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6 WINTER STORM FERN LESSONS:

7 SUPPLYING RELIABLE POWER TO MEET PEAK DEMAND

8 TUESDAY, MARCH 17, 2026

9 House of Representatives,

10 Subcommittee on Energy,

11 Committee on Energy and Commerce,

12 Washington, D.C.

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16 The subcommittee met, pursuant to call, at 10:01 a.m. in
17 Room 2123, Rayburn House Office Building, Hon. Robert E.
18 Latta [chairman of the subcommittee], presiding.

19 Present: Representatives Latta, Palmer, Harshbarger,
20 Miller-Meeks, Bentz, Fry, Lee, Evans, Goldman, Fedorchak,
21 Guthrie (ex officio); Peters, Menendez, Mullin, McClellan,
22 Matsui, Veasey, Schrier, and Pallone (ex officio).

23 Staff Present: Ansley Boylan, Director of Operations;
24 Christian Calvert, Press Assistant; Jessica Donlon, General
25 Counsel; Andrew Furman, Professional Staff Member; Sydney
26 Greene, Director of Finance and Logistics; Calvin Huggins,
27 Clerk; Megan Jackson, Staff Director; AT Johnson, Special

28 Advisor; Brayden Lacefield, Special Assistant; Joel Miller,
29 Chief Counsel; Ben Mullaney, Press Secretary; Seth Ricketts,
30 Clerk; Chris Sarley, Member Services/Stakeholder Director;
31 Peter Spencer, Senior Professional Staff Member; Timothy
32 Trimble, Staff Assistant; Matt VanHyfte, Communications
33 Director; Giancarlo Ceja, Minority Staff Assistant; Waverly
34 Gordon, Minority Deputy Staff Director and General Counsel;
35 Tiffany Guarascio, Minority Staff Director; Serena Klebba,
36 Minority Intern; Kristopher Pittard, Minority Professional
37 Staff Member; Emma Roehrig, Minority Staff Assistant; Kylea
38 Rogers, Minority Policy Analyst; Medha Surampudy, Minority
39 Professional Staff Member; Kyle Wolf, Minority Press Intern;
40 and C.J. Young, Minority Deputy Communications Director.
41

42 *Mr. Latta. So the Subcommittee on Energy will come to
43 order, and the chair recognizes himself for five minutes for
44 an opening statement.

45 Again, good morning and welcome to today's hearing to
46 examine the performance of our electric grid through the
47 duration of Winter Storm Fern.

48 Starting on January the 23rd, a significant winter storm
49 brought widespread snow, sleet, and freezing rain from New
50 England to the Rockies and down to the Gulf of America. This
51 storm was followed by an Arctic front that kept stubbornly
52 low temperatures across the country and additional
53 snowstorms. As expected, American families bundled up,
54 staying indoors to avoid the inclement weather and dangerous
55 road conditions. When they were at home they relied on our
56 nation's complex energy system to keep the lights on, their
57 homes warmed, and their refrigerators stocked.

58 Just like any other day, families expected their lights
59 to come on with a flick of a switch. While seemingly
60 routine, an exhaustive amount of preparation, coordination,
61 and real-time decision-making occurred behind the scenes to
62 make sure American communities had power. While some outages
63 occurred, the grid held up because of the important work of
64 some of the witnesses we have before us today.

65 The Southwest Electric Power Company, or SWEPCO, is an
66 electric utility across Arkansas, Texas, and Louisiana. The

67 Northeast Gas Association represents natural gas utilities
68 across 11 northeastern states. Grid strategies developed
69 public policies that support a clean energy transition, and
70 the North American Electric Reliability Corporation, or NERC,
71 is the regulatory authority that ensures reliability and
72 security of our nation's bulk power system today.

73 Today these witnesses will provide critical insights
74 into how the nation's electric grid remained resilient
75 through the duration of the significant weather event. While
76 I'm looking forward to today's opportunity to learn more
77 about the grid's performance through the storm, one thing
78 remains clear: baseload and dispatchable resources saved the
79 day. Generation from coal, natural gas, and fuel oils
80 skyrocketed while intermittent resource generation,
81 unfortunately, plummeted. Nuclear has always remained steady
82 and reliable. Without access to these affordable and
83 reliable supplies of baseload generation, the setting of this
84 hearing would be and would look much different. Power
85 outages that occur in freezing temperatures cause billions in
86 economic damage and, even more importantly, tragic deaths in
87 our vulnerable communities.

88 Our New England states illustrate an interesting
89 example. Through the storm the fuel mix in New England was
90 carried by natural gas, fuel oil, and nuclear power. In
91 spite of generous subsidies and favorable public policy

92 choices, intermittent resources were nowhere to be found when
93 New England needed power the most. Because limited gas
94 pipeline capacity in New England regions restrict supply and
95 raise prices, power plants had to opt for more expensive and
96 less efficient fuel oil. It's important to recognize fuel
97 oil plants for their predominant source of generation 70
98 years ago. Importantly, outages across the country were
99 limited, but the success of the grid through the Winter Storm
100 Fern should serve as a warning.

101 That brings us to the present day. How should policy-
102 makers and regulators consider the operation of our future
103 bulk power system? We stand on the precipice of tremendous
104 growth in our nation's electricity demand. The Energy and
105 Commerce Committee has held several hearings and passed
106 legislation to shore up the reliability crisis caused by the
107 Biden Administration to power next-generation industries.
108 Now we are considering the implications of a generation
109 resource mix that can appropriately meet the needs of
110 households at one -- at all times of the year while
111 simultaneously ensuring America leads in the future economy.

112 The answer is clear. Our nation needs more dispatchable
113 power, and it needs a lot more of it. Given the military
114 activity taking place in Iran and the implications of energy
115 markets throughout the Strait of Hormuz, now more than ever
116 we need to utilize the bountiful resources we have here,

117 right in the United States. The lessons of Winter Storm Fern
118 should illustrate that common sense must rule the day.
119 American energy dominance and independence must be achieved
120 so we can keep our communities safe at home.

121 [The prepared statement of Mr. Latta follows:]

122

123 *****COMMITTEE INSERT*****

124

125 *Mr. Latta. With that I yield back the balance of my
126 time, and at this time the chair recognizes the gentleman
127 from California's 50th district for five minutes for an
128 opening statement.

129 *Mr. Peters. Thank you, Mr. Chairman, for holding this
130 important hearing. Ranking Member Castor was delayed by the
131 weather today so I am stepping in for her to give an opening
132 statement.

133 At nearly every hearing this year we have talked about
134 the significant growth in energy demand every region in the
135 United States will face. And even though that growth is very
136 exciting, it comes with real challenges that everyone in this
137 room is grappling with. Americans are feeling the strain of
138 these challenges on their wallet. Electricity costs are
139 eight percent higher today than they were a year ago. Some
140 projections show residential utility rates climbing as much
141 as 18 percent in the coming years, and no region has been
142 spared.

143 We have also been saying it every -- nearly every
144 hearing this Congress that we are running out of time. I and
145 every utility grid operator and developer I talk to do not
146 think we are ready to meet the current moment. Right now we
147 are on track to lose our competitive edge to nations like
148 China. So far in the 2020s China has completed more than
149 8,200 miles of high-voltage, long-range transmission lines,

150 while the U.S. has built only 375.

151 European utilities are also rapidly increasing the
152 minimum transfer capacity between countries to move power
153 back and forth. Over 125,000 miles of advanced conductors,
154 which can help us get the most out of the grid, have been
155 installed in India, Europe, and China. The United States has
156 installed less than 10 percent of that. By focusing only on
157 building the kinds of generation one party likes or by
158 keeping old, inefficient, and expensive coal plants online,
159 we are holding our country back.

160 Every witness before us has been clear: We need more of
161 everything, whether it be transmission pipelines, solar,
162 wind, or gas. But that doesn't mean we need to keep every
163 asset that is uneconomic or inefficient. Now, instead of
164 focusing on how to develop a long-term plan and holistic
165 energy strategy which has proven -- which has been proven to
166 decrease costs and improve reliability for everyone, we are
167 constantly talking about short-term fixes that will increase
168 costs, steamroll state regulators, and negatively affect
169 reliability in the long run.

170 Look at Texas, which is slated to receive roughly half
171 of U.S. industrial electricity demand growth through 2030.
172 When the natural gas system failed and people died from cold
173 in Superstorm Uri, did Texas exclusively turn to more natural
174 gas or keeping coal plants open? No. Texas reduced its risk

175 of blackouts and brownouts from 10 percent to 1 percent by
176 deploying all resources, including solar energy and batteries
177 for storage. Now they are primed to dominate this area of
178 sustained load growth because they built new generation to
179 meet new demand instead of only holding on to the past.

180 To confront this challenge, we as a country must build
181 more generation, make it easier to connect that generation to
182 the grid, and increase regional and interregional access to
183 that energy. Right now there are over 2,500 gigawatts worth
184 of energy projects in the interconnection queue, which is the
185 number-one barrier to connecting resources. It is
186 insufficient grid capacity or too much congestion in a given
187 area. So you can build all the generation you want, but if
188 you can't connect it you can't use it. In 2024 that
189 transmission congestion, our inability to move power around
190 the grid, cost customers over \$12 billion, and it happened
191 during Winter Storm Fern.

192 We need to build a better grid nationwide which will
193 increase competition, reduce congestion, and ensure customers
194 can access the next cheapest electron. That is our North
195 Star. The North American Electric Reliability Corporation,
196 represented by one of our witnesses today, has said clearly
197 that an additional 35 gigawatts of interregional transfer
198 capacity across the country would make the grid more
199 resilient, lower costs, and enable us to better meet load

200 growth.

201 I agree with my colleagues in the majority that the
202 Federal Government needs to take a somewhat stronger hand in
203 planning and permitting in collaboration with state partners
204 to make sure we can keep the lights on. But we need to stop
205 looking backwards. It is difficult to reach consensus, but
206 doing nothing is costing us money, hurting the reliability of
207 the grid, and making us less competitive. We need everyone
208 at the table, and we will not meet this moment if our
209 approach is business as usual. I look forward to hearing
210 about some potential solutions from our witnesses, and
211 working with my colleagues on both sides of the aisle to find
212 some as well.

213 [The prepared statement of Mr. Peters follows:]

214

215 *****COMMITTEE INSERT*****

216

217 *Mr. Peters. Thank you, and I yield back.

218 *Mr. Latta. Thank you very much. The gentleman yields
219 back the balance of his time. The chair now recognizes the
220 gentleman from Kentucky, the chairman of the full Committee
221 of Energy and Commerce, for five minutes for an opening
222 statement.

223 *The Chair. Thank you, Mr. Chair. I appreciate the
224 recognition. I appreciate our witnesses being here today.

225 The massive winter storms have put our vital energy and
226 power delivery systems to the test this year. Today's focus
227 on Winter Storm Fern helps direct attention to what really
228 matters for designing our electric system: making sure
229 energy systems provide the power Americans need when they
230 need it. Fern and other recent major storms like Elliot in
231 2022 and Yuri in 2021 represent consistent lessons to discuss
232 this morning.

233 First, reliable generation resources matter. When power
234 demand spikes during major winter storms, 80 to 90 percent of
235 additional electricity needed is supplied by dispatchable
236 fossil generation: natural gas, coal, and even oil. Nuclear
237 consistently provides baseload power and these dispatchable
238 resources step into the breach. Wind power may supply
239 additional energy in some regions, but despite its enormous
240 capacity it cannot be relied upon during these storms. Solar
241 energy can be relied upon even less so.

242 Second, preparation and planning matters. Vast, multi-
243 day deep freezes challenge fuel and grid systems across large
244 regions. This requires planning and coordination to make
245 sure power will be available as demand spikes. The Storm
246 Elliot caused the highest single-day electricity demand on
247 record during the winter months. It also caused 90 gigawatts
248 of cold-weather-related generation outages, more than other
249 recent storms. Operators underestimated the demand and the
250 extent of the freeze, which reduced gas supplies and gas
251 generation. The storm was so large, southeastern states
252 could not import sufficient power from other regions which
253 were short excess power themselves. This caused rolling
254 blackouts, including in Kentucky on Christmas Eve.
255 Authorities said a longer freeze would have been catastrophic
256 for the New York City gas supplies.

257 How past lessons informed preparation for last month's
258 storm will be useful to examine today. The Trump
259 Administration leaned in effectively on coordination, gas
260 generators withstood winter impacts better than in past
261 storms, and there was much more energy to dispatch as demand
262 spiked.

263 Third, what we do in the future matters. Expanding
264 generation in a grid to meet massive new energy demand
265 requires a focus on policies that ensure reliable, affordable
266 power delivery. Storms like Fern show us the generation mix

267 that we can depend upon when it matters most.

268 [The prepared statement of The Chair follows:]

269

270 *****COMMITTEE INSERT*****

271

272 *The Chair. Thank you, Mr. Chairman. I thank our
273 witnesses for being here, and I will yield back.

274 *Mr. Latta. Thank you very much. The gentleman yields
275 back the remainder of his time, and the chair now recognizes
276 the gentleman from New Jersey, the ranking member of the full
277 committee, for five minutes for an opening statement.

278 *Mr. Pallone. Thank you, Mr. Chairman.

279 Today's hearing addresses an important topic. But given
280 that this committee has jurisdiction over the reliability and
281 affordability of all energy, not just electricity, we should
282 really be addressing skyrocketing oil prices, all the result
283 of Trump deciding to wage an irresponsible war in Iran. The
284 war is throwing the region and gas prices into chaos.

285 Two weeks ago President Trump threw the Middle East into
286 chaos with his irresponsible war. And in the weeks since it
287 has become clear that no one in the Trump Administration had
288 a plan for what to do about oil prices, let alone any plans
289 on how to end a war that should never have happened. And the
290 level of incompetence, to me, is astounding. Oil prices have
291 been extraordinarily volatile while gasoline prices have
292 increased by nearly \$0.75 per gallon since the start of the
293 year. Some analysts think that oil could reach over \$200 per
294 barrel, and it is clear that the Trump Administration has no
295 idea how to fix it.

296 In fact, Trump does not actually consider this a

297 problem. Just last week he said, and I quote, "When oil
298 prices go up, we make a lot of money.'" I don't know about
299 you, but when oil prices go up my constituents feel it with
300 their wallets. American families feel it as they sit around
301 their kitchen table trying to figure out how they are going
302 to make ends meet. It is once again crystal clear that the
303 President only cares about making big oil CEOs a buck, and
304 that is who he is talking about when he said we make a lot of
305 money. And once again American families suffer. They are
306 left paying the bill.

307 Now, the President and congressional Republicans are not
308 only driving up oil prices, their policies are also driving
309 up monthly power bills, which gets to the topic of today's
310 hearing. Just under two months ago much of the southern and
311 eastern parts of the country were under a blanket of snow.
312 Temperatures plummeted, winds whipped, and many of us feared
313 the worst. However, the bulk power system endured. That is
314 not to say there weren't localized issues. Local
315 distribution systems suffered with freezing rain and wind
316 taking down power lines and causing blackouts. Utility crews
317 worked around the clock to restore power, and all of us are
318 thankful for their hard work. But at the end of the day,
319 unlike in Texas during Winter Storm Uri or the southeast
320 during Winter Storm Elliot, there was enough supply of
321 electricity to meet demand.

322 Grid reliability is a team sport. Every resource
323 including wind, solar, and storage has a role to play. These
324 resources were especially vital during Winter Storm Fern, as
325 renewables in general exceeded expectations. They were able
326 to take on more of a role than the grid operators required,
327 but that was not the case for every resource. The weather
328 knocked roughly 20 gigawatts of largely fossil fuel resources
329 offline in the Mid-Atlantic alone, due in part to freeze-offs
330 at gas wellheads.

331 Unfortunately, transmission constraints harmed the grid
332 during the winter storm and helped bring us close to the
333 brink. Within PJM, power in Chicago was bottled up and
334 couldn't reach the East Coast to help lower prices. In the
335 middle of the country Southwest Power Pool had to curtail
336 nearly 10 gigawatts of wind energy at one point because it
337 didn't have the transmission capacity to take that power to
338 where it was needed most.

339 A 2024 study by the North American Electric Reliability
340 Corporation found that our country needs over 35 gigawatts of
341 new interregional transmission for its reliability needs
342 alone, and that is before taking into account the tremendous
343 growth in data centers fueling artificial intelligence
344 applications that were seen following that study. So if
345 Republicans are serious about wanting to make our grid more
346 resilient to extreme weather, we should be talking about how

347 to build more large, interregional power lines.

348 Now, finally, Mr. Chairman, I would be remiss if I did
349 not acknowledge a central irony of what some of my colleagues
350 are advocating for today. We all agree that severe weather
351 events stress the grid unlike anything else. But the
352 increase in severe weather events is fueled by the same
353 polluting coal power plants that many Republicans want to be
354 the solution to severe weather events. Forcing every coal
355 plant in this country to stay online will further exacerbate
356 climate change in the coming decades so we must invest in
357 real, durable reliability for the power grid.

358 [The prepared statement of Mr. Pallone follows:]

359

360 *****COMMITTEE INSERT*****

361

362 *Mr. Pallone. And with that I thank you and yield back,
363 Mr. Chairman, the balance of my time.

364 *Mr. Latta. Well, thank you very much. The gentleman
365 yields back the balance of his time. This concludes member
366 opening statements. The chair reminds members that, pursuant
367 to the committee rules, all members' opening statements will
368 be made part of the record.

369 And again, we want to thank our witnesses for appearing
370 today and taking time to testify before the subcommittee.
371 Each witness will have the opportunity to give an opening
372 statement followed by a round of questions from the members
373 of the subcommittee.

374 And just real quick, if I -- housekeeping -- you want to
375 pull those mikes up close to you when you speak.

376 With the lights there, just a quick explanation. They
377 will be green for four minutes. That turns yellow at the --
378 for the last minute, and turns red when your time is up.

379 So our witnesses today are Mr. James Robb, the president
380 and CEO of the North American Electric Reliability
381 Corporation, NERC; Mr. Brett Mattison, president and CEO of
382 Southwestern Electric Power Company; Mr. Michael Goggin, the
383 executive vice president of GridStrategies; and Mr. Jose
384 Costa, the president and CEO of Northeast Gas Association.
385 Again, we appreciate you all being here today.

386 And Mr. Robb, you are recognized for five minutes for

387 your opening statement.

388 *Mr. Robb. Terrific.

389

390 STATEMENT OF JIM ROBB, PRESIDENT AND CHIEF EXECUTIVE OFFICER,
391 NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (NERC); BRETT
392 MATTISON, PRESIDENT AND CHIEF OPERATING OFFICER, SOUTHWESTERN
393 ELECTRIC POWER COMPANY (SWEPCO); MICHAEL GOGGIN, EXECUTIVE
394 VICE PRESIDENT, GRIDSTRATEGIES; AND JOSE COSTA, PRESIDENT AND
395 CHIEF EXECUTIVE OFFICER, NORTHEAST GAS ASSOCIATION

396

397 STATEMENT OF JIM ROBB

398

399 *Mr. Robb. Good morning, Chairman Latta, Representative
400 Peters, and members of the subcommittee. Thank you for
401 letting me set the table for today's hearing. I am speaking
402 here today on behalf of NERC, the independent, non-partisan,
403 FERC-certified electric reliability organization structured
404 by Congress through the Energy Policy Act of 2005.

405 So here is the top line. Even though many metrics show
406 strong grid performance, risk is growing more acute. Nearly
407 two-thirds of the country is at elevated or high risk of
408 energy shortfall over the next five years.

409 Winter Storm Fern was a severe, long-duration event that
410 significantly stressed the grid. During Fern the industry
411 showed commendable improvement in cold weather performance.

412 However, the system ran very close to the edge, leaving no
413 room for error. Operators needed every tool at their
414 disposal, and extraordinary actions by government played an
415 important role.

416 Fern was a classic near-miss event that reinforces
417 concerns documented in our recent LTRA. That report assesses
418 risk of energy shortfall over a 10-year horizon and,
419 importantly, it is a risk assessment, not a prediction. It
420 shows where the system is exposed. In a space filled with
421 single-issue advocates, NERC's LTRA is unique because it is
422 the only independent and transparent assessment of this type,
423 rigorously peer reviewed with geographic and temporal
424 consistency. Congress was quite wise in how they conceived
425 the model of the ERO.

426 So three trends explain why two-thirds of the nation
427 risks energy shortage. These include unprecedented demand
428 growth, a changing resource mix with increasingly unfamiliar
429 reliability characteristics, and lagging supply additions
430 that are not keeping up with growth and planned retirements.
431 Let me start with demand.

432 Over the next 10 years electricity demand projections
433 are higher than we have ever seen at any point in the last 2
434 decades. These trends are driven by the proliferation of
435 large industrial loads, particularly but not exclusively data
436 centers, and expanding use of electric heating and electric

437 vehicles. The rate of increase is staggering. Summer peak
438 demand is projected to rise by over 200 gigawatts, with
439 winter demand growing faster. That is 70 percent higher than
440 what we projected at this time last year.

441 Next, the generation base is changing. As older
442 generators retire and get replaced by power electronics-based
443 renewables and batteries, the resource mix is becoming
444 increasingly variable and weather-dependent, and there is a
445 decline in the essential reliability services that are
446 necessary to support voltage, frequency, and ramping needs.
447 Over the next 10 years coal and natural gas generation is
448 projected to decline from 62 percent to 48 percent, while
449 renewables and batteries will grow from 12 to 34 percent on
450 peak. These renewable resources work very, very well in the
451 summer but are frequently challenged to perform during winter
452 events.

453 Finally, energy supply is just falling short. Winter
454 growth is projected to exceed resource additions by over 60
455 gigawatts. Projects need to get out of the queue and into
456 the ground much more quickly. A recent Berkeley Lab study
457 finds that even projects with interconnection agreements are
458 taking longer to reach operation, and many projects,
459 including those with strong sponsorship, never get built at
460 all.

461 Let me turn back to Fern. The storm brought long-

462 duration cold, widespread snow, sleet, and freezing rain
463 across the eastern two-thirds of the country. Demand
464 forecasts surged and industry activated an extensive array of
465 operating procedures to manage the reliability risk. DoE
466 stepped in with emergency orders. During the event natural
467 gas, coal, and nuclear resources provided most of the
468 generation. However, renewables did contribute. In New
469 England fuel oil and liquefied natural gas kept the lights
470 on. And in general, the natural gas system performed better
471 than in previous storms, and gas storage withdrawals were
472 essential. However, this storm was not as cold as initially
473 forecast, and widespread closures of schools and businesses
474 alleviated pressure on the combined systems.

475 This outcome reflects years of sustained and ongoing
476 winterization efforts following Winter Storms Uri and
477 Elliott, industry preparation and collaboration, and
478 extensive outreach by NEC and its regional entities.
479 Nevertheless, the widespread use of emergency procedures and
480 extraordinary government actions are powerful warnings that
481 we should not ignore. A system bordering on the edge during
482 winter extremes should not be normalized. A larger, colder,
483 longer storm would have had far more consequence.

484 We have four primary recommendations to address these
485 challenges: first, we just got to get off the dime and
486 effectively address siting and permitting reform at the

487 Federal, state, and local levels; we need to accelerate
488 efforts to speed resource addition; we need to reliably --
489 figure out how to reliably integrate large loads; and we need
490 to accelerate efforts to better coordinate the increasingly
491 interdependent gas and electric systems that serve this
492 country.

493 So thank you for the opportunity to testify. I look
494 forward to answering your questions.

495 [The prepared statement of Mr. Robb follows:]

496

497 *****COMMITTEE INSERT*****

498

499 *Mr. Latta. Well, thank you very much for your
500 statement.

501 And Mr. Mattison, you are recognized for five minutes
502 for your opening statement.

503

504 STATEMENT OF BRETT MATTISON

505

506 *Mr. Mattison. Thank you, sir. Chairman Latta and
507 Congressman Peters and members of the committee, thank you
508 for the opportunity to testify today. My name is Brett
509 Mattison, and I serve as the president and chief operating
510 officer of Southwestern Electric Power Company, known as
511 SWEPCO, a subsidiary of American Electric Power.

512 SWEPCO has provided electricity, reliable electricity,
513 for more than a century, and today serves approximately
514 558,000 customers across Louisiana, Arkansas, northeast
515 Texas, and the Texas panhandle. With nearly 1,400 employees
516 we operate a diverse generation portfolio that includes coal,
517 natural gas, wind, and purchased power.

518 Winter Storm Fern brought extreme cold across our
519 service territory, with temperatures dripping -- dipping to
520 negative 2 in Fayetteville, Arkansas and 17 degrees in
521 Shreveport, Louisiana. More than 200,000 customers were
522 impacted and restored, thanks to the dedication of our SWEPCO
523 team, including IBEW frontline employees who worked in truly

524 difficult situations.

525 Our experience during Winter Storm Fern and other recent
526 winters reaffirm a core principle: reliability depends on
527 being able to call on a resource when it is needed for as
528 long as it is needed, regardless of the weather. During the
529 storm coal supplied more than half of SWEPCO-owned
530 generation, supported by on-site fuel that ensured steady
531 performance. Natural gas units provided essential
532 flexibility and ramped as demand increased, but remains tied
533 to pipeline delivery which can and does tighten during
534 extreme weather and when resources contributed and supported
535 the system but their output varies with weather conditions
536 and cannot substitute for around-the-clock resources.

537 Since Winter Storm Uri in 2021 SWEPCO has made
538 substantial reliance improvements. As we plan the system
539 needed for this new era, I would like to emphasize five
540 points.

541 First, new natural gas plants will be indispensable.
542 The unit SWEPCO planned to build will include robust cold
543 weather enhancements and must be paired with reliable
544 pipeline capacity.

545 Second, new nuclear energy will be crucial for long-term
546 zero-carbon baseload power. SWEPCO is currently evaluating
547 opportunities in Texas, Arkansas, and Louisiana to support
548 the advancement of nuclear technologies.

549 Third, existing baseload resources, especially coal,
550 continue to provide vital reliability during extreme
551 conditions. Federal policy must avoid premature retirements
552 until new, equally dependable resources are available.

553 Fourth, a resilient future requires modern transmission.
554 Policies at FERC and regional planning bodies such as the
555 Southwest Power Pool must support strong, interregional
556 transmission, including 765 kV lines to enhance both
557 reliability and affordability.

558 Finally, across all of this, affordability must be
559 maintained as a priority. Existing customers cannot be asked
560 to shoulder the cost of integrating new large loads. Long-
561 term arrangements, innovative rates, and coordinated regional
562 planning are helping to ensure that growth benefits all
563 customers.

564 Our grid is facing extraordinary challenges, but with
565 the right policies and the right investments we can ensure
566 the system remains reliable, affordable, and resilient.

567 Thank you again for the opportunity to testify, and I
568 look forward to your questions.

569 [The prepared statement of Mr. Mattison follows:]

570

571 *****COMMITTEE INSERT*****

572

573 *Mr. Latta. Well, thank you for your opening statement.
574 Mr. Goggin, you are recognized for five minutes for your
575 opening statement.

576

577 STATEMENT OF MICHAEL GOGGIN

578

579 *Mr. Goggin. Chair Latta, Mr. Peters, and members of
580 the subcommittee, thank you for the opportunity to appear
581 today. My testimony reviews the data from Winter Storm Fern
582 and other recent events to make five main points.

583 First, wind and solar resources performed well during
584 Winter Storm Fern and other recent events, while fossil
585 generation did not.

586 Second, in all recent cold snap events natural gas
587 accounted for the majority of generator outages, followed by
588 coal.

589 We also saw natural gas prices spike during Winter Storm
590 Fern and these other events, costing consumers billions of
591 dollars.

592 Fourth, I recommend that a diverse generation mix
593 increases resilience. Each resource type has distinct outage
594 risks, so a diverse mix reduces the economic and reliability
595 risk to ratepayers.

596 And finally, expanding transmission increases resilience
597 by providing Americans with more affordable and reliable

598 power and tapping into diversity among regions in the timing
599 of peak demand and generator outages.

600 First let's look at generator performance. Wind and
601 solar provided around 20 to 25 percent of the power during
602 Winter Storm Fern's peak demand periods in Texas and the 2
603 other large grid operators in the middle of the country, the
604 Southwest Power Pool and the Midcontinent Independent System
605 Operator. At the Southwest Power Pool, MISO and PJM regions
606 experienced peak demand during Winter Storm Fern. Wind and
607 solar provided over 38,000 megawatts, nearly twice the 21,000
608 megawatts of output they are compensated to provide and are
609 expected to provide during peak demand events. By exceeding
610 grid operators expectations by over 17,000 megawatts, wind
611 and solar picked up some of the slack as gas under-performed
612 its accredited capacity by 52,000 megawatts and coal by 7,000
613 megawatts.

614 Gas and coal generators fell short of grid planners'
615 expectations during Winter Storm Fern, largely because they
616 experienced outages at many times higher -- rates higher than
617 renewable generation. This is consistent with performance
618 patterns during other recent extreme weather events like
619 Winter Storms Uri and Elliott, when gas generators accounted
620 for 63 percent and 55 percent of outages, respectively. Coal
621 and gas generators depend on fuel deliveries and access to
622 cooling water, while wind and solar do not.

623 Retiring coal generators that the Department of Energy
624 has mandated remain online also performed poorly during
625 Winter Storm Fern, consistently delivering only 29 to 42
626 percent of their capacity, according to the Department of
627 Energy's own numbers. In contrast, the largely complete
628 Vineyard Wind project, which the Administration has
629 repeatedly attempted to halt by retroactively revoking its
630 permits, operated at a 75 percent capacity factor during
631 Winter Storm Fern, delivering more than 400 megawatts into
632 New England. Land-based wind and solar powered tens of
633 millions of homes as the central and eastern U.S. experience
634 peak demand during Winter Storm Fern, just as they did during
635 other recent winter storms. Intruding on state authority and
636 impeding market forces, which are replacing uneconomic and
637 unreliable old power plants with modern resources, only
638 results in higher costs and less reliability for ratepayers.

639 During Winter Storm Fern and other recent winter storms,
640 gas's performance problem was partially caused by gas wells
641 freezing. This happened in winter -- in Texas during Winter
642 Storm Uri and in the Marcellus Shale area during Winter Storm
643 Elliot. Each took offline about 20 percent of total U.S. gas
644 production, which played a major role in kickstarting the
645 cascading failures that led to rolling blackouts in Texas and
646 parts of the southeast in those events.

647 Winter Storm Fern was less cold, and it caused about a

648 10 percent drop in gas production, which led to gas prices
649 spiking to 60 to 90 times normal in many parts of the eastern
650 U.S., costing consumers billions of dollars. Domestic
651 natural gas prices are also increasingly tethered to global
652 prices due to liquefied natural gas exports. By diversifying
653 our generation mix with wind and solar, which will always
654 have a fuel cost of zero, we can protect consumers from both
655 short-term gas price volatility during extreme weather, as
656 well as long-term uncertainty due to global geopolitical
657 events like the ongoing closure of the Strait of Hormuz.

658 A stronger transmission grid also would have provided
659 Americans with more affordable and reliable power during
660 these extreme weather events. Expanded transmission between
661 Texas and the southeast could have kept the heat on for
662 millions of Texans during Winter Storm Uri while the same
663 ties could have kept the lights on for customers in the
664 southeast during Winter Storm Elliot, providing more than \$1
665 billion in value. In Winter storm Fern modest transmission
666 expansion between western and eastern PJM would have saved
667 ratepayers in the eastern U.S. around \$90 million. Customers
668 across the Midwest similarly could have saved tens of
669 millions of dollars with stronger transmission ties among
670 those grid operating areas. Transmission provides these
671 benefits by tapping into diversity in the timing of peak
672 demand and generator outages among regions.

673 Extreme weather events don't hit the entire country at
674 once, and they move over time. So imports from neighboring
675 regions are a key tool for cost effective resilience. In
676 short, a diverse generation mix and transmission that taps
677 into regional diversity are the best solutions for ensuring
678 Americans have affordable and reliable power in the face of
679 extreme weather, wars, and other uncertainties.

680 [The prepared statement of Mr. Goggin follows:]

681

682 *****COMMITTEE INSERT*****

683

684 *Mr. Latta. Well, thank you very much for your opening
685 statement.

686 And Mr. Costa, you are recognized for five minutes for
687 your opening statement.

688

689 STATEMENT OF JOSE COSTA

690

691 *Mr. Costa. Chairman Latta, Mr. Peters, and
692 distinguished members of the subcommittee, thank you for the
693 opportunity to testify today. My name is Jose Costa. I am
694 president of the Northeast Gas Association and I represent
695 the natural gas industry in the northeast. I appreciate the
696 chance to share insights from Winter Storm Fern and the
697 extended cold that followed. This event tested our energy
698 systems and underscored a reality: our infrastructure is
699 operating at maximum capacity and we need to invest in new
700 natural gas infrastructure and storage.

701 I would like to first highlight how the industry
702 performed before discussing some of the significant stresses
703 experienced.

704 To begin, during Fern, Appalachian producers performed
705 exceptionally well. They deserve recognition for their
706 winterization efforts. Moving upstream, pipeline operators
707 and gas utilities ensured that gas was delivered to where it
708 was needed. During and after Fern, northeast pipelines

709 recorded some of the highest flow days ever, and utilities
710 met record-setting customer demand. This is only possible
711 because of the maintenance and preparations they do in
712 advance and the dedicated efforts of their workforce.

713 Fern clearly showed just how reliable the gas industry
714 is. However, the northeast natural gas infrastructure is
715 significantly constrained. As demand peaked and New
716 England's pipelines reached their max flows, the region
717 turned to LNG import facilities and on-system LNG storage to
718 provide additional supply to the region. Across the
719 northeast natural gas is typically the dominant fuel for
720 electric generation.

721 As supplies tightened, the pipelines continued to move
722 significant volumes of gas to their firm gas utility
723 customers. However, eventually they reached points where
724 they could no longer supply gas to power plants that do not
725 hold firm contracts. During this period natural gas remained
726 the essential baseline fuel supporting the region's electric
727 grid, supplying at least a quarter of the generation in New
728 England. For several days gas-fired generation in New
729 England relied on LNG imports to maintain operations.

730 It should also be noted that this event went as well as
731 it did due to significant industry coordination and
732 communication with our partners in the electric sector and in
733 government. NGA's Gas Supply Task Force was activated

734 throughout the event, and NGA closely coordinated with
735 broader industry through the Electric Gas Operations
736 Committee, which we co-chair with ISO New England. However,
737 while we weathered the storm this event tested the northeast.
738 An earlier arrival to the blizzard of 2026 could have been
739 the tipping point.

740 As I said, this extended cold led to extreme demand
741 across the region. All three regional ISOs reported elevated
742 and sustained demand for the duration. As available pipeline
743 gas tightened, the region became increasingly dependent on
744 fuels delivered by truck and barge. This required state and
745 Federal agencies to issue waivers, including allowing drivers
746 to drive extended hours in sometimes dangerous conditions.
747 Further complicating supply chain, oil fuel depots
748 experienced delivery disruptions. This is not reliable,
749 sustainable, or cost effective.

750 And all this led to some of the highest volume --
751 wholesale energy prices the northeast has ever seen. Gas
752 spot prices for New York and Connecticut were 17 times higher
753 than prices just across the state line in northeast
754 Pennsylvania. Power prices in New England and New York also
755 spiked to record levels. Gas utilities take steps to
756 mitigate price spikes, including buying firm transportation
757 supply contracts, implementing financial hedges, and
758 utilizing storage. Yet despite these efforts it is

759 impossible to protect customers completely from market
760 volatility like we saw this winter.

761 It is important to note that we support an all-energy
762 source solution. However, during Fern weather-dependent
763 resources failed to meet the moment. Many generators in New
764 York and New England switched to oil, with oil becoming New
765 England's leading fuel source for power generation. This
766 immediately led to emissions increases. In fact, according
767 to ISO New England, CO2 emissions in New England this January
768 were up an estimated 24 percent compared to January 2025.

769 Finally, a better path is available. Thoughtful
770 investment and more natural gas infrastructure can improve
771 reliability, reduce costs, and cut reliance on higher-
772 emitting fuels.

773 Thank you for your time, and I look forward to answering
774 your questions.

775 [The prepared statement of Mr. Costa follows:]

776

777 *****COMMITTEE INSERT*****

778

779 *Mr. Latta. Well, thank you all for your opening
780 statements. We really appreciate it. And this does conclude
781 the opening statements from our witnesses, and we will now
782 begin with questions from our members. And I will begin the
783 questioning and recognize myself for five minutes.

784 First, the question I ask everyone that comes before us
785 in this subcommittee: Do we need to have more energy or less
786 energy in this country?

787 *Mr. Robb. More.

788 *Mr. Mattison. Much more.

789 *Mr. Goggin. More and more diverse.

790 *Mr. Costa. Much more.

791 *Mr. Latta. Well, thank you very much. I know that
792 when we had the RTOs and ISOs and ERCOT in last year, they
793 all said the exact same thing. We have to have more. And
794 they also added that we have to make sure that we are not
795 taking off -- any existing generation offline, and that is
796 where I am going to start with my questions with you, Mr.
797 Robb, because, you know, you and your statement mentioned
798 about the premature thermal retirements going offline in the
799 next five years. What is going to happen?

800 *Mr. Robb. So the loss of those resources is -- it
801 creates multiple problems for the grid. You know, the first
802 is you lose the energy production. Many of those facilities
803 aren't extremely large producers of energy, but they are

804 strategically located.

805 And one of the things that is very important about
806 traditional generation is it provides what we call essential
807 reliability services. They can be controlled within very
808 tight parameters. They provide support for the frequency of
809 the grid, the voltage of the grid, and they can be ramped up
810 and down to accommodate changes in load or changes in the
811 performance of other generating resources. So they are
812 absolutely essential to the reliable performance of the grid.

813 *Mr. Latta. Well, thank you.

814 Mr. Mattison, if I could ask this question -- because
815 you are talking about the reliability out there, and also
816 that coal is 50 percent of the power during the storm, if I
817 understood that correctly, what would happen if we didn't
818 have that generation at this time?

819 *Mr. Mattison. Quite honestly, if we didn't have that
820 dispatchable resource that is reliable and dependable and it
821 was 50 percent of our load during that storm, unfortunately,
822 we would have had customers' lights go out.

823 *Mr. Latta. Okay, thank you.

824 Mr. Costa, being up in the northeast you were talking
825 about the LNG storage. If you could have one number-one ask
826 to Congress, what would it be?

827 *Mr. Costa. Can you repeat that again? I am sorry.

828 *Mr. Latta. If you had one number-one ask to Congress,

829 what would it be?

830 *Mr. Costa. I think we need more. The permitting
831 reform, the work you are doing on permitting reform, is
832 critical to bring more supplies from Marcellus Shale to the
833 region.

834 *Mr. Latta. Well, and, you know, that is important
835 because, you know, from the beginning of this Congress the
836 first thing that we have heard, pretty much on an even scale,
837 we have to be producing that energy but we also have the
838 permitting reform. Because what good is getting the --
839 having energy if you can't move it from point A to point B?
840 And so that is an important thing that we are talking and
841 trying to get done in this committee. And it is at the top
842 of the list, when it comes right down to it.

843 Mr. Robb, how -- you know, when you talk about the
844 energy supply, how can we speed up the process, especially on
845 permitting? How would you see it done?

846 *Mr. Robb. I am not sure I have -- excuse me -- a good
847 prescription for the answer here. I think it is, you know,
848 clear that we have seen, you know, some agencies, you know,
849 reduce the amount of time it takes to produce the
850 environmental impact statement. FERC has made some very
851 strong progress in that area.

852 But at the end of the day, we are not getting stuff
853 built quickly, right? You know, I -- the most recent

854 interstate transmission lines took 15 to 20 years to get
855 built. A natural gas plant might take seven years to get
856 built. And the problem is that we can add a data center,
857 which is an enormous consumer of power, as everyone has
858 noted, you know, in 18 to 24 months. And we want those data
859 centers to get built.

860 So all these timeframes need to be compressed. And
861 whether that is done through permitting reform, other actions
862 to speed the development of resources, unclogging supply
863 chains, speeding interconnection queues, all those are part
864 of the solution and need to be pursued.

865 *Mr. Latta. Thank you.

866 Mr. Mattison, in your five points that you laid out, one
867 of the things that you talked about again is really on our
868 modernization of that transmission and the, you know,
869 permitting and, really, the supply chain. In my last about
870 50 seconds, how can we make sure we can live up to that?
871 Because it is taking so long to get these things done. So --

872 *Mr. Mattison. I think on a state basis that -- we have
873 got each of our three states -- Arkansas, Louisiana, and
874 Texas have really done a good job in clearing the way. But
875 we need Federal policy to -- the gentleman, Mr. Robb, to my
876 right, is stating that we can get things accelerated with
877 policies that allow us to build transmission a lot faster, a
878 lot quicker than we are today.

879 *Mr. Latta. Well, and again, that is one of the things
880 that this subcommittee has been looking at because, again, we
881 all recognize the absolute need. When we have seen a flat-
882 lining out there of electricity usage over a good number of
883 years, and how it has just skyrocketed up, we have got to get
884 this thing done.

885 My time has expired, and I recognize the gentleman from
886 California's 50th district for five minutes for questions.

887 *Mr. Peters. Thank you, Mr. Chairman.

888 I really enjoyed being a trial lawyer when I did
889 environmental law and -- but I always thought that if you
890 went to trial it was because someone misunderstood their
891 leverage. And really, a good lawyer serves his or her client
892 best by finding where there is agreement and trying to settle
893 the case ahead of time. And this strikes me as something
894 where we should not be going to trial. We seem to have
895 violent agreement among everyone. There is not disagreement
896 about what you are talking about. Everyone is talking past
897 each other.

898 We need new natural gas facilities. Sure, we understand
899 that. We also understand it takes seven years and there is
900 no way to connect them.

901 New nuclear. There is virtually unanimous support in
902 this room for new nuclear. Virtually unanimous.

903 Regarding the existing baseload, the premature

904 retirement, of course we understand we don't want to retire
905 things prematurely. I think Democrats object to propping
906 them up artificially when the market wants to retire them.

907 Every single person talks about transmission here. This
908 committee has done nothing on transmission, but everyone says
909 interregional transmission is important for reliability, for
910 cost control, for competition. We know we need it for
911 interconnection. You could build a gas plant tomorrow at
912 PJM. There is no way to connect it because there is no
913 capacity on the grid. We agree on that.

914 We agree that affordability is a priority, as Mr.
915 Mattison said.

916 We understand that a diverse mix compensates for the
917 defects in each particular form of energy because none of it
918 is perfect. You love natural gas. It is not perfect. You
919 love wind. It is not perfect. We understand that. And the
920 market is driving us to more diversity, the kinds of things
921 that Mr. Goggin was talking about.

922 We understand fuel oil in New England is bad, and we
923 want to get rid of that. That is dumb, right? We all
924 understand that.

925 And we all know that -- I think increasingly -- everyone
926 understands the need for permit reform and speed.

927 So I look at this as a lawyer. I think that this case
928 should be settled. We should do it now, and we should move

929 on. And the fights we are fighting, like, you know, Mr.
930 Latta always asks, do we need more power? We all know we
931 need more power. So it is very frustrating for me, who used
932 to litigate cases, to say why we should not take this to
933 trial. Everyone -- and to see everyone agree from up here,
934 and agree over the course of the last year and a half, the
935 same thing.

936 I would like to introduce for the record this article,
937 "Winter Storm Fern Highlights the Need for More Resilient
938 Transmission," talking about how regions across the country
939 are exporting and importing all types of energy over that
940 four-day period during Fern.

941 *Mr. Latta. Without objection, so ordered.

942 [The information follows:]

943

944 *****COMMITTEE INSERT*****

945

946 *Mr. Peters. I guess I wanted to ask Mr. Robb. Last
947 year NERC released a study that said an additional 35
948 gigawatts of interregional transfer capability, which are
949 grid connections among regions, would make the grid more
950 resilient against extreme weather, lower costs, and enable us
951 to meet load growth. I understand we need more generation
952 and reforms to the permitting process as part of the solution
953 here. Can you talk about how those grid connections help --
954 on the transmission help resources like coal and natural gas,
955 not just renewables?

956 *Mr. Robb. Well, the whole premise of interregional
957 transmission is to be able to move power from a region that
958 has excess into a region that has deficit. And you cited the
959 study that we conducted, and it showed 35, 37 gigawatts. The
960 important thing to note about that is it is not evenly
961 distributed, right? There are certain areas of the country
962 where that transmission would be valuable from a reliability
963 perspective, and it would benefit all resources whether it is
964 wind, solar, coal, natural gas, nuclear, what have you,
965 because it would expand market opportunities and access.

966 It would also improve reliability for those areas that
967 find themselves at times in reserve deficit --

968 *Mr. Peters. That is regardless of the generation
969 source, right?

970 *Mr. Robb. Pardon?

971 *Mr. Peters. That is regardless of how the power is --

972 *Mr. Robb. Irrespective of the generation source.

973 *Mr. Peters. Mr. Goggin, I know folks have done
974 analysis about how during the Storm Fern there was sufficient
975 generation available that couldn't be transmitted to where it
976 was needed because of transmission congestion. Can you give
977 us a brief example of that happening, and whether it had an
978 impact on customer costs?

979 *Mr. Goggin. Absolutely. There were a number of points
980 of congestion on the grid, and it shows that we do need these
981 not just for reliability, but for economics. And we need to
982 expand our grid and allow these flows from region to region
983 as well as within regions.

984 One example is within PJM. Consumers in this area in
985 eastern PJM paid about \$90 million more than they should have
986 because there was abundant low-cost generation in the western
987 part of PJM in northern Illinois and places like that that
988 could not make it here. We suddenly saw wind generation
989 being curtailed in the southwest power pool. That would have
990 been worth over \$30 million if it could have been delivered
991 into the Midcontinent Independent System operator area, also
992 in the Midwest, as they experienced peak demand. So tens of
993 millions of dollars left on the table.

994 *Mr. Peters. And I would just say, look, I am willing
995 to work with everyone in this committee room to do this.

996 Part of the Federal Government -- reason we are a Federal
997 Government is we should be forcing these connections across
998 state lines to serve all of our constituents in all of the
999 states. And I think we got to get about the business of
1000 doing that.

1001 I yield back.

1002 *Mr. Latta. Thank you. The gentleman yields back and
1003 the chair now recognizes the gentleman from Kentucky, the
1004 chair of the full committee, for five minutes for questions.

1005 *The Chair. Thank you, Mr. Chair. I appreciate the
1006 recognition.

1007 I appreciate you all for being here, and I just want to
1008 make sure -- it seems like there is a sort of a disconnect in
1009 some of the testimony. You know, clearly, dispatchable
1010 energy provided the bulk of power during the storm. Yet we
1011 hear wind outperformed gas and coal in terms of accredited
1012 capacity, which, as I understand it, basically just means it
1013 performed higher than expected. So for example, if it was
1014 only budgeted for two percent but performed at four percent,
1015 proponents would claim that is a major increase or major
1016 performance. But it pales in comparison to dispatchable
1017 power. So for example, the MISO system during the storm,
1018 variable wind power ranged from 20 percent supply to 3
1019 percent supply, while gas and coal dispatched from 78 percent
1020 to 62 percent of the power, depending on what was needed.

1021 So Mr. Mattison, as an operator, do you rely more on gas
1022 and coal or wind when a major storm is approaching?

1023 *Mr. Mattison. Thank you for your question. We do have
1024 a diverse mix in our portfolio. However, whenever we know
1025 that there is a winter storm like Fern approaching, we need
1026 to make sure that our resources that are dispatchable are
1027 ready at any moment notice because they are dependable,
1028 reliable, and dispatchable is the key. Our wind assets
1029 perform decent during Fern. Unlike in Winter Storm Heather
1030 earlier in the year where there was a lot of icing, they did
1031 not.

1032 So I want everyone on the committee to understand that
1033 our North Star is our customer. That is what we focus on.
1034 And we have to keep their lights on, irregardless of
1035 policies, et cetera. We want to make sure our units are
1036 running, so we spent about \$7.5 million winterizing our units
1037 as a result of -- Winter Storm Uri taught us a lesson -- to
1038 make sure they are ready and available. So we put a lot of
1039 emphasis on that dispatchable resource when a winter storm is
1040 coming.

1041 *The Chair. Thank you. So it is -- wind and solar
1042 works when the wind is blowing steady, not fast, and when the
1043 sun is shining. But that is -- somebody told me, he said,
1044 well, that was an unusual day. That is why you can see that
1045 wind and solar didn't perform the way it was supposed to. I

1046 said, well, you need power on the unusual -- that is when you
1047 need it the most. So you can't dismiss that.

1048 So Mr. Robb, you say that various emergency actions
1049 during Fern should serve as a warning. What do you mean by
1050 that?

1051 *Mr. Robb. Thank you for the question. I get very
1052 worried when we normalize risk. And, you know, the -- for --
1053 as everyone has noted, an uninterruptible supply of power in
1054 the 21st century is absolutely essential to every aspect of
1055 our lives. And when we run close to the edge like we did
1056 during Fern, that should serve as a wake-up call and be
1057 viewed for what it is, you know, a near-miss situation.

1058 This storm could have been much worse, right? What
1059 bailed the system out was the fact it wasn't as cold as
1060 projected, and we saw a lot of loadshed occur because
1061 businesses and schools were shut down, and that is not a
1062 societal outcome that we want.

1063 So the system is losing margin. That is driving
1064 operators to have to go to more and more extreme operating
1065 measures, and they need every tool. They needed every tool
1066 in their tool kit to keep the lights on across the country.
1067 That is not the way we want to run the electric grid that is
1068 so essential to our life.

1069 *The Chair. So -- thank you. So question -- my next
1070 question. So huge, multi-day storms can limit help from

1071 other regions. During Christmas 2022, when Winter Storm
1072 Elliot hit, 2 Kentucky utilities were unable to get enough
1073 power from PJM to keep their lights on. During Fern, despite
1074 a brand-new large transmission line, Hydro-Quebec sent power
1075 meant for New England to its own Canadian customers.

1076 So Mr. Costa, what does this say about the importance of
1077 ensuring dependable resources within regions?

1078 *Mr. Costa. Thank you for the question, Congressman.
1079 The -- you are correct that what we saw during Fern was that
1080 we actually had wood burning and trash incineration produced
1081 more electricity at that time than we did with the -- with
1082 weather-dependent energy sources.

1083 *The Chair. Yes, I saw that. I kept checking back to
1084 -- this has to be some trick on the internet. But it is
1085 absolutely true that in New England you burn -- by burning
1086 wood and refuse you created more energy than wind and solar.

1087 *Mr. Costa. That was per ISO New England's own website
1088 details.

1089 And so, as I have been saying, I think the dispatchable
1090 fuels we have been hearing today, as well, dispatchable fuels
1091 are critical to our region, and it is just a shame that we
1092 have the Marcellus Shale so close to us that could bring us
1093 cost-effective energy to the northeast if we were able just
1094 to --

1095 *The Chair. What would happen if you did -- so every

1096 time we talk about this we get accused sometimes in this
1097 committee of -- we are just here defending polluters is what
1098 they say. Well, these people aren't there to produce
1099 pollution. They are to produce energy. What if you didn't
1100 have dispatchable power? The wind and -- I mean the fossil
1101 fuels last Fern.

1102 *Mr. Costa. Yes --

1103 *The Chair. What would have happened?

1104 *Mr. Costa. I mean, when you talk about pollution, if
1105 you look at natural gas, natural gas --

1106 *The Chair. But if you didn't have natural gas, what
1107 would have happened?

1108 *Mr. Costa. If we didn't have natural gas?

1109 *The Chair. If you didn't have that option.

1110 *Mr. Costa. It is -- the generation there, just oil or
1111 -- most likely at this point we would actually have outages.

1112 *The Chair. Well, you wouldn't have oil either. So you
1113 would have outages if you didn't have any of this, right?
1114 Because wind and solar -- if you were 100 percent wind and
1115 solar, it wouldn't have performed.

1116 *Mr. Costa. That is correct.

1117 *The Chair. Yes, thank you.

1118 I yield back.

1119 *Mr. Latta. Thank you very much. The gentleman yields
1120 back, and the chair now recognizes the gentleman from New

1121 Jersey, the ranking member of the full committee, for five
1122 minutes for questions.

1123 *Mr. Pallone. Thank you, Mr. Chairman. My questions
1124 are of Mr. Goggin.

1125 Over the last 16 months the Republicans keep repeating
1126 their claims that wind and solar are unreliable when the grid
1127 needs them most. But your testimony based on actual data
1128 kind of tells a different story. So can you talk about how
1129 renewables help keeping the grid going during Winter Storm
1130 Fern, and talk about how they performed relative to
1131 expectations?

1132 *Mr. Goggin. Absolutely. In terms of total
1133 performance, wind and solar in the Southwest Power Pool
1134 region, we are about 20 to 27 percent during the peak demand
1135 periods. In ERCOT it was -- in the Texas grid operating area
1136 it was 15 to 24 percent. And in MISO on the two peak days
1137 they had there during the peak hours, it was 23 percent. So
1138 very strong performance over 20 percent on most of those days
1139 and most of those large markets.

1140 This also was well above the expected capacity, and that
1141 is really, I think, the important metric of what we are
1142 looking at. The grid is a product of decades of planning.
1143 And when those grid planners think about what generation will
1144 be there when power demand is high, that is the relative
1145 metric is how did you perform relative to what is expected of

1146 you, and what, importantly, you are compensated to provide.
1147 Regions like PJM, MISO have capacity markets where resources
1148 get paid for the capacity they provide, and wind and solar
1149 outperformed that by a large margin, as I outlined. It was
1150 nearly twice, if you look across the SBP, MISO, and PJM
1151 areas, roughly twice what they were expected to provide and
1152 what they are compensated to provide. In contrast, gas and
1153 coal fell well below that, what it is compensated --

1154 *Mr. Pallone. Well, that was my second question about,
1155 you know, this isn't just about renewables outperforming
1156 expectations. It is also about gas and coal-fired power
1157 plants under-performing. So talk a little more. Did thermal
1158 power plants -- that is, gas and coal -- under-perform during
1159 this extreme winter weather?

1160 And will they likely continue to struggle during future
1161 cold weather events?

1162 *Mr. Goggin. Yes they did, and we have seen this
1163 repeatedly in the events over the last several years and even
1164 over the last decade or more. There have been repeated
1165 correlated outages of fossil generation coal and gas. For
1166 many of the coal units as well as some of the gas units, this
1167 is simply equipment failures: things breaking, things
1168 freezing, water pipes freezing like it might at your house
1169 when it is really cold. You know, as I mentioned, these
1170 thermal resources need cooling water and they use water to

1171 produce steam. In many cases, that just creates more things
1172 that can freeze and break when it gets really cold.

1173 We also -- you know, the gas supply issues are also a
1174 very real factor, and were a major impact. You know, in Fern
1175 it wasn't large enough to cause rolling blackouts like we had
1176 in Uri and Elliot, but they still happened. It was 10
1177 percent of production, natural -- U.S. natural gas production
1178 in Winter Storm Fern versus 20 percent in Winter Storms
1179 Elliot and Uri.

1180 And so we have these correlated risks because of those
1181 dependencies on a certain type of fuel or, you know,
1182 dependencies on, you know, things that we use, water, and
1183 therefore have the -- are prone to certain types of failures.
1184 And so having more diversity, bringing in wind and solar that
1185 don't need fuel, that don't need water gives you more
1186 diversity that protects against those risks.

1187 *Mr. Pallone. All right. And then my last question is
1188 about your work on Winter Storm Fern. Throughout last year
1189 Energy Secretary Wright, in my opinion, has illegally abused
1190 emergency authorities under the Federal Power Act repeatedly
1191 to force coal plants to stay online long after they were
1192 slated to retire. And so can you talk about how these so-
1193 called emergency orders drive up energy costs for ratepayers,
1194 and are they actually necessary for reliability?

1195 *Mr. Goggin. Absolutely. So these are plants that, as

1196 part of that, you know, decade-old planning process, were
1197 slated for retirement. And that was a decision by the owner,
1198 by the utility, by the utility's regulators in many of these
1199 markets, and by the market forces that were sending a price
1200 signal to those units that you are no longer economic, you
1201 are -- the services you are providing are no longer valued.
1202 Basically, your cost is greater than your value, and you
1203 should retire, and you should be replaced with new, more
1204 economic, more reliable resources.

1205 And we saw that during this event. The performance of
1206 these coal units by DoE's own numbers was extremely poor.
1207 The numbers DoE put on its website showed 29 to 42 percent
1208 consistent output from -- as a share of those resources'
1209 capacity during Winter Storm Fern. That is well below what,
1210 you know, the offshore wind and many of the land-based wind
1211 resources were providing. And it is certainly well below
1212 what grid operators expect from a coal --

1213 *Mr. Pallone. And so would you say -- I am just
1214 interrupting because we are running out of time -- do you
1215 think that these emergency orders are necessary for a
1216 reliable --

1217 *Mr. Goggin. Absolutely not. The markets and the
1218 existing state regulatory processes are working well. They
1219 are providing the right price signals to bring market entry
1220 and replace these uneconomic, unreliable resources with new,

1221 more reliable resources. Intruding on that market and those
1222 regulatory processes is not going to benefit consumers.

1223 *Mr. Pallone. I thank you.

1224 Thank you, Mr. Chairman.

1225 *Mr. Latta. Thank you. The gentleman yields back and
1226 the chair now recognizes the gentleman from Alabama's 6th
1227 district for five minutes for questions.

1228 *Mr. Palmer. Thank you, Mr. Chairman.

1229 Mr. Robb, I am trying to think back to the 1950s, 1960s,
1230 1970s, when we had some pretty severe winter storms. My
1231 recollection is that most of the power outages that came from
1232 those were the result of trees or other things taking down
1233 the lines. But it wasn't catastrophic grid failure, is it?
1234 Do you have any knowledge of our past history and how our
1235 grid held up under winter storm conditions?

1236 *Mr. Robb. I have some, but I don't have personal
1237 experience all the way back to the 1950s.

1238 [Laughter.]

1239 *Mr. Robb. However, I would say that, in general, it is
1240 very unusual to see resource-driven outages. Most outages
1241 have always been because of problems on the distribution
1242 system due to icing on lines, people running into telephone
1243 poles, that sort -- or utility poles, that sort of thing. We
1244 are in a very unique period of time where we are seeing
1245 resource deficiency.

1246 *Mr. Palmer. Why do you think it -- that we are seeing
1247 that now? Is it because of the, as NERC pointed out --

1248 *Mr. Robb. Well, I --

1249 *Mr. Palmer. -- a couple of years ago, the change in
1250 resource mix is the number-one threat to the grid?

1251 *Mr. Robb. I think it is driven by a few things. I
1252 think the change in the resource mix is clearly one of the
1253 issues that we are seeing. We are just -- we don't have the
1254 same fuel security we had in the 1950s, 1960s and 1970s.

1255 I think the weather systems that we are seeing are more
1256 extreme and more routinely extreme than what we have seen in
1257 the past.

1258 *Mr. Palmer. I don't know that they are more extreme
1259 because we have known about polar vortexes since the 1850s,
1260 and it was first identified as a polar vortex in a magazine
1261 that was -- the editor was Charles Dickens. The most extreme
1262 event we had was in the early 1900s, and we -- actually, the
1263 event that took place in Texas was predicted weeks in advance
1264 because atmospheric scientists identified atmospheric
1265 conditions above the North Pole, very similar to what
1266 happened in the 1920s when we had the super vortex. So I
1267 don't know that we have got more extreme events, and I just
1268 think that we have changed the fuel mix, the resource mix,
1269 and we are -- we have become reliant on things that I am not
1270 sure are totally reliable.

1271 The question I would like to ask, Mr. Mattison, would
1272 reopening some of the facilities that have been closed,
1273 particularly the coal-fired facilities, and reopening those
1274 empowering those with small modular reactors mitigate some of
1275 the issues with reliability? Because the transmission lines
1276 are still there. You don't have the issue with transmission
1277 lines that you do with trying to build solar or wind.

1278 *Mr. Mattison. Yes, thank you for the question. And I
1279 would like to make a point. When we talk about coal plants
1280 during winter events, we have long-term secured coal
1281 contracts. We have on-site fuel sitting on the ground.

1282 I have heard a number of times that the cost to the
1283 customer on those coal-fired plants went up. I don't know
1284 how they calculate those numbers, but --

1285 *Mr. Palmer. They make them up.

1286 *Mr. Mattison. They did not go up. And so that fuel
1287 price is consistent. So I wanted to make sure that I noted
1288 that.

1289 If there is an area where you have an interconnection,
1290 where you have retired a plant, putting a plant back in that
1291 place, the interconnection still exists. Yes, sir, to your
1292 question, that would be very helpful.

1293 *Mr. Palmer. But the issue isn't just extreme weather
1294 events. It is the fact that we have gone so whole-hog toward
1295 renewables in certain areas of the country that they are now

1296 high-risk, just based on demand.

1297 *Mr. Mattison. Well, and I think it is math, and it is
1298 a proper -- you know, physics as well. We are not opposed to
1299 win. If you look at our portfolio, we have a large portion
1300 of wind. We have a diversified portfolio, and it complements
1301 and acts well at times.

1302 But ask -- Mr. Guthrie asked about dependability and
1303 reliability. I can rely on those dispatchable sources, and
1304 they hedge as an insurance policy. But again, our goal is to
1305 always keep the lights on for the consumer. That is what I
1306 am tasked with as an operator.

1307 *Mr. Palmer. Mr. Costa, you discussed the importance of
1308 gas reliability. What happens if the gas supply can't meet
1309 demand? And what does a gas outage look like?

1310 *Mr. Costa. So in the northeast, with the gas supply,
1311 it is -- you have gas utilities that have firm contracts.
1312 And as a result, at this point, if you take, you know, Winter
1313 Storm Fern, their customers weren't protected with the -- it
1314 is really the power plants that do not have firm contracts,
1315 and they are the ones that would suffer, and then you would
1316 have lights out.

1317 *Mr. Palmer. Okay. Thank you, Mr. Chairman. I yield
1318 back.

1319 *Mr. Latta. Thank you. The gentleman yields back and
1320 the chair now recognizes the gentleman from New Jersey's 8th

1321 district for five minutes for questions.

1322 *Mr. Menendez. Thank you, Chairman.

1323 Today's hearing is on an important topic, but it is
1324 being held at a time when Congress and this committee should
1325 be laser-focused on the affordability crisis that the Trump
1326 Administration has exacerbated with the President's
1327 unauthorized war with Iran, a war that the American people
1328 have overwhelmingly opposed since its start, a war that goes
1329 directly against Trump's America First promise and pledge
1330 that he wouldn't start any new wars.

1331 Since the start of the year our military operations have
1332 extended into Iran and Venezuela. It is only March, and this
1333 is actively making life more expensive for Americans. Last
1334 week oil prices spiked to over \$110 a barrel, the highest
1335 since the start of the COVID-19 pandemic. In the past month
1336 oil prices have increased by almost 52 percent. Natural gas
1337 costs have increased 13 percent since the start of the --
1338 Trump's second term, and gasoline prices are up over 25
1339 percent since the start of this year. This comes when the
1340 President -- asked about his performance on the economy and
1341 affordability, gave himself an A plus, plus, plus, plus,
1342 plus, no room for improvement.

1343 Let's also remember that to mitigate this spike the
1344 Administration announced plans last week to tap into the
1345 Strategic Petroleum Reserve. This is a strategy that both,

1346 yes, Republicans and Democratic administrations have used in
1347 the past. But when President Biden tapped into the reserve
1348 in response to rising oil prices following Russia's invasion
1349 of Ukraine -- a war that he did not start, by the way --
1350 Republicans were outraged.

1351 Speaking about Russia, last week the Administration
1352 announced a temporary waiver on U.S. sanctions on Russian
1353 oil, which means that Russia is now a direct beneficiary of
1354 the President's war on Iran. That is not an America First
1355 policy.

1356 Let's also rewind back to when the president -- when
1357 President Biden was making these decisions. Colleagues on
1358 this committee, including the gentleman from Alabama, were in
1359 -- up in arms, saying President Biden has drained our SPR to
1360 the lowest level since the 1980s. Instead of draining our
1361 reserves for political motives, Biden should focus on
1362 reversing his administration's disastrous policies that have
1363 caused energy prices to skyrocket. Just once again, energy
1364 prices, natural gas costs have increased 13 percent since the
1365 start of Trump's term, and gasoline prices are up over 25
1366 percent since the start of this year. I doubt you will see a
1367 tweet like this addressed to President Trump and his
1368 disastrous policies that are hurting the American people when
1369 they need relief from their government and an America First
1370 focus.

1371 We should be having the Secretary of Energy, Secretary
1372 Wright, before this committee, but he is tied up in
1373 Venezuela, which is, by the way, not the U.S. He is tied up
1374 on Iran, which, again, is not the U.S. Everything that this
1375 Administration is doing is running counter to all the
1376 promises that President Trump and Republicans on this
1377 committee ran on in 2024.

1378 So let's recap. Republicans were upset that President
1379 Biden tapped into the reserve. Now President Trump is doing
1380 it. Republicans had the opportunity and President Trump had
1381 the opportunity to replenish that reserve. They failed to do
1382 so at an adequate level. And now the Strait of Hormuz is
1383 closed because of a war that Trump started. We are tapping
1384 into that reserve again to lower prices that have increased
1385 exponentially since the start of the war.

1386 By the way, the Strait of Hormuz was something that was
1387 obvious to anyone who studied the Middle East, and this would
1388 be a response by the Iranian Government, but not so much this
1389 Administration.

1390 I say all this because this is an important issue in
1391 terms of what we have seen this year in storms and being
1392 prepared for it, our energy production in this country.
1393 Incredibly important. But when we sit here and our
1394 colleagues across the aisle pretend it is business as usual
1395 and we are not in this trying moment and the American people

1396 are not in this trying moment, it gets extremely frustrating,
1397 especially because so much of the time spent on this
1398 committee by my colleagues across the aisle are in constant
1399 critique of the prior administration. But when they see
1400 things that are hurting the American people being done by
1401 this administration, the lack of accountability of this
1402 administration, they are often silent.

1403 So I appreciate you all being here and I yield back.

1404 *Mr. Latta. Thank you. The gentleman yields back the
1405 balance of his time. The chair now recognizes the gentlelady
1406 from Tennessee's 1st district for five minutes for questions.

1407 *Mrs. Harshbarger. Thank you, Mr. Chairman, and thank
1408 you for being here today and for your testimony.

1409 Winter Storm Fern was a real-world test of our electric
1410 grid. For my home state I am proud of the men and women at
1411 TVA and our rural electric co-ops who worked around the clock
1412 in dangerous, icy conditions to swiftly restore our power.

1413 And I am sure you know the TVA's board recently
1414 announced it will continue operations at the Cumberland and
1415 Kingston coal plants. That decision didn't just happen in a
1416 vacuum. As shared in Mr. Robb's testimony, NERC has sounded
1417 the alarm about early retirements in its 2025 long-term
1418 reliability assessment. And Winter Storm Fern showed us
1419 exactly why those warnings deserve our attention. When the
1420 other resources under-performed during the storm, it was

1421 dispatchable generation that kept the lights on. And in the
1422 Tennessee Valley, coal alone provided 14 percent of our power
1423 generation at peak demand. Solar and wind combined just
1424 provided 1 percent.

1425 So Mr. Mattison what does Winter Storm Fern tell us
1426 about the role of dispatchable infrastructure, especially
1427 coal, in maintaining grid reliability, sir?

1428 *Mr. Mattison. Thank you for your question. I think it
1429 is very important. And when you look at how our assets
1430 performed during Winter Storm Fern, coal, they were at 81
1431 percent of their capacity factor. When you look at wind, it
1432 was around 42 percent, and natural gas was about 31 percent.
1433 So that dispatchable coal unit is the workhorse. It is the
1434 baseload unit --

1435 *Mrs. Harshbarger. Yes.

1436 *Mr. Mattison. -- and -- subject to check, but I
1437 believe I am right here -- AEP SWEPCO built the last coal
1438 plant that has been built in the United States. It is called
1439 the Turk plant in Fulton, Arkansas. It came online in 2012.
1440 It is an ultra-super-critical plant, which just means the
1441 temperatures are higher and it, when built, complies with the
1442 current CCR, ELG rules, and all the environmental rules that
1443 are available today. And it is one of the workhorses in our
1444 fleet. And that plant performed perfectly during Winter
1445 Storm Fern.

1446 *Mrs. Harshbarger. Fantastic. I also want to mention
1447 how much our electric grid and pipeline network rely on
1448 significant preparation scenario analysis and real-time
1449 communications and coordination during these extreme weather
1450 events. Forecasting for severe weather and all possible
1451 outcomes can be very time-consuming and burdensome. I know I
1452 talked to the CEO of TVA when we had Hurricane Helene, and I
1453 asked about AI projections and things of that nature.

1454 So Mr. Mattison, I will go to you again. With the
1455 advent of AI and advanced computing, how can these tools be
1456 used to forecast potential supply shortfalls and demand
1457 increases and help respond to these events?

1458 *Mr. Mattison. Well, thank you for your question.

1459 One thing I want to mention about AI. In northwest
1460 Louisiana we just landed an Amazon data center that is going
1461 to be 1.2 gigs.

1462 *Mrs. Harshbarger. Yes.

1463 *Mr. Mattison. And we have got power plants in the
1464 offing to be built to support that. That will be fueled by
1465 natural gas. And I think it is early in the game to be
1466 precise on what AI can do, but it will be a game-changer in
1467 predicting algorithms and forecasting fuel needed, weather
1468 patterns.

1469 *Mrs. Harshbarger. Yes.

1470 *Mr. Mattison. The one thing about a Winter Storm Fern

1471 is like a hurricane. They can be devastating --

1472 *Mrs. Harshbarger. Yes.

1473 *Mr. Mattison. -- but we have notice of when it is
1474 happening so we can begin to gear up. But I see a future
1475 with AI, when you put that data into an AI system, it will
1476 tell you exactly what you need to do, when to do it, how to
1477 do it.

1478 Kind of comical, watching these driverless cars. I was
1479 in Austin yesterday, and they were telling me that once they
1480 learned an algorithm --

1481 *Mrs. Harshbarger. Yes.

1482 *Mr. Mattison. -- then they start driving more
1483 aggressively like those around them. So it is amazing, I
1484 think, what AI will be able to do for us.

1485 *Mrs. Harshbarger. Yes. Remind me not to take one of
1486 those --

1487 *Mr. Mattison. Yes, exactly.

1488 [Laughter.]

1489 *Mrs. Harshbarger. I am pretty aggressive myself.

1490 Let's see, Mr. Robb, as more intermittent generation is
1491 added to the system, how important will reliable natural gas
1492 infrastructure be to maintaining grid stability during severe
1493 weather events?

1494 *Mr. Robb. Yes, it is going to be critical to be able
1495 to balance the uncertainty in renewable production.

1496 One of the issues with renewables is that while they
1497 tend to perform well in the summer, they don't perform well
1498 in the winter in general. You know, the winter peaks
1499 typically happen at 6:00 in the morning and 8:00 at night,
1500 right?

1501 *Mrs. Harshbarger. Yes.

1502 *Mr. Robb. When the sun doesn't shine. Batteries can
1503 help alleviate some of that, but not all of that, at least
1504 with the technologies we have today.

1505 So right now we need something to balance those
1506 resources, and the only real fuel we have to do that that has
1507 the flexibility and ubiquity is natural gas. So it is an
1508 essential fuel for reliability.

1509 *Mrs. Harshbarger. Thank you, sir.

1510 Mr. Mattison, you have talked about Amazon working -- we
1511 have -- I guess TVA has partnered with Google to do some
1512 innovative things for their data centers, and it won't cost
1513 the ratepayers any more. And, you know, we are going to be
1514 checking on that, but this is going to happen all over the
1515 country.

1516 So with that, Mr. Chairman, I yield back.

1517 *Mr. Latta. Thank you very much. The gentlelady yields
1518 back, and the chair now recognizes the gentlelady from
1519 California's 7th district for five minutes for questions.

1520 *Ms. Matsui. Thank you very much, Mr. Chairman, and I

1521 want to thank the witnesses for being here today.

1522 I want to be 100 percent clear. Maintaining the
1523 reliability of the electric grid is our number-one priority.
1524 When it comes to extreme cold or extreme heat, keeping the AC
1525 or heat running is a matter of life or death.

1526 Republicans want to accuse Democrats and clean energy
1527 advocates of undermining reliability, so I want to set the
1528 record straight. Nothing could be further from the truth.
1529 Climate change and extreme threat to the grid (sic), not to
1530 mention every other aspect of our lives. Wildfires are the
1531 biggest threat in California. They are also the biggest
1532 driver of electricity prices. And it is well established
1533 that the severity and frequency of wildfires is increasing
1534 because of climate change. Hurricanes, another massive
1535 threat to grid reliability, are becoming stronger because of
1536 climate change. Extreme heat is becoming more common because
1537 of climate change. Even extreme cold like Winter Storm Fern
1538 can be linked to climate change. As climate change
1539 destabilizes Arctic weather patterns, extreme cold air can be
1540 pushed down into lower latitudes.

1541 Mr. Robb, NERC has acknowledged the impact of climate
1542 change on reliability in the 2021 long-term reliability
1543 assessment and the 2022 State of Reliability Report. NERC
1544 stated that climate change is increasingly increasing the
1545 severity and frequency of extreme weather, which is

1546 threatening reliability. Yes or no, is that correct?

1547 *Mr. Robb. I would have to go back and look at the
1548 reports, but I don't doubt that.

1549 *Ms. Matsui. Okay. NERC's mission is to conduct
1550 reliability assessments and establish reliability standards.
1551 Do you consider the role of fossil fuels in exacerbating the
1552 extreme weather that is threatening the grid?

1553 *Mr. Robb. I don't have an opinion on that.

1554 *Ms. Matsui. Okay. It is not NERC's mission to stop
1555 climate change at all?

1556 *Mr. Robb. No, our mission is to preserve the
1557 reliability --

1558 *Ms. Matsui. Okay.

1559 *Mr. Robb. -- of the bulk power system.

1560 *Ms. Matsui. Okay. Our responsibility on this
1561 committee is to see the bigger picture and implement a long-
1562 term strategy to stop climate change while still maintaining
1563 everyday grid reliability. That is our job, and we are
1564 failing. These storms, heat waves, wildfires, hurricanes,
1565 and floods are only going to get worse if we don't do
1566 something about it. So how can we meet demand during winter
1567 storms without burning fossil fuels?

1568 Twenty-twenty-six was the coldest winter in decades for
1569 parts of the south and east coast, but it was unusually warm
1570 for much of the west. Mr. Goggin, what was solar output like

1571 in the western U.S. during Winter Storm Fern?

1572 *Mr. Goggin. It was extremely good, and power prices,
1573 as you noted, were quite low throughout the west during this
1574 event. And that reflects it was just not that cold there, so
1575 there was abundant supply. Electricity demand was not that
1576 high --

1577 *Ms. Matsui. Sure.

1578 *Mr. Goggin. -- and the solar output was very strong.
1579 And so if we did have stronger transmission ties between the
1580 eastern and the western U.S. and between Texas and the east
1581 and the west, some of that surplus solar power and just
1582 general low-cost power in the west could have kept rates low,
1583 could have helped keep the lights on in the eastern U.S. and
1584 Texas when those areas needed it.

1585 *Ms. Matsui. Okay. Well, you --

1586 *Mr. Goggin. And we did see solar --

1587 *Ms. Matsui. -- you answered my next question right
1588 now.

1589 *Mr. Goggin. Yes, sorry.

1590 *Ms. Matsui. So --

1591 *Mr. Goggin. Okay.

1592 *Ms. Matsui. I will continue here.

1593 *Mr. Goggin. Yes.

1594 *Ms. Matsui. In Sacramento we don't get winter storms,
1595 snow storms like Fern, but we do deal with extreme heat waves

1596 that put serious strain on the grid. Six years ago, in
1597 twenty-twenty, extreme summer heat pushed California's grid
1598 to the breaking point, and we saw rolling blackouts across
1599 the state. But since then California has dramatically
1600 improved the reliability of our grid, despite facing similar
1601 heat waves.

1602 Mr. Goggin, can you talk about how California has
1603 achieved this stunning turnaround?

1604 *Mr. Goggin. Absolutely. A big part of it is a diverse
1605 mix of resources and facilitating the transmission expansion
1606 that is necessary for that. And California has been
1607 procuring wind resources both in-state as well as from more
1608 distant areas where there is less diversity in the
1609 correlations of the profiles from those areas. So they are
1610 buying New Mexico wind, they are buying Wyoming wind. And
1611 this is building a diverse generation mix.

1612 In the state, obviously, there is a lot of solar
1613 investment, there is a lot of battery storage --

1614 *Ms. Matsui. Sure.

1615 *Mr. Goggin. -- investment, and that is playing a key
1616 role. These three resources -- wind, solar, batteries --
1617 work together extremely well to provide dependable capacity,
1618 flexibility, and to work with the existing resources as well
1619 as imports to meet reliability. And we are seeing the same
1620 thing play out in Texas and other areas where this is the

1621 winning solution, is these -- this diverse mix of --

1622 *Ms. Matsui. Mr. Goggin, you are answering my next
1623 question.

1624 *Mr. Goggin. Sorry.

1625 *Ms. Matsui. So we are going through this very quickly.

1626 *Mr. Goggin. Okay.

1627 *Ms. Matsui. But I just want to say since previous
1628 winter storms, Texas and other states have taken steps to
1629 winterize their grids and improve reliability safeguards.
1630 And two weeks ago this committee passed the SECURE Grid Act,
1631 which I co-authored with Chairman Latta, to strengthen
1632 states' ability to assess and prepare reliability risks.

1633 Mr. Robb, how important are state energy programs for
1634 driving reliability improvements?

1635 *Mr. Robb. Yes, they are absolutely critical because
1636 the states have the responsibility for the resource mix.

1637 *Ms. Matsui. Okay, thank you, and I have run out of
1638 time.

1639 I yield back.

1640 *Mr. Latta. Thank you very much. The gentlelady yields
1641 back and the chair now recognizes the gentleman from Oregon's
1642 2nd district for five minutes for questions.

1643 *Mr. Bentz. Thank you, Mr. Chair, and thank all of you
1644 for being here.

1645 I think I want to start by focusing on the most simple

1646 approach, Mr. Robb, to the problems that we are facing and
1647 what we here in Congress can do about it. So you already
1648 mentioned that we have a shortage of generation.

1649 In the northwest -- I am from Oregon -- we anticipate a
1650 shortage of -- a massive amount of shortage for our area,
1651 about -- we need about as much power in the future as we have
1652 today, and we need it really soon. So that means we have to
1653 double the amount that we have in the northwest. So we have
1654 a real shortage there. Is this true across the nation, or is
1655 this just a northwest problem?

1656 *Mr. Robb. It is not ubiquitous, but you are not alone.
1657 A lot of places are facing enormous load growth, and the need
1658 to get new generation, and supporting infrastructure in
1659 place.

1660 *Mr. Bentz. Right. So let's -- I was going to go to
1661 infrastructure next, and that would be transmission. And so
1662 when we just heard Mr. Goggin talking about the movement of
1663 wind and solar out of the southwest up into California, into
1664 Oregon and so forth, that takes transmission. And we have an
1665 incredible problem with our transmission in the northwest, a
1666 problem in the sense that it is too small, it is full up.
1667 There is no more capacity. Is that correct across the
1668 nation?

1669 *Mr. Robb. Again, not ubiquitous but that problem is
1670 fairly common.

1671 *Mr. Bentz. And so now we are getting to it. How do we
1672 solve these two problems, one on the generation side and one
1673 on the transmission side? What is it going to take to solve
1674 these two problems?

1675 *Mr. Robb. The main thing is we got to figure out how
1676 to get stuff built, right? I mean, grid planners understand
1677 where there is need for more transmission, they understand
1678 where there is need for resources. The issue is getting
1679 permits to build it, getting through the interconnection
1680 queues where that is an obstacle, dealing with supply chain
1681 bottlenecks to get the equipment to build the stuff. But we
1682 got to be able to get it put in place, and we got to get it
1683 put in place very --

1684 *Mr. Bentz. Yes, we do. And let's focus on those
1685 obstacles again because you are here in front of Congress,
1686 the idea is that you will tell us what it is we need to do to
1687 try to address the very obstacles that are standing between
1688 us and getting that generation and that transmission. So
1689 let's talk about transmission first.

1690 Is it the environmental work that we have to do to put a
1691 power line in that is the problem, or is there some other --
1692 or additional problem? Because certainly the EIS and
1693 everything else is a problem.

1694 *Mr. Robb. That question would probably be better
1695 addressed by one of the people who actually build

1696 transmission because we don't, but the issue is permitting
1697 and siting.

1698 *Mr. Bentz. Of the three we have here, who should I
1699 ask?

1700 *Mr. Robb. I would ask Mr. Mattison.

1701 *Mr. Bentz. Mr. -- you are up.

1702 *Mr. Mattison. I am going to throw him a question in a
1703 minute.

1704 [Laughter.]

1705 *Mr. Mattison. But that is okay. No, we do build
1706 transmission lines. And I agree with Mr. Robb, we do need to
1707 streamline the process. As I said earlier, the states have
1708 done a very good job of expediting permitting. But when you
1709 start going across, you know, transmission lines interstate,
1710 if we would have a more robust Federal policy --

1711 *Mr. Bentz. So -- this is good. Every time I hear the
1712 word "robust," I start to nod off.

1713 *Mr. Mattison. Yes.

1714 *Mr. Bentz. Let me just say that it is -- we just had a
1715 vote on the SPEED Act. And the SPEED Act vote was 221 to
1716 196; 11 Democrats joined the rest of all but 1 Republican
1717 voting for that. It hasn't gone anywhere over in the Senate.
1718 If that were to pass, would that help?

1719 *Mr. Mattison. Yes. Let's interchange the word for
1720 robust to speed.

1721 *Mr. Bentz. Okay, right.

1722 *Mr. Mattison. And that would help us from expedited,
1723 and that is what we need.

1724 *Mr. Bentz. You know, and we -- so if we are going to
1725 actually solve these problems that we have heard about for
1726 the last several hours, we actually need to do something to
1727 reduce the amount of time it is going to take to get
1728 generation, to get transmission. So you are saying the SPEED
1729 Act would help?

1730 *Mr. Mattison. Yes.

1731 *Mr. Bentz. And yet it is not moving in the Senate.

1732 *Mr. Mattison. Yes.

1733 *Mr. Bentz. So you are telling Congress, do something
1734 with the SPEED Act. Is that what I am hearing?

1735 *Mr. Mattison. Yes, sir.

1736 *Mr. Bentz. And so if the SPEED Act were to pass, would
1737 that help us address these almost existential problems that
1738 we are facing without having enough power to bring about
1739 artificial intelligence?

1740 *Mr. Mattison. It would build a highway. I like to
1741 look at it like -- this transmission system that we are
1742 talking about in Oregon -- as a two-lane highway. We need a
1743 10-lane highway to be able to move bulk power. No matter
1744 what the generation source is, we can't move it right now.

1745 *Mr. Bentz. And we have created these laws and

1746 requirements and studies and standards and everything else
1747 that are standing between us and actually getting done what
1748 has to be done to help protect this nation and -- as we go
1749 into this electrically-driven future.

1750 Thank you so much, all, for being here.

1751 *Mr. Mattison. Sure.

1752 *Mr. Bentz. I yield back.

1753 *Mr. Latta. Well, thank you very much. The gentleman
1754 yields back and the chair recognizes the gentleman from
1755 Texas's 33rd district for five minutes for questions.

1756 *Mr. Veasey. Mr. Chairman, thank you very much.

1757 Now that we know that extreme weather is no longer just
1758 an occasional stress test for our grid, that it is becoming
1759 sort of a routine operating condition, you know, we need to
1760 be cognizant of that. I know that Winter Storm Fern was the
1761 third major winter event in as many years, and it forced grid
1762 operators across much of the country to manage simultaneous
1763 spikes in electricity demand, fuel constraints, and
1764 infrastructure stress.

1765 The encouraging news is that the bulk power system has
1766 pretty much held together. Grid operators learned a lot of
1767 lessons -- I know we did in Texas, ERCOT, with Winter Storm
1768 Uri and Elliot -- like improved weather forecasting and
1769 better coordination and more clear-eyed planning to help keep
1770 flowing during peak demand.

1771 But Fern also reinforced something that is also, I
1772 think, equally important, and that is there is no single
1773 resource or technology that guarantees reliability. Cleaner
1774 energy provided meaningful generation and helped limit
1775 operating costs during periods of extremely high fuel prices,
1776 and natural gas supplies face price spikes and delivery
1777 challenges, and local outages were often caused by
1778 distribution infrastructure failures rather than generation
1779 shortages. And so we have to move beyond fuel versus fuel
1780 debates. I think that that has, unfortunately, become almost
1781 sort of comical here. But every resource type definitely has
1782 distinct outage risks during extreme weather.

1783 And I want to focus my questions on what policies
1784 actually reduce risk and lower cost going forward. Mr.
1785 Goggin, analysis shows that cleaner energy helped reduce
1786 operating costs during Winter Storm Fern when fuel prices
1787 surged. And so I wanted to ask you, to what extent can
1788 renewable generation act as a hedge against fuel price shocks
1789 that ultimately show up in consumer bills?

1790 *Mr. Goggin. Absolutely. It is an extremely powerful
1791 hedge because wind and solar have no fuel cost. They will
1792 always be free, and that is something that you can't get with
1793 other resources. Gas is obviously mostly traded on the spot
1794 market, and so the price can be extremely volatile during
1795 short-term emergencies like we saw with Winter Storm Fern, as

1796 well as long term, just with geopolitical and other
1797 macroeconomic factors that are uncertain. And so wind and
1798 solar does not have that risk and it gives you a valuable
1799 hedge as a ratepayer that some of your fuel price is known
1800 and locked in at zero.

1801 So that is extremely valuable, and I think it has been a
1802 big part of the solution in Texas with the massive amount of
1803 wind, solar, and batteries they have built, particularly over
1804 the last several years.

1805 *Mr. Veasey. Yes. Does over-reliance on a single fuel
1806 create affordability and reliability risk at the same time?

1807 *Mr. Goggin. Absolutely. You see these correlated
1808 risks. Each fuel has, you know, some types of risks. Some
1809 are economic, some are reliability. And the solution to
1810 those risks is to have a diverse portfolio so that if one
1811 resource is unavailable or is too expensive, you can use the
1812 other resources. And that diversity, I think, not putting
1813 all your eggs in one basket, is an extremely smart way to
1814 plan a generation system. And you need the transmission
1815 system that also enables that, it allows you to access
1816 diverse resources within your region as well as from
1817 neighboring regions. And so --

1818 *Mr. Veasey. Yes.

1819 *Mr. Goggin. -- generation and transmission diversity
1820 is really key.

1821 *Mr. Veasey. Yes. No, thank you very much. And I want
1822 to ask Mr. Robb.

1823 I know that Winter storm Fern saw some natural gas
1824 prices spike nearly 10 to 35 times at major hubs. And given
1825 the gas-electric coordination risk identified by NERC, how
1826 can we better align the two -- these two industries to ensure
1827 that fuel is available when the grid needs it most?

1828 *Mr. Robb. That is a great question.

1829 First of all, we need to recognize that these two
1830 systems are two sides of the same coin, right? Natural gas
1831 now supplies 45 percent of power generation fuel, and power
1832 generation consumes about 45 percent of natural gas. So the
1833 first thing I would say is we need to figure out how to plan
1834 these two systems together. Right now they are planned
1835 independently on different bases.

1836 Second, we need to address the disconnects between the
1837 realities of fuel procurement for the power sector, which are
1838 very, very different than the fuel procurement needs of a
1839 local distribution company for home heating. One of the
1840 issues we ran into in Fern was just the duration from when
1841 the operators needed to make their gas buy versus when they
1842 actually purchased the gas. It was five or six days. That
1843 is an eternity. That needs to be addressed.

1844 Third, we need better coordinating mechanisms between
1845 the two sectors. That is being addressed in some ways

1846 voluntarily by the initiatives that Jose discussed in the
1847 northeast. We see similar things in other parts of the
1848 country.

1849 And then finally, the gas system needs to be able to
1850 perform during extreme weather to the same degree that we
1851 require the electric system to perform. That is going to
1852 require more infrastructure, both pipelines and storage, and
1853 probably some requirements on the pipelines and the upstream
1854 production to make sure that they can continue to operate
1855 during extreme cold events.

1856 *Mr. Veasey. Yes. No, thank you very much.

1857 Mr. Chairman, I yield back. Thank you.

1858 *Mr. Latta. Thank you. The gentleman yields back and
1859 the chair now recognizes the gentlelady from Florida's 15th
1860 district.

1861 [Pause.]

1862 *Mr. Latta. I will take that back. The chair now
1863 recognizes the gentlelady, the at-large member from North
1864 Dakota, for five minutes for questions.

1865 *Mrs. Fedorchak. Thank you, Mr. Chairman, and thank you
1866 to my colleague from Florida for allowing me to jump ahead of
1867 her for these questions.

1868 This is like the Super Bowl of hearings for me. I am a
1869 former utility regulator. These issues that we are talking
1870 about today are what drove me to run for Congress because I

1871 saw the reliability risks front and center as president of
1872 NARUC, as a state utility regulator for 12 years, and was
1873 frustrated that we weren't shining enough light on these
1874 issues and paying enough attention to them.

1875 So Mr. Robb and I have worked together for years. I
1876 appreciate your focus on this. I want to highlight something
1877 that you said, Mr. Robb. Fern was a classic near-risk event,
1878 near-risk event. I wonder how different the room would be
1879 today if it wasn't a near-risk event, if things had gone just
1880 a little bit differently. I can estimate what it would be
1881 like in here. It would be packed, and all of us would be
1882 really mad at all of you because somebody else, not us, would
1883 be to blame. That is what happens with this. The engineers
1884 come through like champs in the hour of our greatest need,
1885 and they figure it out -- until they don't.

1886 But guess what? We have been warned. Your report, time
1887 and time again, year after year from NERC, has been warning
1888 this country that we are at risk of not having enough power
1889 to meet demand. Two-thirds of the country is at risk of not
1890 having enough power to meet demand. That is not acceptable.
1891 We have to do better. So I appreciate you guys being here
1892 today and sharing some of your wisdom on what we should be
1893 doing better.

1894 Mr. Mattison, you mentioned that you would like the
1895 Federal Government -- I am paraphrasing -- you would like the

1896 Federal Government to pay more attention to reliability and
1897 to demand more of the system as it relates to reliability
1898 through our policies. What would you like us to do?

1899 *Mr. Mattison. Well, as I was talking to Mr. Bentz I
1900 think -- and Mr. Robb said it many times -- we need to build
1901 stuff. At the end of the day we need to build transmission
1902 lines, bulk transmission lines. We need to expedite that.
1903 It is needed today.

1904 We need to win at this AI game. We really do as the
1905 United States. They are happening all over the place. They
1906 will go somewhere else. We want them here. To me it is a
1907 matter of national security. So to be able to build out to
1908 that demand, we can't haggle around with policies -- it ought
1909 to be this way, that way -- we need to -- to me it ought to
1910 be a bipartisan solution because the whole country is
1911 dependent on building out the infrastructure that we need
1912 because the reality is -- it is pretty simple -- the lights
1913 will go out if we don't do this.

1914 *Mrs. Fedorchak. Right. I agree with you. It should
1915 be bipartisan.

1916 Mr. Robb, how are premature retirements of baseload
1917 resources such as natural gas and coal making matters worse
1918 when we have increased demand?

1919 *Mr. Robb. Thanks for the question. It makes matters
1920 worse in a number of different ways when you lose the energy

1921 production associated with those facilities.

1922 And we saw in Winter Storm Fern a number of facilities
1923 that were operating under 202© orders did perform and were
1924 required to keep the lights on. There is no question about
1925 that.

1926 The second thing is that those facilities create the
1927 special sauce that keeps the grid operating. They create
1928 frequency, they create voltage, they create the ability to
1929 control those within very tight parameters, which is what
1930 allows the high-voltage transmission system to operate.
1931 Without that kind of generation, we don't have the ability to
1932 operate a transmission system of the scale that we have. We
1933 may eventually be able to do that with grid-forming inverters
1934 and other technologies, but those aren't ready for prime time
1935 yet. So they play a very, very essential role in the
1936 reliability of the grid.

1937 *Mrs. Fedorchak. Thank you. In the past I have heard
1938 you say that one of the easiest things that we should be
1939 doing in the country to address our current urgent needs is
1940 to stop retiring things that are already connected to the
1941 grid and working. Do you still believe that that would be a
1942 good first step?

1943 *Mr. Robb. I think the way to get out of a hole is to
1944 stop digging. And to the extent that some of these plants
1945 have remaining valuable life, they should be continuing to

1946 operate. That is not to say that there aren't some plants
1947 that probably need to go, right, because they haven't been
1948 maintained and they are not ready to operate. But that is
1949 not the characteristic of the entire fleet.

1950 *Mrs. Fedorchak. Thank you. I thank you all for what
1951 you are doing.

1952 And I yield back, Mr. Chairman.

1953 *Mr. Latta. The gentlelady yields back, and the chair
1954 now recognizes the gentlelady from Virginia's 4th district
1955 for five minutes for questions.

1956 *Ms. McClellan. Thank you, Mr. Chairman, and thank you
1957 to the witnesses for being here for this very important
1958 hearing.

1959 The reliability of the nation's grid and our ability to
1960 maintain a stable and robust supply of energy during extreme
1961 weather events and disasters, both natural and man-made, is
1962 extremely important to our overall national security.
1963 Unfortunately, what I have heard from my colleagues on the
1964 other side of the aisle is the same myth that only fossil
1965 fuels can serve as reliable sources of energy, and that
1966 renewable energy does not have a place in ensuring the
1967 stability of our grid. But that is simply not true.

1968 As painfully demonstrated by President Trump's
1969 unauthorized war of choice in Iran, conflict in one part of
1970 the globe can dramatically disrupt the movement of fossil

1971 fuels everywhere and send the price of oil and natural gas
1972 into the stratosphere. This fossil fuel reliance undermines
1973 our national security and threatens the stability of our
1974 grid.

1975 As things are now, in order to recklessly balance his
1976 addiction to fossil fuels with his duty to the American
1977 people to keep energy costs affordable, President Trump has
1978 eased sanctions on Russia just to try and keep energy prices
1979 from continuing their meteoric rise. And Secretary Bessent
1980 has said that the Trump Administration is fine with Iran
1981 exporting almost one billion barrels of oil, while other oil
1982 traffic through the Strait of Hormuz remains paralyzed.

1983 In other words, we are now funding the world's largest
1984 exporters of global instability and chaos just to maintain a
1985 semblance of energy stability.

1986 This is only exacerbated by the actions of my colleagues
1987 across the aisle who have sat idly by while the
1988 Administration zealously undermined the clean energy
1989 transition and worked to kill dozens of clean energy projects
1990 and hundreds of billions in clean energy tax credits that
1991 would have made our grid more resilient to the current supply
1992 disruptions that are affecting the globe because of the
1993 President's senseless war.

1994 Now, Mr. Goggin, in your testimony you note that natural
1995 gas -- I am sorry, that question has actually already been

1996 answered, so I am going to skip.

1997 You highlighted in your testimony that renewable energy
1998 projects account for 92 percent of power generation resources
1999 that are trying to interconnect to the grid. Can you discuss
2000 how we should work to expedite that interconnection process,
2001 and what the benefits of doing so would be for the
2002 reliability and stability of the grid?

2003 *Mr. Goggin. Absolutely. Transmission is one of the
2004 key bottlenecks in getting new generation of all types onto
2005 the grid. And we do see, as you mentioned, a large amount of
2006 wind, solar, and battery capacity is stuck in this
2007 interconnection logjam. And moving transmission forward is -
2008 - you know, building things, as I think everybody here has
2009 said, is really the key solution.

2010 And we talked about the three Ps in terms of driving
2011 transmission: planning, paying, and permitting. Planning is
2012 easy. You can, like, draw lines on a map. Figuring out who
2013 pays for transmission, developing regional, workable cost
2014 allocation methods to pay for transmission, is a key
2015 impediment in most regions.

2016 And then finally, permitting is obviously something
2017 that, you know, the Federal Government, as well as state
2018 governments, can work together to achieve. And that allows
2019 transmission lines to be built and permitted in an
2020 expeditious way. And that will give us this -- basically,

2021 open up the market, let these resources that are trying to
2022 get onto the grid move forward. And when solar batteries can
2023 be deployed very quickly, you can build them in a year or
2024 less, much faster than any other form of generation. And so
2025 they are extremely valuable as we have this large load growth
2026 going on now.

2027 *Ms. McClellan. And speaking of permitting, I guess it
2028 doesn't help, once permits are awarded, if the Administration
2029 pauses the construction of a wind project for no apparent
2030 reason.

2031 *Mr. Goggin. That does not help.

2032 *Ms. McClellan. Thank you. And Mr. Goggin, previous
2033 witnesses to this committee have highlighted that increased
2034 renewable energy generation provides an opportunity to
2035 significantly update aging and outdated parts of the grid as
2036 we seek to ensure that these new sources of energy are able
2037 to seamlessly integrate into the grid. Could you speak to
2038 the necessity of updating aging grid infrastructure?

2039 *Mr. Goggin. Absolutely. It is something we need to be
2040 investing in anyway. Most of our power grid was built 40-
2041 plus years ago. It is now reaching the end of its life, and
2042 there is opportunities to rebuild that at higher capacity
2043 using modern technology, advanced conductors, and other
2044 things that give you a lot more capacity with a similar, you
2045 know, profile and, you know, land use.

2046 And so there is a lot of opportunities to do that, and
2047 that is why we talk about we need proactive, multi-value
2048 transmission, recognizing that transmission is not just
2049 needed to bring new generation on, it is not just needed for
2050 new loads. It provides economic value, it provides
2051 reliability value. It provides -- FERC has identified seven
2052 benefits, distinct categories of benefits of transmission.
2053 And so we need to be thinking, as we are replacing our aging
2054 assets on the grid, how can we maximize those seven
2055 categories of benefits across -- you know, economics,
2056 reliability, resilience, all of that, all ultimately flows to
2057 the ratepayers. And so, yes, we need to be thinking about
2058 all of that and investing at a level that is commensurate
2059 with those benefits. We are woefully short of that today.

2060 *Ms. McClellan. Perfect timing.

2061 I yield back.

2062 *Mr. Latta. Thank you very much. The gentlelady yields
2063 back. The chair now recognizes the gentlelady from Florida's
2064 15th district for five minutes for questions.

2065 *Ms. Lee. Thank you, Mr. Chairman.

2066 During Winter Storm Fern Florida saw snow flurries as
2067 far south as my district in Hillsborough County, with
2068 temperatures dropping down into the thirties -- that is
2069 unusual for us back home -- destroying over 3.1 billion worth
2070 of crops across Florida.

2071 [Pause.]

2072 *Mr. Latta. Okay, the gentlelady will informally pass
2073 and we will come back to the gentlelady, and the chair will
2074 recognize the gentleman from South Carolina's 7th district
2075 for five minutes for questions.

2076 *Mr. Fry. Thank you, Mr. Chairman, and thank you to the
2077 witnesses for being here today.

2078 Reliable energy is essential to every aspect of our
2079 modern life, especially to public health and our welfare, yet
2080 power outages have cost the American people \$44 billion each
2081 year. Winter Storm Fern highlighted the importance of grid
2082 reliability, leaving more than 1 million customers without
2083 power at its peak, including 70,000 in my home state of South
2084 Carolina. These disruptions make it clear that reliability
2085 must remain a top priority, particularly during severe
2086 weather events that place extraordinary strain on the
2087 electric system.

2088 Winter Storm Fern also demonstrated the critical
2089 importance of dispatchable energy sources. During the storm
2090 peak coal generation rose by 25 percent, and peak natural gas
2091 generation rose by 47 percent. Across all impacted regions
2092 dispatchable energy significantly outperformed wind and solar
2093 generation. The grid's performance during severe weather
2094 depends not only on these baseload and dispatchable
2095 resources, but also on real-time coordination among grid

2096 operators, generators, transmission owners, marketers, and
2097 other market participants. Analyzing how the bulk power
2098 system performs during these events is essential, I think, to
2099 strengthening reliability and ensuring the continued delivery
2100 of electric power that Americans depend on every day.

2101 Mr. Costa, during Winter Storm Fern natural gas
2102 generation played a significant role. Where are you at?
2103 Played a significant role at meeting peak electricity demand.
2104 Importantly, natural gas storage infrastructure is necessary
2105 to protect against potential capacity constraints or pipeline
2106 failures that limit supply. Can you discuss how your areas
2107 utilized natural gas storage to ensure fuel delivery and
2108 availability during the storms?

2109 *Mr. Costa. Yes. So thank you for the question,
2110 Congressman.

2111 One thing I want to note is that -- also to your
2112 question -- is that in the northeast, in the power generation
2113 sector we -- over 20 percent -- and Mr. Robb will probably
2114 have the exact number -- of generators are actually natural
2115 gas. Those generators went offline, and that is the reason
2116 we saw the hike.

2117 But when we did have -- the Marcellus Shale performed
2118 extremely well this winter with the winterization efforts,
2119 but we did see some of the areas with that, and storage was a
2120 big player this year. And being able to -- and those are

2121 firm contracts that utilities have to be able to pull from
2122 when needed, and storage was a big player this year in making
2123 sure that we were able to get the supply we needed.

2124 *Mr. Fry. Yes, there was a lot of preparation and
2125 coordination leading up to and during the storm among members
2126 of the power and gas sectors. This included the
2127 Administration taking proactive steps to issue 202© orders to
2128 enable maximum availability of dispatchable coal and gas and
2129 backup generation if it was needed. It also included longer-
2130 term adjustments like winterization, obviously.

2131 To the -- to Mr. Robb and Mr. Mattison and Mr. Costa,
2132 how did planning and actions taken during Fern reflect
2133 lessons from past storms?

2134 Additionally, can you all speak to any existing
2135 coordination practices between pipelines, generators, and
2136 grid operators that could expand to further strengthen that
2137 reliability during extreme weather?

2138 We will start -- we will go down here. Yes, sir.

2139 *Mr. Robb. So following a 2018 cold weather event we
2140 started the process of developing mandatory reliability
2141 standards related to winterization. Those were approved by
2142 FERC last year, will be mandatory and enforceable next year.
2143 Many of the power generating units kind of leaned in and have
2144 gotten ahead of the enforcement date, and have taken steps to
2145 winterize their equipment against very, very extreme cold

2146 temperatures, which is, again, one of the things we defined
2147 with FERC.

2148 I think the efforts around coordination -- and that
2149 helped. That is one of the reasons why we did -- we believe
2150 that is one of the reasons we didn't see the same number of
2151 generation outages in Fern that we did in Elliot and Uri is
2152 because of those winterization requirements.

2153 In terms of coordination between the two sectors, the
2154 AGA, the American Gas Association, last year initiated a
2155 series of regional forums to drive better situational
2156 awareness between the two sectors, better understand the
2157 vulnerabilities. I participated in one of those events in
2158 the Pacific Northwest, and those are desperately needed
2159 relationships that need to be automated and activated in real
2160 time so that the grid operators know what is going on in the
2161 gas system and vice versa because they are so interdependent.

2162 *Mr. Fry. Mr. Mattison?

2163 *Mr. Robb. Brett?

2164 *Mr. Mattison. Well, one thing we did is what Mr. Robb
2165 said, is we prepared for winter -- especially Uri taught us a
2166 lesson -- with putting heat tracing and things of that nature
2167 in our gas power plants. We did winterization of our coal
2168 plants to meet those requirements.

2169 And the second thing that we did is we always practice
2170 any type of weather event. And so in October we went through

2171 a full-blown, two-day practice session. And it is ironic, it
2172 basically mirrored what Fern did. So everybody was on point,
2173 and we had practiced, rehearsed, so that helped us
2174 tremendously.

2175 *Mr. Fry. Mr. Costa, you are off the hook because --

2176 *Mr. Latta. I am sorry, the gentleman's time has
2177 expired. And if you want to respond to him written, we would
2178 greatly appreciate that.

2179 [The information follows:]

2180

2181 *****COMMITTEE INSERT*****

2182

2183 *Mr. Latta. The chair now recognizes the gentleman from
2184 California's 15th district for five minutes for questions.

2185 *Mr. Mullin. Thank you, Mr. Chairman.

2186 As of yesterday the cost of crude oil had gone up 50
2187 percent in less than 2 weeks. The average price of gas hit
2188 \$3.72 a gallon. Americans are already paying the price for
2189 Trump's reckless and chaotic war in Iran, so it is
2190 disappointing to hear the same tired arguments about tying
2191 our electric system to these volatile markets.

2192 When gas pipelines froze during Winter Storm Uri a few
2193 years ago, energy prices spiked in Texas and some families
2194 were hit with catastrophic electric bills of over \$10,000.
2195 Today we are faced with similar unpredictability, although
2196 this time of our own making, as a result of an unnecessary
2197 war. If we double down on fossil fuels, Americans will
2198 continue to be at the mercy of foreign wars and industry
2199 price-gouging.

2200 So Mr. Goggin, your testimony notes that in every recent
2201 winter storm the natural gas accounted for the majority of
2202 the generator outages. Can you describe how diverse sources
2203 of power, including renewables, protect consumers from the
2204 massive oil price spikes we are seeing, not least due to this
2205 war?

2206 *Mr. Goggin. Absolutely. There is both the reliability
2207 and resilience benefit as well as an economic benefit. And

2208 Winter Storm Fern, luckily, was not -- did not appear -- did
2209 not result in a reliability event. We did not have rolling
2210 blackouts like we did during Winter Storms Elliot and Uri.
2211 However, the risk is still there. If it was a colder event,
2212 I think we could have seen, you know, the loss of gas
2213 generation at the levels that we saw in those previous
2214 events, and that could have pushed things over the edge.

2215 Fern was, however, a economic event. We will see rates
2216 go up dramatically for ratepayers to cover those fuel costs,
2217 you know, the billions of dollars that were expended
2218 particularly on natural gas when it spiked to, you know, over
2219 100 times normal in some places. These are extreme pricing
2220 events, and they are going to have a large impact on
2221 ratepayers.

2222 And so having a diverse mix of wind and solar and
2223 battery resources that do not have that fuel price exposure,
2224 do not have that exposure to the fuel supply delivery
2225 interruptions, that is extremely valuable for both economics
2226 and reliability.

2227 *Mr. Mullin. Thank you for that.

2228 And Mr. Robb, your organization's 2024 report found that
2229 America needs 35 gigawatts of new interregional transmission
2230 to keep the grid reliable. Can you elaborate on that finding
2231 and describe how it may have shifted, given increasing energy
2232 demand since that study was finalized?

2233 *Mr. Robb. Yes, that is a great question.

2234 So the 35 gigawatts was identified as opportunities to
2235 better use the reserve base of the country by sharing
2236 reserves during extreme events. It did not examine every
2237 opportunity to do that. It looked at transmission as the
2238 solution to that. That is just important to note.

2239 The question as to how things have evolved given the
2240 demand forecast, the load growth that has happened -- because
2241 that study was vintage to 2023 data -- is a great one. I
2242 honestly can't tell you how it changes because areas that
2243 were deficient, that showed deficiency, probably are showing
2244 more deficiency. Areas that might have been able to export
2245 may also be in deficiency now because of the load growth.
2246 Really, the analytics would have to be done to ascertain
2247 whether that number is higher or lower today.

2248 *Mr. Mullin. Worthy of further exploration. So thank
2249 you all for your testimony today.

2250 And with that I yield back.

2251 *Mr. Latta. Thank you very much. The chair will again
2252 recognize the gentlelady from Florida's 15th district for
2253 five minutes for questions.

2254 *Ms. Lee. Thank you very much, Mr. Chairman, and I am
2255 going to try this again.

2256 Thank you all so much for being here with us today.
2257 During Winter Storm Fern Florida saw snow flurries as far

2258 south as my district in Florida, which had really damaging
2259 impacts on our agriculture industry. And during the storm
2260 the Department of Energy issued seven emergency orders to
2261 mitigate the risk of blackouts in Florida. Backup generation
2262 was leveraged to stabilize the grid, ensuring more than 100
2263 different local entities, including critical services, could
2264 maintain power.

2265 While today's hearing focuses on Winter Storm Fern, the
2266 lesson is broader. In Florida we tend to face hurricanes
2267 rather than winter storms, but the challenge is the same:
2268 ensuring that our grid can withstand extreme events and
2269 deliver reliable power when Americans need it most. Mr.
2270 Robb, I would like to start by coming back to you.

2271 NERC's reliability assessments have warned about growing
2272 risks to the bulk power system as demand increases and
2273 dispatchable resources retire. In Florida our utilities
2274 spent significant resources hardening the grid for
2275 hurricanes, strengthening poles, putting lines underground,
2276 preparing for rapid restoration. But generation reliability
2277 is just as critical for us during these extreme events.
2278 Based on NERC's analysis of Winter Storm Fern and other
2279 severe weather events, what lessons should policy-makers be
2280 keeping in mind to ensure the grid maintains sufficient
2281 dispatchable generation and reliability during extreme
2282 weather events like hurricanes?

2283 *Mr. Robb. Yes, that is a super question.

2284 You know, one of the things that is very unique about
2285 Florida that we really admire is the fact that your natural
2286 gas generation fleet and the natural gas system in Florida is
2287 purpose-built, largely for the generation business. We think
2288 there is a really important lesson learned there relative to
2289 the dual-purpose gas system we have in the rest of the
2290 country, where it has to serve both local distribution load
2291 for home heating as well as the power sector.

2292 I think the planning of the grid, both the power sector
2293 and the natural gas sector in Florida, have significantly
2294 improved the resilience of that system for the benefit of
2295 Floridians.

2296 *Ms. Lee. And are you seeing any particular reliability
2297 concerns in regions experiencing rapid population growth
2298 where electricity demand increases? I know my district has
2299 three of the fastest-growing counties in the country. Does
2300 that affect your assessment and issues related to
2301 reliability?

2302 *Mr. Robb. Yes, absolutely, because as the population
2303 migrates, so does load, right? And we have seen big
2304 migration into Florida and into Texas in particular. And it
2305 is one of the drivers of the -- our characterization of Texas
2306 as a elevated or high-risk area of the country.

2307 *Ms. Lee. Thank you.

2308 And Mr. Costa, you said something earlier during the
2309 hearing. You noted that during Winter Storm Fern the
2310 weather-dependent sources failed to meet the moment. Tell us
2311 a little bit more about that failure to meet the moment and
2312 what we should be thinking about to ensure that we prevent
2313 that type of situation in the future.

2314 *Mr. Costa. Well, thank you for the question. And I
2315 think it has been said earlier today -- and we agree -- that
2316 all energy sources have a place. But when it came to Winter
2317 Storm Fern, it was evident that renewable sources weren't
2318 there. It was the dispatchable fuels like natural gas,
2319 nuclear, and, in this case, oil that really took the moment
2320 and ensured that we kept the lights on.

2321 *Ms. Lee. And Mr. Mattison, Secretary Wright has argued
2322 that a more levelized demand profile, where electricity
2323 demand is kept stable throughout the day, could help reduce
2324 costs by minimizing the need to ramp power plants up and down
2325 throughout the day. From an operator's perspective, could
2326 you explain how policies that encourage more consistent
2327 electricity demand might help reduce prices for consumers?

2328 *Mr. Mattison. Yes. Well, right now what we have is --
2329 I think what he is talking about and you are referring to is
2330 when there is peak demands it is usually between, in our
2331 service territory, 1:00 p.m. and 7:00 p.m. Like, in the
2332 summertime or wintertime, that is when the most consumption

2333 is. We have a very good energy efficiency program in all
2334 three of our jurisdictions to encourage a better use and
2335 utilization of the energy dollar that a customer spends.
2336 That is that is one way.

2337 Also making sure that you have a diversified mix in your
2338 portfolio, I think, is important. You are not putting all
2339 your eggs in one basket. So I look at our portfolio -- and
2340 it is done this way on purpose -- where we have coal, we have
2341 natural gas, we also have wind resources. And so at any
2342 point in time during the day, one of those is going to be a
2343 little less expensive than the other. So we use what is
2344 called economic dispatch through our regional transmission
2345 organization, and I think that is something that has proven
2346 to be very cost conscious for our consumers and we need to
2347 continue with that.

2348 *Ms. Lee. Thank you, Mr. Chairman, I yield back.

2349 *Mr. Latta. Thank you very much. The gentlelady yields
2350 back. The chair now recognizes the gentlelady from Iowa's
2351 1st district for five minutes for questions.

2352 *Mrs. Miller-Meeks. Thank you very much, Mr. Chairman
2353 and Ranking Member Castor, for holding this important hearing
2354 on the lessons learned from recent Winter Storm Fern, which
2355 was one of the few winter storms that did not affect Iowa to
2356 the degree it affected the southeast.

2357 But Winter Storm Fern showed us an uncomfortable truth

2358 about our grid: This is not a picture of a confident, well-
2359 planned system; it is a picture, as Mr. Robb has said, of a
2360 system boxed in by infrastructure decisions made years ago.
2361 Prolonged coal, high demand, and regional fuel constraints
2362 all arrived at once, and in many ways the grid performed
2363 better than in past events because of years of winterization
2364 and hard lessons from Uri and Elliot.

2365 The lesson from Fern is that we are asking more of the
2366 grid in every region, and increasingly relying on emergency
2367 tools and extraordinary coordination to navigate conditions
2368 that are becoming more common, not more rare. And at the
2369 same time, we have layered on emergency orders, special
2370 directives, and broad must-run orders that in some regions
2371 effectively over-procure generation and crash prices. Those
2372 tools helped us through Fern, but they are not a sustainable
2373 business model for a grid that is about to serve even larger
2374 loads.

2375 Data centers, advanced manufacturing, and
2376 electrification on many levels of our economy are driving
2377 demand up quickly, yet building the infrastructure to serve
2378 that demand -- modern gas plants and nuclear storage, new
2379 pipelines, transmission lines, or any renewable source, which
2380 Iowa does have -- takes years longer than it should because
2381 technology -- not because technology is unproven, but because
2382 our permitting pathways are slow, fragmented, and

2383 unpredictable.

2384 When we fail to build, everyone in the system has less
2385 room to maneuver when the weather turns. My aim today is to
2386 connect those dots. If we want a grid that can meet historic
2387 load growth without lurching from one emergency order to the
2388 next, we need to reform permitting so that necessary projects
2389 can be built on timelines that match the needs of households,
2390 businesses, and critical institutions.

2391 Mr. Robb, during Fern we saw heavy use of emergency
2392 authorities and operator alerts. From your perspective, are
2393 we beginning to normalize emergency actions because we have
2394 under-built the system?

2395 *Mr. Robb. I certainly hope not, but I believe in the
2396 situations that we found in Fern and will probably find in
2397 the next two or three winters, we are probably going to have
2398 to rely on those kinds of actions until we get the grid up to
2399 scratch to deal with the situations on their own.

2400 *Mrs. Miller-Meeks. And looking back at Winter Storm
2401 Fern, if the projects currently stuck in interconnection
2402 queues and permitting processes had been in service, how
2403 different would the system's risk profile have been?

2404 *Mr. Robb. It would have been better, but I couldn't
2405 say by how much.

2406 You know, one of the issues we are seeing is that, even
2407 when things clear the queue, the interconnection queue, it

2408 still takes a long time for them to get built and, in many
2409 cases, they don't get built at all. And that is true for
2410 projects that have strong state sponsorship as well. So the
2411 interconnection queue is increasingly a hurdle, but it is not
2412 sufficient to count on that generation showing up in a
2413 certain timeframe.

2414 *Mrs. Miller-Meeks. So it is difficult to quantify how
2415 much of our near-miss problem is a build-out problem.

2416 *Mr. Robb. Yes. That was said much more eloquently.

2417 *Mrs. Miller-Meeks. Mr. Costa, you note that pipelines
2418 were issuing customer-specific operational flow orders to
2419 generators during Fern. Can you walk us through what those
2420 OFOs look like in practice, who got curtailed first, how much
2421 notice they had, and what that meant for gas-only generators
2422 versus dual-fuel units in New England and New York?

2423 *Mr. Costa. Yes, there was constant -- and thank you
2424 for the question -- and there was constant communication
2425 going on, and that is part of the collaboration that took
2426 place during Winter Storm Fern, especially with the
2427 pipelines, with the producers, ISOs, all the way down to the
2428 generators. And their goal was to ensure -- to keep them on
2429 as long as they could without them taking more than they
2430 should so it wouldn't hurt the home heating customers.

2431 It just got to a point where they ended up shutting down
2432 the -- especially the oil, the dual-fuel ones that can go on

2433 oil, but unfortunately also the gas-only generators who could
2434 get gas from Marcellus Shale if we put pipelines in the
2435 ground. We are not able to get gas.

2436 *Mrs. Miller-Meeks. There are so many questions we
2437 could certainly ask about this, but in a state that has a
2438 myriad of generation of electricity and power from numerous
2439 sources, and having visited MISO, let me just ask you, Mr.
2440 Robb, as the FERC representative. So when we have rules or
2441 legislation that is taking generation offline without
2442 addressing the need for how we are bringing generation online
2443 -- and I am referring specifically to Power Plan 2.0 under
2444 the past administration and the tailpipe admission rule which
2445 is rapidly developing electric vehicles -- so we are taking
2446 energy offline and increasing demand for energy, and that is
2447 even without data centers and advanced manufacturing. How
2448 much stress does that put on the grid?

2449 *Mr. Latta. Well and I am sorry --

2450 *Mrs. Miller-Meeks. And reliability.

2451 *Mr. Latta. -- to say that the gentlelady time has
2452 expired. But if you could answer written -- in a written
2453 statement back to the gentlelady, we would appreciate that.

2454 [The information follows:]

2455

2456 *****COMMITTEE INSERT*****

2457

2458 *Mr. Latta. The chair now recognizes the gentleman from
2459 Colorado's 8th district for five minutes for questions.

2460 *Mr. Evans. Thank you, Mr. Chairman, Ranking Member.
2461 Thank you, of course, to all of the witnesses for coming
2462 today.

2463 As my colleagues on this committee and my constituents
2464 back in Colorado's 8th congressional district know, I am a
2465 strong advocate for all-of-the-above energy because we have
2466 it all. Four percent of U.S. crude comes out of my district,
2467 but we also have one in two wind generators were made in my
2468 district, some of the biggest solar projects, geothermal,
2469 battery, the last vestiges of what used to be nuclear
2470 generation in Colorado. So we need to have that because we
2471 know what the statistics say: We are going to need more
2472 power on the grid. I think it is 165 gigawatts more in the
2473 next 4 years than we currently generate right now.

2474 There is a right way to do wind and solar and variables.
2475 And unfortunately, what the ruling Democrats in my home state
2476 in Colorado have done is the absolute wrong way to do it,
2477 which is one-size-fits-all, heavy-handed government mandates.
2478 They have declared war on coal and oil and gas production in
2479 pursuit of their truly unattainable net zero goals. And as
2480 states around the country have been investing in growing
2481 their generation, Colorado has actually declined in how much
2482 electricity they are producing. We made 2,000 gigawatt hours

2483 less electricity last year than the year before that. And as
2484 we all know, when the supply goes down the costs go up.

2485 And so my first question -- this is just going to be a
2486 yes-no question to the entire panel -- do state mandates that
2487 remove dispatchable energy from generation portfolios build
2488 more reliable and affordable grids or less reliable and
2489 affordable grids?

2490 So I guess yes is more reliable and no is it is less
2491 reliable. So a yes-or-no question. We will just start at
2492 the left.

2493 *Mr. Robb. I would say no.

2494 *Mr. Mattison. No.

2495 *Mr. Goggin. It depends on what you are replacing it
2496 with.

2497 *Mr. Costa. No.

2498 *Mr. Evans. Thank you. And Mr. Goggin, thank you for
2499 the answer. I just want to point you to a previous quote
2500 that you have, which is, "A diverse generation mix increases
2501 resilience," which I would assume includes oil, gas, coal?

2502 *Mr. Goggin. It depends on what you have already. If
2503 you have a lot of that, then more diverse would be less of
2504 that. You would be bringing in other things. It depends on
2505 what you have.

2506 *Mr. Evans. So there is a place for oil, gas, and coal.

2507 *Mr. Goggin. It depends on what you have on your

2508 generation mix. And if you have -- you know, some places
2509 have --

2510 *Mr. Evans. So if you have --

2511 *Mr. Goggin. -- abundant hydro.

2512 *Mr. Evans. So there is a place for oil and gas and
2513 coal on that generation mix.

2514 *Mr. Goggin. It depends on what resources you have.

2515 *Mr. Evans. Okay. Well, I think a diverse generation
2516 mix includes oil, gas and coal. So thank you for that.

2517 To Mr. Robb, NERC's long-term reliability assessment
2518 mentions the significant consequences of retiring fossil fuel
2519 generation at a pace that energy providers and the supply
2520 chain can't keep up with. In 2025 Colorado was responsible
2521 for retiring 10 percent of the country's dispatchable
2522 baseload power, despite producing only 2 percent and,
2523 actually, as we just heard, declining in producing 2 percent
2524 of the nation's power.

2525 And so my question to you: What impact does the
2526 premature retirement of coal plants and other baseload
2527 dispatchable energy like natural gas, what does that have on
2528 electricity costs for ratepayers?

2529 *Mr. Robb. So we don't do the economic analysis of what
2530 it means for rates. So be clear on that. But it doesn't
2531 bode well because we are replacing generally older
2532 depreciated assets and bringing on, you know, high-fixed-cost

2533 assets at a time of relatively high interest rates. So I
2534 can't do the math in terms of -- in my head as to whether it
2535 is higher or lower, but it is certainly putting pressure on
2536 affordability.

2537 *Mr. Evans. What about reliability? Can you speak to
2538 reliability?

2539 *Mr. Robb. I can definitely speak to reliability. The
2540 benefits of having what I call spinning mass generation,
2541 stuff that kind of generates power the old-fashioned way,
2542 from a reliability perspective, based on the grid we have
2543 right now, is absolutely essential. And one of the things
2544 that concerns us about the retirements is that we are losing
2545 spinning mass generation and we are replacing it with power
2546 electronic-based generation that doesn't behave the same way.

2547 *Mr. Evans. Got it. That makes perfect sense to me
2548 because of what we have seen happen in Colorado.
2549 Fortunately, we -- I have some statistics that I can mention
2550 about reliability.

2551 The ruling Democrats in Colorado and their drive for
2552 this net-zero variable-power-only is going to cost our state
2553 \$61 billion. That is not my statistic. That is the Colorado
2554 Energy Office's statistic. And we know that if utility
2555 providers have to go funnel \$61 billion into these failed
2556 policies, they can't upgrade the grid, they can't invest in
2557 reliable generation.

2558 We have seen the results in Colorado. Just this week we
2559 had to do our fourth power shut-off because we don't have a
2560 reliable grid in Colorado. Not the fault of the utilities.
2561 That is the fault of the mandates coming from the ruling
2562 state Democrats.

2563 And I am out of time, so I will yield back to the chair.

2564 *Mr. Latta. Thank you very much. The gentleman yields
2565 back and the chair, seeing no other members wishing to ask
2566 questions, I want to thank our witnesses for appearing before
2567 us today.

2568 And our members may have additional questions for you,
2569 and I remind members that they have 10 business days to
2570 submit additional questions for the record. And I ask the
2571 witnesses to do your best to respond within 10 business days
2572 in receipt of those questions.

2573 I ask unanimous consent to insert in the record the
2574 documents included on the staff hearings documents list.

2575 Without objection, so ordered.

2576 [The information follows:]

2577

2578 *****COMMITTEE INSERT*****

2579

2580 *Mr. Latta. And without objection, the subcommittee is
2581 adjourned.

2582 [Whereupon, at 12:09 p.m., the subcommittee was
2583 adjourned.]