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6	NATIONAL PETROLEUM COUNCIL MEETING
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14	TUESDAY, DECEMBER 14, 2021
15	9:00 A.M.
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25	Reported by: George Quade, CERT

National Petroleum Council Meeting

12/14/2021

1	INDEX	
2		PAGE:
3	Call to Order	3
4	Remarks by J. Larry Nichols, Chairman of NPC	4
5		
6	Remarks by the Honorable Jennifer Granholm,	
7	Secretary of Energy	5
8		
9	Questions between Council and Secretary	
10	Granholm	14
11		
12	Administrative Matters	40
13		
14	Closing Remarks	48
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	PROCEEDINGS
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3	(Meeting called to order, 9:00 a.m.)
4	MR. L. NICHOLS: So with that, I will again
5	welcome everyone, ladies and gentlemen, to the 131st
6	meeting of the National Petroleum Council, and the
7	second virtual meeting of this Council, and I'm sure we
8	all hope the last.
9	Nevertheless, welcome, everyone. If no one
10	has any objection, I will dispense with the calling of
11	the roll. For the members of the Council, the online
12	registration will serve as our official attendance
13	record.
14	We also have a YouTube audience that has been
15	invited to watch the livestream of our proceedings.
16	This virtual audience includes members of the public,
17	press, and other individuals who are interested in this
18	Council and our work.
19	I would now like to introduce you to our
20	virtual head table. We're pleased to have, of course,
21	the Honorable Jennifer Granholm, Secretary of Energy;
22	Darren Woods, NPC Vice Chair; Ryan Lance, Chair of the
23	NPC Agenda Committee; Byron Dunn, Chair of our Finance
24	Committee; Jim Hackett, Chair of the Nominating
25	Committee; Jennifer Wilcox, Acting Assistant Secretary

- 1 for Fossil Energy and Carbon Management; and, of
- 2 course, Marshall Nichols, the long-time Executive
- 3 Director of our Council.
- 4 Let me begin by updating the members of the
- 5 Council on our meetings with the Secretary. We met
- 6 with her in May, shortly after she took office, to
- 7 review possible study topics, which resulted in the
- 8 hydrogen energy request that we will consider later in
- 9 this meeting, and of course led to ongoing discussions
- 10 about a potential second study on reducing greenhouse
- 11 gases from the natural gas supply.
- 12 Also, at her request, the Cochairs'
- 13 Coordinating Committee met with the Secretary virtually
- 14 last week. At that meeting, we had a very useful and
- 15 candid conversation acknowledging both the importance
- 16 and the incredible complexity of the energy transition.
- 17 Council members are, of course, eager to meet
- 18 the needs of the changing energy system in coming
- 19 years, and the current challenges of post-pandemic
- 20 energy demand. Finding a path forward for reliable and
- 21 affordable and lower carbon energy is the direction we
- 22 all desire for this nation and the world. The Council
- 23 stands ready to assist this administration in every way
- 24 that we possibly can.
- With that said, our first order of business is

- 1 to hear from the Secretary of Energy, the Honorable
- 2 Jennifer Granholm. She served as Governor of Michigan
- 3 for two years, and prior to that was Michigan's
- 4 Attorney General.
- A year ago, she was nominated by President
- 6 Biden to head the Department of Energy, and in February
- 7 of this year was sworn in to be the 16th, and just the
- 8 second woman, Secretary of Energy.
- 9 With that, we're honored to have you,
- 10 Secretary. The floor is yours.
- 11 SECRETARY GRANHOLM: Thank you so much, Larry,
- 12 for the introduction. Friendly amendment: I served as
- 13 Governor for two terms, not two years. And --
- MR. L. NICHOLS: Ahh, sorry.
- 15 SECRETARY GRANHOLM: -- one of those years was
- 16 a term in and of itself. So just a slight amendment.
- 17 Anyway, thanks so much for all you do as the
- 18 leader of the National Petroleum Council, and thanks to
- 19 all of you who are joining us today. I also want to
- 20 welcome the new members who were recently appointed. I
- 21 look forward very much to hearing your insights on the
- 22 state of the energy market and the risks and the
- 23 opportunities that are ahead.
- 24 And I do want to start by acknowledging how
- 25 much I appreciated really the opportunity to speak with

- 1 some of you during last week's Cochairs' Coordinating
- 2 Committee. You know, it was candid, and I'm really
- 3 grateful. I'm all about having candid conversations
- 4 because that's the only way we work together to solve
- 5 some of the biggest -- the biggest problems facing not
- 6 just our country, but our globe. So thank you for
- 7 that.
- I also know that there are some deeply
- 9 valuable perspectives represented on the full NPC, and
- 10 that's why I'm so glad to be able to spend some time
- 11 with you today.
- So what I heard from our Cochairs' meeting
- 13 last week is that your industry has been contending
- 14 with some serious challenges. That's especially true
- 15 when it comes to increasing production. There are
- 16 struggles around financing. It takes time to get
- 17 through permitting and to get infrastructure in place.
- 18 This is the best country in the world to do business,
- 19 but even here getting through all the wickets is hard.
- 20 So I want to emphasize -- and this is part of
- 21 what we discussed last week -- that by and large the
- 22 issues around current production do not stem from
- 23 decisions made by the Biden administration. As I
- 24 mentioned last week, there are over 9,000 permits for
- 25 extraction on public lands that are sitting unused, and

- 1 there are over 23 million acres of leases on and off
- 2 shore that are sitting idle. And so while I understand
- 3 that you may disagree with some of our policies, it
- 4 doesn't mean that the Biden administration is standing
- 5 in the way of your efforts to help meet current demand.
- And so my message to the public from the White
- 7 House podium is the same one that I will reiterate to
- 8 you here today, which is that consumers, as you know,
- 9 are hurting at the pump, and with inflation -- and
- 10 energy is a big part of that, and you clearly have some
- 11 important tools to alleviate that pain.
- So I hope you'll hear me say that please take
- 13 advantage of the leases that you have. Hire workers,
- 14 get your rig count up. You know, right now, just to be
- 15 clear, we are averaging -- the Biden administration is
- 16 averaging higher approval for leases on public lands
- 17 than the last administration did, because our objective
- is to meet America's energy needs even while we
- 19 transition to this new future.
- 20 So one of the things I heard loud and clear
- 21 last week in the Cochairs' meeting is that it was
- 22 important to take the uncertainty of the crude oil
- 23 export ban off the table. And as I'm sure you saw, the
- 24 administration has responded. And I can report, as my
- 25 White House colleagues shared last week, we are not

- 1 considering reinstating the ban on exports. And I've
- 2 heard you loud and clear, and so has the White House,
- 3 and we wanted to put that rumor to rest.
- 4 Now, at the end of our meeting last week, I
- 5 was also asked whether this administration wants
- 6 progress or a fight. And I'll reiterate what I said, I
- 7 do not want to fight with any of you. We do see,
- 8 though, some of the things that some of you are saying
- 9 out there, or some of the organizations that are funded
- 10 by some of you. And I do think it's much more
- 11 productive to work together on future-facing solutions.
- 12 And I really appreciated what you said in the
- introduction, future-facing solutions rather than
- 14 making this administration a bogeyman.
- So my goal is to make progress on addressing
- 16 climate change and deploying clean energy, while
- 17 keeping energy affordable and reliable. Both have to
- 18 happen. And these are goals that many of you have told
- 19 me you share, and we can do this together. You know,
- 20 we know climate change is happening. We know climate-
- 21 charged super extreme weather, you know, poses a
- 22 massive threat to the long-term health of this country,
- 23 but also to your businesses. I mean, Hurricane Ida
- 24 alone cut U.S. oil output by up to 30 million barrels,
- 25 which is the worst loss in 16 years.

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1 I mean, in other words, the cost of the 2 inaction hurt you, too, but I also want to focus on the 3 great fortunes that await if we get moving together in 4 the same direction. And I've said this before, the global market for clean energy technology just keeps 5 6 growing, \$23 trillion by the end of this decade at a 7 minimum. I mean, the potential is enormous, and all of 8 you are uniquely positioned to reap the benefits, even 9 considering the headwinds that are facing oil and gas. And I know that so many of you realize this 10 and are moving in this direction, because it's 11 12 reflected in the actions that you have taken to widen 13 your energy portfolios, including, for example, the 14 joint effort to build a world-class carbon capture and storage hub in Houston, Darren. And I even got a call 15 16 -- I've been talking to a number of you. You know, 17 I've seen what you are saying and doing. And I got to see Air Liquide's work in hydrogen and hydrogen fuel 18 19 cell technology when I visited one of their facilities 20 earlier in the year in Houston. 21 You know, we need more -- we need more. 22 need more of you pursuing those kinds of efforts.

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not lecturing at you. You see what's happening.

Department of Energy is ready to help you raise your

ambitions and work together. The last time we met back

- 1 in May, I did talk a little about the incredible
- 2 alignment between the fossil energy industry's work
- 3 force and infrastructure and technical knowhow and all
- 4 that's needed to harness, for example -- some of you've
- 5 heard me say this before -- geothermal energy. I mean,
- 6 cracking the cost questions around geothermal would
- 7 just be a game-changing development. And nobody is
- 8 better suited than oil and gas companies who are
- 9 already drilling experts. So I hope that we can work
- 10 together to make that happen. You know, let's work
- 11 together to bring down the costs of a range of
- 12 promising technologies.
- For example, our Energy Earthshots Initiative
- 14 is all about commercializing the next generation of
- 15 clean energy sources. Two of them would be
- 16 groundbreakers for this industry. Our Hydrogen
- 17 Earthshot, you know, we are aiming to lower the cost of
- 18 clean hydrogen to \$1 per one kilogram in one decade.
- 19 Our Carbon Negative Earthshot is aiming to reduce the
- 20 cost of CO2 removal to less than \$100 per net metric
- 21 ton. You know, I've already asked you, as was
- 22 described, to undertake a study on how we can scale
- 23 hydrogen deployment, much like the excellent road map
- 24 you put together on CCUS a couple of years ago. And I
- 25 sure hope to see that request move forward. I know

- 1 you'll be considering it.
- I hope you'll seize the other opportunities to
- 3 get these technologies market ready, starting with the
- 4 demonstrating projects that are supported by the
- 5 Bipartisan Infrastructure Law; huge opportunities
- 6 there.
- 7 You know, granted, I know this is all going to
- 8 take some time, but there's so much that this industry
- 9 can do to lower emissions in the here and now. I know
- 10 the Council has discussed a new study on the topic of
- 11 reducing methane and other greenhouse gas emissions
- 12 from natural gas; fully in favor of that.
- 13 I've been encouraged to learn that some of you
- 14 are already taking really concrete steps to address
- 15 methane leaks in the supply chain. We're working on
- 16 this ourselves in support of President Biden's Methane
- 17 Emissions Reduction Action Plan.
- 18 We're awarding \$35 million to 12 projects that
- 19 are focused on technologies to remove methane
- 20 emissions. I know Jen Wilcox is on today, and she'll
- 21 be shepherding that -- those efforts. There are over
- 22 100 countries that have taken the global methane pledge
- 23 to cut methane emissions 30 percent by 2030. So, you
- 24 know, that is a huge market opportunity as well. And
- 25 when you -- when you add it all up, I think you will

- 1 see that our focus is really on growing the energy pie.
- 2 What we need is more energy, more affordable, reliable
- 3 energy, and we need more and more coming from clean
- 4 zero carbon sources.
- 5 So that's why on top of the Bipartisan
- 6 Infrastructure Law, we do need the rest of President
- 7 Biden's Build Back Better agenda. It just makes little
- 8 sense for this administration to stand in the way of
- 9 oil and gas production as we come back from this
- 10 pandemic. And just as that would make little sense, it
- 11 does make little sense, I think -- or short -- it would
- 12 be short-sighted for the oil and gas industry to try to
- 13 hold back clean energy deployment tomorrow.
- So, you know, we -- we want to work with you
- 15 on this. You know -- you know, obviously, you're
- 16 seeing it everywhere, that there's global momentum
- 17 behind this transition. There is just no holding it
- 18 back. I just -- you know, when I was governor of
- 19 Michigan, for years we battled the CAFÉ standards, the
- 20 Corporate Average Fuel Economy standards, for cars.
- 21 And then came the more fuel-efficient imports. And we
- 22 still battled the trend, but the consumers spoke, and
- look what happened. This weekend, the U.S. auto
- 24 industry, during the recession, went bankrupt. And the
- 25 suppliers went bankrupt before that; the biggest

- 1 bankruptcies in U.S. history. That near-death
- 2 experience woke us up, and so we decided to diversify
- 3 into car 2.0, which is the electric vehicle. And now
- 4 those automakers that were so fiercely supportive of
- 5 making sure that the CAFÉ standards were not out of
- 6 touch with where they were going, they are now pledging
- 7 to have half their fleets electric by 2030.
- 8 So, you know, as the old saying goes, as the
- 9 hockey fans in Michigan recite, you always want to
- 10 skate to where the puck is going, is headed. So many
- of you are doing this, I know. I just wanted you to
- 12 hear directly from me, I just hope that the rest of you
- 13 will be part of this energy 2.0. And I know for some
- 14 that is not going to be easy -- I know for all that's
- 15 not going to be easy. And I know it's not going to be
- 16 painless, but I firmly believe that for those who
- 17 embrace the change rather than fighting it will be
- 18 rewarded on the other side.
- 19 So going forward I hope we will not allow
- 20 ourselves to get caught up in pointing fingers at one
- 21 another when we disagree. Instead, I hope we can keep
- 22 pointing to the future. So, thank you for your candor;
- 23 thank you for working with me; thank you for being part
- 24 of this Council and for working together on solutions.
- 25 MR. L. NICHOLS: Thank you very much for your

- 1 comments. They're appreciated as always.
- 2 The Secretary has graciously agreed to take
- 3 comments, so we appreciate that. Of course with the
- 4 challenge of managing a virtual meeting of this size,
- 5 we asked Council members to send in their questions in
- 6 advance, and we have some. I will start it off.
- 7 Last week, we listened to Dan Yergin, who, as
- 8 always, is eloquent in his Atlantic Magazine article.
- 9 And he talked about how the transition to energy will
- 10 be complicated, to get the reliable, affordable, whole
- 11 carbon energy is going to require an unprecedented
- 12 advancement in technology, in investment, in consumer
- 13 behavior, the list goes on and on. At the same time,
- 14 we must ensure that our existing energy sources are
- 15 adequate to support that transition until we get to the
- 16 new economy.
- 17 So my question to you, Madam Secretary, is how
- 18 can we best focus on our efforts together on this
- 19 progress? Do you have any specific ideas in that area?
- 20 SECRETARY GRANHOLM: Yeah. I mean, I do. And
- 21 I thank you for this question, because it gets to this
- 22 notion of growing the energy pie. I mean, since
- 23 January of this year, just as an example, the
- 24 Department of Energy has put out over \$2.5 billion to
- 25 support clean energy research development,

- 1 demonstration, and deployment, RDD&D. We've got over
- 2 \$40 billion in loans available for large-scale clean
- 3 energy infrastructure projects.
- 4 I mentioned earlier that the Bipartisan
- 5 Infrastructure Law, that includes funding for clean
- 6 energy demonstration projects like we have never seen
- 7 before, \$21 billion for next generation technologies
- 8 like carbon capture, clean hydrogen, storage, and that
- 9 Build Back Better Act is going to add levels of funding
- 10 for clean deployment that we've never seen before
- 11 through a combination of tax incentives and rebates and
- 12 grants and the like.
- So, you know, this administration is doing
- 14 everything we can to improve technology and incentivize
- 15 investment and guide consumers toward clean energy
- 16 products even as we work to ensure that Americans have
- 17 reliable access to affordable energy right now.
- 18 So I think that together we can work on -- you
- 19 know, you could help first by ramping up production in
- 20 oil and gas and keep prices affordable. And we
- 21 certainly are open to conversations around what we can
- 22 do to address the challenges that you're facing on that
- 23 front, but most of all we should be taking any and
- 24 every opportunity to work together on clean energy
- 25 innovation to figure out how to maximize your -- you

- 1 know, your expertise and minimize emissions.
- 2 You know, I know that a lot of that starts
- 3 with communication, and I appreciate this. So let's
- 4 keep having those conversations and identifying ways to
- 5 help each other. But I'm telling you, the technologies
- 6 that have been funded in the Bipartisan Infrastructure
- 7 Law are in many ways right up your alley in terms of
- 8 partnering on zero carbon strategies like clean
- 9 hydrogen.
- 10 And in addition to that, in that second piece
- 11 of legislation, for those of you who have expressed
- 12 interest, for example, in capitalizing on your
- 13 expertise in offshore platforms, you know, being
- 14 providers of offshore wind capabilities, you know,
- 15 there obviously are oil and gas companies that have
- 16 transitioned fully into this space. We're going to
- 17 need to build that. I mean, the jackup ships, the
- 18 technology, all of that that you do already, can be
- 19 used in this new space.
- 20 And as I mentioned, geothermal, you all are
- 21 such experts in pinpoint drilling, we've got so much
- 22 geothermal beneath our feet. And you may have looked
- 23 at this years ago, and, you know, discarded it because
- 24 maybe the fracking technology -- you weren't thinking
- 25 about it, but I'm asking for a fresh look at this

- 1 because there is so much subsurface energy that is
- 2 clean and renewable beneath our feet that you guys hold
- 3 the keys to.
- 4 All of that is to say we can do both. We can
- 5 provide reliable energy and we can invest in new
- 6 technologies. And we can partner together on the
- 7 things that make sense and provide opportunity for both
- 8 citizens as well as your industry.
- 9 MR. L. NICHOLS: Thanks, appreciate those
- 10 comments.
- 11 With that, we'll move on to ask others their
- 12 questions. I will call upon you. When I do, identify
- 13 yourself and your organization for the benefit of the
- 14 Secretary and for the record.
- 15 I'd first like to recognize our Vice Chairman,
- 16 Darren Wood. Darren?
- 17 MR. WOODS: Thank you, Larry. And good
- 18 morning, Madam Secretary. Good to see you again.
- 19 Darren Woods with Exxon Mobil.
- 20 You've touched on, I think, that -- I know in
- 21 my conversations with the industry players, we're very
- 22 engaged in trying to develop carbon capture and
- 23 storage, clearly one of the areas, hydrogen, advanced
- 24 biofuels. And you referenced some of the legislation,
- 25 some of the money that's being funded into some of

- 1 these important technologies.
- 2 Question, Madam Secretary: In terms of
- 3 advancing research and looking at ways to lower the
- 4 cost for some of these critical technologies, I was
- 5 wondering if you could share your department's strategy
- 6 or approach to how we most effectively channel that
- 7 research money into advancing these technologies so
- 8 that collectively, society and the industry
- 9 specifically can lower that cost, deploy those
- 10 technologies, and deal with what -- the real challenge
- 11 here, which is the emissions of our energy system.
- 12 Thanks. Nice to see you again.
- 13 SECRETARY GRANHOLM: Thanks, Darren. And I'll
- 14 ask Jen Wilcox to chime in, too. Let me just start by
- 15 saying I'm super glad you raised it because it just
- 16 shows how much of a difference this Bipartisan
- 17 Infrastructure Law is going to make.
- 18 Our efforts to implement the law are underway,
- 19 and that's what I'll ask Jen to say a word about, but
- 20 while it's early, you know, we're already working to
- 21 align our base research and development programs with
- 22 technologies that the law focuses on. So when it comes
- 23 to CCUS, for example, the 12 -- I think it's \$12.1
- 24 billion that has been set aside in the Bipartisan
- 25 Infrastructure Law is really unprecedented. And to

- 1 make the most of that, we're going to be harnessing the
- 2 capabilities of our 17 national labs and various
- 3 research institutions that are also developing novel
- 4 technologies for CO2 capture and dedicated storage and
- 5 conversion into products like concrete.
- I mean, essentially we're looking at
- 7 technologies, and technologies with high potential, to
- 8 reduce costs and trying to find opportunities to test
- 9 out those new techniques for technologies at power
- 10 plants and at industrial facilities. And we're going
- 11 to be working to build hubs for carbon dioxide removal
- 12 and hydrogen, as you're aware, which will similarly
- 13 work to commercialize some of the advances that are
- 14 uncovered by the research and development side.
- 15 So we'll be leveraging two decades of
- 16 investment in carbon storage to support the development
- 17 of commercial transport and storage facilities. And it
- 18 gives us a great opportunity to partner since we could
- 19 use power plants or industrial facilities that you
- 20 operate as sites of our demonstration projects.
- 21 I don't know, Jen, if you want to say any more
- 22 about the implementation side.
- MS. WILCOX: Sure. Thank you so much. I
- 24 think you actually covered a lot. Really, what we're
- 25 looking to do is recognize that we -- just as the

- 1 Secretary mentioned, we've been investing in carbon
- 2 capture over the last two decades. And we have three
- 3 successful demonstration scale projects like the Air
- 4 Products Project in Texas, like ADM in Illinois that's
- 5 coupled to the first Class VI well for dedicated CO2
- 6 storage in the United States, in addition to Petra
- 7 Nova. So we have three successful demos, and we need
- 8 more. We need more of these demonstrations.
- 9 And so we're going to leverage the
- 10 infrastructure funding in order to look at broadening
- 11 the portfolio of approaches focusing also not just on
- 12 coal-fired power plants, but also natural gas fired
- 13 power plants, in addition to the industrial sector like
- 14 cement and steel. But we also need a place to put the
- 15 CO2, and so we need to expand our Carbon Safe Program.
- 16 Today in the United States, we have five
- 17 projects associated with Carbon Safe. We need more
- 18 than five. We need to look at regions like Ohio River
- 19 Valley, more in North Dakota and Wyoming, and also the
- 20 Gulf Coast and in Texas, where there's existing
- 21 infrastructure that can be leveraged from the oil and
- 22 gas industry to reverse the flow of carbon back into
- 23 the earth.
- 24 And so looking at really leveraging all the
- 25 expertise that we have already invested in, and also a

- 1 lot of the expertise that's here in this meeting today.
- 2 MR. L. NICHOLS: Okay. Thanks for those
- 3 insights, appreciate that.
- 4 Our next question comes from Jim Hackett, who
- 5 has chaired this Council in the past. Jim?
- 6 MR. HACKETT: Thank you, Larry.
- 7 Madam Secretary, Jen, thanks for being on the
- 8 call and working with us on new and important studies
- 9 for the country. I'm the president of Tesselation
- 10 Services, but I also have the great pleasure of
- 11 chairing the board of NuScale Power, which you are
- 12 putting a bunch of money behind for advanced nuclear,
- 13 and I want to thank your department for that support.
- 14 And we just -- we just announced a potential public
- 15 offering of that entity, which will allow us to access
- 16 additional outside capital in addition to what the
- 17 Department of Energy is doing. So we're very excited
- 18 about where that is headed.
- 19 I had a question regarding the oil and gas
- 20 business. It's part of what you were speaking to,
- 21 Madam Secretary, earlier, which is how do we get
- 22 investment going in the sector? And as you mentioned,
- 23 it takes a bunch of capital. One of the things we saw
- 24 in the pandemic with the drop in demand and prices was
- 25 a very dramatic decrease in investment, for obvious

- 1 reasons. And as we have tried to ramp back up to
- 2 satisfy some of the issues you and the President are
- 3 speaking about very vocally and very articulately,
- 4 we're having issues with accessing the financial sector
- 5 in a way that we traditionally had. Part of that is
- 6 due to social pressure outside of the administration,
- 7 but we're wondering if there is anything the
- 8 administration can do to help us at least with the
- 9 projections that we're going to still need hydrocarbons
- in the near term to solve that piece of the energy
- 11 puzzle a little bit better than we may be doing without
- 12 any influence from the administration.
- 13 SECRETARY GRANHOLM: Yeah, thanks -- thanks for
- 14 that. You know, obviously I can't speak for Wall
- 15 Street. I can't offer investment advice. But, you
- 16 know, I would say this -- and before I get into that
- 17 answer, I just want to say a word about the nuclear
- 18 side, Jim, because, you know, I have been referring to
- 19 this transition as really not a silver bullet but silver
- 20 buckshot. And that's the oil and gas side, too, right?
- 21 Decarbonizing energy is a piece of that buckshot;
- 22 nuclear is a piece of that buckshot, as well as the
- 23 traditional renewable stuff; geothermal is a piece of
- 24 that buckshot.
- I mean, we want to do all zero carbon

- 1 strategies so that we are not -- you know, that we're
- 2 not behind the eight ball. So, you know, this is why
- 3 the -- if we look at this landscape, I think the -- we
- 4 can all see the financial sector getting more and more
- 5 interested in clean energy investment opportunities.
- 6 You know, while COP26 was underway, I think there were
- 7 over 450 banks and asset managers and financial firms
- 8 that probably represented \$130 trillion assets that were
- 9 pledging to help decarbonize businesses by 2050. That's
- 10 40 percent of the world's global financial assets coming
- 11 -- you know, coming forward and saying they're committed
- 12 to going clean. And, of course, those are voluntary
- 13 steps.
- 14 But the point is we can see money moving in
- 15 that direction. And with that in mind, you know, I
- 16 would think that a way for, as you know, the oil and gas
- 17 companies to ensure that they're moving along with that
- 18 is to develop these -- and to continue to develop and
- 19 grow the serious plans for diversifying into a broader
- 20 energy company. Many of you are diversified energy
- 21 companies, but to really emphasize the diversification
- 22 and -- you know, the current energy environment shows
- 23 the importance for oil and gas in the near term. And if
- 24 you pair that with concrete steps toward clean energy,
- 25 to me that is a strong hand to play, demonstrating right

- 1 now we need it, we know we're going to continue to need
- 2 it, but we're also recognizing where the puck is going.
- 3 And I think that both of those will be very important.
- 4 And, you know, to the extent that there were --
- 5 I heard a number of complaints when the President and
- 6 others were calling for an increase in supply globally,
- 7 but not requesting it back home, or at least the
- 8 perception was that we weren't calling for an increase
- 9 in supply back home. We are calling for an increase in
- 10 supply back home. So if that -- you know, that
- 11 continued verbal exhortation helps, but I think what
- 12 will help long term mostly is to continue to diversify
- into energy 2.0.
- 14 MR. L. NICHOLS: Thanks. Our next comment, our
- 15 next question, comes from Don Paul, a long-time NPC
- 16 study contributor and member.
- 17 Don?
- 18 MR. PAUL: Thank you, and good morning,
- 19 everyone. Thank you, Madam Secretary, for engaging with
- 20 the Council this morning on these important discussions.
- 21 Continuing on the technology discussion, the
- 22 industry, as you know, has a long, successful track
- 23 record at innovating technology and development in terms
- 24 of expanding energy supply and reducing the cost of
- 25 energy.

- 1 We also, as part of that, has been a
- 2 longstanding and successful partnership between the
- 3 industry and the Department of Energy. As we move into
- 4 the energy transition and some of the challenges that
- 5 were discussed, such as financing for the industry, how
- 6 do you see the opportunities for the relationship
- 7 between the industry and the Department of Energy to
- 8 evolve to maximize our opportunities to continue
- 9 technology innovation together?
- 10 SECRETARY GRANHOLM: Yeah, thanks -- thanks for
- 11 that. And, you know, Jen, if you have anything to pipe
- 12 in after, you know, I respond, too, feel free.
- 13 You know, it is really true that we have to
- 14 continue to innovate in our approach to achieving these
- 15 goals. Right? There's far more need for investment in
- 16 research and development and demonstration and
- 17 deployment of clean energy and carbon reducing
- 18 technologies. And it gets back to what I was saying
- 19 earlier. I really believe that any company that
- 20 increases focus on advancing clean energy is
- 21 strengthening the argument for investors to buy in on
- 22 their future. And one partner you can always turn to is
- 23 going to be the Department of Energy. We're always
- 24 looking to support promising clean energy projects. And
- 25 few players out there have the means and the expertise,

- 1 as you noted, to bring some of these projects to life.
- 2 The Energy Act of 2020 and the Bipartisan
- 3 Infrastructure Law really spell out the U.S.
- 4 Government's priorities around energy innovation. You
- 5 know, we've talked today about some of the areas that
- 6 DOE is particularly interested in, from clean hydrogen
- 7 and carbon capture to geothermal and methane reduction.
- 8 So I hope we can find work -- you know, work together on
- 9 these. I hope we can, you know -- we can get started on
- 10 the demonstration projects in the Bipartisan
- 11 Infrastructure Law, which will require significant
- 12 private sector industrial partnerships to make them --
- 13 to make them come to life. And we want to tap into the
- 14 great, you know, scientists and researchers that you
- 15 have embedded in you to be able to achieve that.
- Jen, I don't know, do you want to add anything
- 17 on that?
- MS. WILCOX: I could just say quickly, you
- 19 know, one of the things that we're also focused on is
- 20 when we think about hydrogen production and clean
- 21 hydrogen, or we think about low carbon electricity,
- 22 we're also making sure that we couple to the feedstock,
- 23 that we understand how the fossil fuel is produced, and
- 24 also understanding the emissions associated with it,
- 25 which is why it's also exciting that this group is

- 1 considering methane and also the greenhouse gas
- 2 reductions associated with fossil fuel production.
- 3 And I mention this because there's actually
- 4 research in that area, too, that we need to -- although
- 5 we have the tools to monitor and understand where the
- 6 leakages take place today, and we have opportunities to
- 7 fix those leaks, there's also a lot of work to be done
- 8 in advanced monitoring, advanced sensing, so that we can
- 9 have predictability associated where the leaks might
- 10 take place, not to mention continuous monitoring across
- 11 -- you know, across the sector to be able to not just
- 12 understand one well, but to understand the portfolio of
- 13 wells across a basin and in a region to really be able
- 14 to understand, you know, what are the emissions
- 15 associated with how we extract fossil fuels out of the
- 16 earth today and make that extraction as sustainable as
- 17 possible to minimize those emissions. And that's a
- 18 really important piece that we are invested in, and we
- 19 want to make sure to not decouple the fossil fuel
- 20 feedstock from how we use the fossil fuels for energy
- 21 generation today.
- MR. L. NICHOLS: Good, okay. Let's move on to
- 23 midstream infrastructure, which of course is a critical
- 24 part of our industry, and a question from Alan
- 25 Armstrong. Alan?

- 1 MR. ARMSTRONG: Great. Thank you, Larry.
- 2 And good morning, Secretary Granholm. Thank
- 3 you again for spending time with us on these important
- 4 topics.
- 5 My question relates to infrastructure
- 6 permitting, and certainly specifically the National
- 7 Environmental Policy Act and what can be done to improve
- 8 there.
- 9 If we look back at the National Petroleum
- 10 Council's 2019 infrastructure report, which was labeled
- 11 Dynamic Delivery, we certainly at that time recognized
- 12 the need for infrastructure, which was mated right
- 13 alongside the carbon capture report that you referenced
- 14 earlier. And I think we continue to see that as a
- 15 really big challenge in terms of getting a much more
- 16 efficient permitting process, and I want to emphasize
- 17 that in that report.
- 18 And I think speaking for the industry in
- 19 general, we're not looking for lighter standards. We're
- 20 not looking to pull back on what we want to accomplish
- 21 in terms of environmental quality and public engagement
- 22 standards, but we are looking for a much more efficient
- 23 and reliable process as we get to that. And so really
- 24 under any scenario that you lay out for an energy
- 25 transition, infrastructure permitting is going to be

- 1 absolutely critical. And I think maybe one of the most
- 2 important things that we could tackle from an
- 3 administrative and a policy perspective is getting
- 4 infrastructure permitting process streamlined.
- 5 And so my question to you is -- and I know you
- 6 really do appreciate this issue, but I'm wondering how
- 7 the National Petroleum Council can work with the
- 8 Department of Energy in really bringing forward a voice
- 9 towards streamlining our permitting processes for
- 10 infrastructure.
- 11 SECRETARY GRANHOLM: Yeah. This is a great
- 12 question. Thank you. And Ryan Lance raised this last
- 13 week as well. You know, if we want to deploy clean
- 14 energy technology to scale, we've got to improve the
- 15 permitting process. And I know it frustrates many of
- 16 you. It frustrates certainly me. I hate bureaucracy
- 17 with a passion. And while I respect the goals of its --
- 18 the layers -- and layers add waste, honestly, and time,
- 19 even though you want to achieve the right end. So it's
- 20 already on our radar.
- 21 You know, we're working with our sister
- 22 agencies on this. We know that we have to engage
- 23 partners in the states as well since they make key
- 24 decisions on infrastructure siting and approval. And we
- 25 know that the Bipartisan Infrastructure Law made FAST-41

- 1 permanent and expanded its benefits to more types of
- 2 infrastructure projects. And we know, to your point,
- 3 that we're going to need, you know, CO2 pipelines; we're
- 4 going to need hydrogen infrastructure. So, you know,
- 5 there is no doubt that we've got to do this.
- 6 And that bill, it also encourages DOE and the
- 7 other federal agencies on that FAST-41 permitting
- 8 council, it encourages us to prepare or it exhorts us to
- 9 prepare one joint environmental impact statement; not
- 10 sequential, but one. So the hope is that that improves
- 11 speed and coordination and transparency, and of course
- 12 accelerates.
- So I can also tell you that, you know, DOE and
- 14 other agencies are looking at more focused tools that
- 15 can help us speed infrastructure deployment. So earlier
- 16 in the year, DOE made over \$8 billion available in loans
- 17 for transmission projects, for example. So DOE -- DOT
- 18 issued new guidance to enable the use of existing rights
- 19 of ways, for example, for siting transmission lines so
- 20 that we can take advantage and leverage the double
- 21 goals, whether it's road building or the putting up of
- 22 EV infrastructure, charging, and/or transmission, and/or
- 23 broadband. I mean, all of that requires digging. And
- 24 so, you know, in the spirit of dig once, we want to be
- 25 able to leverage existing infrastructure to be able to

- 1 make that happen.
- 2 You know, for offshore wind, we're considering
- 3 interagency agreements involving the Department of
- 4 Energy and the Coast Guard and the Army Corps and others
- 5 which could help clarify respective jurisdictions and
- 6 improve permitting and approval process for offshore
- 7 wind facilities, which is extremely complicated.
- 8 So, you know, we really welcome your advice as
- 9 well, particularly on areas like hydrogen and what that
- 10 infrastructure looks like; CO2, and -- you know, you all
- 11 have direct experience with the permitting process and
- 12 you've got a sense of where and how things can be
- improved, and you've already written a report on it. So
- 14 let us stay in communication about this because it is
- 15 very, very important.
- 16 MR. L. NICHOLS: Good. Let's shift a little
- 17 bit and focus on hydrogen. Our last two questions
- 18 really have to do with the hydrogen.
- 19 First, Mike Graff. Mike?
- MR. GRAFF: Thanks, Larry.
- 21 Secretary Granholm, Mike Graff with Air
- 22 Liquide. Thank you so much for being with us again
- 23 today.
- 24 As you've already mentioned, deploying clean
- 25 hydrogen at scale is key to the clean energy transition.

- 1 The path to achieving the at-scale production of clean
- 2 hydrogen is different depending on the production
- 3 method. For electrolysis, it clearly requires the
- 4 scaling of production facilities, infrastructure, as
- 5 you've mentioned, and renewable power.
- 6 For steam methane reforming, the focus is
- 7 really on reducing the carbon intensity through carbon
- 8 capture, while preserving both the economic benefits of
- 9 natural gas production, but also the co-produced natural
- 10 gas liquids that are so critically important to the
- 11 nation's chemical industry.
- 12 How can DOE and the NPC work together to ensure
- 13 that federal support and investment in hydrogen is
- 14 inclusive of all hydrogen production pathways in order
- 15 to advance the overall clean hydrogen ecosystem?
- 16 SECRETARY GRANHOLM: Yeah. Thank you. And
- 17 this, too, I will ask Jen to weigh in as well. But let
- 18 me just say that, you know, it's -- if we're trying to
- 19 get to zero -- when we say clean, we're talking about
- 20 zero carbon. Right? So that means if it is a natural
- 21 gas, if it's steam methane reforming, we have to make
- 22 sure that both CO2 is captured as well as methane leaks
- 23 are addressed.
- You're probably seen some of these studies that
- 25 have come out recently about blue hydrogen, and there's

- 1 a lot of blowback about it. So I want to be able to
- 2 prove them wrong; that we can button it up and that we
- 3 can do, you know, hydrogen that has, you know, natural
- 4 gas as the feed, but we're going to do it in a way that
- 5 is zero carbon emission. And this is why we've done
- 6 this Hydrogen Earthshot. It's to reduce the cost.
- 7 Obviously electrolyzers are the big cost on
- 8 green hydrogen, and we want to continue to bring down
- 9 those costs. But it is also why there is such a big
- 10 emphasis in the Bipartisan Infrastructure Law about
- 11 demonstration projects that will get us to this end so
- 12 that we -- there may be several vectors of research and
- 13 deployment that we need to attempt in order to get
- 14 there.
- I can tell you that, you know, hydrogen overall
- 16 is the number one issue that -- when I talk with my
- 17 counterparts in other countries, that people want to see
- 18 resolved. I mean, whether it is -- you know, it
- 19 converts into green ammonia, you know, hydrogen as an
- 20 energy carrier is just seen as the -- you know, a very
- 21 important part of that silver buckshot, I'll just say.
- 22 And we want to make that happen.
- Jennifer, I don't know if you want to say a
- 24 word about how that partnership can happen.
- MS. WILCOX: No, I think that -- absolutely.

- 1 So I think that we do need to think about these hydrogen
- 2 production processes as holistic, too. When you look at
- 3 steam methane reforming, you do have to ask where is the
- 4 steam coming from, and making sure that that process is
- 5 also decarbonized, looking at forward thinking processes
- 6 like autothermal reforming where you can get deeper
- 7 reductions in a single process, for instance, and
- 8 they're not separate in terms of decarbonization.
- 9 But also I think it's important that we have to
- 10 think about the future and aligning with net zero carbon
- 11 goals, and that we have to also ask ourselves what are
- 12 we doing with the hydrogen. Are we producing power? Is
- 13 it a feedstock to a synthetic chemical or fuel? Is it
- 14 used for fertilizer? And in thinking about, too, the
- 15 transition to green hydrogen because we need to move
- 16 down the cost curve on green hydrogen as well.
- 17 And so when we invest in infrastructure
- 18 associated with blue hydrogen, are there opportunities
- 19 to transition to green hydrogen in those locations, too?
- 20 Are there -- is there an abundance of low carbon energy,
- 21 for instance, for electrolysis? Is there water
- 22 available for electrolysis? And I think bringing these
- 23 together in a way that's forward thinking to align with
- 24 net zero is really critical.
- MR. L. NICHOLS: Good comments, thanks.

- 1 Our last question comes from Mike Wirth with
- 2 Chevron. Mike?
- 3 MR. WIRTH: Secretary Granholm, this is Mike
- 4 Wirth with Chevron. Nice to see you this morning. You
- 5 know, as you mentioned, the Department is poised to play
- 6 a key role in advancing the deployment of low carbon
- 7 hydrogen, as are many member companies here and those
- 8 not represented that have extensive experience in
- 9 producing and handling and using hydrogen, particularly
- 10 as Jen said in steam methane reforming, traditional
- 11 methods of hydrogen manufacture, but also experience
- 12 with developing industrial projects at scale.
- 13 And so my question relates to the
- 14 Infrastructure Act and how DOE will activate some of the
- 15 additional authorities that were included in that,
- 16 including support for hydrogen hubs. And so really two
- 17 questions: If you could comment on how the hydrogen hub
- 18 concept, along with other provisions in the act, will
- 19 support some of the work you've already referred to,
- 20 like the Hydrogen Earthshot.
- 21 And then, second, the Infrastructure Act had a
- 22 requirement for a hydrogen strategy and roadmap. And
- 23 our company is going to, you know, subject to the rest
- of today's meeting, end up in a leadership role on this
- 25 hydrogen study. I'd be interested in your comments on

- 1 the hydrogen strategy and roadmap and how that might
- 2 align with the NPC's hydrogen energy study. Thank you.
- 3 SECRETARY GRANHOLM: Yeah, thank you. Thanks
- 4 for that. And we hope it will align, because we would
- 5 love to have that study be informing, the roadmap.
- 6 Jen, I'm going to ask you to speak to the
- 7 specifics on the roadmap. But the hydrogen hubs, we
- 8 know that there are -- you know, there are regions of
- 9 the country that are already organizing around this. I
- 10 mean, I know, Darren, I'm looking at you. But we also
- 11 know that there are areas that -- and are looking at
- 12 different -- different colors of hydrogen. So there are
- 13 some areas that are looking at pink from nuclear, and
- 14 there are, you know, some that are looking at blue and
- 15 some that are looking at green.
- 16 And I would say the hydrogen hub concept -- and
- 17 I think we're going to be putting out very soon a notice
- 18 of intent, right, Jen, on getting feedback from areas
- 19 that are -- that want to -- or areas and entities that
- 20 want to provide input on the strategy. So to inform, to
- 21 make sure that we're doing this and thinking about it in
- 22 the right way.
- I do know that as we consider these hubs, we
- 24 want to consider not just the zero carbon strategy, but
- 25 also how those hubs impact communities, and particularly

- 1 disadvantaged communities. We want the -- you know,
- 2 we've got this Justice 40 commitment that 40 percent of
- 3 the benefits of the investments must address either
- 4 fossil communities, communities in transition, or
- 5 communities that have been disadvantaged particularly by
- 6 fossil extraction.
- 7 So that's going to be an important aspect of
- 8 our consideration, as well as making sure that there's
- 9 community buy-in. Some of the strategies that I've
- 10 heard that people are talking about, again, we haven't
- 11 selected a particular strategy yet, but I'm just giving
- 12 you some ideas of what inputs should be considered.
- 13 Some have partnered, for example, in their nascent
- 14 thinking with HBCUs or MSIs in trying to make sure that
- 15 all -- that we're considering particularly communities
- 16 of color; making sure that there is -- a robust jobs
- 17 component is going to be important.
- I know you're asking maybe for a more
- 19 technology roadmap, but I just want you to know sort of
- 20 the variables that will be, I think, considered.
- 21 And then the final thing I will say, and then
- 22 ask Jen to comment, is it's very interesting to consider
- 23 combinations of technologies. So whether it's hydrogen
- 24 and, you know, carbon capture, whether it's, you know,
- 25 some deindustrial -- you know, some industrial

- 1 decarbonization strategy that is coupled with an
- 2 existing plant, as I was mentioning before, you know, we
- 3 are interested in creating hubs that respond to a
- 4 variety of issues and technologies.
- 5 So, Jen, do you want to add anything?
- 6 MS. WILCOX: I'll just say quickly, you know,
- 7 in terms of the hubs, it's really about, number one,
- 8 sourcing the hydrogen. But as I mentioned before, as we
- 9 lock in infrastructure, making sure that we can lock it
- 10 in so that all forms of hydrogen, whether it's pink or
- 11 turquoise now, which is biomass sourced, or green or
- 12 blue, that we -- and I'll also say the end part is also
- 13 important. What are we using it for? Are we using it
- 14 for direct reduction of iron for clean steel production?
- 15 Are we using it to create low carbon or low emissions
- 16 ammonia, for instance, for fertilizer?
- 17 Is it used as a feedstock to also manage carbon
- 18 to produce synthetic fuels or e-fuels, for instance,
- 19 that can help with the aviation sector; really hard to
- 20 decarbonize today. Or is the hydrogen used for regional
- 21 transportation, or is it used for power? And so
- 22 recognizing all of these different areas that we can use
- 23 hydrogen, we also need to realize that we need to be
- 24 able to store hydrogen on a large scale. And that's
- 25 going to be a challenge.

- 1 And one of the things that we're doing at our
- 2 Office of Fossil Energy and Carbon Management is really
- 3 leveraging the expertise -- and this group knows it well
- 4 -- is subsurface storage and looking at that also in
- 5 terms of siting hubs such that we can store hydrogen in
- 6 the subsurface on a large scale in order to be used as a
- 7 feedstock for all of these different applications.
- 8 And, again, it goes back to kind of the carbon
- 9 management hubs. It's the same types of regions that
- 10 are heavy in industry today, so like the Ohio River
- 11 valley, maybe the Gulf Coast, right, which is -- you see
- 12 all of the refining, of course, and also in Texas. And
- 13 so in these same kinds of regions, we just need to make
- 14 sure we understand, like, if we're locking in the
- 15 infrastructure that we're locking it in not just for
- 16 blue but for these other opportunities as well.
- 17 MR. L. NICHOLS: Okay. Very good. Thanks
- 18 That concludes our questions. But I did get one note
- 19 from Dan Yergin, who Madam Secretary, noted in your
- 20 comments/answers to Jim Hackett's question, and he has a
- 21 request that you pass on your comments to the financial
- 22 regulators so that they do not inadvertently push
- 23 production offshore.
- 24 SECRETARY GRANHOLM: Got it.
- 25 MR. L. NICHOLS: That certainly is in the

- 1 interest of the -- the country as a whole.
- 2 So that concludes. Madam Secretary, thank you.
- 3 We appreciate your taking so much time. We note that
- 4 and duly appreciate that.
- 5 SECRETARY GRANHOLM: All right. Thank you so
- 6 much. Thanks to you all. You bet.
- 7 MR. L. NICHOLS: You bet. We will now move on
- 8 to administrative matters, which are necessary. And
- 9 we're going to have three different administrative
- 10 issues that we need to vote on. After each report,
- 11 you'll have the opportunity to answer a poll whether you
- 12 will approve or disapprove or abstain, if you wish.
- 13 We'll leave the polling open for a moment and then we
- 14 will move on.
- 15 Our first administrative item comes from the
- 16 Agenda Committee, which is chaired quite ably by Ryan
- 17 Lance. Ryan?
- 18 MR. LANCE: Thank you, Larry. And the -- I
- 19 wanted to really inform the Council that by letter dated
- 20 November 8th of 2021, a copy of which was sent to you on
- 21 December 6th, the Secretary of Energy, Jennifer
- 22 Granholm, who you just heard from, formally requested
- 23 the National Petroleum Council to undertake a study on
- 24 the deployment of low and zero carbon hydrogen energy at
- 25 scale through the value chain.

- 1 Now, pursuant to the NPC articles of
- 2 organization, our Chair, Larry Nichols, referred the
- 3 Secretary's request to the NPC Agenda Committee for our
- 4 recommendation as to whether the request is proper and
- 5 advisable for Council consideration.
- Now, the Agenda Committee unanimously found
- 7 this request to be fully consistent with the scope of
- 8 the study as envisioned by our Cochairs' Coordinating
- 9 Committee in its report on new study topics for the
- 10 Council to potentially undertake.
- I reported our initial thoughts on potential
- 12 topics at last December's Council meeting. Our final
- 13 report was approved by the Cochairs' Coordinating
- 14 Committee and sent to you in late February 2021.
- Now, as you may recall, the Council's Chair,
- 16 Vice Chair, Executive Director, and I, met with the
- 17 Secretary last May to review the work of the Cochairs'
- 18 Coordinating Committee, and we all agreed that the
- 19 hydrogen topic was the leading candidate for Council
- 20 study. Following further review by the Department, the
- 21 Secretary issued the study request before us today.
- Now, you heard in the Secretary's remarks this
- 23 morning that the Department is working on two
- 24 Earthshots, one of which is hydrogen. So she expressed
- 25 her expectations for this help the study could provide

- on the deployment of low and zero carbon energy,
- 2 hydrogen energy, at scale through the value chain.
- 3 So, accordingly, I am pleased to report that
- 4 the NPC Agenda Committee has found Secretary of Energy
- 5 Jennifer Granholm's November 8th, 2021, hydrogen study
- 6 request to be proper and advisable for NPC
- 7 consideration.
- 8 So, Larry, that completes the report of the
- 9 Agenda Committee, and on its behalf I move the Council
- 10 accept the Secretary's hydrogen study request. Thank
- 11 you.
- MR. HACKETT: I'd second that, Larry, if you
- 13 need it.
- 14 MR. L. NICHOLS: Yep. Thanks. We now have it
- 15 moved and seconded. Any questions from anyone? It's
- 16 going to be hard to see on the website, but if you do,
- 17 raise your hand and I will try and call on you. If not,
- 18 I will call for the poll to be open. And it is now open
- 19 so everyone can vote.
- 20 While we are doing that and waiting for the
- 21 polls, I just say a little -- a few more comments about
- 22 our second request, which is the reduced greenhouse
- 23 gases from -- I'm trying to get my own answer poll in --
- 24 which is greenhouse gases from natural gas supply
- 25 chains, which, of course, our industry has been working

- 1 on for some time. And the Agenda Committee is going to
- 2 review that request and provide its recommendation in
- 3 due course.
- 4 Our articles of organization permit us to
- 5 proceed with that study if the Agenda Committee
- 6 recommends it favorably, and if there's not a Council
- 7 meeting coming up in the near future, which of course
- 8 there will not be. So we anticipate that that study
- 9 will probably get kicked off here shortly.
- The results are now in on the agenda, and it is
- 11 approved. The hydrogen study is approved. And in
- 12 anticipation that that would be approved, we've already
- 13 started working on that study. And I'm pleased to say
- 14 that Mike Wirth with Chevron has agreed to chair that.
- 15 So, Mike, thank you very, very much for that. That's
- 16 going to be a very interesting project.
- 17 If anyone wants to volunteer -- if you don't
- 18 volunteer, the long arm of justice might reach out and
- 19 grab you anyway, but certainly if you want to volunteer
- 20 on that study, it should be very interesting.
- Next is the Finance Committee, which has been
- 22 headed by Byron Dunn for some time, quite capably.
- Byron, your report?
- MR. DUNN: Thank you, Mr. Chairman. In
- 25 addition to reviewing periodic performance reports

- 1 throughout the year, the Finance Committee has met twice
- 2 this year to discuss Council's finances, once in late
- 3 August and then again yesterday afternoon. I'm proud to
- 4 say we had 100 percent attendance, which indicates how a
- 5 committee retains and is still very engaged.
- 6 Our August meeting included a review of the
- 7 calendar year 2020 draft audit report, as well as the
- 8 IRS form 990 with Johnson and Lambert Company, the
- 9 Council's outside auditors. The auditors provided us --
- 10 the Council -- with a clean opinion letter, which agrees
- 11 that our financial controls are sound.
- 12 Yesterday afternoon, the Finance Committee
- 13 covered a variety of topics, including the 2021 year to
- 14 date status and projected year-end expenditures, as well
- 15 as the contribution collections. The Council
- 16 anticipates 2021 spending to be just under the budgeted
- 17 amount of \$4 million, which includes the continuation of
- 18 many discretionary cost reductions adopted back in 2020
- 19 at the onset of the pandemic.
- 20 Contribution collections are currently
- 21 anticipated to exceed 85 percent of the amount
- 22 requested. The Council's officers, the Finance
- 23 Committee members, and staff understand the financial
- 24 stress the contributions represent and greatly
- 25 appreciate the Council members' unwavering support,

- 1 especially over the last couple of years.
- 2 Yesterday the Committee also discussed and
- 3 agreed upon the proposal for the 2022 budget in the
- 4 amount of \$5,313,000, which assumes that the Council's
- 5 ongoing operations return to normal and provide
- 6 resources to begin the newly requested hydrogen study
- 7 and the likely second study on reducing greenhouse gas
- 8 emissions.
- 9 While the proposed 2020 budget represents an
- 10 increase over the 2021 -- I call it the lockdown budget
- 11 -- the total spending is consistent with 2018, a year in
- 12 which the Council also conducted two major studies.
- 13 Finally, the Finance Committee recommended
- 14 total funding requests from membership for the same
- 15 period of \$5,313,000 with individual requests amounts
- 16 based on the NPC's approved formulas. This increase is,
- 17 of course, necessary as the Council returns to normal
- 18 operating levels and ramps up the activities for those
- 19 two critical studies.
- The Finance Committee and the NPC management
- 21 recognize the recurring economic challenges that face
- 22 the member companies with this Council. And
- 23 accordingly, we have worked diligently to scrutinize the
- 24 Council's annual budget by line item to capture
- 25 learnings and bottom line efficiencies from our recent

- 1 past to minimize costs wherever possible.
- 2 The Council's management is being proactively
- 3 frugal while being responsible to the Council's mission.
- 4 I believe that the '22 budget reflects those efforts.
- 5 And subject to the approval of the budget today and the
- 6 contribution recommendations, the Council will send the
- 7 individual '22 contributions out to the members early
- 8 next year.
- 9 So, members, I encourage you to respond
- 10 expeditiously upon receiving your respective funding
- 11 requests. But a note, there's some of you still out
- 12 there that have not paid your 2021 contributions, and we
- 13 ask that you please consider doing so promptly so we can
- 14 get those monies in before year end.
- 15 Mr. Chairman, that completes the report of the
- 16 Finance Committee. I move that it be adopted by the
- 17 Council membership.
- 18 MR. L. NICHOLS: Thank you, Byron. I'll just
- 19 second it and we'll move on to the vote.
- While we're doing that, I would like to make a
- 21 couple of comments. One is to thank the membership
- 22 during this really difficult time. We had virtually no
- 23 one who did not pay their dues and maintain the
- 24 financial strength of this organization. And that is
- 25 really critical to keeping us in the position we're now

- 1 in, which we're in great financial position to undertake
- 2 these studies and move forward with this administration.
- 3 I'd also particularly like to thank Marshall
- 4 Nichols and his staff, who did a really wonderful job of
- 5 jumping into it with both feet in terms of reducing the
- 6 budget and keeping control of this organization, making
- 7 significant reductions to the budget, their staffing,
- 8 payroll, what have you. It really puts us into this
- 9 great position.
- The polling has been concluded, and I'm pleased
- 11 to report that the report is unanimously approved.
- With that, we will move onto our Nominating
- 13 Committee, our third and final administrative matter,
- 14 and that is a report from Jim Hackett, who chairs that
- 15 committee.
- 16 Jim?
- 17 MR. HACKETT: Mr. Chairman, thank you so much.
- 18 The Committee met, and we want to thank ahead of time
- 19 those that are willing to be nominated, particularly to
- 20 lead the organization.
- 21 The first of those nominations is for NPC
- 22 Chair, Darren Woods; for NPC Vice Chair, Alan Armstrong;
- 23 for the Agenda Committee, Deb Caplan, Bob Catell, Greg
- 24 Garland, Ray Hunt, Jeff Miller, Gretchen Watkins, Bill
- 25 Way, Bill White, Mike Wirth, who will be busy, and Dan

- 1 Yergin, with Ryan Lance serving as Chairman still of
- 2 that group.
- For the Appointment Committee, we recommend the
- 4 following members: Nick Akins, Joe Gorder, David
- 5 Grzebinski -- and I'm messing that up as you know --
- 6 John Hess, Terry Jacobs, Mike Linn, Pierce Norton,
- 7 Lorenzo Simonelli, Scott Tinker, and John Walker, with
- 8 Vicki Hollub serving as Chair of that committee.
- 9 And as the at-large members of the Cochairs'
- 10 Coordinating Committee, we nominate Rusty Braziel,
- 11 Willie Chiang, Kim Greene, Mike Graff, and Frank
- 12 Verrastro. And I'll put that in the form of a motion,
- 13 Mr. Chairman, if that pleases you. Thanks.
- 14 MR. L. NICHOLS: It does. And I will second
- 15 that, and we'll start the polling for that question.
- 16 While we're doing that, I would just like
- 17 briefly to reflect on my two years as Chairman of this
- 18 organization, which have been rewarding, but challenging
- 19 because of the difficult times we've been in. At the
- 20 beginning of 2020, we were full of questions and
- 21 expectations for a new administration when COVID hit us
- 22 all like a ton of bricks.
- 23 And we had to pivot from really making much
- 24 forward progress to preserving this institution that's
- 25 been around for seventy years and keeping it in the

- 1 great condition that it's now in so that we can move
- 2 forward. I'm pleased with that work. Sorry it was not
- 3 an opportunity to do more creative work moving forward,
- 4 but it certainly got us in the great position that we're
- 5 in now.
- 6 I'm pleased to report that I see the report
- 7 that a majority of the -- well, a unanimous vote that is
- 8 all in favor of the report from your committee, Jim.
- 9 Thank you very much.
- 10 MR. HACKETT: And, Larry, thank you for all
- 11 you've done. We all --
- MR. L. NICHOLS: Appreciate that. Let me --
- 13 Darren Woods as incoming is now Chairman of this
- 14 organization. Any comments you wish to make?
- 15 MR. WOODS: Thank you, Larry. I'll do my best
- 16 to follow the standards that you've set in your tenure,
- 17 and look forward to leading this organization. It's a
- 18 real honor to represent the men and women of the
- 19 industry. And as you -- as we've just talked about with
- 20 Secretary Granholm, a lot of challenges lay ahead of us,
- 21 but I also think a lot of opportunity. So I look
- 22 forward to working with the membership and with the
- 23 Department of Energy to try to advance our agenda. So
- 24 thank you, and thanks for the vote of confidence;
- 25 appreciate that.

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              MR. L. NICHOLS: Thank you, Darren, for taking
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     this on. It should be an interesting and challenging
 3
     and worthwhile time.
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              With that, our agenda is now complete. And
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    unless there are objections, I will call the 131st
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     meeting of this organization to be adjourned. Thank you
 7
    very much. Thanks for your patience and attention in
     this meeting. We're adjourned.
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              (Whereupon, at 10:04 a.m., the meeting was
     adjourned.)
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