

**This is a preliminary transcript of a Committee hearing. It has not yet been subject to a review process to ensure that the statements within are appropriately attributed to the witness or member of Congress who made them, to determine whether there are any inconsistencies between the statement within and what was actually said at the proceeding, or to make any other corrections to ensure the accuracy of the record.**

1 {York Stenographic Services, Inc.}

2 RPTS MEYERS

3 HIF206.180

4 ``NRC POLICY AND GOVERNANCE OVERSIGHT''

5 TUESDAY, JULY 24, 2012

6 House of Representatives,

7 Subcommittee on Environment and the Economy

8 Joint with the

9 Subcommittee on Energy and Power

10 Committee on Energy and Commerce

11 Washington, D.C.

12 The Subcommittees met, pursuant to call, at 10:02 a.m.,  
13 in Room 2123 of the Rayburn House Office Building, Hon. John  
14 Shimkus [Chairman of the Subcommittee on Environment and the  
15 Economy] presiding.

16 Present from the Subcommittee on Environment and the  
17 Economy: Representatives Shimkus, Murphy, Pitts, Bass, Latta,  
18 McMorris Rodgers, Cassidy, Barton, Upton (ex officio), Green,

19 Butterfield, Barrow, Matsui, DeGette, Capps, Dingell, and  
20 Waxman (ex officio).

21 Present from the Subcommittee on Energy and Power:

22 Representatives Whitfield, Walden, Terry, Burgess, Bilbray,  
23 Scalise, Olson, McKinley, Gardner, Pompeo, Griffith, Rush,  
24 Castor, Markey, and Engel.

25 Staff present: Nick Abraham, Legislative Clerk; Carl  
26 Anderson, Counsel, Oversight; Gary Andres, Staff Director;  
27 Charlotte Baker, Press Secretary; Mike Bloomquist, General  
28 Counsel; Sean Bonyun, Communications Director; Anita Bradley,  
29 Senior Policy Advisor to Chairman Emeritus; Maryam Brown,  
30 Chief Counsel, Energy and Power; Allison Busbee, Legislative  
31 Clerk; Annie Caputo, Professional Staff Member; Cory Hicks,  
32 Policy Coordinator, Energy and Power; Heidi King, Chief  
33 Economist; David McCarthy, Chief Counsel, Environment and the  
34 Economy; Andrew Powaleny, Deputy Press Secretary; Chris  
35 Sarley, Policy Coordinator, Environment and the Economy;  
36 Brett Scott, Staff Assistant; Peter Spencer, Professional  
37 Staff Member, Oversight; Lyn Walker, Coordinator, Admin/Human  
38 Resources; Jeff Baran, Democratic Senior Counsel; Phil  
39 Barnett, Democratic Staff Director; Alison Cassady,  
40 Democratic Senior Professional Staff Member; and Caitlin  
41 Haberman, Democratic Policy Analyst.

|  
42           Mr. {Shimkus.} The joint subcommittee hearing will now  
43 come to order.

44           First of all, I want to welcome our friends from the  
45 Nuclear Regulatory Commission. And let me start by again  
46 welcoming you in particular. Well, let me just recognize  
47 myself for 5 minutes for an opening statement.

48           Again, welcome. And Chairman Macfarlane,  
49 congratulations. And it is good to meet with you for a few  
50 minutes before this session. Commissioner Apostolakis will  
51 be unable to be here today since he is visiting his mother in  
52 Greece. We wish him safe travel and pray that she feels  
53 better soon.

54           A lot has happened since the Commission last testified  
55 before this committee. Early this year, the NRC issued the  
56 first license for new plants in 34 years. In March, the  
57 Commission issued orders to implement post-Fukushima  
58 improvements. Only 2 weeks ago, we saw a ``changing-of-the-  
59 guard'' as Chairman Jaczko exited the Commission and Chairman  
60 Macfarlane was sworn in. Under Chairman Jaczko, the last 3  
61 years have been turbulent for the NRC, to say the least, and  
62 the change in leadership was long overdue.

63           With the new chairman, today's hearing provides an  
64 excellent opportunity to review policy and governance of the

65 Commission. We can gather important perspective from the  
66 commissioners, and importantly, Chairman Macfarlane, about  
67 the future of the Commission and its work. This is an  
68 opportunity, not to dwell on the past, but to look to the  
69 future through some of the important lessons of recent  
70 commission events and actions. It is critical for our  
71 oversight that we examine weaknesses in the NRC governance  
72 identified during the past chairman's tenure and to assess  
73 the many policy challenges facing the agency.

74 One broad area of policy interest concerns regulatory  
75 priorities. In its other work, this committee has focused  
76 significant attention on the combined effect many substantial  
77 EPA regulations has had on our Nation's coal plants. It  
78 should be of no surprise I am similarly concerned about the  
79 potential impact of numerous post-Fukushima and other  
80 regulatory changes on our Nation's nuclear plants.

81 Without a doubt, the industry must ensure safe operation  
82 and regulatory compliance. None of us would tolerate  
83 anything less. However, I believe it is incumbent on the  
84 Commission to consider the cumulative effect regulatory  
85 changes have on safety. In a March 2011 information paper to  
86 the Commission, the NRC staff cautioned that the cumulative  
87 Effects of Regulation ``can potentially distract licensee or  
88 entity staff from executing other primary duties that ensure

89 safety or security.'" I believe this cumulative effect risk  
90 is valid.

91 The NRC and the industry had a full workload of safety  
92 improvements under development before the Fukushima accident  
93 occurred. The Commission must be diligent about ensuring its  
94 licensees can focus on completing changes with greatest  
95 safety significance rather than being diverted onto other,  
96 less important changes simply to meet artificial timelines.

97 Adequate protection is about risk reduction but should  
98 not be confused with ``risk elimination.'" Risk is inherent  
99 to all sources of energy, yet energy is necessary to our  
100 health and well being--to heat our homes, grow our food, and  
101 power our economy. With the Atomic Energy Act, Congress  
102 endeavored to balance the benefits nuclear energy brings to  
103 the general welfare with protection of public health and  
104 safety. Our goal as legislators and yours as regulators  
105 should be to preserve that balance.

106 I want to thank all of the commissioners for coming here  
107 today to update the Committee on the NRC activities, and I  
108 look forward to their testimony and willingness to answer our  
109 questions.

110 And I would like to yield the balance of my time to my  
111 friend, Mr. Terry, from Nebraska.

112 [The prepared statement of Mr. Shimkus follows:]

113 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
114           Mr. {Terry.} Thank you, Mr. Chairman. Thank you for  
115 holding this very important hearing. As you may be aware, I  
116 introduced legislation in December of last year in response  
117 to many of the concerns that were being raised at the Nuclear  
118 Regulatory Commission, and the IG reports confirmed those  
119 concerns.

120           I want to welcome the new chair of the Commission and  
121 relay that it is my sincere hope that we can work together.  
122 I wanted to also stress that the NRC has been known  
123 throughout the world as a premier regulatory agency that has  
124 been known to work together. I hope we can restore the  
125 confidence that people once held with the NRC.

126           Now, during my questions, I want to discuss aspects of  
127 my bill to get your feedback, particularly on the previous  
128 abuse of emergency powers and maybe setting those down in a  
129 more certain way.

130           I yield back my time.

131           [The prepared statement of Mr. Terry follows:]

132           \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

133 Mr. {Shimkus.} The gentleman yields back his time.

134 Does Mr. Barton want the remaining time?

135 Then, the chair reels back his time now. And the chair  
136 recognizes the gentleman from Texas, Mr. Green, for 5  
137 minutes.

138 Mr. {Green.} Thank you, Mr. Chairman, for holding this  
139 hearing. And I want to welcome our commissioners back to our  
140 committee.

141 Chairman Macfarlane, congratulations on your recent  
142 appointment. We are aware of the situations you inherited  
143 and I applaud your enthusiasm and willingness to address the  
144 governance issues head-on. I know some of my colleagues  
145 continue to have concerns about some of the actions initiated  
146 under the former Chairman Jaczko. I do hope that we can  
147 allow the new chair the opportunity to tackle some of these  
148 governance issues before making the assumptions on the NRC's  
149 work going forward. In the meantime, we should focus our  
150 committee oversight on ensuring safety and viability of our  
151 nuclear fleet.

152 I am a long-term supporter of nuclear energy because it  
153 is a cleaner energy alternative. The President has said he  
154 supports investments in alternative forms of energy, and  
155 Secretary Chu has testified before this committee that we

156 would be unable to meet the President's goals if we do not  
157 continue to invest in nuclear energy.

158         With that, there is no doubt, though, that the issue of  
159 long-term and interim nuclear storage facility disposal needs  
160 to be dealt with and I do hope the Commission will seriously  
161 look at this issue in the near future.

162         Again, thank each of you for being here. My hope is  
163 that today starts a new chapter in our committees'  
164 relationship with the NRC and I wish you all the luck in  
165 turning over a new leaf.

166         With that, Mr. Chairman, I would like to yield the  
167 balance of my time to our ranking member of our full  
168 committee, Mr. Waxman.

169         [The prepared statement of Mr. Green follows:]

170         \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
171 Mr. {Waxman.} Thank you very much for yielding to me.

172 I also want to begin by welcoming Dr. Allison Macfarlane  
173 and the other members of the Commission. I look forward to  
174 your testimony on the safety and security of America's  
175 nuclear power plants.

176 The mission of the Nuclear Regulatory Commission is to  
177 license and regulate the Nation's civilian use of nuclear  
178 materials to ``ensure adequate protection of public health  
179 and safety, promote the common defense and security, and  
180 protect the environment.'' This is a vital mission, but for  
181 the last year-and-a-half, the Commission has been distracted  
182 from its responsibilities by politicians who second-guessed  
183 its decisions and sowed internal dissent. Regrettably,  
184 this committee helped fan the flames of discord within the  
185 Commission by looking for any opportunity to cast aspersions  
186 on the former chairman.

187 It is time to move on with the four commissioners here  
188 today and the new chairman. We should focus on examining  
189 important nuclear safety issues, not rehashing old grudges.  
190 There is no shortage of issues to discuss, from the ongoing  
191 shutdown of the San Onofre Nuclear Generating Station in  
192 California due to safety concerns, to the status of NRC's  
193 post-Fukushima review of nuclear power plant safety in the

194 United States.

195           It has been more than a year since the Fukushima nuclear  
196 accident in Japan. Japan's independent commission  
197 investigating the events leading up to the disaster recently  
198 concluded that the power plant operator and Japan's nuclear  
199 regulators failed to implement basic safety measures despite  
200 known risks posed by earthquakes, tsunamis, and other events  
201 that can cause long-term blackouts at reactors. This is a  
202 cautionary tale for the United States, one that NRC should  
203 heed when implementing lessons learned from the Fukushima  
204 disaster.

205           I look forward to the hearing. I thank the gentleman  
206 for yielding to me and I yield back the time to Mr. Green  
207 should he wish to use it.

208           [The prepared statement of Mr. Waxman follows:]

209 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
210 Mr. {Green.} Mr. Chairman, unless another member on our  
211 side wants the remainder of the minute--no one?

212 I yield back my time.

213 Mr. {Shimkus.} The gentleman yields back time.

214 The chair recognizes the chairman of the Energy  
215 Subcommittee, Mr. Whitfield, for 5 minutes.

216 Mr. {Whitfield.} Thank you, Mr. Chairman. And I also  
217 want to welcome the commissioners from the NRC today and tell  
218 all of you how much we appreciate the important work that you  
219 do. We are all optimistic and hopeful that Chairwoman  
220 Macfarlane will make great improvements and restore the  
221 collegiality at the Commission. And we know that she has an  
222 impressive background in this area and look forward to  
223 working with her.

224 All of us watched closely the events that surrounded the  
225 Fukushima situation, and when the Japanese Diet's Nuclear  
226 Accident Independent Investigation Commission reported that  
227 if Fukushima had been required to implement, for example, the  
228 ``B.5.b'' order issued by the NRC following the 9/11  
229 terrorist attacks on the U.S., ``that accident may have been  
230 preventable.''

231 That same report also observed that Japanese plants were  
232 not required to consider a possible station blackout

233 scenario, something that the NRC instituted in the 1980s.  
234 And last year, the NRC's Taskforce concluded that ``events  
235 like the Fukushima accident are unlikely to occur in the  
236 United States'' and that ``continued operation and licensing  
237 activities do not pose an imminent risk to public health and  
238 safety.''

239       We all were encouraged by that and I know that on March  
240 9 of this year, the NRC issued a series of orders without a  
241 rigorous cost-benefit analysis. I understand it was the  
242 Commission's collective judgment to proceed in that fashion  
243 due to the urgency of those high-priority issues and I don't  
244 think any of us disagree with that. But moving forward with  
245 the complicated and complex issues that you deal with, we do  
246 know that you will be striving and we hope that you will  
247 strive for a solid technical basis and rigorous cost-benefit  
248 analysis on any decision that is made.

249       But once again, we look forward to your testimony and  
250 look forward to the opportunity to ask questions, and thank  
251 you for joining us.

252       And I would yield the balance of my time to the chairman  
253 of the full committee, Mr. Upton.

254       [The prepared statement of Mr. Whitfield follows:]

255 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|

256           The {Chairman.} Thank you. And I thank both of you for  
257 holding this important and very timely hearing. I am pleased  
258 for the opportunity to personally relay the concerns that  
259 folks in southwest Michigan have regarding recent news  
260 reports of degraded performance of the Palisades nuclear  
261 plant in my district. I share those concerns and have raised  
262 them with Entergy officials. I understand they have made  
263 many management changes and have very detailed plans about  
264 how to restore their facility to the high level of safety  
265 that we, every one of us, expect. And while I am encouraged  
266 by their commitment to resolve the situation, I will continue  
267 monitoring this situation closely, working directly with the  
268 company, as well as the NRC, and I look forward to asking  
269 questions of the Commission on that issue.

270           With regard to governance, Congress recognized in 1974  
271 that one person should not be able to dictate what  
272 constitutes nuclear safety. They gave that responsibility to  
273 a commission of five people to consider complex issues  
274 collegially and in a manner that maximizes the benefit of  
275 nuclear technology while protecting the public. Collegiality  
276 is not just a buzzword; it is a critical safeguard against  
277 ill-considered policymaking by any single commission member.

278           Following the Three Mile Island accident, Congress

279 passed the Reorganization Plan of 1980 to address  
280 organizational weaknesses and clarify lines of authority.  
281 The Reorganization Plan shifted a certain amount of authority  
282 from the Commission to the chairman, and while that approach  
283 served the Nation well for nearly 30 years, we have now  
284 witnessed how one person, intent on expanding the limits of  
285 his authority, can undermine the Commission's effectiveness.  
286 I am relieved the Jaczko era is officially behind us, but  
287 flaws have been exposed at the Commission that still need to  
288 be addressed.

289       As we have learned through our investigations and two IG  
290 reports, just a few of the former chairman's actions include:  
291 repeated attempts to influence or withhold agency staff  
292 information from the Commission; intimidation and bullying of  
293 commissioners and agency professionals creating a chilled  
294 work environment; and use of the Public Affairs Office to  
295 denigrate his colleagues and politicize and pressure  
296 commission policy positions.

297       In all my years on this committee, I have never  
298 witnessed a situation like that during the past 3 years at  
299 the NRC. Last year, four commissioners took the  
300 unprecedented step of privately alerting the White House  
301 Chief of Staff to the untenable situation. Sadly, the  
302 President's response was to turn a blind eye while the four

303 eminently qualified commissioners, whom he nominated, were  
304 all vilified by Chairman Jaczko's allies when their concerns  
305 became public. We must ensure history never repeats itself.

306 I yield back.

307 [The prepared statement of Mr. Upton follows:]

308 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
309 Mr. {Shimkus.} The gentleman yields back his time.

310 And again, I would like to welcome the commission  
311 members. And it is my understanding that the chairman will  
312 offer the opening statement for--oh, I am sorry.

313 Without objection, I would like to recognize the ranking  
314 member of the Energy Subcommittee--I didn't know there were  
315 any other subcommittees other than mine, Bobby--for 5 minutes  
316 for your opening statement.

317 Mr. {Rush.} I want to thank you, Mr. Chairman, and I  
318 want to thank again all of the NRC commissioners for your  
319 attendance here today. You certainly deserve all the  
320 accolades that we can give to you because of the hard work  
321 that you do and have continued to do, even under the former  
322 chairman.

323 Dr. Macfarlane, I really want to thank you for being  
324 here and I want to welcome you. We look forward to your  
325 insightful and rigorous leadership, and we know that the  
326 genius is yet to appear, but it is here present with us and  
327 so I am so delighted that you are here before this committee  
328 and that you are the chairman of the NRC. So welcome.

329 I look forward to hearing from you and I look forward to  
330 hearing your vision for the agency moving forward. And I  
331 look forward to hearing how you plan to work in concert with

332 your fellow commissioners to ensure that the agency is  
333 conducting its work smoothly and without interruption.

334 Mr. Chairman, for Illinois, our State, housing more  
335 nuclear reactors than any other State in the country, my  
336 constituents and yours want to be assured that the NRC has in  
337 place commonsense protocols for both mitigating risks of a  
338 nuclear disaster, as well as procedures to safeguard the  
339 public in the event that a disaster occurs. Specifically, I  
340 look forward to hearing more about the steps that the  
341 Commission has put in place to improve safety based on a huge  
342 amount of information we have learned following the events at  
343 Fukushima.

344 It has now been over 16 months since the horrific  
345 disaster of last March, and in the past 12 months, there have  
346 been seven major reports on Fukushima, as well as numerous  
347 international IAEA and other international studies on the  
348 events that took place at Fukushima. The 30 plus NRC actions  
349 that were initially approved by the agency were based on a  
350 report that was drafted within 3 months of the Fukushima  
351 events and before any root cause or detailed timeline of  
352 events had been made public. And I am curious to know if the  
353 agency has assessed the list of NRC actions against the vast  
354 array of information to ensure that the NRC staff, and more  
355 importantly, the industry, are focused on the issues that

356 were the cause and that are safety-significant.

357           Mr. Chairman, while I believe nuclear power must be a  
358 vital part of our country's overall energy portfolio, we must  
359 ensure that we have the best systems and practices in place  
360 to safeguard against an unforeseen nuclear accident to  
361 prevent widespread disaster like what we witnessed last March  
362 in Japan. My constituents in the 1st District and in  
363 Illinois, as well as the larger American public expect us to  
364 address these pressing issues, so I look forward to hearing  
365 from the commissioners today.

366           One other matter, Mr. Chairman, on another significant  
367 note, I also look forward to hearing more about the NRC's  
368 work in supporting the engineering departments of HBCUs,  
369 historically black colleges and universities, as reported in  
370 the magazine ``U.S. Black Engineer and Information  
371 Technology.'' Supporting STEM education is a top priority  
372 for me, and the NRC was recognized as one of the government  
373 agencies considered most supportive of the engineering  
374 departments of HBCUs, and I would like to hear more about  
375 your work in that particular area.

376           So I look forward to hearing more about this work, more  
377 in depth about all your activities.

378           And Mr. Chairman, with that, I yield back 9 seconds.

379           [The prepared statement of Mr. Rush follows:]

380 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
381           Mr. {Shimkus.} The chair welcomes the ranking member  
382 for those 9 seconds.

383           And now, I would like to recognize Chairman Macfarlane.  
384 Your full statement is in the record for the Commission, and  
385 then you are recognized for 5 minutes, and we will be very  
386 generous, so don't feel rushed. And then I think it is our  
387 understanding that we will give the other members of the  
388 Commission an opportunity for 5 minutes for an opening  
389 statement.

390           With that, the chair recognizes the chairman of the NRC,  
391 Hon. Macfarlane.

|  
392 ^STATEMENTS OF ALLISON M. MACFARLANE, CHAIRMAN, U.S. NUCLEAR  
393 REGULATORY COMMISSION; KRISTINE L. SVINICKI, COMMISSIONER,  
394 U.S. NUCLEAR REGULATORY COMMISSION; WILLIAM D. MAGWOOD,  
395 COMMISSIONER, U.S. NUCLEAR REGULATORY COMMISSION; AND WILLIAM  
396 C. OSTENDORFF, COMMISSIONER, U.S. NUCLEAR REGULATORY  
397 COMMISSION

|  
398 ^STATEMENT OF ALLISON M. MACFARLANE

399 } Ms. {Macfarlane.} Thank you very much.

400 Chairmen Whitfield and Shimkus, Ranking Members Rush and  
401 Green, and members of the subcommittees, I am honored to be  
402 here before you today in my first congressional appearance as  
403 chairman of the U.S. Nuclear Regulatory Commission.

404 I am pleased to join my fellow commissioners to discuss  
405 the critical policy issues facing our agency. I have had the  
406 opportunity and privilege to begin working with Commissioners  
407 Svinicki, Apostolakis, Magwood, and Ostendorff. They are all  
408 talented professionals with a rich and diverse set of  
409 experiences. I am looking forward to collaborating with them  
410 and forming a collegial relationship and service to the  
411 country and the mission of the agency.

412 I would like to take a moment to address my leadership

413 style and the approach I will take as chairman. I have  
414 already begun to reach out to my fellow commissioners to lay  
415 the groundwork for a strong working relationship, and I look  
416 forward to seeking and receiving their advice on  
417 consequential matters facing the agency. I am committed to  
418 maintaining open lines of communication and a respect for  
419 their views and best judgment. I believe that by working  
420 together collegially, the product of our efforts as a  
421 commission will be stronger and more protective of the public  
422 interest.

423         To execute their responsibilities effectively, my  
424 colleagues must have access to unfettered and timely  
425 information, and I will ensure that they are fully and  
426 currently informed.

427         One of my responsibilities is to ensure that the  
428 Commission's policy direction is being carried out in the  
429 most effective and efficient manner to support the mission.  
430 While the commitment and capability of the executive director  
431 of operations and his senior management team is impressive,  
432 the chairman must be in the position to monitor staff  
433 performance and verify that mission responsibilities are  
434 being met effectively. I look forward to working with the  
435 EDO to find the right balance between our respective roles.

436         Finally, I embrace the NRC's organizational values that

437 are intended to guide every action taken by agency personnel.  
438 These values are integrity, service, openness, commitment,  
439 cooperation, excellence, and respect. I support the  
440 commitment to an open, collaborative work environment that  
441 encourages all employees and contractors to promptly speak up  
442 and share concerns and differing views without fear of  
443 negative consequences. I believe these values are worthy of  
444 highlighting as we reinforce our agency's focus on its  
445 critical mission of safeguarding the public's health, safety,  
446 and security and protecting the environment.

447       This is especially valuable at a time when the agency is  
448 dealing with a wide array of critical safety matters. We  
449 continue to focus on implementing the important lessons  
450 learned from the Fukushima Daiichi accident. The NRC  
451 continues to believe that our Nation's nuclear fleet is safe  
452 and not facing imminent risk from a similar accident.  
453 However, the Fukushima disaster clearly offers lessons to be  
454 learned.

455       I look forward in this context to working with my  
456 colleagues to establish safety measures derived from the  
457 recommendations by the NRC Near-Term Taskforce. The staff  
458 has prioritized these recommendations into three tiers. In  
459 March, the Commission approved the first tier of actions for  
460 the staff to issue as immediately enforceable orders. We

461 also issued requests for information to our licensees to help  
462 inform the staff as we proceed in developing the Tiers 2 and  
463 3 measures. This is a substantial amount of progress in a  
464 short time, and the Commission looks forward to continuing to  
465 work with the staff to address remaining Fukushima-related  
466 lessons.

467 In addition, the NRC has made significant strides in  
468 several other areas this year. We issued the first two new  
469 reactor licenses in over 30 years--the Vogtle site in Georgia  
470 and the Summer site in South Carolina. We also authorized a  
471 new design certification for the AP-1000 reactor, four new  
472 uranium recovery licenses, and a license for the AREVA Eagle  
473 Rock centrifuge enrichment facility. We anticipate more  
474 applications and decisions being made in the next few years  
475 in all these areas.

476 With all these new developments, the NRC continues its  
477 responsibility for making the safety and security of our  
478 current operating nuclear fleet by performing thousands of  
479 hours of inspections at plants and material sites. On the  
480 whole, our Nation's nuclear power plants have performed well,  
481 and where issues have arisen, the agency has moved  
482 expeditiously to resolve any problems.

483 We are always working to bring transparency to our  
484 operations and maintain strong relationships with our

485 stakeholders and the public. It is these accomplishments  
486 that demonstrate time and again the level of professionalism  
487 among the NRC staff. I am proud to be a part of this agency  
488 and I look forward to working with my fellow commissioners  
489 and the staff in the coming months.

490 Thank you for this opportunity to appear before you  
491 today. I am happy to answer any of your questions.

492 [The prepared statement of Ms. Macfarlane follows:]

493 \*\*\*\*\* INSERT 1 \*\*\*\*\*

|  
494           Mr. {Shimkus.} Thank you, Chairman. Right on the  
495 button on 5 minutes so you were well prepared. So that is a  
496 good first start.

497           The chair now recognizes Commissioner Svinicki. You are  
498 recognized for 5 minutes.

|  
499 ^STATEMENT OF KRISTINE L. SVINICKI

500 } Ms. {Svinicki.} Thank you, Chairman Shimkus, Ranking  
501 Member Green, Chairman Whitfield, Ranking Member Rush, and  
502 members of the subcommittees for the opportunity to appear  
503 before you today at this oversight hearing to examine NRC  
504 policy and governance.

505 I would like to begin by recognizing the early  
506 commitment of the Commission's new chairman, Dr. Allison  
507 Macfarlane, to forge a collegial relationship with each  
508 member of the Commission, which began even prior to her  
509 swearing in earlier this month and has continued since that  
510 time. I am appreciative of her reaching out to me, our  
511 fellow commissioners, and members of the NRC Senior Executive  
512 Service and staff. The tone she is setting is constructive  
513 and is a most welcomed opportunity to move forward in a  
514 positive manner.

515 Having joined the Commission in March of 2008, I arrived  
516 at an agency whose regulatory program is regarded as among  
517 the most informed and disciplined in the world. I am  
518 grateful to President Obama for having nominated me this year  
519 to serve a second term on the Commission. Having been  
520 confirmed just last month, I continue to pledge my efforts to

521 advance the NRC's important work during this new term of  
522 service.

523         The tragic events in Japan in 2011 cast the NRC's work  
524 into even sharper relief for the American public. Nuclear  
525 technology is unique and its use demands an unwavering  
526 commitment to safety principles. This past March, the NRC  
527 issued a series of orders to nuclear power plant licensees  
528 requiring features to mitigate beyond design-basis extreme  
529 natural events, the installation of Hardin venting systems at  
530 some plants, and enhanced spent fuel pool instrumentation.  
531 The NRC is also requiring nuclear power plant licensees to  
532 undertake substantial reevaluations of seismic and flooding  
533 hazards at their sites.

534         The NRC continues to develop and communicate the  
535 specific guidance for implementing these actions with input  
536 from nuclear operators, nuclear safety, and environmental  
537 interest groups, and other members of the public. This work  
538 is carried out through the committed efforts of the women and  
539 men of the NRC in advancing the NRC's mission of ensuring  
540 adequate protection of public health and safety and promoting  
541 the common defense and security.

542         I would like to convey publicly my gratitude to the NRC  
543 staff for the work they do and for assisting my efforts to  
544 advance our shared goals.

545 Chairman Whitfield, Ranking Member Rush, Chairman  
546 Shimkus, Ranking Member Green, and members of the  
547 subcommittees, I appreciate the opportunity to appear today  
548 and look forward to your questions. Thank you.

549 [The prepared statement of Ms. Svinicki follows:]

550 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
551           Mr. {Shimkus.} Thank you. The chair now recognizes  
552 Commissioner Magwood, sir, for 5 minutes.

|  
553 ^STATEMENT OF WILLIAM D. MAGWOOD

554 } Mr. {Magwood.} Thank you. Chairmen Whitfield and  
555 Shimkus, Ranking Members Rush and Green, members of the  
556 subcommittees, it is a pleasure to be before you today to  
557 discuss the work of the Nuclear Regulatory Commission.

558       During the 2-1/2 years I have served on this commission,  
559 we have been faced with historic challenges and significant  
560 change. We have authorized electric utilities to begin  
561 construction on the first new nuclear power plants since the  
562 1970s. We have also licensed the construction and operation  
563 of the first uranium enrichment facilities in this country  
564 not constructed by the government. At the same time, we have  
565 also seen troubling errors in the application of radioactive  
566 sources for medical treatment at the Philadelphia Veterans'  
567 Affairs Medical Center, and in the last year, we responded as  
568 nuclear power plants were rocked by earthquakes, threatened  
569 by floodwaters, buffeted by hurricanes and tornadoes.

570       In a very real sense, the key attribute of a safety  
571 regulator is the ability to process experience into learning  
572 and learning into action. All these events and many others  
573 provide us lessons that must be learned and applied to make  
574 us a better regulator. Fortunately, in my experience, the

575 NRC has proven to be extraordinary in its ability to learn  
576 from experience and find practical ways of assuring safety.

577 For this current commission, the greatest challenges we  
578 face arise from the urgent need to continue to learn from the  
579 lessons of the tragedy in Japan at the Fukushima Daiichi  
580 plant. The Commission has already unanimously approved a set  
581 of high-priority initiatives that are designed to enhance the  
582 defense and depth at U.S. plants and enable operators to  
583 respond more effectively to beyond design-basis of events.

584 We still have much work to do but the steps taken thus  
585 far represent a very significant increase in safety based on  
586 the Fukushima experience. While the technical and regulatory  
587 lessons are important, it is my observation that the greatest  
588 lesson Fukushima holds for any safety regulator is the  
589 fleeting nature of credibility. A regulator who loses  
590 credibility and public trust is a regulator that has failed  
591 its mission. If a regulator is not seen as truthful,  
592 credible, and reliable with a clear focus on the health and  
593 safety of the public, it cannot function nor can nuclear  
594 facilities earn its oversight. Those who question this need  
595 only observe the tens of thousands of Japanese citizens who  
596 marched in Tokyo this past weekend.

597 It is in that respect that I welcome Chairman Macfarlane  
598 to this commission. I look forward to working with her to

599 assure that the NRC continues its long tradition of technical  
600 excellence, veracity, and credibility. In the very short  
601 time she has been with us, I believe she is off to an  
602 excellent start.

603         This commission and the agency as a whole will face many  
604 difficult impactful decisions in the coming weeks and months.  
605 It does not overstate the matter to tell you that these  
606 decisions could determine the future shape of nuclear  
607 regulation in this country for many years to come. I look  
608 forward to working with my colleagues on the Commission, our  
609 many stakeholders, and with your subcommittees as we address  
610 the challenges ahead.

611         I look forward to today's discussion and look forward to  
612 your questions. Thank you.

613         [The prepared statement of Mr. Magwood follows:]

614 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
615           Mr. {Shimkus.} Thank you.

616           Now, I would like to recognize Commissioner Ostendorff.

617 And before that, it is important for me to use the bully

618 pulpit to make sure that I put on record, beat Navy. We have

619 priorities here in this country, and that Army-Navy rivalry

620 is one of the biggest.

621           So before you start, beat Navy. And you are recognized

622 for 5 minutes.

|  
623 ^STATEMENT OF WILLIAM C. OSTENDORFF

624 } Mr. {Ostendorff.} Chairman, I must call to your  
625 attention the record of the past decade. But I have a son  
626 who served as an Army officer, did two combat tours in Iraq  
627 and was there in a very busy time period, so I have a very  
628 soft spot in my heart for the Army.

629 Chairman Shimkus, Ranking Member Green, Chairman  
630 Whitfield, Ranking Member Rush, members of the committee, I  
631 appreciate the chance to be here before you today. It has  
632 been a little bit over a year since I had the opportunity to  
633 appear before this committee.

634 Last July, the NRC Fukushima Taskforce concluded that a  
635 sequence of events in the United States similar to that  
636 experienced in Japan is unlikely. The taskforce also  
637 significantly concluded that there is no imminent risk from  
638 continued operation of U.S. nuclear power plants. I firmly  
639 believe those conclusions offered in July of last year remain  
640 true and solid today. Nevertheless, I continue to support  
641 the NRC in its efforts to strengthen our regulatory framework  
642 where appropriate in response to Fukushima.

643 Along with my colleagues at this table, I commend the  
644 NRC's dedicated staff of professionals. I also appreciate

645 the work of my colleagues at this table.

646 Earlier this year, along with my other colleagues, I  
647 voted to approve the issuance of three orders associated with  
648 Fukushima actions. Orders related to acts of mitigation  
649 strategies, containment vent systems, and spent fuel pool  
650 instrumentation based on lessons learned from Fukushima. I  
651 continue to support the information-gathering and analysis  
652 necessary to take additional actions as appropriate to  
653 enhance safety. We need to continue to pursue these efforts  
654 in a prioritized, thoughtful manner.

655 But even as we dedicate resources to implementing the  
656 recommendations and lessons learned from Fukushima, the  
657 Commission and our staff continues to be successful in  
658 performing our other vital work. Effective safety oversight  
659 of reactor materials licensees remains our preeminent goal.

660 And as mentioned by colleagues to my right, earlier this  
661 year in February and March, we issued the first new reactor  
662 licenses for construction operations at the Vogtle and Summer  
663 plants. I note that the additional Fukushima-related  
664 requirements that came from the Commission were imposed in  
665 these new construction reactors. I had the chance to witness  
666 the construction of these two sites just 2 weeks ago, and I  
667 am encouraged by the progress that I saw.

668 Finally, I join my colleagues in warmly welcoming Dr.

669 Macfarlane to the Commission. I fully expect that the  
670 collegiality and effectiveness of the Commission will benefit  
671 from her new leadership. And I state with great confidence  
672 today that she is off to a very strong start as chairman.

673 I appreciate this committee's oversight role and I look  
674 forward to your questions. Thank you.

675 [The prepared statement of Mr. Ostendorff follows:]

676 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
677 Mr. {Shimkus.} Thank you.

678 Now, I recognize myself for 5 minutes for the first  
679 opening round of questions.

680 This is to the Commission as a whole. My district is  
681 home to Honeywell's uranium conversion plant. It is the only  
682 one of its kind in the U.S. This past May, the NRC  
683 reconfirmed as part of a performance review that the plant is  
684 operating safely. Two months later, Honeywell is in the  
685 process of laying off 228 employees due to a prolonged  
686 shutdown to address recently discovered seismic issues. I am  
687 concerned for both the safety of the nearby residents but  
688 also for the livelihoods of those employees. What I am  
689 struggling to understand is this: was the NRC correct in May  
690 when they indicated the plant is safe? If so, then shouldn't  
691 there be a way to make safety improvements while minimizing  
692 the disruption to the plant's operation and the lives of the  
693 employees? Chairman?

694 Ms. {Macfarlane.} Thank you for that question,  
695 Chairman.

696 You will have to bear with me. I have been on the job 2  
697 weeks and I am struggling to understand all of the different  
698 issues that are before us. But I am familiar with the  
699 Honeywell issue and I am familiar with the fact that the

700 order, the confirmatory action letter that was issued to the  
701 Honeywell plant came out of Fukushima-related inspections.  
702 And that is my current understanding of the situation. So it  
703 was perhaps separate from what you are talking about.

704 Mr. {Shimkus.} Commissioner Svinicki?

705 Ms. {Svinicki.} Chairman, as Chairman Macfarlane  
706 indicated, the NRC did order some additional in-depth  
707 inspections at facilities, including fuel-cycle facilities at  
708 Honeywell after the events in Fukushima. As a result of  
709 that, there were indications that the amount of material that  
710 could hypothetically be released in a seismic event had been  
711 underestimated previously, and that is under further analysis  
712 by both Honeywell as the operator and the NRC staff at this  
713 time. There is the potential for facility modifications to  
714 be needed and I my understanding is that the issue of what  
715 measures might be needed is under very active analysis right  
716 now.

717 Mr. {Shimkus.} So just a brief follow-up. So you are  
718 saying that the May analysis may not have been correct and  
719 you are not attributing that to Fukushima changes?

720 Ms. {Svinicki.} My understanding is that the situation  
721 that the facility is in right now is an outgrowth of the more  
722 in-depth Fukushima-related inspection but it is against the  
723 current design basis of the facility.

724           The question of whether or not this could have been  
725 discovered previously is a very complex one, Congressman, and  
726 I think we owe you, as we complete our analysis, a further  
727 answer on that.

728           Mr. {Shimkus.} Yeah. And more to the 228 employees who  
729 no longer have employment right now.

730           Commissioner Magwood?

731           Mr. {Magwood.} Yeah, I think both of my colleagues have  
732 given you a very good summary of the situation. The only  
733 thing I would add is that a portion of the difficulty we face  
734 with the Honeywell facility is that it is a very old facility  
735 that actually predates some of our regulatory structure. And  
736 while we have a lot of certainty that it is being operated  
737 safely, some of the criteria that one might apply today were  
738 not available when this plant was first built. So, for  
739 example, there are no criteria guiding whether the buildings  
740 housing the process facilities should have any earthquake  
741 resistance, for example. We don't have that requirement in  
742 place for this facility. But what we do have in place is a  
743 requirement that in the event of a credible accident that the  
744 public be protected.

745           And as Commission Svinicki pointed out, in the analysis  
746 to decide whether the public is protected, you have to make  
747 an assumption as to how much material could possibly be

748 released, and that appears to have been an error made in the  
749 process to determine how much could have been released. We  
750 now believe much more could be released than had been  
751 previously assumed, and that is why this change has been--

752 Mr. {Shimkus.} Yeah, let me reclaim my time because I  
753 have got 3 and I am only going to get one question in.

754 So let me to go a quote by you, Commissioner Magwood,  
755 that said, ``it does not, as a general matter, advance the  
756 cause of safety to inundate licensee staff with multiple  
757 actions when a more thoughtful process might achieve the  
758 agency's safety goals without straining licensee resources.``  
759 And this is the issue about the additional work, time,  
760 effort, energy that might take people off the prize of the  
761 real concerns on safety. What are your comments to that?  
762 That is your comment, Commissioner Magwood. Why don't you  
763 follow up on that?

764 Mr. {Magwood.} Well, just very briefly and give others  
765 a chance to comment. My belief is that it is very important  
766 whenever we take a regulatory action that it be done in a  
767 prioritized fashion. Obviously, every facility is very  
768 different and we should have an approach that recognizes that  
769 what may be a threat to one facility may be a much lesser  
770 threat to a second facility. And then as we are approaching  
771 our regulatory implementation, we ought to take that into

772 consideration.

773           Mr. {Shimkus.} Does everyone generally agree with that  
774 analysis? And I see everyone shaking their head yes, and we  
775 appreciate that.

776           With that, my time is expired. Chair recognizes the  
777 ranking member, Mr. Green, for 5 minutes.

778           Mr. {Green.} Thank you, Mr. Chairman.

779           On June the 8th, the U.S. Court of Appeals in D.C.  
780 Circuit Court called NRC's evaluation of the risk of spent  
781 nuclear fuel deficient, noting the Commission did not examine  
782 the environmental impact, the impacts of failing to license a  
783 permanent repository, or environmental risk. The court  
784 instructed the NRC to perform a detailed evaluation and  
785 possible risk posed by the extent of storage pools in reactor  
786 sites such as leaks and fires or explain why such an  
787 evaluation is not needed.

788           When do you plan to start this evaluation? And what do  
789 you expect it to look like?

790           Ms. {Macfarlane.} We are in the process of considering  
791 various options of what to do with waste confidence decisions  
792 right now, and these options are being vetted. And I can't  
793 say more because the issue is an active adjudicatory matter.

794           Mr. {Green.} Do you have any idea on a time frame?

795           Ms. {Macfarlane.} We are going to be working part of

796 this right now, immediately.

797       Mr. {Green.} Okay. On June the 18th, the NRC received  
798 a petition to suspend final decisions on all pending reactor  
799 licensing proceedings pending revisions to be remanded about  
800 the Waste Confidence Rule. In its response, NRC stated,  
801 ``the commission staff agrees that no final decision to grant  
802 a combined license, operating license, or renewed operating  
803 license is to be made until the NRC has appropriately  
804 disposed of the issues remanded by court.'' Is it true that  
805 you will not make any final decision on a license until you  
806 have addressed the problems with the Waste Confidence Rule?

807       Ms. {Macfarlane.} Again, I believe this is an  
808 adjudicatory matter and we can't say more until we have taken  
809 a vote.

810       Mr. {Green.} Okay. In the 16 months since the nuclear  
811 accidents in Japan, there has been a vast amount of  
812 information published about the event, the causes, the action  
813 taken by the global nuclear energy industry. With the  
814 benefit of this information, have your initial conclusions on  
815 the cause of accidents or the priority of the regulatory  
816 actions associated with Fukushima changed?

817       Ms. {Svinicki.} Congressman Green, the NRC staff  
818 remains very cognizant of those international reports as they  
819 are issued and they do have the potential to further inform

820 our response in the United States to Fukushima. So I would  
821 characterize to you that we stay very engaged in reviewing  
822 those results and want to have the most risk-informed process  
823 that we can to respond to Fukushima going forward.

824 Mr. {Green.} You know, our concern is we want to make  
825 sure--it was a terrible tragedy in Japan. We just want to  
826 make sure we don't reinvent the wheel, that we see what the  
827 problem was there.

828 You issued three orders and a request for information on  
829 flooding, seismic and emergency preparedness in March. Based  
830 on the information that is available in the past 12 months,  
831 are there any other areas where orders may be necessary?

832 Ms. {Macfarlane.} I believe this is to be decided. We  
833 are working through the different tier activities, and as we  
834 get to Tier 2 and Tier 3 activities, we may decide on new  
835 orders.

836 I invite my colleagues to comment.

837 Ms. {Svinicki.} I would just add that the orders that  
838 you described were considered by the Commission and the NRC  
839 staff to be those that provided the greatest potential for  
840 risk reduction, so they were the highest priority items.

841 Mr. {Ostendorff.} I wanted to add, Congressman, to echo  
842 Commissioner Svinicki's comments that not all of these  
843 recommendations from the taskforce are of equal safety

844 significance. There are some that are more urgent, some less  
845 urgent, and some that still need to be studied. And I will  
846 just tell you from where we sit, a year and 4 months after  
847 Fukushima, I think the thoughtful prioritized approach that  
848 the agency has taken as a result of the staff's  
849 recommendations has been very supportive of safety.

850 Mr. {Green.} So there are other orders being looked at,  
851 just not the higher priority that these three orders, is that  
852 correct? If you will say yes so the mike can pick it up.

853 Mr. {Ostendorff.} Well, I would say that we are still  
854 reviewing. As Chairman Macfarlane mentioned, there is a Tier  
855 1 set of issues, the highest priority. We are still  
856 evaluating recommendations on Tier 2 and Tier 3.

857 Mr. {Green.} There are a number of recent reports and  
858 articles critical of the Japanese nuclear industry and  
859 government emergency preparedness plans and activities. Are  
860 there differences between our regulatory requirements and  
861 those of Japan with respect to emergency preparedness than  
862 those of Japan?

863 Mr. {Magwood.} Yes, actually, there are very  
864 significant differences in our approaches. For example, in  
865 the United States, each nuclear plant is required to perform  
866 a full-scale emergency planning exercise once every 2 years.  
867 That requirement doesn't exist in Japan. And so we practice

868 emergency planning very rigorously. It is a very important  
869 part of our defense in depth. And I think this is something  
870 that in Japan they are giving a lot of careful thought to  
871 today.

872 Mr. {Green.} Mr. Chairman, I know I am almost out of  
873 time. A number support expansion of nuclear power. There is  
874 lots of things in the market--low-price natural gas, lots of  
875 other issues--but if we are going to deal with long-term, we  
876 need to have some transparency, which the chair talked about,  
877 but also some guidelines so the industry can have some  
878 certainty to make sure they go forward.

879 Mr. Chairman, I thank you for my time.

880 Mr. {Shimkus.} And the gentleman yields back his time.

881 The chair now recognizes the chairman of the Energy  
882 Subcommittee, Mr. Whitfield, for 5 minutes.

883 Mr. {Whitfield.} Thank you, Mr. Chairman.

884 And thank you all for your testimony.

885 As you know, the U.S. is still struggling to rebuild its  
886 economy and to lower unemployment, and energy is always a key  
887 component in our ability to compete in the global  
888 marketplace. And of course, cost is a factor that we always  
889 look at, the cost of producing energy. Regulations certainly  
890 affect cost. And I talked about in my opening statement how  
891 the Japanese Diet's investigation really was quite

892 complimentary of the U.S. regulatory system because we had  
893 put in place certain safety safeguards that certainly Japan  
894 did not have. And as Mr. Ostendorff mentioned, you all  
895 adopted three emergency orders last summer. And it is my  
896 understanding that it is not required that you do a cost-  
897 benefit analysis and it is not required that you do some sort  
898 of a technical basis, rationalization for the decision. And  
899 I am assuming that in those three orders there was not a  
900 cost-benefit analysis or a technical analysis. Is that  
901 correct?

902 Ms. {Macfarlane.} That is correct. Two of them were  
903 deemed adequate protection issues and one was given an  
904 exemption.

905 Mr. {Whitfield.} Two were--I am sorry?

906 Ms. {Macfarlane.} Deemed adequate protection issues.

907 Mr. {Whitfield.} Okay.

908 Ms. {Macfarlane.} I will let my colleagues expand on  
909 that.

910 Mr. {Whitfield.} Well, then, Chairman Macfarlane and  
911 each of the commissioners, let me ask this question. I know  
912 you are looking at different tiers now, Tier 2, Tier 3, Tier  
913 4, or there may be additional orders for post-Fukushima  
914 safety improvements. Do you believe that any future post-  
915 Fukushima actions--it would be beneficial to have a rigorous

916 technical basis and a cost-benefit analysis?

917 Ms. {Macfarlane.} I believe we have to consider all  
918 potential actions on their own merits as they come through,  
919 and we will decide at that time whether they are an adequate  
920 protection issue or not. And, you know, it depends. There  
921 is a lot of information we need to gather and examine about  
922 each of these different issues in the different tiers.

923 Mr. {Whitfield.} Ms. Svinicki, do you--

924 Ms. {Svinicki.} Chairman Whitfield, I don't disagree  
925 with Chairman Macfarlane that each regulatory action will be  
926 assessed based on the circumstances, but as a general matter,  
927 in a number of my votes on the NRC's post-Fukushima actions,  
928 I have indicated that after the highest priority potential  
929 risk reductions are taken such as the three orders we just  
930 issued, that it is my personal view that we need to begin to  
931 return to the disciplined cost-benefit analysis because the  
932 subsequent and follow-on actions will likely not have the  
933 potential to achieve as significant of a risk reduction.  
934 Therefore, I believe moving back into our back-fit rule and  
935 our cost-benefit evaluation is appropriate for that reason.

936 Mr. {Whitfield.} Mr. Magwood?

937 Mr. {Magwood.} To some degree I agree with both of my  
938 colleagues on this because I do think that most of the  
939 actions that may follow should undergo a more rigorous

940 analysis. But I also think that there may be some actions  
941 that are in the Tier 2 and Tier 3 category that are adequate  
942 protection issues and not to go through that evaluation. So  
943 I agree with Chairman Macfarlane's statement that we should  
944 look at each on one an individual basis and make a judgment  
945 as we go.

946 Mr. {Whitfield.} Mr. Ostendorff?

947 Mr. {Ostendorff.} Chairman Whitfield, I would just add  
948 that I think the commission members here at this table that  
949 have been voting in these matters, my two colleagues to the  
950 right and Commissioner Apostolakis, who is not here, have  
951 very clearly stated in our voting record on Fukushima issues  
952 that we need a technical analysis to underpin any  
953 recommendations for taking action. And I think our staff has  
954 done that.

955 Mr. {Whitfield.} Okay. Well, thank you very much.

956 And I yield back the balance of my time.

957 Mr. {Shimkus.} The gentleman yields back his time.

958 The chair now recognizes my colleague from Illinois, Mr.  
959 Rush, for 5 minutes.

960 Mr. {Rush.} Mr. Chairman, back in May, my office was  
961 notified that the NRC was recently honored by U.S. Black  
962 Engineering Information Technology Magazine as one of the  
963 government agencies considered most supportive of the

964 engineering departments of historically black colleges and  
965 universities. The survey was a result of a poll among deans  
966 of accredited HBCU engineering programs and corporate-  
967 academic alliance Advancing Minority Interests in  
968 Engineering, which is its name, the Alliance's name.  
969 Supporting STEM education and especially for minorities and  
970 women is one of my top educational priorities.

971 I would like to hear more about some of these programs  
972 that the NRC has been involved in in this particular area.  
973 So I would ask if any of you could discuss some of the  
974 agency's work in supporting the HBCUs' engineering program.  
975 And can my office be of assistance? And how can we be of  
976 assistance especially in areas of recruiting in STEM areas?  
977 We know that future scientists and engineers of tomorrow, a  
978 lot of them could and should come from HBCUs. So just take a  
979 moment. I am aware of the time and I do have some other  
980 questions. So please be as brief as you possibly can.

981 Ms. {Macfarlane.} Let me just say that in fiscal year  
982 2011, the Minority Servicing Institutions Grants Program  
983 issued 26 grants, of which 15 were awarded to historically  
984 black colleges and universities and totaled over \$1 million.  
985 And the program funded approximately \$737,000 in stipends  
986 through the Research Participation Program. And as you  
987 noted, the NRC has been recognized as a top supporter based

988 on a survey of deans from engineering schools for 4  
989 consecutive years.

990 Mr. {Rush.} Would you send myself, my office, and  
991 anyone else on the subcommittees the information in writing  
992 on that?

993 Ms. {Macfarlane.} Absolutely, happy to.

994 Mr. {Rush.} Thank you very much.

995 In the 16 months since the nuclear accidents in Japan,  
996 there has been a vast amount of information published about  
997 the event, the causes and actions taken by the local nuclear  
998 industry. With the benefit of this information, have your  
999 initial conclusions on the cause of the accidents or on the  
1000 priority of the regulatory actions associated with Fukushima  
1001 changed? What are the top five most important actions being  
1002 taken by the NRC staff and industry to improve safety based  
1003 on the huge amount of information surrounding Fukushima?

1004 Ms. {Macfarlane.} Well, we have issued three orders and  
1005 as well as some requests for information from our licensees.  
1006 Those are the first actions that the NRC has done and now we  
1007 are working through Tier 2 and Tier 3 activities.

1008 Mr. {Rush.} The 30 plus NRC actions that were approved  
1009 by the NRC were based on a report that was drafted within 3  
1010 months of the accident and before any root cause or detailed  
1011 timeline of events had been made public. Have you assessed

1012 the list of NRC actions against this vast array of  
1013 information to ensure that the NRC staff and the industry are  
1014 focused on issues that were the cause and that are safety-  
1015 significant?

1016 Ms. {Macfarlane.} The staff is working very hard to  
1017 understand all the full suite of information available out  
1018 there. They are keeping abreast of it and keeping up with  
1019 their colleagues in other countries.

1020 And I invite my other colleagues to comment as well.

1021 Mr. {Ostendorff.} I would add, Ranking Member Rush,  
1022 that I am going to simplify this a little bit. I think there  
1023 are two main categories of Tier 1 actions that our staff has  
1024 been working diligently to look at. One is the protection  
1025 against external events such as a seismic event or flooding.  
1026 And the second is, what are the mitigation strategies if you  
1027 have an accident, for instance, if you have a loss of all  
1028 power onsite? So those two high-level mitigation strategies  
1029 and the protection against external events I think are the  
1030 top two categories of all the myriad recommendations that  
1031 came out of taskforce. Those are the ones that are getting  
1032 the highest priority.

1033 Mr. {Shimkus.} The gentleman's time is expired.

1034 Mr. {Rush.} Thank you, Mr. Chairman.

1035 Mr. {Shimkus.} I recognize the chairman of the full

1036 committee, Mr. Upton, for 5 minutes.

1037           The {Chairman.} Thank you, Mr. Chairman.

1038           And I want to just reiterate to Chairman Macfarlane I do  
1039 welcome some of your comments on your new role and I look  
1040 forward to sitting down with you and getting to know you  
1041 certainly a lot better in the weeks and months ahead and  
1042 ensuring that we have a solid relationship. You have a very  
1043 important job and we want to make sure that you have the  
1044 resources to do your job and you do it in a very efficient  
1045 way. And we are all pulling for you.

1046           Commissioner Ostendorff, as you know the Palisades plant  
1047 in my district is in Column 3 of the NRC's Reactor Oversight  
1048 Program. Would you briefly describe for us what that means  
1049 and what actions the NRC generally takes for plants in that  
1050 column?

1051           Mr. {Ostendorff.} Yes, sir. We have a reactor  
1052 oversight process that goes from Column 1, which is the best  
1053 operating plant, all the way down to Column 5, which is the  
1054 worst operating plant status. And as a plant has more  
1055 problems, there is increased oversight that occurs by the NRC  
1056 staff at that plant. Currently, Palisades is in Column 3,  
1057 which is basically the result of a substantial safety  
1058 significance finding dealing with inadequate work  
1059 instructions associated with DC power supplies that led to

1060 reactor scramble and reactor trip. That was also accompanied  
1061 by what is called a ``White'' finding of low to moderate  
1062 safety significance that was associated with a service water  
1063 pump coupling failure. As a result of those two items,  
1064 Palisades is in this Column 3. It is the degraded  
1065 cornerstone column. There is increased oversight. We expect  
1066 our NRC team to be looking with the licensee at their  
1067 corrective action program and the licensee's assessment of  
1068 where their problems are. And we expect the next NRC close  
1069 look at this to be coming sometime probably in September of  
1070 this year.

1071       The {Chairman.} So is it your understanding and belief  
1072 that Entergy and the owners, the operators of this facility,  
1073 that they are taking all the right actions at this point?

1074       Mr. {Ostendorff.} I think the final determination of  
1075 that, Congressman, remains to be seen. I think so far  
1076 Entergy has been communicating well with the NRC staff about  
1077 what they are doing. Entergy on their own commissioned an  
1078 external group to come in and do a safety culture assessment  
1079 earlier this year. That has been reviewed by the NRC staff.  
1080 Following inspection in September we will look at those  
1081 details of the safety culture assessment.

1082       The {Chairman.} So in September you will review all  
1083 this information and at that point would it be possible to

1084 make a determination to move them back to Column 2 or not?

1085           Mr. {Ostendorff.} We go through an annual assessment  
1086 process led by our executive director for operations, Bill  
1087 Borchardt, and Bill is in the back row behind us here. And  
1088 that is on an annual cycle that goes through--I am not sure  
1089 exactly what the cycle is but typically those determinations  
1090 are made in the spring, early summertime period. So I can't  
1091 tell you exactly when a determination might be made as to  
1092 whether or not that plant should or should not remain in  
1093 Column 3.

1094           The {Chairman.} And you will literally have that  
1095 information--you will be able to make that determination come  
1096 September?

1097           Mr. {Ostendorff.} Well, there would be a certain aspect  
1098 that will be looked at September. This is the safety culture  
1099 aspects that are believed to be part of the root cause, some  
1100 of the concerns of that plant.

1101           The {Chairman.} And you will be sharing that with us I  
1102 am sure.

1103           Mr. {Ostendorff.} Yes, sir.

1104           The {Chairman.} And last question, is that early  
1105 September?

1106           Mr. {Ostendorff.} I don't have a specific date for  
1107 that. We can get back to you if we have some more

1108 information about it.

1109 The {Chairman.} Thank you. I yield back.

1110 Mr. {Shimkus.} The gentleman yields back his time.

1111 The chair now recognizes the chairman emeritus, Mr.  
1112 Dingell, for 5 minutes.

1113 Mr. {Dingell.} Mr. Chairman, I thank you for your  
1114 courtesy.

1115 These questions to Chairman Macfarlane. Madam Chairman,  
1116 I have heard concerns related to the Part 52 licensing  
1117 process for new facilities. It is my understanding that this  
1118 process is intended to provide both a construction and an  
1119 operating license through the same review and to streamline  
1120 the previous Part 50 process. When the first round of Part  
1121 52 license applications came into the NRC in 2007 and 8, the  
1122 stated goal by NRC was to complete these reviews in 36  
1123 months. Since that time, the time has been raised to 42 to  
1124 48 months. And now it seems that many are headed for 60-  
1125 month review. This is occurring even as there are less  
1126 applications in the review pipeline. My question to you,  
1127 Madam Chairman, is the NRC committed to completing these  
1128 reviews in an expedited manner? Yes or no?

1129 Ms. {Macfarlane.} The NRC is committed to completing  
1130 these reviews as efficiently as possible.

1131 Mr. {Dingell.} Thank you.

1132           Now, there has been frustration on the slowness of the  
1133 relicensing process. Is the NRC committed to complete these  
1134 relicensing reviews in an expedited manner? Please answer  
1135 yes or no.

1136           Ms. {Macfarlane.} The NRC is committed to completing  
1137 these relicensing reviews as efficiently as possible.

1138           Mr. {Dingell.} Thank you. Now, Madam Chairman, you  
1139 were a member of the Blue Ribbon Commission that recommended  
1140 working with the communities who might volunteer for a single  
1141 waste storage site. How long would such a process take to  
1142 finalize?

1143           Ms. {Macfarlane.} It is totally uncertain. It could  
1144 take a few years or it could take decades. It entirely  
1145 depends on the situation.

1146           Mr. {Dingell.} I am very little comforted but I think  
1147 that is a fair answer.

1148           Madam Chairman, can you tell us what would be the cost  
1149 of this exercise?

1150           Ms. {Macfarlane.} The costs of working with the  
1151 community?

1152           Mr. {Dingell.} Yes.

1153           Ms. {Macfarlane.} It entirely depends.

1154           Mr. {Dingell.} To finalize the process.

1155           Ms. {Macfarlane.} Again, it entirely depends, and it

1156 depends also in part on how much compensation is decided for  
1157 the community and in what form that compensation would be.

1158 Mr. {Dingell.} Thank you, Madam Chairman.

1159 Now, under current law, how many sites are authorized to  
1160 be evaluated and licensed as a single storage site?

1161 Ms. {Macfarlane.} One.

1162 Mr. {Dingell.} One. Now, does the NRC currently have  
1163 the funding to move forward to evaluate and license the Yucca  
1164 Mountain facility? Yes or no?

1165 Ms. {Macfarlane.} My understanding is that there is  
1166 some funding available--

1167 Mr. {Dingell.} I am sorry?

1168 Ms. {Macfarlane.} --to complete the license--my  
1169 understanding is there is some funding available to complete  
1170 the license review.

1171 Mr. {Dingell.} Some. Enough to complete the action?

1172 Ms. {Macfarlane.} That I am not completely certain and  
1173 I would invite my colleagues to--

1174 Mr. {Dingell.} Could you give us an answer for the  
1175 record later or is--

1176 Ms. {Macfarlane.} Yes, certainly. Absolutely.

1177 Mr. {Dingell.} All right, if you please.

1178 Now, in the audience today, I have constituents of mine  
1179 who are studying nuclear science at the University of

1180 Michigan, which is an institution I have the honor of  
1181 representing. In its fiscal year 2013 budget request, NRC  
1182 stated that it is not requesting funding for the Integrated  
1183 University Program, which historically has been the sole  
1184 provider of critical funding for both student and faculty  
1185 development in the field of nuclear science. NRC states that  
1186 this reflects the confidence that the nuclear industry will  
1187 create incentives for students to enter nuclear-related  
1188 programs.

1189 Now, I have constantly watched the development of our  
1190 technical, scientific, and engineering people. And I have  
1191 always found that we are lagging a lot of other people around  
1192 the world. I had two boys who were metallurgical engineers.  
1193 We found that we are developing approximately 11  
1194 metallurgical engineers. The Chinese are developing about  
1195 11,000. Do you believe that there is a need to train nuclear  
1196 engineers in this country and do you support the NRC's role  
1197 in the IUP? Yes or no?

1198 Ms. {Macfarlane.} Excuse me, the--

1199 Mr. {Dingell.} In the IUP.

1200 Ms. {Macfarlane.} Right. Certainly as a scientist  
1201 myself, I support education in science and engineering and I  
1202 think that the NRC Commission also supports that strongly.

1203 Mr. {Dingell.} If you withdraw from this, however, I

1204 must assume that there will be no federal money for this kind  
1205 of exercise and that we will not be training the scientists,  
1206 engineers, et cetera, that we will need in this area. Are we  
1207 going to produce the scientists, engineers, and technicians  
1208 that we need if we withdraw and if the NRC withdraws or are  
1209 we not?

1210 Ms. {Macfarlane.} I would leave some of the funding of  
1211 science and engineering education to you all.

1212 Mr. {Dingell.} My time is up. Thank you, Mr. Chairman.  
1213 I have got my serious doubts that we will be doing so.

1214 Mr. {Shimkus.} The gentleman's time has expired.

1215 The chair now recognizes another chairman emeritus, Mr.  
1216 Barton, for 5 minutes.

1217 Mr. {Barton.} Well, and there is only really one and  
1218 that is Mr. Dingell. I am glad to be in the same sentence  
1219 with him.

1220 We are glad to have our new chairman of the NRC.

1221 Mr. {Dingell.} You know, this business of being  
1222 chairman emeritus sounds mighty good but it really ain't  
1223 much.

1224 Mr. {Shimkus.} If the gentleman would yield to my  
1225 colleagues who are in the lower levels waiting to ask  
1226 questions, I still think it is very valuable.

1227 Mr. {Barton.} Well, I tend to echo Mr. Dingell. Take

1228 that and 50 cents, and in Texas, you get a Dr. Pepper. But  
1229 it is good to be on the committee regardless of what the  
1230 titles are.

1231 Chairman Macfarlane, we are certainly glad to have you  
1232 and I noticed that the previous questioners have all been  
1233 unbelievably polite, which is somewhat unusual for this  
1234 committee but not unique.

1235 I would like to go into waters that are a little bit  
1236 murkier. Your predecessor was not known for his collegiality  
1237 with his fellow commissioners. In fact, there were some  
1238 fairly rigorous attempts on his behalf to withhold  
1239 information and to manipulate the decision-making process.  
1240 Would you care to give us your view on how you plan to manage  
1241 the decision-making process and the information gathering and  
1242 dissemination at the Commission?

1243 Ms. {Macfarlane.} Surely. I am committed to being as  
1244 collegial as possible. I regard my fellow commissioners as  
1245 my peer equals. And as such, I think they should have access  
1246 to all the information I have access to. I am committed to  
1247 sharing with them written information from my office, and I  
1248 have directed my staff as well to be as open with their  
1249 staffs.

1250 Mr. {Barton.} So you don't intend to use your position  
1251 as chairman to withhold and in some ways shape the outcome of

1252 decisions? You plan to use the position to gather but to  
1253 share on an equal basis whatever information comes to you as  
1254 chairman? Is that a fair assessment?

1255 Ms. {Macfarlane.} That is a fair assessment. I believe  
1256 that the intention of the Commission with five commissioners  
1257 is to act together. We certainly will not agree on every  
1258 issue but that is not the intention of the Commission.

1259 Mr. {Barton.} Okay. Now, some of the members may have  
1260 asked a storage question, but there is an obvious--I don't  
1261 want to say elephant in the room because that has political  
1262 overtones, but there is a big issue that is not being  
1263 addressed and that is permanent high-level waste storage. I  
1264 would say a majority of our committee feels that it would be  
1265 appropriate to move forward at Yucca Mountain. There are  
1266 members of the Energy Committee that would prefer that we  
1267 not. Do you have a view that you want to express about how  
1268 to assess what to do at Yucca Mountain?

1269 Ms. {Macfarlane.} About how to assess what to do at  
1270 Yucca Mountain? No, at this point I do not. I will wait to  
1271 see what issues are presented to us as a commission.

1272 Mr. {Barton.} That is fair enough for the first time  
1273 you are here.

1274 I yield back, Mr. Chairman.

1275 Mr. {Shimkus.} The gentleman yields back his time.

1276           The chair now recognizes the ranking member of the full  
1277 committee, Mr. Waxman, for 5 minutes.

1278           Mr. {Waxman.} Thank you very much, Mr. Chairman.

1279           There are two nuclear power plants in California. One  
1280 is Diablo Canyon in Mrs. Capps' district; the other is the  
1281 San Onofre Nuclear Generating Station near San Diego. And I  
1282 would like to ask some questions about the San Onofre plant.

1283           In February 2011, new steam generators were placed in  
1284 service at that plant, which was a major capital expense.  
1285 The project cost California ratepayers \$670 million. This  
1286 expense was large, but the new equipment was supposed to last  
1287 40 years. But on January 31 of this year, less than a year  
1288 after generators were put in place, a tube in one of the  
1289 unit's steam generators started leaking radioactive steam  
1290 into the atmosphere. An alarm sounded; the reactor was shut  
1291 down. The other unit was not operating at the time because  
1292 it was being refueled. Six months later, both reactors  
1293 remain shut down. Fortunately, NRC has determined that the  
1294 actual release of radiation into the environment was minimal  
1295 in this case. Is that right, Dr. Macfarlane?

1296           Ms. {Macfarlane.} I believe that is correct.

1297           Mr. {Waxman.} After the January shutdown, NRC sent in  
1298 an inspection team who issued their report last week, and  
1299 according to NRC's inspection team after just a single year

1300 of operation, a large percentage of tubes in the steam  
1301 generators had been worn down because excessive vibration was  
1302 causing them to rub against each other. Last week's report  
1303 found that this problem was probably caused by faulty  
1304 computer modeling in the design of the steam generators and  
1305 by manufacturing issues. The report stated, ``the loss of  
1306 steam generator tube integrity is a serious safety issue that  
1307 must be resolved prior to further power operation.''

1308 Do all of you agree that this is a serious safety issue?

1309 Ms. {Macfarlane.} Certainly.

1310 Mr. {Waxman.} I see the witnesses all shaking their  
1311 heads in the affirmative. Does anybody disagree? If not, I  
1312 will assume that all of you agree.

1313 Dr. Macfarlane, can you explain why these significant  
1314 design and manufacturing flaws were not detected earlier?  
1315 What NRC oversight process was in place to ensure that the  
1316 new steam generators would be safe and why didn't that  
1317 process identify the flaws before the steam generators were  
1318 turned on?

1319 Ms. {Macfarlane.} Thanks for your question, Congressman  
1320 Waxman.

1321 I am still learning about all the issues and the  
1322 technical details of the issues at the San Onofre plant. And  
1323 I understand that this past March the NRC issued a

1324 confirmatory action letter to require evaluation and repair  
1325 of the steam generators prior to restart. And so the NRC  
1326 will certainly ensure that the plant is safe before it does  
1327 restart.

1328         As to why this was not detected prior, I will defer to  
1329 my colleagues for much of that question, but my understanding  
1330 is that the NRC did evaluate the plans for the new steam  
1331 generators, but certainly I think we will be evaluating the  
1332 lessons learned from this entire experience.

1333         Mr. {Waxman.} Anybody else want to answer anything?

1334         Ms. {Svinicki.} Yes, sir, to add to Chairman  
1335 Macfarlane's answer. I am in agreement with her answer. I  
1336 would note that the Augmented Inspection Team Report that you  
1337 referred to that was issued last week also identified 10  
1338 unresolved items that will be the subject of additional  
1339 follow-up. I would just mention relevant to your question  
1340 that there are, of these 10 items, some related to design  
1341 issues, control of original design dimensions, and adequacy  
1342 of Mitsubishi's thermo-hydraulic model that mentioned. So at  
1343 least 3 of the 10 I think have direct relevance to the  
1344 question you asked.

1345         Mr. {Waxman.} But why didn't the process identify these  
1346 flaws before the generators were turned on?

1347         Ms. {Svinicki.} Well, I didn't mention another of the

1348 10, which is the methodology itself for the review is another  
1349 unresolved item for additional follow-up.

1350 Mr. {Magwood.} Yeah, I believe, Congressman, you are  
1351 asking the right questions, a question I have asked the staff  
1352 myself because I believe that if you look at what the  
1353 licensee did and going forward with the replacement, they  
1354 followed our process the way they should have. Everyone did  
1355 what they were supposed to do under the process. So when you  
1356 have an outcome that is not satisfactory, you have to take a  
1357 look at the process. And I think we should take a look at  
1358 the process and see if there is something that we can  
1359 improve.

1360 Mr. {Waxman.} Well, I hope that all of you will look to  
1361 see how we can prevent something like this from happening  
1362 again at a nuclear reactor. It is a relief that the shutdown  
1363 of this reactor went smoothly, the defects in the equipment  
1364 were discovered before there was a major release of radiation  
1365 into the atmosphere, but it should not take a release of any  
1366 amount of radiation into the environment before problems like  
1367 this one are detected. If ratepayers are going to foot the  
1368 \$670 million bill for new equipment at a nuclear reactor,  
1369 that equipment needs to be safe and last a lot longer than 1  
1370 year.

1371 Thank you, Mr. Chairman.

1372 Mr. {Shimkus.} Mr. Waxman, would you mind if we allow  
1373 Mr. Ostendorff to answer your last question, too?

1374 Mr. {Waxman.} Oh, yes.

1375 Mr. {Shimkus.} Without objection.

1376 Mr. {Ostendorff.} Thank you, Chairman Shimkus. Thank  
1377 you, Congressman Waxman.

1378 I was just as San Onofre just 2 days ago--

1379 Mr. {Waxman.} Good.

1380 Mr. {Ostendorff.} --and spent 3 hours there Sunday  
1381 afternoon this past weekend and had members of Congressman  
1382 Issa's staff, Senator Boxer, and Senator Feinstein's staff  
1383 with me to receive a briefing from the licensee about this  
1384 exact issue. And I agree with everything my colleagues have  
1385 said. I will also add that I believe there is a very  
1386 comprehensive, rigorous technical evaluation that still is  
1387 underway to look at these problems, and I assure you that  
1388 everyone shares your concerns on the safety aspects of this  
1389 issue.

1390 Mr. {Waxman.} Well, I appreciate that. We want to be  
1391 sure that it operates it safely and we don't want to have to  
1392 find out that it wasn't operating safely after the fact. We  
1393 want to prevent problems. Thank you.

1394 Mr. {Shimkus.} The gentleman's time is expired.

1395 Chair recognizes the gentleman from Nebraska, Mr. Terry,

1396 for 5 minutes.

1397 Mr. {Terry.} Thank you, Mr. Chairman.

1398 And certainly it has been unanimously noted here that  
1399 the previous chairman certainly was a brilliant manipulator  
1400 of rules and therefore exposed some weaknesses in the rules  
1401 and processes within the NRC, which we would like your  
1402 feedback on how to properly repair. If there is a bill that  
1403 comes through our committee on reforms of NRC rules, I would  
1404 ask each of you if you could within the next 30 days  
1405 individually provide us your views on legislative changes  
1406 that you feel would be useful in this process. It is nice  
1407 that we can actually now ask you for that type of help when  
1408 before we felt like that would be, well, not appropriate. So  
1409 it is great that there is now a new atmosphere that allows us  
1410 to have open discussions about reforms within the NRC rules.

1411 One of the reforms that I think is necessary, and that  
1412 is in declaration of an emergency. Again, I think that was  
1413 highlighted by the last chairman that that is uncertain and I  
1414 would like, Mr. Ostendorff, because of your unique background  
1415 and view, your opinion on the lack of clarity in the  
1416 management and leadership in the NRC during times of  
1417 emergencies and how it could be improved.

1418 Mr. {Ostendorff.} Congressman Terry, thank you for your  
1419 question. Let me make an overall comment first and then I

1420 will get to the specific issue on perhaps emergency powers--

1421 Mr. {Terry.} Okay.

1422 Mr. {Ostendorff.} --if that is acceptable.

1423 Mr. {Terry.} Sure.

1424 Mr. {Ostendorff.} I would say that we have certainly  
1425 under the Energy Reorganization Act, as well as the  
1426 Commission's own internal commission procedures, we have in  
1427 place a structure that guides how the Commission does  
1428 business. And I think everybody here in this committee has  
1429 experience in leadership roles, management, roles, and so  
1430 often how those roles are executed is a function of the  
1431 personality and the character of the person who has the key  
1432 positions. And so I can say at one level that there are no  
1433 changes required to any of our procedures just by virtue of  
1434 the fact we have a different chairman in place right now. At  
1435 the same time I can say that while it should not be  
1436 situation- or personality- or individual-specific, and  
1437 therefore, there might be some changes that would be  
1438 appropriate. So I commit to you to providing this feedback  
1439 within 30 days on legislative remedies.

1440 With respect to emergency powers, as I previously  
1441 testified before Congress, we had and other colleagues I  
1442 think the same situation with Chairman Jaczko at the time  
1443 grave concerns on his lack of notification as to whether we

1444 actually were in a situation where he had taken emergency  
1445 authority in the events of Fukushima. And there was a clear  
1446 lack of clarity as to whether or not he had taken those  
1447 powers, and I think certainly trying to have a more bright  
1448 line as to whether or not those powers are being invoked  
1449 would be appropriate.

1450 Mr. {Terry.} All right, I appreciate that.

1451 And Chairman Macfarlane, do you think in times of  
1452 emergency it is important or not important to have the input  
1453 of your other colleagues, the commissioners?

1454 Ms. {Macfarlane.} I understand that the chairman has  
1455 the authority in an emergency and as chairman I would always  
1456 follow the law and commission procedures I would like to--

1457 Mr. {Terry.} Is that a no, then?

1458 Ms. {Macfarlane.} --commit to that now. No.  
1459 Certainly, it is the opposite. If time allowed before  
1460 emergency powers were declared, I would absolutely consult  
1461 with the other commissioners to get their views and hear  
1462 their concerns.

1463 Mr. {Terry.} All right. I appreciate the answer, then.  
1464 And I have one more question regarding the voting process.  
1465 One of the things that we have learned is that there appears  
1466 to be a lack of transparency and commissioners, some have  
1467 suggested that it needs to be more transparent to the point

1468 of all discussions should be live on camera and on the  
1469 record. That is certainly how we do it in the House but I  
1470 kind of learned that it is more of a collegial, almost like  
1471 the Supreme Court discussions. So yes or no, Ms. Macfarlane,  
1472 do you believe that there needs to be changes in how the  
1473 voting process is done, you know, in 7 seconds.

1474 Ms. {Macfarlane.} I think I need to learn more about  
1475 the history of voting practices at the NRC to better  
1476 understand the options for the internal voting procedures.  
1477 And certainly, in an effort to maintain collegiality, before  
1478 any changes were made to the voting process, I would consult  
1479 again with my fellow commissioners to understand their  
1480 thoughts on this issue.

1481 Mr. {Terry.} All right. Thank you, Mr. Chairman.

1482 Mr. {Shimkus.} I thank my colleague. I would just jump  
1483 in and just say there is also an issue of time when a vote is  
1484 called and how long people can vote and there was a problem  
1485 identified with that. So I appreciate that.

1486 The chair now recognizes the gentleman from Georgia, Mr.  
1487 Barrow, for 5 minutes.

1488 Mr. {Barrow.} Thank you, Mr. Chairman.

1489 Members of the Commission, the biggest thing going on in  
1490 my State right now is the construction of the two nuclear  
1491 cells at Plant Vogtle in my district. And I wonder who is in

1492 a position to give me an update on the status of the progress  
1493 being made there? Yes, sir?

1494 Mr. {Ostendorff.} Congressman, I was down there 2 weeks  
1495 ago and visited the site, both Summer and Vogtle, and there  
1496 is a lot of activity down there. There is probably close to  
1497 2,000 workers on the site at Vogtle and they are working on  
1498 both units three and four. There had been a delay over some  
1499 what is called rebar issues on the framing that goes down for  
1500 the base net concrete. I believe that there is a clear path  
1501 forward for the licensee, Southern Nuclear Company, to move  
1502 forward with that. Our NRC resident team is onsite with at  
1503 least three inspectors full-time plus other people from  
1504 Atlanta, the Region 2 offices, to inspect the status of  
1505 construction and I think things are moving along well.

1506 Mr. {Barrow.} What impresses me about a project this  
1507 large is the relationship you got to have between the owners,  
1508 the contractors, and the regulators. How would you describe  
1509 the relationship between the three groups of actors who are  
1510 responsible for bringing this off?

1511 Mr. {Ostendorff.} My other colleagues, I would ask them  
1512 to add in here, Congressman, but I think there is great  
1513 openness in communications between Southern, and they are  
1514 part of a consortium with Westinghouse and with Shaw, which  
1515 run the contracting group for the construction operation. I

1516 think those three entities on the consortium are  
1517 communicating well with NRC and I think, as with any project,  
1518 there are lessons learned, some improvements that could be  
1519 made, but I think as far as where things are from where I  
1520 sit, I think it is in pretty reasonable condition.

1521 Mr. {Barrow.} Mr. Magwood, do you have anything to add?

1522 Mr. {Magwood.} I agree with Commission Ostendorff's  
1523 comments. I visited the site myself some months ago and have  
1524 talked recently with leadership associated with the project.  
1525 And I think one answer I give to your question is that it is  
1526 a learning process. This is the first time a nuclear power  
1527 plant has been built using the 10 CFR Part 52 process.

1528 Mr. {Barrow.} First one we have done in this country in  
1529 30 years.

1530 Mr. {Magwood.} It is the first one in 30 years but this  
1531 is the first plant in history ever to use this particular  
1532 process. And I think we have all learned a lot as we have  
1533 gone forward in the last several months that clearly the  
1534 relationship between the owners and the contractors is  
1535 evolving as we speak. The relationship between NRC and the  
1536 project is evolving because of the types of information that  
1537 every side needs to have during the construction process. It  
1538 is something we are all learning and it has actually been a  
1539 very educational process I think for everybody.

1540 Mr. {Barrow.} Commissioner Svinicki, do you have  
1541 anything to add?

1542 Ms. {Svinicki.} Congressman, I would only add that I  
1543 share your observation about the importance of this  
1544 communication three ways, the constructor, the licensee, and  
1545 the regulator, and I have heard that acknowledgement  
1546 articulated from Southern, from Shaw as well. And I think  
1547 there is also a commitment, although they realize that  
1548 communications need to get to a very high fidelity, also  
1549 accountability of who has the authority to do what is  
1550 something I think that they had been working through some  
1551 issues there, who approves what kind of changes. But I think  
1552 also there is a commitment that they want to map these things  
1553 out and learn these lessons one time, learn them early, and  
1554 have the process go smoothly moving forward.

1555 Mr. {Barrow.} Chairman Macfarlane, what is your  
1556 impression of the progress being made?

1557 Ms. {Macfarlane.} Of the--sorry?

1558 Mr. {Barrow.} Of the progress being made on this  
1559 project.

1560 Ms. {Macfarlane.} As far as I understand, it is going  
1561 well. The process is working as it should and the  
1562 communication between the regulator, the NRC, and the  
1563 licensee. And I have not had an opportunity yet in my 2

1564 weeks to visit the Vogtle plant, but I do look forward to  
1565 visiting.

1566 Mr. {Barrow.} I look forward to your visit as well.

1567 One last question to all of you all collectively. Are  
1568 there any concerns on the horizon that you are aware of that  
1569 we need to address that would help us to know about?

1570 Ms. {Macfarlane.} At this point, no.

1571 Mr. {Barrow.} Does that go for the rest of you? Thank  
1572 you so much.

1573 I yield back the balance of my time, Mr. Chairman.

1574 Mr. {Shimkus.} The gentleman yields back his time.

1575 Chair now recognizes the gentleman from Ohio, Mr. Latta, for  
1576 5 minutes.

1577 Mr. {Latta.} Thank you, Mr. Chairman. Appreciate the  
1578 time and also for you all coming in again to testify. I tell  
1579 you, it is a little bit different from the past testimonies  
1580 we have had when you have all assembled, quite refreshing.

1581 If I could start with this question, during the hearing  
1582 process for a license renewal application, the Atomic Safety  
1583 and Licensing Board and the Commission must adjudicate  
1584 various contention petitions and appeals. Historically, such  
1585 decisions were reached in little over 100 days on average.  
1586 Beginning in 2009--I guess we got the chart right here, as  
1587 you can see--the average time frame doubled and remains at

1588 185 days or higher. Our research shows that several matters  
1589 were pending before the Commission for over a year. The  
1590 NRC's reliability principle states that, ``regulatory action  
1591 should always be fully consistent with written regulations,  
1592 should be promptly, fairly, and decisively administered so as  
1593 to lend stability to the nuclear operational and planning  
1594 processes.'' And here is the question. What steps are the  
1595 Commission taking to address this situation and how promptly,  
1596 fairly, and decisively administer these matters?

1597 Ms. {Macfarlane.} Let me take a first stab at this. I  
1598 will take the 30,000 foot view. My understanding is that the  
1599 NRC and staff are working very efficiently, as efficiently as  
1600 possible, but we all must recall that these license renewals  
1601 and licensing issues are adjudicatory matters and they take  
1602 time before the Commission, especially when they are  
1603 contested. And we at the Commission have no control over  
1604 whether these licensing issues are contested.

1605 I will let my colleagues answer, too.

1606 Ms. {Svinicki.} In viewing your chart, Congressman, I  
1607 think I would share two observations. One is that when the  
1608 time period began to be protracted, I believe overlaps with  
1609 periods where the Commission only had three serving members--  
1610 and although I can't definitely attribute the prolonged  
1611 durations to that period--I would say that the Commission

1612 functions best when it is at its full complement of five.  
1613 When there are only three members, if two vote, a quorum is  
1614 not established and the third has, in essence, a pocket veto.  
1615 And so the Commission, in my view, does not function as  
1616 efficiently when it is down at three members.

1617         So although I can't prove that that is part of the  
1618 attribution of the prolonged durations, the other observation  
1619 that I would make is though I have only been on the  
1620 Commission for a little over 4 years, but I have noticed that  
1621 participants and interveners in the Commission's proceedings  
1622 have really observed the evolution of license renewal issues  
1623 over time. They have become extremely skilled and informed  
1624 in their participation and intervention in these proceedings.  
1625 Therefore, the numbers of appeals and petitions to the  
1626 Commission has increased.

1627         I think in response to your question of what can we do,  
1628 I would make a personal pledge to look at agency resourcing  
1629 for our Office of Commission Appellate Adjudication, which is  
1630 a group that, as a first instance, receives and reviews  
1631 Briefs on these appeals and develops drafts opinions and  
1632 orders for the Commission. I think that we could look at  
1633 whether that office is adequately resourced.

1634         Thank you.

1635         Mr. {Latta.} Thank you. Commissioner Magwood?

1636 Mr. {Magwood.} It actually raises some questions in my  
1637 own mind, so I would like to discuss with the staff to see if  
1638 there are some trends that we should be aware of, and if  
1639 there are some trends, find ways to correct them.

1640 But as a general matter, let me say that it has always  
1641 been my view that regulatory actions take as long as they  
1642 take. I don't think the regulators should ever really  
1643 apologize for taking more time if more time is necessary to  
1644 assure safety. But at the same time, I do think it is our  
1645 responsibility to be efficient and to dispatch issues quickly  
1646 and fairly. But if, because of the contested process, we  
1647 have a longer-than-normal situation develop with a particular  
1648 renewal, that is a process we simply have to work our way  
1649 through. And we have had, in recent years, some plants that  
1650 have had more difficult renewals.

1651 Mr. {Latta.} Commissioner Ostendorff?

1652 Mr. {Ostendorff.} Thank you, Congressman. I agree my  
1653 colleagues. I will add maybe just one statement that is  
1654 while these issues with extended license renewal process have  
1655 typically almost always been in contested cases, I would say  
1656 I think the commissioners at this table and Commissioner  
1657 Apostolakis that have voted in a very timely matter on the  
1658 actions when those have been presented to the Commission, not  
1659 everything comes to us directly. There are certain

1660 activities before the licensing boards that we don't get  
1661 involved in. And our voting record, I believe, has been very  
1662 responsible as far as acting in a timely manner once it gets  
1663 to us. Oftentimes, that is delayed because of contentions.

1664 Mr. {Latta.} Well, thank you very much.

1665 And Mr. Chairman, I see my time has expired.

1666 Mr. {Shimkus.} Your time has expired.

1667 The chair now recognizes the gentlelady from California,  
1668 Mrs. Capps, for 5 minutes.

1669 Mrs. {Capps.} Thank you, Mr. Chairman.

1670 And Chairman Macfarlane, congratulations on your new  
1671 position. I wish you every success. The fact that you are 2  
1672 weeks on the job and you are making an appearance here shows  
1673 a lot of courage on your part, and I appreciate your  
1674 willingness to do so.

1675 Before I get to my questions, as my colleague, Mr.  
1676 Waxman, mentioned, I do represent--I have Diablo Canyon  
1677 Nuclear Power Plant in California and the surrounding  
1678 communities. Right now, some of the best eyes and minds in  
1679 our country and looking at the seismic issues at this plant.  
1680 And I have worked with the NRC and the utility there, which  
1681 is PG&E, to pause the relicensing process until advanced  
1682 seismic studies are finished and reviewed. And I do give a  
1683 lot of credit to PG&E, as well as state and federal

1684 regulators, for working to update their seismic analyses. As  
1685 a geologist, you surely recognize why this type of analysis  
1686 is very important. This is first and foremost about safety.

1687 But the seismic concern also impacts affordability and  
1688 reliable generation as well. My constituents living in the  
1689 communities around Diablo feel the same way. And I just want  
1690 your commitment to work with us and make sure these studies  
1691 are completed in a timely manner.

1692 Ms. {Macfarlane.} Absolutely.

1693 Mrs. {Capps.} Thank you.

1694 Ms. {Macfarlane.} I am absolutely committed to that.

1695 Mrs. {Capps.} And now, I want to turn to the Fukushima  
1696 disaster and the spent fuel pools. Fukushima clearly  
1697 illustrates how spent fuel pools can become unstable when a  
1698 nuclear power plant loses the power needed to cool them. The  
1699 spent fuel rods in Fukushima continue to pose serious  
1700 problems and many concerns as Japan attempts to stabilize and  
1701 clean up the site. My understanding is that many spent fuel  
1702 pools in the United States are even more densely packed with  
1703 spent fuel rods. Chairman Macfarlane, what are the safety  
1704 concerns associated with densely packed spent fuel pools?

1705 Ms. {Macfarlane.} This is an issue in one of the  
1706 Fukushima activities, the Tier 3 Fukushima activities that  
1707 the NRC will be looking at. So I assure you, this issue will

1708 get attention. And it is, I believe, also getting attention  
1709 from a National Academy of Sciences study as well.

1710 Mrs. {Capps.} Exactly. The alternative to pool  
1711 storage, of course, is dry cask storage--

1712 Ms. {Macfarlane.} Um-hum.

1713 Mrs. {Capps.} --and in 2006 the National Academy of  
1714 Science issued a report showing that moving spent fuel from  
1715 pools to dry above-ground casks reduces both the likelihood  
1716 and potential impact of a radioactive release from spent  
1717 fuel. This is my question. Do you believe dry casks do rely  
1718 on external power sources to cool the stored fuel?

1719 Ms. {Macfarlane.} No, they are passively cools.

1720 Mrs. {Capps.} Okay. As we all know, the reactors in  
1721 Fukushima lost all power after the earthquake and the  
1722 tsunami. So the question is, how did the dry cask on  
1723 Fukushima site withstand the earthquake, the tsunami, and  
1724 subsequent station blackout? I am sure this is a question  
1725 you have been addressing.

1726 Ms. {Macfarlane.} My understanding is that the spent  
1727 fuel casks, the dry casks at Fukushima withstood both the  
1728 earthquake and tsunami very well. And we have additional  
1729 information from this country because there were dry casks at  
1730 the North Anna facility in Virginia during last summer's  
1731 mineral Virginia earthquake, and those dry casks also

1732 performed very well.

1733 I invite my colleagues to add anything if they would  
1734 like.

1735 Mr. {Magwood.} I would just add one comment and that is  
1736 that while there certainly has been a lot of concern and  
1737 discussion about the spent fuel pools at the Fukushima site,  
1738 the fact is that the spent fuel pools at Fukushima actually  
1739 survived the event reasonably well. And today, we believe  
1740 from all the information we received from our Japanese  
1741 colleagues are safe right now. And while we encourage them  
1742 to move that spent fuel out of those pools as quickly as  
1743 possible, it does demonstrate how rigorous these buildings  
1744 and structures are, and the ability of the facility at the  
1745 Fukushima site to survive an earthquake and tsunami does  
1746 give some confidence that these pools are safe and don't  
1747 present a threat to the public.

1748 Mrs. {Capps.} And of course this is a topic that is  
1749 going to take a lot of continued study, long-term study, and  
1750 I don't have to ask--I hope I can assume--that there is a  
1751 tremendous interest on your part in doing that given the  
1752 benefits of dry casks it would seem. And I ask for a  
1753 confirmation from you or some comments that accelerating  
1754 transfer of spent fuel from pools to casks lowers the risk  
1755 posed by densely packed spent fuel pools. And then to sum up

1756 in the few seconds your thoughts on this particular area,  
1757 which I wish to explore with you further.

1758 Ms. {Macfarlane.} Sure. And I would be happy to  
1759 explore this in the future with you at greater length, but as  
1760 I said, certainly the Nuclear Regulatory Commission is  
1761 looking at this specific issue and will gather more  
1762 information about this specific issue.

1763 Mrs. {Capps.} Thank you very much.

1764 Mr. {Shimkus.} The gentlelady's time is expired.

1765 The chair will now recognize the gentleman from West  
1766 Virginia, Mr. McKinley, for 5 minutes.

1767 Mr. {McKinley.} Thank you, Mr. Chairman.

1768 To the committee as a whole, I think earlier there was  
1769 some discussion about the--or Congressman Barton bringing up  
1770 the subject of the Yucca Mountain. There was some discussion  
1771 about it. I am curious. I have been reading about Yucca  
1772 Mountain since the '80s. I am just one of two engineers in  
1773 Congress who practice engineering. '82 is when the Act was  
1774 put into effect. In '87 is when Yucca Mountain was  
1775 designated to be the repository. Twenty-five years we are  
1776 still talking about it. Is that what I am hearing from the  
1777 panel? We are not sure what we are going to do with that?

1778 Ms. {Macfarlane.} It is not the NRC's job to make  
1779 policy. We are a regulator. But given that and given my

1780 past experience as a commissioner on the Blue Ribbon  
1781 Commission, I will say, yes, there is still discussion about  
1782 Yucca Mountain. And let me just say as a scientist--you are  
1783 an engineer and maybe engineers, you work faster than  
1784 scientists--but science often works very slowly.

1785 Mr. {McKinley.} But I think we work faster than 25  
1786 years. I am just curious how much money has been spent on  
1787 Yucca Mountain in terms of infrastructure, bricks-and-mortar?  
1788 What have we invested in that over these 25 years?

1789 Ms. {Macfarlane.} This again is an issue that is not  
1790 under the control or purview of the Nuclear Regulatory  
1791 Commission, but I believe if you are looking just at what has  
1792 been spent on Yucca Mountain itself and not on the entire  
1793 waste disposal program, you are looking at a figure between 7  
1794 and \$8 billion

1795 Mr. {McKinley.} I am sorry?

1796 Ms. {Macfarlane.} Between 7 and \$8 billion. I don't  
1797 have the exact number.

1798 Mr. {McKinley.} Seven and eight billion dollars?

1799 Mr. {Shimkus.} If the gentleman would yield, I think  
1800 you can make some claims for 15 billion. And the other  
1801 thing, just to put this in perspective, what the NRC needs to  
1802 do is finish the scientific study. A lot of Yucca Mountain  
1803 issue is DOE and money spent in that venue.

1804 Mr. {McKinley.} We have the permit.

1805 Mr. {Shimkus.} The NRC is tasked, we hope, eventually  
1806 to finish the scientific study, and then that would then be  
1807 the final aspect of proving the viability for Yucca. They  
1808 won't manage the site. There are not going to be empowered  
1809 to do that.

1810 Mr. {McKinley.} I am just trying to get a better handle  
1811 of it up close. This glacial pace that we move around here  
1812 is pretty incredible to think that 25 years later we still  
1813 don't have a place to deposit. So my question would from you  
1814 all, your perspective, given there are probably two courses  
1815 of action dealing with spent fuel rods, they are either going  
1816 to go into a geological formation below the ground someplace  
1817 or we are going to recycle them as they do in France with  
1818 AREVA La Hague. So can you tell me which is the more likely  
1819 direction you see nuclear fuel rods going in in this country?

1820 Ms. {Macfarlane.} Well, again, the NRC doesn't set that  
1821 policy for the U.S. The NRC regulates the reactors and  
1822 materials.

1823 Mr. {McKinley.} I understand you don't, but in your  
1824 opinion, you are the regulatory group on nuclear power.

1825 Ms. {Macfarlane.} Um-hum.

1826 Mr. {McKinley.} Where do you think we are going as a  
1827 nation after 25 years we can't decide it is going to be Yucca

1828 Mountain in Washington--

1829 Ms. {Macfarlane.} Well--

1830 Mr. {McKinley.} --are we going to go to recycling?

1831 Which direction do you think we should go as a nation?

1832 Ms. {Macfarlane.} No matter whether you go in direct  
1833 disposal of spent fuel or you recycle as France does, you  
1834 will need a final repository. And France itself is working  
1835 now on its final site selection for a deep geologic  
1836 repository.

1837 Mr. {McKinley.} As a nation, do you see us in recycling  
1838 ever?

1839 Ms. {Macfarlane.} I think it is largely an economic and  
1840 policy question.

1841 Mr. {McKinley.} Okay. I don't think it comes under  
1842 your purview but I believe under the Act in '82 that they set  
1843 up that the consumers using nuclear power would be assessed  
1844 charges for the disposal of--

1845 Ms. {Macfarlane.} Yes, the Nuclear Waste Fund, yes.

1846 Mr. {McKinley.} Right. Where is that money going? If  
1847 we don't have--

1848 Ms. {Macfarlane.} You manage it. Congress manages the  
1849 money, the Nuclear Waste Fund and you appropriate it.

1850 Mr. {McKinley.} I am trying to understand here. So we  
1851 can have that turned back over to the consumer or is it being

1852 collected and just saved?

1853 Ms. {Macfarlane.} It has been collected and saved into  
1854 the Nuclear Waste Fund and the consumers--sorry, it is the  
1855 ratepayers who pay into this fund at 1 mil per kilowatt hour.

1856 Mr. {Shimkus.} The gentleman's time is expired.

1857 Mr. {McKinley.} My time is expired, I am sorry. Thank  
1858 you.

1859 Mr. {Shimkus.} Before I go to the gentlelady from  
1860 Florida, I would ask unanimous consent for my colleague, Mr.  
1861 Green, for 1 minute.

1862 Mr. {Green.} This is for my colleague. I think we need  
1863 to look at both long-term storage, which Yucca Mountain was  
1864 the solution from the '80s, but we also need to look at  
1865 recycling. But we have to have interim storage. And the  
1866 success in these other countries--France, for example--they  
1867 have interim storage but recycling--but again France doesn't  
1868 have a long-term storage solution either whereas Sweden--and  
1869 I know Mr. Murphy and I were there a while back and they at  
1870 least have a potential for long-term storage in Sweden.

1871 Mr. {Shimkus.} The gentleman's time is expired.

1872 The chair recognizes the gentlelady from Florida, Ms.  
1873 Castor, for 5 minutes.

1874 Ms. {Castor.} Thank you, Mr. Chairman.

1875 Thank you all very much for being here this morning.

1876 Dr. Macfarlane, in your testimony you reference that  
1877 there are currently two units in extended shutdowns, and one  
1878 of those is the Crystal River Unit 3 in Florida. Crystal  
1879 River remains in extended shutdown while its owner evaluates  
1880 repair options for a separation in the concrete wall of the  
1881 containment building. In 2009, you all are aware they were  
1882 conducting some repairs there, and during that time, they  
1883 discovered an unexpected crack, separation in the concrete  
1884 wall. And I guess the technical term is delamination. You  
1885 all know more about that than I do. They informed the NRC.  
1886 NRC sent an inspection team. You all followed up with a  
1887 special inspection team. You have had public meetings. You  
1888 have issued a special inspection report, came down for  
1889 another public meeting. In June of last year, Progress  
1890 Energy, the owner then, stated their intent that they  
1891 intended to repair Crystal River and they were proceeding  
1892 with necessary engineering and construction plans, dealing  
1893 with insurance issues, and had stated an intent to return the  
1894 plant to service in 2014.

1895 Since that time, just hear earlier in the month,  
1896 Progress Energy merged with Duke Energy, and reports  
1897 following that merger appear to make the future of the  
1898 Crystal River Unit 3 plant a little more uncertain. It  
1899 appears that the NRC's position has been that Crystal River

1900 can be repaired safely. Is that correct in your opinions?

1901 And have any of you traveled to the site?

1902 Ms. {Macfarlane.} Well, as you might suspect, I haven't  
1903 had the opportunity to travel to Crystal River yet but I  
1904 intend to learn more about the situation at Crystal River.  
1905 And I will ask my colleagues to comment.

1906 Mr. {Magwood.} I had the opportunity to visit Crystal  
1907 River. I think it has probably been about 2 months ago. And  
1908 I did inspect the repair work that is underway. The NRC  
1909 staff has been watching this very closely. The repair work  
1910 that is underway is very complex in many ways. Some of it is  
1911 actually quite unique, but from everything that I was able to  
1912 learn during my visit and subsequent conversations, it is  
1913 clearly repairable. It is clearly something that the  
1914 licensee knows how to complete. I think that the kinds of  
1915 discussions that you are referring to are business decisions  
1916 really. How long are they willing to wait and how much will  
1917 it cost them? But from a regulatory standpoint, from a  
1918 technical standpoint it seems quite repairable. But whether  
1919 it is a decision they plan to make or not, we will wait and  
1920 see.

1921 Ms. {Castor.} Any other comment?

1922 Mr. {Ostendorff.} I visited Crystal River maybe 2 years  
1923 ago. My understanding is not as up-to-date as Commissioner

1924 Magwood, but I believe it is consistent with what I have  
1925 heard generally.

1926 Ms. {Castor.} Okay. Is it the NRC's role to examine  
1927 the costs, do a cost-benefit analysis of moving forward or  
1928 not?

1929 Ms. {Svinicki.} No, that would not be an appropriate  
1930 role for us.

1931 Ms. {Castor.} Okay. If the nuclear reactor is  
1932 repaired, is it subject to all of the updated NRC safety  
1933 requirements?

1934 Ms. {Macfarlane.} Yes.

1935 Ms. {Castor.} Including ones--is that the same as if it  
1936 were going for a new license? The license for this plant  
1937 expires in 2016. Is that the same analysis and the same  
1938 requirements?

1939 Ms. {Macfarlane.} Same requirements for?

1940 Ms. {Castor.} A repair. Would NRC be asking for the  
1941 same updated safety requirements when they go for a license  
1942 renewal? The license expires there in 2016.

1943 Ms. {Macfarlane.} My understanding it not necessarily  
1944 will.

1945 Mr. {Magwood.} I think as a general matter that all of  
1946 our plants operate under the same safety standards. So we  
1947 don't differentiate between a plant that is operating under

1948 its original license versus a plant that is operating under  
1949 its renewed license or a plant that has been repaired. They  
1950 are all expected to meet the same standards.

1951 Ms. {Castor.} Are you aware that the Duke Energy Board  
1952 of Directors conducted an independent analysis of the Crystal  
1953 River plant? And has anyone received any report or the  
1954 details of that independent analysis conducted here over the  
1955 last few months?

1956 Ms. {Svinicki.} I am not aware of that and I am not  
1957 aware that the agency has received any such report.

1958 Mr. {Shimkus.} The gentlelady's time is expired.

1959 I do appreciate my colleagues really getting their  
1960 questions done and we have got a lot of Members that are  
1961 still obviously here to ask questions. And everybody has  
1962 been doing it in a timely manner. I appreciate that.

1963 The chair now recognizes the gentleman from Colorado,  
1964 Mr. Gardner, for 5 minutes.

1965 Mr. {Gardner.} Thank you, Mr. Chairman, and thank you  
1966 to the witnesses for your time today. And welcome, Ms.  
1967 Macfarlane, to the Committee.

1968 In a previous question, there was a question about  
1969 emergency powers that were taken up by the previous chairman  
1970 of the NRC. Any of those powers left, residual powers? They  
1971 have all been business as usual has been restored, returned?

1972 Ms. {Macfarlane.} It is my understanding.

1973 Mr. {Gardner.} Thank you.

1974 And a couple questions about the Office of Public  
1975 Affairs I think are very important to some of the  
1976 interactions that we have had as this committee with the NRC.  
1977 If you take a look at the reorganization plan of 1980 that  
1978 provided the Office of Public Affairs reports directly to the  
1979 chairman to assist the chairman as the principle spokesman  
1980 for the agency, when this committee began its investigation  
1981 into governance of the NRC, we identified some key questions  
1982 about the role of the Office of Public Affairs. And I wanted  
1983 to just talk and read a little bit about some of the work  
1984 that we have seen coming out of the Office of Public Affairs.

1985 And this is from a July 2011 rollout plan for the  
1986 Fukushima Taskforce recommendations, as prepared by the  
1987 director of the Office of Public Affairs. ``In this speech,  
1988 the chairman can lay out his thought for how to proceed, what  
1989 he sees as his priorities, the need to move with dispatch, et  
1990 cetera. This will be a subtle nudge to others to get on  
1991 board or appear to be foot-dragging. The speech needs to be  
1992 a) newsworthy, and b) collegial but firm with perhaps a  
1993 notional timetable to set expectations which, if not met, he  
1994 can point to as evidence of fill-in-the-blank criticism.''

1995 That statement then was made. And of course, in December to

1996 the Washington Post editorial page, there was another  
1997 statement from the Office of Public Affairs. ``As you may  
1998 have noticed, our chairman is in a shooting match with his  
1999 four colleagues on the Commission, a very public and bitter  
2000 dispute.''

2001 The office director drafted a statement that read, ``I  
2002 was not the choice of the nuclear industry to sit on the  
2003 Commission, let alone be chairman. Time after time on  
2004 critical safety questions, my vote has been the lone tally  
2005 cast in the interest of stronger safety requirements and  
2006 accountability. Others have sought a different level of  
2007 safety. Some have sought to delay and dilute safety  
2008 decisions.''. And I guess I would ask to you, Madam Chairman  
2009 and to the other commissioners, do you believe it is  
2010 appropriate for the Public Affairs Office to devise press  
2011 strategies to influence commissioners' votes or to impugn  
2012 commissioners' dedication to public safety?

2013 Ms. {Macfarlane.} Thanks for your question. As you  
2014 said, my understanding is that the Office of Public Affairs  
2015 at the NRC assists the chairman in carrying out his or her  
2016 responsibilities as principle spokesperson for the NRC.  
2017 Therefore, the director of Public Affairs and the Office of  
2018 Public Affairs works at the direction of the chairman. And  
2019 all I can point out is now, there is a new chairman. And in

2020 my 2 weeks there, I have been comfortable working with the  
2021 Office of Public Affairs.

2022 Mr. {Gardner.} And so the question of do you believe it  
2023 is appropriate for Public Affairs to devise press strategies  
2024 to influence commissioners' votes, you would disagree with  
2025 that strategy?

2026 Ms. {Macfarlane.} As far as I understand your question,  
2027 yes.

2028 Mr. {Gardner.} So you would not be using the Office of  
2029 Public Affairs--Public Affairs would not be used to try to  
2030 influence other commissioners?

2031 Ms. {Macfarlane.} I have absolutely no intention of  
2032 doing that.

2033 Mr. {Gardner.} Or to impugn dedication to public  
2034 safety?

2035 Ms. {Macfarlane.} I have no intention of that.

2036 Mr. {Gardner.} Other commissioners care to comment?

2037 Ms. {Svinicki.} I would note, Congressman, that a  
2038 member of the committee this morning asked for any  
2039 recommendations where statutory language could be perhaps  
2040 clarified about the appropriate uses of perhaps an office  
2041 such as Public Affairs. And so I would note that the  
2042 legislative history of this matter indicates that although  
2043 the chairman is the principle spokesman, he or she is to be

2044 bound in those communications by the overall policy and  
2045 guidance of the Commission as a whole. So I didn't respond  
2046 earlier to the question about proposing changes to the  
2047 Reorganization Act or plan, but I do feel that my experiences  
2048 of the last 4 years have exposed areas where there was  
2049 disagreements amongst members of the Commission about what  
2050 these statutory provisions meant.

2051         And so in my commitment to provide any proposals, I  
2052 think they wouldn't be to change anything the Congress did  
2053 after Three Mile Island because I think it was appropriate to  
2054 strengthen the chairman's role, but I do think that we have  
2055 disputed each other over what some of the words mean. And to  
2056 the extent that the Congress were willing to clarify or  
2057 emphasize some of these points, I think it could further the  
2058 collegial functioning of the Commission in the future.

2059         Mr. {Gardner.} And that is exactly right. And so going  
2060 back--I am running short on time here--just to make sure that  
2061 we are clear on what this Office of Public Affairs can and  
2062 shouldn't be used for, to the chairman, is it appropriate for  
2063 the chairman to use the Public Affairs Office to promote  
2064 personal views as a commissioner? I direct that to you.

2065         Ms. {Macfarlane.} To promote personal views?

2066         Mr. {Gardner.} Yes, to promote--

2067         Ms. {Macfarlane.} No, the--

2068 Mr. {Gardner.} --their personal policy views, excuse  
2069 me.

2070 Ms. {Macfarlane.} Sorry. The chairman is representing  
2071 the organization, so personal views should not be part of  
2072 this.

2073 Mr. {Gardner.} Okay. And you made the comments on the  
2074 collegial structure. And I guess I would just ask for your  
2075 commitment, Madam Chairman. Will you commit to refrain from  
2076 these tactics that have been used in the past?

2077 Ms. {Macfarlane.} As far as I understand them, yes, I  
2078 commit.

2079 Mr. {Gardner.} As far as you understand them? So you  
2080 will not use--

2081 Ms. {Macfarlane.} As far as I understand what happened  
2082 in the past. I was not part of the Commission in the past  
2083 and I am trying to understand what has happened with the  
2084 Office of--

2085 Mr. {Gardner.} So you won't be using the Public  
2086 Affairs--I am out of time.

2087 Mr. {Shimkus.} The gentleman's time is expired.

2088 Chair now recognizes the gentleman from New York, Mr.  
2089 Engel, for 5 minutes.

2090 Mr. {Engel.} Thank you very much, Mr. Chairman.

2091 Welcome, everybody. Dr. Macfarlane, congratulations. I

2092 want to talk to you about Indian Point in New York City  
2093 suburbs. It is one of the most serious issues facing New  
2094 York. Indian Point is located obviously by our Nation's  
2095 largest metropolitan area. It has an operational history  
2096 that has been plagued by irresponsible acts, unplanned  
2097 shutdowns, lacking spent fuel pools, and inadequate emergency  
2098 notification and response systems.

2099         One of the planes hijacked on September 11 flew over  
2100 Indian Point on its way to the World Trade Center. We have  
2101 learned that the plant is located near two seismic faults  
2102 that together raise the possibility of an earthquake far  
2103 larger than any anticipated when it was built. And there  
2104 simply aren't enough roads to allow for a real evacuation in  
2105 the event of an accident or attack. Neither of the county  
2106 executives in both Westchester County, which I represent, and  
2107 Rockland County, which I also represent, both county  
2108 executives--one Republican, one Democratic--have refused to  
2109 certify the evacuation plans for Indian Point because they  
2110 know they are ridiculous.

2111         Indian Point's two active reactors are set to retire in  
2112 2013 and 2015 unless their application for relicensing are  
2113 approved, and there has always been a cozy relationship,  
2114 unfortunately, between the NRC and the industry which in my  
2115 opinion has precluded a serious and realistic evaluation of

2116 the safety of Indian Point. I have toured it. I have been  
2117 there with your predecessor, Dr. Macfarlane, and I am  
2118 interested in meeting with you to discuss Indian Point in  
2119 greater detail and perhaps tour with me and Congresswoman  
2120 Lowey. Would you be willing to arrange a time to meet with  
2121 me and talk?

2122 Ms. {Macfarlane.} Would I be willing to do that in the  
2123 future? Absolutely. I would be willing to talk with you  
2124 about it and visit it together with you.

2125 Mr. {Engel.} Thank you. And let me say at the outset I  
2126 am not opposed to nuclear power. I never issued a peep about  
2127 Indian Point until September 11 when it became clear to many  
2128 of us that this was a safety hazard. So thank you.

2129 I want to talk about decommissioning. It is an  
2130 expensive process. The New York Times reported in March of  
2131 this year that the operators of 20 of the Nation's aging  
2132 nuclear reactors, including some whose licenses expire soon,  
2133 have not saved nearly enough money for prompt and proper  
2134 dismantling. And Entergy, which owns the Indian Point plant,  
2135 again, just 24 miles north of New York City and is at least  
2136 \$500 million short of the \$1.5 billion estimated cost of  
2137 dismantling Indian Point Reactors 2 and 3. Entergy insists  
2138 that the shortfall won't be a problem because they expect  
2139 Indian Point to be relicensed for another 20 years, and over

2140 that period of time, they expect interest to accrue to  
2141 sufficient levels in the reactor's retirement accounts. But  
2142 the fact is that 12 reactors across the country have been  
2143 retired in the last 3 decades all on short notice because of  
2144 a design or safety flaw that the economics did not justify  
2145 fixing. The shortfall in these retirement accounts raises  
2146 the possibility that New York could be sitting on sleeping  
2147 reactors for decades.

2148           So Dr. Macfarlane, I would like to ask you, what do you  
2149 envision happening if one of the Nation's 20 underfunded  
2150 reactors needed to be decommissioned?

2151           Ms. {Macfarlane.} Well, I will note that the U.S. has  
2152 decommissioned a number of reactors and they have been  
2153 decommissioned successfully. So it can happen. There can be  
2154 a positive outcome.

2155           As far as how to handle the scenario that you describe,  
2156 I think we will probably have to visit it if it happens.

2157           Mr. {Engel.} Okay. I want to finally talk about  
2158 relicensing criteria because I have long been concerned that  
2159 the relicensing of aging power plants is not subject to the  
2160 same stringent criteria used in an application for new power  
2161 plants for initial construction. So let me ask you this,  
2162 Doctor. Would you support using the same criteria for  
2163 relicensing an existing plant as we used to license new

2164 plants?

2165           Ms. {Macfarlane.} The brand new plants, my  
2166 understanding that we have a well established license renewal  
2167 program. Of course, that doesn't substitute for day-to-day  
2168 regulatory oversight that is required of the operating  
2169 plants. There is a lengthy public hearing process that  
2170 engages a variety of stakeholders in relicensing. And so all  
2171 of this information is publicly available. And I commit to  
2172 ensuring that these reactors operate safely.

2173           Mr. {Engel.} Thank you. If I may just take about 5  
2174 more seconds, Mr. Chairman. I just want to say that  
2175 information that wasn't available when the plant was  
2176 originally licensed, in my estimation, should that not be  
2177 considered in relicensing?

2178           Ms. {Macfarlane.} I think it depends on the particular  
2179 situation.

2180           Mr. {Engel.} Okay, thank you.

2181           Thank you, Mr. Chairman.

2182           Mr. {Shimkus.} I thank my colleague. The gentleman's  
2183 time is expired.

2184           The chair now recognizes the gentleman from Texas, Mr.  
2185 Burgess, for 5 minutes.

2186           Dr. {Burgess.} I thank the chairman for the  
2187 recognition.

2188           And I thank our witnesses for staying with us through  
2189 this lengthy hearing today but it is important. And we hear  
2190 a lot--you all mentioned that in your opening statements  
2191 about the collegiality and the importance of that. And of  
2192 course the average American doesn't know what the NRC is and  
2193 probably would not be able to name the commissioners, but for  
2194 the average American, why should they care about collegiality  
2195 on the Board? Aren't you just supposed to do your jobs  
2196 anyway?

2197           Ms. {Macfarlane.} Certainly, we are supposed to do our  
2198 jobs anyway. I think we do them better and we do gain the  
2199 trust of the American people when they do realize that there  
2200 is an NRC out there. We gain a stronger sense of trust when  
2201 we do operate collegially. I think it is very important that  
2202 we operate collegially just to make the process and all the  
2203 decisions that we take work efficiently.

2204           Dr. {Burgess.} I don't disagree with that, but in fact,  
2205 should not people be able to depend on your commission even  
2206 in the absence of collegiality?

2207           Ms. {Macfarlane.} Yes, absolutely. And I think that  
2208 the Commission did operate and handle all the issues that  
2209 came before it no matter what the situation.

2210           Dr. {Burgess.} Well, it did seem that at times there  
2211 were whispers, there were rumors that, you know, legitimate

2212 differences in policy were interpreted as some of the  
2213 commissioners being characterized as anti-safety. For the  
2214 three commissioners who set the historical precedence, did  
2215 that ever come up with your discussions amongst yourselves?

2216 Ms. {Svinicki.} Congressman, I disagree with the  
2217 characterizations that some of the recent issues on the  
2218 Commission had to do with disagreeing votes on policy  
2219 matters. I believe over the course of my tenure I have  
2220 served with a number of members of the Commission who are no  
2221 longer on the Commission. I think at one time or another I  
2222 have probably disagreed with everybody. I think that the  
2223 dysfunction on the Commission was much more substantive than  
2224 a simple policy disagreement.

2225 Dr. {Burgess.} Was--

2226 Ms. {Svinicki.} It was more substantive. It had to do  
2227 with impeding the flow of information and other very  
2228 fundamental issues that I felt obstructed the ability for  
2229 this commission to operate the way Congress intended.

2230 Dr. {Burgess.} So legitimate policy differences really  
2231 should not be interpreted as anti-safety, but you are saying  
2232 there was an actual impediment of information flow that kept  
2233 you from doing your job. Whether there was a policy  
2234 difference or not, you were not able to do your job as far as  
2235 public health and safety was concerned?

2236 Ms. {Svinicki.} That is correct.

2237 Dr. {Burgess.} And I guess I am getting the impression  
2238 this morning that that situation has resolved?

2239 Ms. {Svinicki.} I think we are off to a very, very  
2240 productive beginning.

2241 Dr. {Burgess.} So the American public to the extent  
2242 that they are watching this hearing this morning can take  
2243 some comfort in the fact that whereas public health and  
2244 safety may not have been at the forefront in the past, it  
2245 will be going forward?

2246 Ms. {Svinicki.} I think all of us kept public health  
2247 and safety forefront, and as Chairman Macfarlane indicated,  
2248 there was an oppressive amount of agency work that was  
2249 conducted. However, I would hope that some would view there  
2250 is a great unanimity here and there is an optimism about  
2251 moving forward.

2252 Dr. {Burgess.} Mr. Ostendorff, let me ask you a  
2253 question because you brought up your observation that the  
2254 series of events in Japan of March 2011 would be unlikely to  
2255 occur in this country. I suspect that the month before the  
2256 earthquake, that same statement could have been made about  
2257 Japan, could it not?

2258 Mr. {Ostendorff.} Congressman, I think the way I would  
2259 respond to that is that there are significant regulatory

2260 differences and some cultural differences between the United  
2261 States and Japan as it affects the nuclear industry. As  
2262 other members of the committee have noted, the Japanese Diet  
2263 report that came out just last week highlighted two  
2264 substantive differences between the United States' regulatory  
2265 framework and that in Japan, one dealing with the actions we  
2266 took in this country after the attacks of 9/11 to require  
2267 additional mitigating strategies called B.5.b under our rules  
2268 to deal with fires, explosions, and flooding; and second, to  
2269 deal with the station blackouts and area loss of all power.  
2270 And I think those are two substantive differences between our  
2271 two regulatory frameworks that are significant factors from  
2272 the comparison of the two countries.

2273       Dr. {Burgess.} Let me just ask you--and I may have to  
2274 submit this for the record because of time--but the month  
2275 before the Japanese earthquake, Chairman Shimkus took several  
2276 of us out to Yucca Mountain. And after the Japanese  
2277 earthquake, one of the big problems that was encountered was  
2278 the loss of the spent fuel rods that were in the cooling  
2279 pools and the loss of electricity. It seemed to me that just  
2280 underscored the importance of getting whatever the long-term  
2281 storage solution is--and I believe Yucca Mountain is still  
2282 viable--but getting that done and getting those spent fuel  
2283 rods out of those pools. Do you have any thoughts on that?

2284 Mr. {Ostendorff.} Well, I think as others at this table  
2285 have mentioned earlier in today's testimony, the Office of  
2286 Research at the NRC is working on a study--it is almost  
2287 finished--on the spent fuel pool risk associated with keeping  
2288 fuel in the pool as contrasted to taking them out of the pool  
2289 and putting them into dry cask where they are air-cooled.  
2290 There are a lot of other factors associated with, you know,  
2291 accelerated campaign risk of taking those out in an expedited  
2292 manner, and I think overall, our staff's assessment to date  
2293 has been those risks are very, very low. But it is still  
2294 something we are looking at as part of our Fukushima actions.

2295 Dr. {Burgess.} Thank you, Mr. Chairman. I will yield  
2296 back.

2297 Mr. {Shimkus.} The gentleman's time is expired.

2298 The chair now recognizes the gentleman from Louisiana,  
2299 Mr. Scalise, for 5 minutes.

2300 Mr. {Scalise.} Thank you, Mr. Chairman. I appreciate  
2301 you having this hearing. I appreciate the commissioners for  
2302 coming before us.

2303 We have had almost a year-and-a-half now since Fukushima  
2304 to receive vast amounts of data. A lot has been published  
2305 about the causes, the actions being taken by the global  
2306 industry. With the benefit of the information that we have,  
2307 have any of your initial conclusions--for those of you--we

2308 got a little construction going on here.

2309 Mr. {Shimkus.} Would the gentleman suspend for a  
2310 second?

2311 Mr. {Scalise.} Sure.

2312 Mr. {Shimkus.} Committee staff, someone needs to find  
2313 out who is doing work and get them to stop.

2314 Gentleman may proceed.

2315 Mr. {Scalise.} Not sure if that is a shovel-ready  
2316 project. I guess I will proceed and we will just have to  
2317 bear with it.

2318 But based on the data that we have, have any of you  
2319 maybe have different reactions today than what the initial  
2320 assessment were back a year-and-a-half ago or, you know, less  
2321 than a year-and-a-half ago about the cause and the priority  
2322 of the regulatory actions associated with Fukushima? If we  
2323 could just start with Mr. Ostendorff and go down.

2324 Mr. {Ostendorff.} Thank you, Congressman.

2325 I think, you know, right after the Fukushima event, the  
2326 Commission made a decision that we did not need to shut down  
2327 nuclear power plants in this country. We felt that there was  
2328 no imminent risk. I believe that finding is still relevant  
2329 today and appropriate today. I think that at a big-picture  
2330 level, the intervening months have indicated that we were on  
2331 a good track and are on a good track to take an integrated,

2332 prioritized approach to what actions we need to take. And I  
2333 think the emphasis on Tier 1 activities to date, mitigating  
2334 strategies, station blackout, looking at external hazards has  
2335 been appropriate. And I think that is echoed and been  
2336 reinforced over the last 16, 17 months.

2337 Mr. {Scalise.} Thanks. Mr. Magwood?

2338 Mr. {Magwood.} I think that over the last year, we have  
2339 had ample opportunity to talk to our international colleagues  
2340 about their response to the Fukushima events. And as I have  
2341 talked with regulators around the world, I have discovered a  
2342 great deal of commonality between what we are doing and the  
2343 thoughts that they are having. We actually are more advanced  
2344 in many of our efforts than they are, so that gives us some  
2345 reassurance. And I think that the more we know about how  
2346 things actually unfolded in Japan over the last several  
2347 years, we see that the Japanese have much more to learn from  
2348 Fukushima than we did and that they are trying to absorb  
2349 those lessons themselves. And a lot of them are cultural  
2350 issues that are very difficult to change.

2351 So as the last year-and-a-half has gone by, I actually  
2352 have grown in confidence that there are some steps we have  
2353 taken are the appropriate steps.

2354 Mr. {Scalise.} Ms. Svinicki?

2355 Ms. {Svinicki.} I agree with my colleagues.

2356 Mr. {Scalise.} Thanks. I don't know if you have got  
2357 maybe a top five or just some top safety changes that you  
2358 think both the NRC and the industry have taken. What are  
2359 some of the top things to improve safety that you have seen  
2360 or that you think should be done that haven't been done based  
2361 on the information we know now?

2362 Mr. {Magwood.} Let me take the first crack at that.  
2363 First, let me say I do think that the infrastructure that we  
2364 had and the approaches we had before Fukushima were very  
2365 strong. I don't think that they were lacking. But one thing  
2366 I would point to is a greater acceptance of the need to be  
2367 able to respond to beyond design-basis events. And that is  
2368 not one specific change; it is more of a philosophical change  
2369 I think that we are all dealing with. The idea that you  
2370 prepare to go beyond the worst-case scenario, you provide  
2371 equipment, you provide training, you do whatever you can to  
2372 be ready to respond in case there is a large earthquake or a  
2373 large flood or a large storm. And that is a philosophical  
2374 change that the agency is adopting.

2375 Mr. {Scalise.} All right. Thanks.

2376 If you look at situations where the NRC comes out with  
2377 new requirements to hinder implementation of other recent NRC  
2378 requirements, when you look at the NRC efficiency principle,  
2379 which states, ``regulatory activity should be consistent with

2380 the degree of risk reduction they achieve,' I think,  
2381 Commissioner Magwood, you had written, ``it does not as a  
2382 general matter advance the cause of safety to inundate  
2383 licensee staffs with multiple actions when a more thoughtful  
2384 process might achieve the agency's safety goals without  
2385 straining licensee resources.' Do you have a view on  
2386 whether staff industry concerns on potential cumulative  
2387 effects on multiple new requirements have merit?

2388 Mr. {Magwood.} I think there is some merit, but I think  
2389 it is very important to understand why there is merit. And I  
2390 think the reason it is important is to make sure that--and I  
2391 think you and a previous Member put it very well--that you  
2392 are not distracted by issues of low safety significance, and  
2393 in dealing with those, miss something that is much more  
2394 important. It is always most important to focus on a  
2395 priority safety effects but make sure you deal with those  
2396 early. And I do think that we ought to look for more ways of  
2397 addressing that in our process to make sure that we aren't  
2398 focusing too much on the small things and missing the big  
2399 things.

2400 Mr. {Scalise.} All right. I see I am out of time. I  
2401 appreciate the answers. I yield back.

2402 Mr. {Shimkus.} The gentleman's time is expired.

2403 The chair now recognizes the gentleman from

2404 Massachusetts, Mr. Markey, for 5 minutes.

2405 Mr. {Markey.} Thank you, Mr. Chairman.

2406 I would like to welcome you, Chairman Macfarlane, and  
2407 congratulate you on your recent confirmation.

2408 After the Fukushima meltdown, then-Chairman Jaczko  
2409 created a taskforce to recommend safety upgrades for American  
2410 nuclear reactors. That taskforce was made up of NRC  
2411 officials who, together, had more than 135 years of nuclear  
2412 regulatory expertise. Its report was released more than a  
2413 year ago and included 12 recommendations, which ranged from  
2414 requirements to upgrade seismic and flood protections against  
2415 the long power outages that were the ultimate cause of the  
2416 Japanese meltdown. They also concluded that each and every  
2417 one of the recommendations were necessary for the adequate  
2418 protection of nuclear power plants and that they should be  
2419 mandatory for each nuclear reactor--mandatory. Chairman  
2420 Jaczko immediately announced his support for all of the NRC  
2421 staff's recommendation. Regrettably, some of his fellow NRC  
2422 commissioners did not do likewise and initially insisted that  
2423 other NRC staff review the taskforce report before the  
2424 Commission voted on any of the recommendations.

2425 But this second staff review reached the same  
2426 conclusions as the first one. They concluded that all  
2427 recommendations should be made mandatory. Despite this, the

2428 Commission has not voted to endorse its top staff reviews,  
2429 and thus, it is possible that some of the Fukushima safety  
2430 upgrades will never be made mandatory for all nuclear power  
2431 plants.

2432 Chairman Macfarlane, do you support the conclusion of  
2433 the NRC's top safety experts that all of the post-Fukushima  
2434 safety recommendations are necessary for the adequate  
2435 protection of nuclear power plants?

2436 Ms. {Macfarlane.} Thanks for that question. As  
2437 chairman, I am strongly committed to protecting the public  
2438 health and safety and I am strongly committed to shepherding  
2439 the Fukushima Taskforce recommendations through. And I--

2440 Mr. {Markey.} Do you believe that they should be  
2441 mandatory?

2442 Ms. {Macfarlane.} I think that I need to understand  
2443 more about, especially the Tier 2 and Tier 3 activities,  
2444 especially the Tier 3 activities.

2445 Mr. {Markey.} Would it be a good idea or outcome if it  
2446 turned out that the nuclear industry argued its way out of  
2447 adopting some of the recommendations that top experts  
2448 recommended on the grounds that it would be too expensive or  
2449 inconvenient?

2450 Ms. {Macfarlane.} Certainly, that would not be a good  
2451 outcome.

2452 Mr. {Markey.} Well, when the NRC staff reviewed the  
2453 taskforce report, it identified several safety measures that  
2454 could be implemented quickly and I am pleased that the  
2455 Commission has moved forward on these. The staff stated that  
2456 the fact that they had identified some recommendations that  
2457 could be adopted early ``should not be interpreted as a lack  
2458 of support for the other taskforce recommendations.'' But  
2459 recently, the Nuclear Energy Institute started to discourage  
2460 the NRC from moving forward on the rest of the  
2461 recommendations saying that the recommendations that were  
2462 adopted would accomplish ``as much as 90 percent of the  
2463 safety benefit from all recommendations'' and that ``at this  
2464 time, the safety benefits derived from the rest of the  
2465 recommendations are unclear.''

2466 So I would like you to respond to this, Chairman  
2467 Macfarlane. Do you agree with the Nuclear Energy Institute  
2468 that the Commission should delay or stop the consideration of  
2469 the rest of the safety recommendations that the NRC's  
2470 Fukushima Taskforce made?

2471 Ms. {Macfarlane.} Absolutely not.

2472 Mr. {Markey.} Absolutely not. And I agree with you.  
2473 And I know that there are other commissioners who disagree  
2474 with that point of view and I would just like to say that you  
2475 have a very difficult job ahead of you, Madam Chair, and you

2476 need to keep in mind that your duty is not to win a  
2477 popularity contest at the NRC with commissioners who disagree  
2478 with this safety agenda but you must lead it in an absolutely  
2479 critical time when it is faced with a daunting task of  
2480 responding to the lessons of the Fukushima nuclear meltdowns  
2481 in a way that ensures that such a thing never happens in the  
2482 United States. You are charged with the task of ensuring the  
2483 safety of our fleet of existing nuclear plants, of licensing  
2484 any new ones, and of responding to what future course our  
2485 nation takes with respect to the seemingly intractable issues  
2486 of how to dispose of all of the toxic high level nuclear  
2487 waste.

2488         And while I would hope that all would be sweetness and  
2489 light over at the Nuclear Regulatory Commission, I seriously  
2490 doubt that that will be the case. So don't be afraid to  
2491 stick to your guns and do what is right for the American  
2492 people, even if that puts you on the losing side of a vote.  
2493 For in the end, Madam Chair, your term as chairman will be  
2494 judged on whether you have successfully completed the task of  
2495 fully implementing the NRC Taskforce recommendation on  
2496 Fukushima, on ensuring that there is safety in the disposal  
2497 of nuclear waste. And that will be your legacy,  
2498 notwithstanding the fact that there are going to be other  
2499 members of the Commission who disagree with that agenda.

2500 Thank you, Mr. Chairman.

2501 Mr. {Shimkus.} The gentleman's time is expired.

2502 The chair now recognizes the gentleman from Oregon, Mr.  
2503 Walden, for 5 minutes.

2504 Mr. {Walden.} I thank the chairman and I welcome the  
2505 new chairwoman to the Commission. We appreciate you and your  
2506 colleagues and the important role that you play in providing  
2507 safety and security to our nation's nuclear power facilities.  
2508 As my colleagues I think up and down the aisle and across the  
2509 aisle, we all believe that that is an essential part of your  
2510 job both moving forward with nuclear energy development but  
2511 making sure we are safe along the way.

2512 I would like to ask the other commissioner since you  
2513 weren't given a chance to respond to my colleague's question  
2514 regarding the taskforce recommendations, your views on those  
2515 recommendations, and whether you believe they should be just  
2516 automatically adopted or not or why they are not. And maybe  
2517 we could just go from left to right since the chairwoman had  
2518 a chance to respond.

2519 Ms. {Svinicki.} Thank you for the question,  
2520 Congressman.

2521 Upon receipt of those recommendations from the taskforce  
2522 I voted, as did a commission majority, to take that output of  
2523 that small group, albeit very experienced as Congressman

2524 Markey mentioned, they were just a small group of  
2525 individuals. And I voted to subject those recommendations to  
2526 the opportunity for public outreach, for comment, for a wide  
2527 diversity of stakeholders to have an opportunity to comment  
2528 on that and then for the NRC staff to synthesize all of that  
2529 input and prioritize and propose to the Commission a plan for  
2530 moving forward on those recommendations. Sitting here today,  
2531 I continue to believe that that was a fulsome and appropriate  
2532 way to proceed.

2533 Mr. {Walden.} So there had not been a transparent or  
2534 public process prior to that?

2535 Ms. {Svinicki.} There had not been an opportunity to  
2536 ventilate or to have public comment on those recommendations.

2537 Mr. {Walden.} Is that a normal process at an  
2538 independent agency?

2539 Ms. {Svinicki.} I think that it is not inappropriate  
2540 for commissioners to have, as a starting point, a small  
2541 experienced group provide some advice. And it was comprised  
2542 solely of NRC staff. But I do think that it was important to  
2543 take that very timely and I think informed output but subject  
2544 it to a much broader kind of opportunity for public comment.

2545 Mr. {Walden.} Appreciate that.

2546 Mr. Magwood, would you care to comment?

2547 Mr. {Magwood.} Yes, I think Commissioner Svinicki said

2548 it very well. In addition, we also insisted that the  
2549 Advisory Committee on Reactor Safeguards are expert, outside  
2550 independent advisory group to give us input as to their  
2551 thoughts about these recommendations. And we also, because  
2552 we were learning as we went during that process, we  
2553 individual commissioners actually did make additions, not  
2554 subtractions but additions to what the taskforce recommended.

2555 Mr. {Walden.} Is that right?

2556 Mr. {Magwood.} Absolutely. There were several  
2557 instances where our colleague, Commissioner Apostolakis put  
2558 in new items. I put in new items. Others did as well. So  
2559 we--

2560 Mr. {Walden.} Additional safeguard items?

2561 Mr. {Magwood.} Additional items for study that I  
2562 believe will eventually be adopted. And I think these are  
2563 very important. And Commissioner Ostendorff, for example,  
2564 made the addressing the station blackout a very high  
2565 priority, higher than I think the staff had originally  
2566 anticipated. So the Commission took a very active role in  
2567 this and I think a very positive, very beneficial role, and I  
2568 am very proud of what we did.

2569 Mr. {Walden.} Commissioner Ostendorff, so explain to me  
2570 this station blackout role and why that was an important  
2571 addition from your perspective.

2572 Mr. {Ostendorff.} Yes, sir. The station blackout rule  
2573 evaluation really refers to when you have a loss of all  
2574 alternating current AC power onsite--

2575 Mr. {Walden.} Um-hum.

2576 Mr. {Ostendorff.} --and AC power--

2577 Mr. {Walden.} Much like what happened at Fukushima.

2578 Mr. {Ostendorff.} Yes. And AC power is needed to drive  
2579 centrifugal pumps--

2580 Mr. {Walden.} Right.

2581 Mr. {Ostendorff.} --that provide cooling to remove heat  
2582 from decay from a core. And so the ability of a plant to  
2583 have robust redundant power sources, including emergency  
2584 diesel generators, portable generators, DC batteries, the  
2585 ability to--

2586 Mr. {Walden.} Right.

2587 Mr. {Ostendorff.} --recharge those batteries, all those  
2588 things are part of the calculus of how we can have a more  
2589 robust opportunity to provide this required decay heat  
2590 removal capability.

2591 Mr. {Walden.} And was it your view that the taskforce  
2592 recommendations didn't go far enough along those lines?

2593 Mr. {Ostendorff.} Well, I think the taskforce did a  
2594 tremendous job given the fact they had 90 days or less to do  
2595 what they did.

2596 Mr. {Walden.} Um-hum.

2597 Mr. {Ostendorff.} But I will note that the taskforce  
2598 recommendations themselves were not accompanied by a  
2599 regulatory technical analysis. And before we go out as a  
2600 regulator and issue orders or require things to be changed,  
2601 it is incumbent upon us to have a regulatory technical  
2602 analysis.

2603 Mr. {Walden.} Right.

2604 Mr. {Ostendorff.} And so that is part of the things  
2605 that Commissioner Svinicki, Commissioner Magwood,  
2606 Commissioner Apostolakis, and I have been very adamant about  
2607 over the last 16 months is to ensure we have that technical  
2608 analysis.

2609 Mr. {Walden.} Right.

2610 Mr. {Ostendorff.} I would tell you that, as  
2611 Commissioner Magwood said, that there are areas that have  
2612 been added in. Commissioner Magwood added in issues on spent  
2613 fuel pool instrumentation, as well as an ultimate heat sink,  
2614 so the mix before the Commission today is broader than that  
2615 that was presented in July of 2011.

2616 Mr. {Walden.} Well, I appreciate that and I know I am  
2617 just out of time here, but I appreciate the fact you are  
2618 doing a public, transparent process so that more than just a  
2619 handful of inside staffers decide what is going to be

2620 mandatory across the country. It is something I have drive  
2621 as chairman of the Communications and Technology Subcommittee  
2622 at the FCC. I don't think they do enough of the appropriate  
2623 sort of public, transparent process where everybody has a  
2624 chance to weigh in. After all, it is the public's business,  
2625 in your case the public safety, and I think it is important  
2626 to get it right.

2627         So thank you, Mr. Chairman, for your indulgence.

2628         Mr. {Shimkus.} I thank my colleague. The chair  
2629 recognizes the gentleman from Virginia for 5 minutes.

2630         Mr. {Griffith.} Mr. Chairman, thank you for having this  
2631 hearing. I have to tell you all, those of us who were here  
2632 the last time that you all were before us know that I was  
2633 very concerned that the process was completely dysfunctional.  
2634 I feel much better today.

2635         That being said, Mr. Chairman, I would like to yield the  
2636 time remaining to you for whichever questions you would like  
2637 to ask.

2638         Mr. {Shimkus.} And I thank my friend and colleague.

2639         Chairman Macfarlane, when nominated to become a  
2640 commissioner, Chairman Jaczko recused himself for 1 year on  
2641 matters relating to Yucca Mountain. In 2009, when asked by a  
2642 writer for the MIT Technological Review, ``is it (Yucca  
2643 Mountain) really unsuitable? And you answered yes. In your

2644 role as NRC chairman you must be fair and objective in  
2645 adjudicating issues that come before the Commission. Your  
2646 public criticism at Yucca Mountain leads us to question your  
2647 objectivity on the matter.'" Will you recuse yourself on  
2648 matters relating to Yucca Mountain just as Chairman Jaczko  
2649 did?

2650 Ms. {Macfarlane.} Like any commissioner, I would  
2651 examine each and every matter before me on the legal  
2652 specifics at the time and take appropriate action, which  
2653 could include possible recusal. But at this point, I believe  
2654 it is inappropriate to commit to a general recusal on this  
2655 matter without a specific commission action in front of me to  
2656 evaluate with counsel input.

2657 Mr. {Shimkus.} You have been well prepared. Thank you.  
2658 The D.C. Circuit Court is considering whether the NRC is  
2659 bound to finish its review of the Yucca Mountain license  
2660 application. In March, Secretary Chu committed to honor that  
2661 court's decision. Will you also commit to honor the court's  
2662 decision?

2663 Ms. {Macfarlane.} Absolutely.

2664 Mr. {Shimkus.} What do you see as the Federal  
2665 Government's proper role in encouraging the use of  
2666 alternative fuels in vehicles?

2667 Ms. {Macfarlane.} Alternative fuels in vehicles?

2668 Mr. {Shimkus.} I have no idea why this is on there.

2669 Ms. {Macfarlane.} Because the NRC doesn't do that.

2670 Mr. {Shimkus.} Well, when we talk about electric  
2671 vehicles, there could be some debate on electricity  
2672 generation.

2673 To each of the serving commissioners, you know, as a  
2674 hearing, this has been a very good hearing. Now, that is Mr.  
2675 Markey going up there to stop me in my final--see, I called  
2676 him out. So I think the hearing has been very, very good and  
2677 we have got one more colleague back to ask questions.

2678 But there is some issues that have been raised that I  
2679 want to give Commissioner Svinicki, Commissioner Magwood, and  
2680 Commissioner Ostendorff an opportunity to--because some of  
2681 your votes have been questioned by people who say that you  
2682 don't support safety. So can each one of you give an example  
2683 of a vote that has been misconstrued and explain why your  
2684 vote was protective of public safety?

2685 Mr. {Shimkus.} Commissioner Svinicki?

2686 Ms. {Svinicki.} I would begin with the matter we were  
2687 just discussing, which is the Commission's very important  
2688 actions on the Fukushima Taskforce recommendations. I will  
2689 use the same word as Commissioner Magwood. I am very proud  
2690 of what the commission majority put in place. I think that  
2691 we have shown a real commitment to safety, to moving forward

2692 in a way that has technical discipline and rigor but at the  
2693 same time is moving forward very seriously with these  
2694 recommendations. And I think that the entire handling of the  
2695 taskforce report has been extremely misconstrued.

2696 Mr. {Shimkus.} Commissioner Magwood?

2697 Mr. {Magwood.} Yeah, I think I am forced to point to  
2698 the same example. There has been this debate about the  
2699 regulatory basis for our decision as to whether they should  
2700 be entered what we call adequate protection or an  
2701 administrative exemption. And in some cases one of us or the  
2702 other have advocated administrative exemption. And in my  
2703 case it wasn't because I thought that these issues weren't  
2704 important. It was simply, as Commissioner Ostendorff pointed  
2705 out earlier, that I thought we needed to have a much more  
2706 rigorous technical basis to evaluate these issues. But I  
2707 wanted them to go forward but still preserve the opportunity  
2708 to do the analysis so they could provide a very strong  
2709 framework for us to go forward. So operationally they mean  
2710 the same thing, but from a regulatory standpoint, it gives  
2711 you a stronger basis to go forward and that is what I was  
2712 looking for.

2713 Mr. {Shimkus.} Thank you.

2714 Commissioner Ostendorff?

2715 Mr. {Ostendorff.} Thank you for the question. I think

2716 my two colleagues have just provided very cogent examples  
2717 which I agree with. I will just state one overall comment  
2718 that I think the actions that the current commissioners have  
2719 taken who have been here through the Fukushima issues have  
2720 been very responsible, that I think in large part what gets  
2721 left out of a lot of the public press commentary is that we  
2722 are by and large following the recommendations of our close  
2723 to 4,000-person staff. Bill Borchardt here who is in the row  
2724 behind us, he and his team under Steering Committee have been  
2725 integrating and prioritizing these recommendations, and I  
2726 think we have been very thoughtful in considering the  
2727 recommendations. Also realize that not all these issues are  
2728 of the same safety significance, and therefore, some deserve  
2729 more urgency than others. And I think today we have acted in  
2730 that way.

2731 Mr. {Shimkus.} And I thank you. And I know a lot of  
2732 this was post-Fukushima but I think there is also examples of  
2733 other issues that you could probably defend your vote on on  
2734 public safety. So with that, I appreciate it.

2735 The chair now recognizes the vice chairman of the  
2736 committee, Mr. Murphy, for 5 minutes.

2737 Mr. {Murphy.} Don't you want to say I am in the Navy?

2738 Mr. {Shimkus.} I said beat Navy. You were here there,  
2739 weren't you? Or that is why you are so late and didn't ask

2740 questions because you didn't get here on time?

2741 Mr. {Murphy.} Admiral, I want to start out by asking  
2742 you. You have been involved with issues with the Navy  
2743 nuclear for a while. You are aware of that. Have we ever  
2744 had any major problems with nuclear energy systems in the  
2745 Navy in its history?

2746 Mr. {Ostendorff.} I would say as far as major problems,  
2747 no, sir.

2748 Mr. {Murphy.} That is an important record. How many  
2749 years has it been?

2750 Mr. {Ostendorff.} Sir, 26 years active duty.

2751 Mr. {Murphy.} But the Navy has been around--

2752 Mr. {Ostendorff.} The Navy has been clear since USS  
2753 Nautilus back in 1954 I believe they had nuclear power  
2754 submarines and carriers.

2755 Mr. {Murphy.} Good track record. Thank you.

2756 And then, Chairman, thank you for coming aboard. I  
2757 appreciate your comments about collegiality. And if it  
2758 hasn't been said before, I will say it now, and if it has, I  
2759 will repeat it. It is valuable. Not only collegiality among  
2760 members of the NRC, which up to this point--well, up to a  
2761 point a few months ago--has had a highly respected position  
2762 and I believe that collegiality is extremely important not  
2763 just among members of the Commission but with Congress and

2764 with the American people. So I appreciate your motivation to  
2765 turn this in a different direction.

2766 I just want to get a couple things on record. Have you  
2767 been to a nuclear power plant?

2768 Ms. {Macfarlane.} Have I been to a nuclear power plant?

2769 Yes.

2770 Mr. {Murphy.} Okay. And have you been to a fuel  
2771 manufacturing facility where they make nuclear fuel and  
2772 assemble it and assembly rods, et cetera?

2773 Ms. {Macfarlane.} Yes, I have actually.

2774 Mr. {Murphy.} Okay. Where was that?

2775 Ms. {Macfarlane.} It was in Europe.

2776 Mr. {Murphy.} Where? I am just curious.

2777 Ms. {Macfarlane.} I think it was Belgium.

2778 Mr. {Murphy.} Okay. Thank you, ma'am. And when you  
2779 were over in Europe, did you have a chance to see what they  
2780 do in France with reprocessing nuclear fuel?

2781 Ms. {Macfarlane.} Yes, I have. I have been to La  
2782 Hague.

2783 Mr. {Murphy.} The AREVA place? Have you been over to  
2784 Sweden where they have nuclear storage there--

2785 Ms. {Macfarlane.} Yes, I have.

2786 Mr. {Murphy.} --underground in that massive cave?

2787 Ms. {Macfarlane.} Yes, to the Clab facility, yes, um-

2788 hum.

2789 Mr. {Murphy.} Pretty incredible facility over there.

2790 Safe?

2791 Ms. {Macfarlane.} Yes.

2792 Mr. {Murphy.} I imagine you are particularly interested  
2793 as a geologist noting the entire country of Sweden is in one  
2794 big block of granite and fairly--

2795 Ms. {Macfarlane.} Well, it is a little more complicated  
2796 than that.

2797 Mr. {Murphy.} I understand, different types of granite  
2798 but it is an impressive facility. Have you been to Yucca  
2799 Mountain?

2800 Ms. {Macfarlane.} Yes, many times.

2801 Mr. {Murphy.} Okay, you have been there. And with  
2802 regard to that, one of the concerns on record that you have  
2803 stated before you took on this position with the committee  
2804 that you are not in favor of Yucca Mountain and I believe you  
2805 are not in favor of reprocessing. Do I have those positions  
2806 correct or am I wrong on those?

2807 Ms. {Macfarlane.} I think you are wrong on them. On  
2808 the Yucca Mountain position, I have never said that I am not  
2809 in favor of Yucca Mountain. In fact, I can read to you--

2810 Mr. {Murphy.} I would love to hear that, thank you.

2811 Ms. {Macfarlane.} --from the book that co-edited,

2812 ``Uncertainty Underground,'' and a direct quote is ``this  
2813 book is not a judgment on the suitability of Yucca Mountain  
2814 as a repository''--

2815 Mr. {Murphy.} I am sorry. What was the title of the  
2816 book, ``Uncertainty?''

2817 Ms. {Macfarlane.} ``Uncertainty Underground.''

2818 Mr. {Murphy.} Sounds like a comment to me.

2819 Ms. {Macfarlane.} It is a comment, yes--

2820 Mr. {Murphy.} All right.

2821 Ms. {Macfarlane.} --it is a comment about uncertainty  
2822 that exists. But it is a technical uncertainty. Anyway, the  
2823 quote is ``this book is not a judgment on the suitability of  
2824 Yucca Mountain as a repository for spent nuclear fuel and  
2825 high-level nuclear waste. We leave that judgment to the  
2826 reader.''

2827 Mr. {Murphy.} I understand, but with a title like that,  
2828 I am serious, I am looking forward to reading your book.

2829 And now your predecessor, Chairman Jaczko, held a fairly  
2830 negative view I think of the nuclear industry and nuclear  
2831 energy. In a speech earlier this year he indicated that 20  
2832 years from now, the nuclear industry is just as likely to  
2833 ``be dominated by a process of continuous decommissioning''  
2834 instead of a process of continuous construction of nuclear  
2835 reactors. What is your view on that?

2836 Ms. {Macfarlane.} On the future of the nuclear  
2837 industry? I think it depends on many, many factors. The  
2838 economics, certainly the economy right now.

2839 Mr. {Murphy.} And policy?

2840 Ms. {Macfarlane.} Policy, absolutely.

2841 Mr. {Murphy.} Policy at the NRC?

2842 Ms. {Macfarlane.} The policy at NRC to a smaller degree  
2843 I would imagine.

2844 Mr. {Murphy.} All right. Please share your opinion  
2845 regarding the benefits and transparency of the notation  
2846 voting process of the members.

2847 Ms. {Macfarlane.} As far as I understand the notation  
2848 voting process, I think it has the potential to operate fine.  
2849 Were there to be any changes to the voting process, I would  
2850 discuss those with my colleagues before proceeding.

2851 Mr. {Murphy.} How about the other commissioners? Ms.  
2852 Svinicki, do you have a comment on that?

2853 Ms. {Svinicki.} On the notation voting--

2854 Mr. {Murphy.} Yes, um-hum.

2855 Ms. {Svinicki.} --process? I am supportive of the  
2856 notation voting process. When I was newly on the Commission,  
2857 I benefited greatly from the rich written record of prior  
2858 votes of commissioners often were dealing with the same issue  
2859 in a different form a few years later. The ability to tap

2860 into the tremendous expertise of those who served before me  
2861 was very beneficial.

2862 Mr. {Magwood.} I think about a week ago I saw a vote  
2863 that Commissioner Svinicki had written that raised issues  
2864 that we in my office had missed. So we investigated  
2865 Commissioner Svinicki's comments and her vote, took a few  
2866 days to do that, but after investigating it, I withdrew my  
2867 original vote and re-voted. That is an example of the kind  
2868 of dynamic you get from a notation voting process that you  
2869 would completely lose--

2870 Mr. {Murphy.} Um-hum.

2871 Mr. {Magwood.} --if you go to an oral, at-the-table  
2872 process because you don't have time to go back and do  
2873 research and you don't have time to confer with staff. And  
2874 so I think a notation voting process works extremely well and  
2875 I wouldn't really change much of anything.

2876 Mr. {Murphy.} Thank you.

2877 Commissioner Ostendorff?

2878 Mr. {Ostendorff.} I would just add I agree with my  
2879 colleagues. I pulled out a vote I cast July 27 of last year.  
2880 It is a 5-page vote on Fukushima issues. These are not yes-  
2881 or-no issues. These are not up or down. These are very  
2882 complex, here is my vote. Other colleagues have similar  
2883 linked votes where I think we have a very rich opportunity to

2884 learn from and explain our viewpoints in a way that we would  
2885 not have if this process went away.

2886 Mr. {Murphy.} I appreciate the complexity of those.

2887 Mr. Chairman, can I just beg for one more since I don't  
2888 see anybody else?

2889 Mr. {Shimkus.} Without objection.

2890 Mr. {Murphy.} Thirty seconds. And then, Chair, in 2009  
2891 when you were asked by a writer for the MIT Technology  
2892 Review, the question ``is Yucca really unsuitable?'' You  
2893 answered yes at that time. Are you saying your opinion has  
2894 changed? And I put this in the context of what the other  
2895 commissioner said, the value of having a more lengthy and  
2896 detailed answer to things because maybe these things cannot  
2897 be reduced to a yes/no answer. Has your position changed?  
2898 Is it yes? Is it no? Is it we have more work to do?

2899 Ms. {Macfarlane.} I am not sure the context of that  
2900 quote, so I can't speak directly to that quote, but what I  
2901 can tell you--and maybe in a sense of reassuring--is that I  
2902 have spent much time researching Yucca Mountain. I believe  
2903 all the analyses that I have done are technically defensible.  
2904 As a scientist, I would not try to publish anything that  
2905 wasn't technically defensible; it wouldn't be publishable.  
2906 Most of the analyses that I did of Yucca Mountain for the  
2907 book, which was published in 2006, were done in the early

2908 2000 time frame. That was before the license application was  
2909 submitted. I have not read the license application. I have  
2910 not read yet the NRC's technical analyses. Of course, with  
2911 time, knowledge, changes, more evidence comes to light, and I  
2912 intend to keep an open mind.

2913 Mr. {Murphy.} I appreciate your candor and your  
2914 scientific integrity. Thank you very much.

2915 I yield back.

2916 Mr. {Shimkus.} The gentleman's time has expired.

2917 We were talking about votes. We took a vote this spring  
2918 on finishing the NRC study; 326 Members voted to do that so I  
2919 think it is by far the majority bipartisan consensus that we  
2920 move forward at least finishing the study.

2921 With that, I would like to ask unanimous consent that  
2922 June 26, 2012, NRC Office of Inspector General report  
2923 concerning possible violations of Reorganization Plan #1 of  
2924 1980, NRC's internal commission procedures be introduced into  
2925 the record. Without objection, the document will be entered  
2926 into the record.

2927 [The information follows:]

2928 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

|  
2929           Mr. {Shimkus.} In conclusion, I would like to thank  
2930 you, all you witnesses, and my colleagues, you could see it  
2931 was very well attended, a lot of good questions participating  
2932 today in the hearing.

2933           I want to remind members that they have 10 business days  
2934 to submit questions for the record, and I ask the chairman  
2935 and the commissioners their willingness to agree to respond  
2936 should you receive any questions from members of the two  
2937 subcommittees.

2938           With that, the Subcommittee is adjourned.

2939           [Whereupon, at 12:37 p.m., the Subcommittees were  
2940 adjourned.]