they don't care what the American people think, they are not going to abide by the 2246 2247 Nuclear Waste Policy Act. And, as a result, we have spent--I 2248 have heard different figures -- Mr. Barton said around 15 billion, 13 billion, 14 billion for Yucca Mountain and no one 2249 2250 talked about the judgments against the Federal Government as 2251 a result of the lawsuits because the Federal Government had 2252 breached its contract because it didn't have the ability to 2253 take possession of the waste, so that is another 12 or \$13 2254 billion. And then the President decides, well, okay, we are 2255 going to pull the plug but we will establish a Blue Ribbon Commission and now you all are asking for 1.3 billion and 2256

pay-as-you-go another 5.6 billion over 10 years. 2257 2258 And, you know, maybe I am biased but when I go to the 2259 Rotary Club and I talk about this kind of waste, it is really 2260 upsetting to people when you talk about a \$16 trillion federal debt that is growing every day and this judgment is 2261 2262 growing every day. And so you really do wonder what is the 2263 President thinking about? We have a federal law that has not 2264 been invalidated. The only reason we are now waiting for a 2265 decision of the courts is because the Administration didn't act, so a lawsuit was filed. And so here we are. And I mean 2266 I have great admiration for you and your intellectual ability 2267 2268 and your understanding of the issue, but I tell you, I think 2269 that Barack Obama is flat wrong on this issue and that the 2270 American people are going to suffer. 2271 Now, maybe that is my opening statement and I would be 2272 happy to give you an opportunity to respond if you want to. 2273 I am certainly not frustrated in any way but if you would like to respond, fine. If you--2274 2275 Secretary {Moniz.} Well, again, it would just be repetitive that Secretary Chu felt that the project would be 2276 unworkable and that is again based on the issue of public 2277

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acceptance, which we consider to be equally important as the
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      scientific criteria. So, again, as I said earlier, when the
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      judgment is made in the litigation with the NRC, I think we
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     will have a path forward there, whichever it is. But, again,
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      I think I have come here today especially to try to, you
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     know, present my perspective. It is the one of the Blue
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     Ribbon Commission that we need to pursue these two tracks in
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     any event. It will be our fastest approach to move fuel, to
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     accept fuel, and we believe that is needed no matter what the
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     repository pathway is. And I hope that we can work together
     to move the ball.
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           Mr. {Whitfield.} And I would just say that, I mean, the
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     President is out there every day talking about all-of-the-
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     above and the nuclear energy is really being stagnant right
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     now because of this waste issue. And if he is genuinely
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      concerned about carbon emission, he should get off the dime
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     and take some action to expedite this waste issue, taking
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      care of this waste issue or we are going to have a pretty
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      stagnant nuclear energy in the U.S. in my view.
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           Secretary {Moniz.} If I may respond to that, I think
      the Administration's actions are very consistent on nuclear
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2299 power with the all-of-the-above strategy. The fact is after 2300 many years of talk, this Administration moved out with the 2301 conditional \$8 billion loan guarantee for first-mover nuclear 2302 plant construction in Georgia, AP 1000s. This Administration 2303 launched the program and already decided on one license for a 2304 new small modular reactor to be constructed, and the 2305 Administration feels that it is putting forward in fact the 2306 proposal for the most effective way to address waste 2307 management in a consent-based approach. So I think the 2308 ground truth, the ground facts speak for themselves. 2309 Mr. {Whitfield.} Well, Mr. Secretary, I may make one 2310 final comment. Every day the President, when he talks about 2311 energy, he talks about all-of-the-above and yet America is 2312 the only country in the world where you cannot build a new 2313 coal-power plant. So I don't see how he can say all-of-the-2314 above. Secretary {Moniz.} Well, I would like to respond to 2315 2316 that as well in a similar vein. I think, first of all, of 2317 course, the President has stated and I have stated and 2318 thousands and thousands of scientists have stated that it would be imprudent not to start addressing the greenhouse gas 2319

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emission issue. So that is kind of a given in the
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     Administration's position. Now, given that, what does all-
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     of-the-above mean? What it means in this case is--and I am
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     going to go back and say there was a lot of talking the talk
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     for many years. This Administration put $6 billion on the
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      table for clean coal projects, eight major sequestration
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     projects, one has started, two will start next year, five are
      in construction. ARPA-E has invested in more than 20
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     projects for novel capture technologies. So if we are going
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     to establish carbon capture utilization -- and I might add six
     of those eight projects have enhanced oil recovery as part of
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      it. If we are going to establish the competitiveness of all
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     of our resources in a low-carbon world, this is exactly what
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     we need to do and the President moved out on these programs.
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          Mr. {Whitfield.} Well, if I may make one final comment,
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      I do hope that you ought to consider things other than just
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      carbon capture and sequestration because there are a lot of
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     other technologies out there that can be just as beneficial.
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           Secretary {Moniz.} Well, in fact, if I may add--I am
      sorry, Mr. Chairman, one last thing--
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          Mr. {Shimkus.} You have been very kind on all this time
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we have given, so of course you can continue. 2341 2342 Secretary {Moniz.} So another example of this case was 2343 a week after the President's climate plan announcement in 2344 Georgetown, our department put out a draft solicitation for an \$8 billion loan guarantee program for advanced fossil 2345 2346 technologies across the board. We are waiting for input in 2347 September but we said, as examples, it could be dry fracking. 2348 It could be new carbon utilization technologies. It could be 2349 advanced fossil combined heat and power. So we are putting 2350 out the programs to establish fossil fuels as part of the 2351 low-carbon future. 2352 Mr. {Shimkus.} And reclaiming my time. And I want to 2353 thank the Secretary for your time. And it was good for some 2354 of my nuclear friends to hear some fossil fuel stuff, so that 2355 is why I definitely am all-of-the-above in my Congressional 2356 District, so it was probably good for them to hear some of 2357 that. 2358 In conclusion, again, I would like to thank you. You 2359 spent a wonderful amount of time in a subcommittee setting, 2360 which it is fairly unique in this process. I want to thank my Members on both sides who participated in today's hearing, 2361

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and I want to remind Members that they have 10 business days
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      to submit questions for the record, and I ask you, Mr.
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      Secretary, to respond to those as promptly as you can.
           Secretary {Moniz.} Yes.
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           Mr. {Shimkus.} And with that, the hearing is now
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      adjourned.
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           Secretary {Moniz.} Thank you, Mr. Chairman. Thank you,
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2369
      Mr. Tonko.
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           [Whereupon, at 4:15 p.m., the Subcommittee was
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      adjourned.]
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