Questions from Chairman Lisa Murkowski

<u>Question 1</u>: With regard to rural energy prices, Alaska has more than 200 rural and remote communities, and many of them are still paying \$9 a gallon for home heating fuel. This is the biggest challenge facing rural Alaska, and I cannot overstate the importance of reducing those costs. Will you commit to working with me – and, again, many other Alaskans – to help us tap into our renewable energy potential, expand microgrid research, and otherwise help us find ways to resolve our rural energy crisis?

Answer: Yes.

Question 2: According to the Alliance for Green Heat, in most northern states, including Alaska, 25 percent or more households use wood or pellets for primary or secondary heat. Even if burning woody biomass is not an "early stage" technology, there is certainly plenty of room for innovation. If confirmed, will you support the continued modernization of wood and pellet heating energy technologies in your role as Assistant Secretary for EERE?

Answer: Yes.

<u>Question 3</u>: There are nearly 100 villages in Alaska that could benefit from the promise of marine hydrokinetics – or marine renewable energy – should the right resources be provided to the program. I know you are familiar with the marine energy project and research and development that has gone on and will be, thanks in part to EERE, continuing in Igiugig. As you have now spent over a year in an acting capacity for the role for which you are now nominated, what is your view of marine hydrokinetics as a future electricity source? Has that view changed at all based on your experiences at EERE over the last year or so?

Answer: My views on marine hydrokinetics have definitely changed over the last year. The biggest thing I have learned is about the potential for marine hydrokinetics to help generate electricity in remote locations including for remote villages or on islands. If confirmed, I will work to increase the viability of this technology through efforts to drive down deployment costs.

Question 4: What is your view on the appropriate role of hydropower as part of our nation's electricity portfolio? Will you highlight the role of hydropower as a renewable resource and commit to supporting it?

Answer: I support all generation sources and believe hydropower is a critical generation source. Hydropower is a low-emissions, reliable, renewable source that will play a crucial role in the grid of the future.

Questions from Ranking Member Maria Cantwell

Question 1: You were leading EERE for over a year prior to your nomination. What are your priorities for the organization?

Answer: My priority is to support affordable and reliable energy to enhance economic growth and energy security. EERE advances research and development to make renewable energy and energy efficiency technologies more affordable and support the integration of renewables into the electric grid. For example, we are taking a holistic view of energy storage to make sure that we drive down the cost of energy storage while exploring other technologies that can provide grid services similar to batteries.

Question 2: Have you played any role in Secretary Perry's efforts to stop the closing of unprofitable coal and nuclear power plants?

Answer: No.

- If so, please describe.
- Do you think it is the Department's role to keep uncompetitive, high-cost power generators in business?

Answer: If confirmed, it will be my role to help reduce costs of all renewable and energy efficiency technologies.

Question 3: Have you played any role in the Administration's proposal to sell off Bonneville, TVA, and federal transmission assets?

Answer: No

• If so, please describe.

Question 4: The Trump administration's proposed 2019 budget recommended funding EERE at \$696 million, a cut of \$1.3 billion below the 2017 budget.

• As the Acting Assistant Secretary for EERE, were you aware of the level of funding that would be proposed by the President's budget prior to its public release?

Answer: Yes

• What role did you play in any of the decision-making behind these proposed cuts?

Answer: I worked with EERE staff to prioritize funding based on the proposed budget. For example, we prioritized the early-stage research and development being conducted at the National Renewable Energy Laboratory.

• Did you have any role in determining which EERE offices would need to be cut or eliminated if this level of funding was enacted and how did you prioritize the efficacy of existing programs over others?

Answer: Yes, I worked with EERE staff to identify and support early-stage research and development that had the potential for the highest impact on our priorities: affordable and reliable energy.

• If EERE was funded at the President's 2019 budget request, how many FTEs do you estimate would have needed to be eliminated at EERE or national labs that are funded by EERE?

Answer: The EERE FY 2019 Program Direction Budget Request is adequate to maintain and support a world-class Federal workforce that manages mission critical early-stage research and development and regulatory functions in sustainable transportation, renewable power, and energy efficiency. The Budget Request will also adequately address our Nation's energy and environmental challenges. In keeping with the direction to generate efficiencies and reduce the cost of government, and to align with reductions in technology program budgets, the Department proposes to reduce EERE-funded Full-Time Equivalents by approximately 34 percent from the FY 2017 level. The specific reduction will be adjusted as required. If Congress appropriates an R&D program significantly higher than the request, the associated Program Direction funding level would need to be similarly increased to avoid FTE reductions.

• The President 2018 budget request also proposed a radical cut to EERE's budget to \$636 million, if you are confirmed will you work to better align the President's future budget requests to Congress' clear preference to maintain at least level funding for EERE?

Answer: I support the President's budget and recognize the important role Congress plays in determining the Department's funding levels and I will follow the budget decisions that the Congress and the President agree upon.

Question 5: Appliance standards will have saved consumers and business nearly \$2 trillion by 2030. The average U.S. household saves about \$500 per year on their utility bills thanks to existing, common sense efficiency standards, while modern appliances provide more features and cost less in real dollars than appliances available even a few years ago.

• Do you have any disagreement with these savings estimates? If so, please explain.

Answer: There are large estimated consumer savings from appliance standards. Advances in energy efficiency have been driven over time by a combination of market-driven efficiency improvements and federal appliance standards. I support the Department's efforts to examine the full range of benefits and costs for these standards, including the upfront cost of new appliances, reductions in energy and water consumption over time, distributional effects, payback period, the time value of money, and the effects of consumer behavior on energy consumption.

Question 6: You've been at EERE for over a year and during that time DOE has missed 23 deadlines for products. How many standards will you finalize by the end of the year?

• When can we expect to see the ANOPR on the process rule?

Answer: Per the information provided in the Spring Unified Agenda, DOE is currently working on a Notice of Proposed Rulemaking (NPRM) for the Process Rule and plans to publish a proposal in the Federal Register in the coming months. The Department is currently engaged in preparation of the Fall 2018 Unified Agenda, which will provide an updated timeline for the rulemaking. We will follow the legally required process in EPCA, APA, and the Process Rule in the promulgation of our rulemakings. When we reach conclusion of the process, we will issue final rules.

• There are three standards that were upgraded on the spring regulatory agenda from "long term action" to "active" – commercial water heaters, furnaces, and external power supplies. Please provide an update of what DOE is working on related to these three standards and what the next steps are, with dates.

Answer: Per the information released in its Spring Unified Agenda, DOE expects to take action on commercial water heaters, furnaces, and external power supplies in the coming months. In the Agenda DOE indicated that it expects to release a final action on external power supplies in July 2018, a supplemental notice on furnaces in September 2018, and a determination on commercial water heaters in October 2018. The Department is currently engaged in preparation of the Fall 2018 Unified Agenda, which will update the timelines for these rulemakings. When that edition of the Agenda is published, the information about DOE rulemakings will be accurate for the time of its release. Each subsequent edition of the Agenda will likewise be updated to provide information as each DOE rulemaking moves through the various stages of the required process.

 Please provide the same update for the four standards that have been on the Active list since the fall 2017 regulatory agenda (fluorescent lamp ballasts, room AC, cooking products, clothes dryers).

Answer: Per the information released in its Spring Unified Agenda, DOE expects to take action on fluorescent lamp ballasts, room air conditioners, cooking products, and clothes dryers in the coming months. It is important that DOE has test procedures in place prior to engaging in

rulemaking to revise or establish an energy conservation standard. This is necessary to ensure parties understand the technical parameters that will be assessed in considering whether more stringent standards are justified for a particular product. Accordingly, these standards will be preceded by any necessary updates to the existing test procedures for those products, which adds context to DOE's timeframes for these standards. We also note that DOE recently received a petition for rulemaking to withdraw the cooking products test procedure. DOE is currently seeking public comment on that request.

In the Agenda DOE indicated that it expects to release a preliminary analysis on clothes dryers in August 2018, a supplemental notice on cooking products in October 2018, a preliminary analysis on fluorescent lamp ballasts in November 2018, and a preliminary analysis on room air conditioners in December 2018. The Department is currently engaged in preparation of the Fall 2018 Unified Agenda, which will update the timelines for rulemakings. When that edition of the Agenda is published, the information about DOE rulemakings will be accurate for the time of its release. Each subsequent edition of the Agenda will likewise be updated to provide information as each DOE rulemaking moves through the various stages of the required process.

• What is DOE's next step on manufactured housing?

Answer: Currently, this matter is in litigation. It is my understanding that DOE does not comment on matters in litigation.

Question 7: According to DOE's February report on appliance standards, DOE has missed 23 statutory deadlines for products with another 40 upcoming deadlines. It's hard not to see this as intentional when the President's Budget set a goal of completing only 3 appliance standards in FY19. In the 6-26-18 hearing, you said the appliance standards backlog was partially due to needing to get the standards right because statutory anti-backsliding rules prevent DOE from fixing rules. DOE has had this statutory role for 40 years.

• Please explain this apparently new concern about getting the rules right.

Answer: While DOE is striving to meet its legal obligations, the Department is also committed to undertaking the necessary steps to ensure that its regulatory actions are well informed and appropriately analyzed. As I noted in the nominations hearing, this involves working toward the statutory deadlines as well as ensuring the rules can withstand judicial scrutiny. As a result of the anti-backsliding provision, we need to ensure the rulemaking has been conducted in a manner that is consistent with applicable statutory requirements before issuance.

• DOE already runs a robust and transparent process for rule development and review. Why is the current process insufficient and what does DOE intend to change about the process by holding these rules up?

Answer: DOE has worked hard to establish a process that includes a wide spectrum of stakeholders in the development of new energy conservation standards. These stakeholder perspectives are a crucial component of the rulemaking process at the Department.

Careful deliberation is necessary upfront in the rulemaking process because these standards affect nearly every American household and because it is not possible to revise these standards retrospectively. This deliberation helps to guarantee that affected households and businesses will benefit from any new standards, and that new standards will not result in distributive effects that have disparate impacts on particular regions, low-income households, or small businesses.

Question 8: The last two budget proposals eliminated both the Weatherization and State Energy Programs.

Did you recommend that these programs be eliminated?

• If confirmed, will you recommend their elimination again?

Answer: I did not specifically recommend the elimination of those programs. I support the President's budget and recognize the important role Congress plays in determining the Department's funding levels.

Question 9: I am concerned about the ability of the Office of Energy Efficiency and Renewable Energy to have the talent and human-power to accomplish its mission. I understand there are many fewer career federal employees at EERE than there were when this Administration started.

What was the staffing level when this you started and what is it now? Please provide
detailed data on both federal and contractor staffing levels for every EERE program
office and support operations.

Answer: EERE's federal staffing levels in January of 2017 was 702 and currently the federal staffing level is at 602. EERE has over 3,000 contractor staff across 13 National Laboratories and other support contracts. The overall contractor staff has not decreased since we were able to maintain, and in some cases increase, our overall funding to the National Laboratories. With the budget uncertainty at the start of FY18, EERE made a concerted effort to forward fund the labs to ensure that they would not experience fluctuations in funding which could adversely affect the workforce.

• Has there been any changes to SES positions?

Answer: Since the start of the Administration, EERE has had nine SES members leave EERE as a result of retirement or to seek opportunities within the Department or outside of Federal

Government. EERE has made several internal reassignments to fill vacancies and has pursued limited term appointments to put people into roles on a temporary basis until a permanent replacement can be recruited.

• I also understand that despite career staff leaving there have been virtually no new ones hired – how many staff from outside EERE have you brought in since you've been acting Assistant Secretary and PDAS?

Answer: Eleven new career staff have been brought on board to date. EERE was conducting hiring actions on a conservative basis due to the disparity between House and Senate marks for our program direction account. Once a final bill was released, EERE has been actively working to backfill critical vacancies. Several positions have already been posted for recruitment and EERE is continuing to pursue additional new hires. EERE anticipates bringing an additional 20-30 staff onboard before the end of the fiscal year.

• How many vacancies do you have at this time?

Answer: EERE's target FTE count is 625. Based on that target, EERE currently has 23 vacancies.

• How can you provide for your mission, and wisely use the resources Congress has provided for you, without bringing in new people? If confirmed, do you plan to hire full time staff in EERE?

Answer: Yes, if confirmed, I plan to continue to recruit federal resources.

• How will you work with the Secretary and other parts of the Department to ensure that you attract talented civil servants, and in a timely manner?

Answer: EERE has been identifying critical hiring needs and working with the Secretary and other parts of the Department to ensure that these positions are approved for hire. If confirmed, I will continue to ensure that EERE's critical hiring needs remain a priority and communicate that need to Departmental leadership.

Question 10: In the past you have made statements related to climate change that indicate you think investing in technologies that help the country avoid carbon pollution isn't of the highest priority. Please describe your current views on climate change and how those views will impact your leadership of EERE.

Answer: I believe the climate is changing and human activities play a role. I believe that for carbon dioxide reduction technologies to become widespread, they need to be cost effective. This is one reason that a focus on research and development to increase the affordability of renewable energy and energy efficiency technologies is of critical importance. If confirmed, I will work to

continue to support research and development to make the carbon-dioxide reducing technologies in the EERE portfolio more affordable and reliable.

<u>Question 11</u>: The Grid Modernization Laboratory Consortium has been a strong partnership between EERE and OE and enabled the national laboratories to work more efficiently together on clearly defined outcomes. As Assistant Secretary will you continue to support GMLC and work with the leadership of PNNL and NREL?

Answer: Yes.

Question 12: Buildings represent over 70% of electricity consumed in the U.S. The EERE Buildings Technology Office supports cutting edge R&D in transactive and advanced controls, sensors and machine learning to optimize building performance and ultimately provide grid services. Do you support these program and how to they contribute to DOE's "Beyond Batteries" initiative?

Answer: Yes. The "Beyond Batteries" program is an exciting initiative that I hope can lay the groundwork for technological advancements in a number of areas related to energy storage. We are taking a broad view of energy storage that includes batteries but also explores other technologies that can provide similar grid services, including transactive controls.

<u>Question 13</u>: There are numerous examples of troubling travel patterns among political appointees in the Trump Administration.

• Please provide a detailed accounting of all of your official travel as Acting Assistant Secretary, including complete itineraries, travel purpose and justification, and cost to taxpayers.

Answer: See the attached accounting.

• Are you confident that EERE has the appropriate travel policies and procedures in place to ensure the appropriate use of Congressionally appropriated funding?

Answer: Yes

Question 14: In 2012 you wrote in U.S. News and World Report that "Wind is expensive because wind cannot be relied upon to produce electricity when people want it, unlike coal, natural gas, nuclear, and hydro." Statements like this make me concerned that leading the government office whose mission it is to research, develop, and promote the adoption of wind energy may not be the right fit for you.

• What assurances can you provide that statements like this --which contradict the mission of EERE and is representative of many similar statements you made throughout your career-- will not guide your decision-making if you are confirmed to this position?

Answer: Wind energy is a variable, non-dispatchable source and I support research and development on wind technologies. I think my views will serve as motivation to not only drive down the costs of wind, but also to advance technologies like energy storage to decrease the variability issues that are associated with wind. Identifying the technical challenges of every energy source will help us focus and overcome those challenges through research and development.

• What role do you think EERE can and should play in changing the levelized price of wind as compared to coal, natural gas, nuclear, and hydro in 5, 10, and 20 years?

Answer: As I stated at the confirmation hearing, the levelized cost of wind energy has decreased substantially over the last several years. EERE should fund research and development to help drive further LCOE reductions in wind technologies.

• Do you believe there is an upper limit to the amount of wind that can be part of a particular balancing authority area? If yes, what is that level and what analysis and real world examples have you used to make that conclusion?

Answer: It is my understanding that regional interconnections and balancing authorities are researching this issue and I look forward to learning about the results of that research.

Question 15: In his 2015 book "Crippled America," President Trump called renewable energy "really just an expensive way of making the tree-huggers feel good about themselves."

• Do you agree with the President's conclusions? If not, please explain in detail how your viewpoint may differ.

Answer: The costs of various sources of energy generation change over time and the costs of wind and solar are very good examples. We have seen dramatic cost reductions in the last few years that change the calculus. A few short years ago I argued that wind and solar were expensive and not competitive, but that calculus has changed in many situations. If confirmed, my job would be to drive continued progress in the affordability of energy efficiency and renewable energy technologies.

• On the campaign trail, President Trump claimed that solar panels only last 10 years and have a 28 year payback period, do you share this analysis?

Answer: I cannot speak for the President. Some solar panels, particularly certain ones sourced in China, have not performed well. While the majority of U.S. PV systems have been installed in the past 5 years, they are expected to have operational lives well in excess of 25 years. Commercial manufacturer warranties (for nothing below a 15% decline in initial output after 25-30 years) are standard on virtually all PV modules sold today. Power delivery contracts signed between PV system owners and electric utility companies cover a time range of 22.5 years to 34

years (Bolinger et al, 2017). The energy payback period for current modules varies depending on numerous circumstances.

• If not what do you believe is a more accurate range for the longevity and payback period for the typical residential, C&I, and utility-scale project?

Answer: Again, payback periods depend on a variety of circumstances, so averages can be of limited usefulness. Nevertheless, one calculation of the average financial payback period for residential PV system quoted in late 2017 was 7.4 years (EnergySage, 2018). Businesses which own and operate commercial and utility PV systems often utilize rate of return (RoR) rather than payback, meaning they want to get paid back and receive a profit. The vast majority of utility-scale PV systems are owned by independent operators, with multiple investors; each with its expected investment time horizon in the project and expected return. Tax equity investors are usually involved in a project for 5-10 years and receive a rate of return between 8%-10%. Debt providers loan funds to build and operate projects and receive interest rates between 3%-6% for a period of 7 to 20 years. Sponsor equity investors receive their return over the life of the asset, typically after tax equity and debt has been paid off. These sponsor equity investors rely on the long length of power contracts and often assume a merchant tail, meaning they expect to continue to sell power after the expiration of the power contract (Chadbourne and Park, May 2015; Feldman and Schwabe, 2017).

<u>Question 16</u>: Your paperwork submitted to the Committee indicates that you are currently a Senior Advisor in the Office of Environmental Management at DOE. Please describe your role at EM and what you intend to accomplish.

Answer: I am a Senior Advisor in EM. I hope to perform duties as assigned. Given the short amount of time between my transfer to EM and the confirmation hearing, I have not engaged in any substantive work for EM yet, but hope to do so.

Questions from Senator Ron Wyden

<u>Question 1</u>: While you were Vice-President for Policy at the Institute for Energy Research and American Energy Alliance, those organizations questioned the value of government investment in renewable technologies, and called for the elimination of the office which you have been nominated to lead. Now, in response to a question from my colleague, Senator King, you said "I believe in EERE's mission, which is to advance American leadership in renewable energy and energy efficiency."

Why has your opinion regarding EERE changed so radically?

Answer: A point of clarification: I did not write the post in question from the American Energy Alliance. I think the post was flawed because it did not treat all forms of energy similarly. More

importantly, as I have worked at EERE for the past year, I have learned a lot more about EERE's work and believe it advances American leadership in renewable energy and energy efficiency.

Do you think federal policy to reduce greenhouse gas emissions is appropriate?

Answer: If confirmed as Assistant Secretary, it would not be within my job scope to formulate or change policy in this space per se. What would be within my job scope is to work on bringing down the cost and improving the integration of non-greenhouse gas emitting energy sources as well as working to improve energy efficiency.

Question 2: You testified that your vision for EERE is focusing on early-stage research.

Are there current EERE programs or projects that you view as not being early-stage research? If so, what would you do with those programs or projects?

Answer: Yes. One example is the Weatherization Assistance Program (WAP) and another example is the Federal Energy Management Program (FEMP). For programs like WAP, as we have previously done, if Congress funds the program, we will faithfully execute the program to the best of our abilities. FEMP conducts a number of non-early stage programs required by statute. If confirmed I will work to make sure we meet our statutory requirements, even if they are not early stage research.

<u>Question 3</u>: You've described growing up in a home with a wood-burning stove, as part of a story about how experiences with renewable energy have shaped your perspective. There are households in many states, including Oregon, that use wood or pellets for primary or secondary heat. DOE has run several Wood Stove Design Challenges to create cleaner and more efficient wood stoves for home heating.

What role do you envision for the Wood Stove Design Challenge going forward?

Answer: Given our commitment to sustainably converting our Nation's abundant biomass resources to affordable energy, we envision support for future Wood Stove Design Challenges. The Wood Stove Design Challenge is a part of EERE's overall strategy to develop affordable bioenergy technologies to convert our nation's abundant biomass resources into fuels, power, and other products. This competition can help stimulate development of more efficient and cleaner technologies which then can be incorporated into new products. The Department has partnered with the Alliance for Green Heat to hold the fourth Wood Stove Design Challenge on the National Mall from November 9-14, 2018.

Question: The Department of Energy's (DOE) Regional Test Centers for Solar Technologies (RTCs) are an integral part of the Office of Energy Efficiency and Renewable Energy's SunShot Initiative to reduce the price and increase adoption of solar technologies. That is why I was pleased to see the minibus that recently passed the Senate included my amendment offered with Senators Nelson and Cortez Masto to set aside \$4.05 million for the continued operation of all currently operating RTCs.

If confirmed, will you commit to ensuring all of the RTCs receive this funding from the DOE?

Answer: Yes. RTCs including the non-National Lab sites at VT, NV, and FL will receive the \$4.05M in FY 19 for R&D work if the funding were allocated by Congress. DOE would like to retain the original plan to transition the non-National Lab RTC sites to a self-sustaining model where federal funding is not provided for O&M of the sites, but the directed funding in FY19 would be used to delay such a transition until FY20 and provide ramp down funding to smooth the transition.

Questions for the Record from Senator Joe Manchin III

Question 1: If confirmed you will oversee the Weatherization Assistance Program and the State Energy Program. These important programs help lower-income Americans weatherize their homes. That leads to reduction in energy waste and money saved for West Virginians – many who suffer the disproportionate impacts of high energy costs due to their modest incomes. Since 2010, West Virginia has received \$19 million from the Weatherization Assistance and State Energy Programs. That has resulted in thousands of homes being weatherized, meaning low-income families are saving money. We want to see the number of families that can benefit from this program grow. Nationally, WAP has helped weatherize 7.4 million low-income households over the life of the program. While I always appreciate spending taxpayer dollars wisely, I have serious concerns over proposed cuts to these two important programs that reduce environmental impacts, create jobs, and put some extra cash in the wallets of our neighbors that need it the most.

Do you believe this program should be eliminated?

Answer: I support the President's budget. I do not believe that the program should be eliminated, but that it should be funded at the state level. Also, given that Congress' position has been very different from the proposed budget, I commit to making sure that WAP funding is expeditiously processed by EERE to go to the states on time.

Question 2: I would like to hear your thoughts on what you believe the DOE's role should be for the commercialization of technologies. I think it is fair to say the Administration is prioritizing early stage research and development, and allowing the private sector to step in when the time

comes to take new technologies to commercialization. That's fine – but there are some instances where the private sector is not willing to finance and needs the right signals to keep innovative technologies born in our labs and universities from falling into the innovation gap or "valley of death". Congress recognized that this was a potential problem and has armed the DOE with a few tools in its toolbox to help finance promising technologies. Unfortunately, these programs like Title XVII and ARPA-E have come under fire.

What role do you think to DOE should take when it comes to financing commercialization activities?

Answer: It is the Administration's position that the Department of Energy focus on early-stage research and development when funding energy technologies and that commercialization of technologies should be the primary responsibility of the private sector. DOE's Office of Technology Transitions works with the private sector to commercialize emerging technologies, including research and development that comes out of the National Laboratories. EERE also funds a variety of initiatives aimed at increasing collaboration with the private sector. For example, in January EERE announced a solar prize competition to encourage private-sector innovation in domestic solar manufacturing.

Do you support the Title XVII Loan program?

Answer: The Loan Programs Office (LPO) is not managed by EERE, so I will not have any role in managing programs or projects in LPO.

Question 3: According to the Department of Energy, approximately 2.2 million Americans are employed in the design, installation or manufacturing of energy efficiency jobs. Energy efficiency jobs can broadly be defined as services that reduce end-use energy consumption. This includes the design, manufacture, and installation of ENERGY STAR appliances and ENERGY STAR labeled products. Demand for energy efficiency employment is expected to increase again in 2017 with energy efficiency employers projecting a nine percent growth rate for 2017 and construction employers projecting 11 percent energy efficiency job growth. In West Virginia, we have approximately 6,400 energy efficiency jobs and over 20,000 jobs that in some way touch or relate to energy efficiency. The Department of Energy also noted in its energy employment report that the trend of energy efficiency job growth is likely to continue and will outpace other sectors.

If confirmed, will you commit to work with the energy efficiency community to find ways to support their work and create jobs in this growing sector?

Answer: Yes. I have met with and delivered remarks for a number of companies and other stakeholders engaged in the energy efficiency community, including the Alliance to Save Energy, the Business Council for Sustainable Energy, and the National Association of Energy

Service Companies. EERE works with energy efficiency stakeholders through a variety of programs, including the Better Buildings and Better Plants programs. If confirmed, I am committed to continuing these and other important collaborations with the energy efficiency community.

Questions from Senator Martin Heinrich

Question 1: I understand you recently visited the Solar Tower at Sandia Labs in Albuquerque. The NSTTF provides critical experimental engineering data for the design, construction, and operation of components and systems used in solar thermal electrical plants for large-scale power generation. What do you see as the future role for this one-of-a-kind test facility?

Answer: The technology used in the Solar Tower at Sandia is truly exciting and has the potential in the future to contribute large-scale generation to the grid. One of the critical functions of EERE is working to drive down the costs of technologies to ensure Americans have affordable, reliable energy and I believe this technology can be a part of that picture in the future. I believe this well-established, time-tested facility at Sandia is important for the proper evaluation of materials, processes and equipment identified in early stage concentrating solar research.

<u>Question 2</u>: I understand there are 52 pending requests since March from solar power companies for exclusions of particular products from the president's safeguard tariffs on certain imported solar cells and modules under section 201 of the Trade Act. If you are confirmed, will you work with USTR and the Department Commerce to help expedite the pending exclusion requests and assure a decision on each request is made in a timely manner?

Answer: Yes. I think it is very important to resolve the issue of exclusions as expeditiously as possible. I have empowered the EERE's Solar Energy Technology Office to work closely with USTR and the Department of Commerce in this process. I believe SETO has provided invaluable information to USTR and the Department of Commerce to understand the solar industry.

Questions from Senator Cory Gardner

Question 1: As an applied research laboratory, NREL is a vital bridge between DOE's research investments and America's technology startup companies. NREL Strategic Partnership Program (SPP) has 750 active partnerships with a variety of small and large companies, universities, and federal agencies.

• What is your vision for NREL's SPP work, and how does it complement the research EERE is funding at the lab and elsewhere?

Answer: I'm a fan of SPP work by the labs, especially NREL. SPP work shows that the lab passes the market test—that the lab capabilities that the private sector is willing to pay to access. Second, SPP work leverages taxpayer dollars and investments in the facilities. NREL has impressive user facilities, including the National Wind Technology Center and the Energy

Systems Integration Facility. SPP is an important tool for the private sector to leverage these unique capabilities.

• Directly funding lab infrastructure and streamlining partnership agreements can lower the overhead rates and speed the technology transfer to those partners. Can more be done in these areas to make it easier to speed technology to US companies and sustain American innovation?

Answer: EERE has provided direct investment for the ESIF facility and has directly funded NREL site-wide expenses to lower the overhead rates of the lab, and these changes have had a positive impact in removing barriers to the establishment of new partnership agreements. I believe more can be done. If confirmed, I will be focused on streamlining oversight of laboratory activities to improve the speed of business between laboratories and US businesses. By streamlining laboratory oversight in a responsible manner, we can more quickly support partnerships with American entrepreneurs to stimulate innovation.

• My work on the Foreign Affairs Committee puts me in contact with leaders from less-developed countries, and I am often asked if they can get help from NREL. NREL has a variety of analysis tools to identify the most cost-effective generation and transmission investments in a developing country, and those plans may lead to investment and construction opportunities for US businesses. What can be done to encourage and streamline those types of agreements with friendly foreign governments to re-enforce our diplomatic efforts, while keeping safeguards to protect US intellectual property?

Answer: The national laboratories, including NREL, are encouraged to work with international partners, consistent with the DOE mission. We continue to work to streamline this process in order to maintain the world's leading position of our national laboratories in research and innovation. Furthermore, we continue to highlight our capabilities and opportunities for collaboration with our national laboratories in our meetings and discussions with international counterparts.

Question 2: The President was very thoughtful to include in his proclamation on solar tariffs a process for excluding products which have not been manufactured in the US, like the 1500 volt panels used in the utility scale solar industry. I understand DOE has been an active participant in the interagency process on exclusion requests and we certainly appreciate the attention and expertise on energy markets that DOE brings to the deliberations with USTR. As you may know, I sent a letter along with several of my colleagues in support of the 1500 volt exclusion – can you give us an update on what DOE has done to make sure its voice is heard in the interagency process with USTR & Commerce? Can you tell us when we might expect a decision on this exclusion request?

Answer: The Office of the United States Trade Representative (USTR) established February 2018 as the deadline for product exclusion requests. Those requests, including the request made for utility scale solar products, are currently in review. The USTR is managing the exclusion

review process in consultation with the Departments of Commerce, Energy and U.S. Customs and Border Protection. DOE has provided USTR and agency counterparts with significant available data on manufacturing, market and technology inputs throughout the 201 process. DOE's Solar Energy Technology Office has had a seat at the table to inform USTR and others about the various technologies at issue and to provide technical input that supports the implementation and administration of the tariff and related exclusions so that the goals of the tariff (to support US manufacturing) can be achieved. The Department of Energy also recently launched the \$3 Million, American-Made Solar Prize (www.americanmadechallenges.org) to further support US solar manufacturing efforts. The schedule for releasing decisions with respect to product exclusions is at the discretion of USTR. DOE has and will continue to endeavor to provide input to USTR as quickly as possible as the process advances.

Question 3: We are experiencing the beginning of wildfire season in Colorado and the West, and the drought reminds us of the interrelationships between water and energy. Wildfires are a threat to the transmission lines of our bulk power system, and electricity is vital to pump water to where it is needed. Low water in our reservoirs can impact hydroelectricity production and impact cooling water for power production. Internationally water desalination is a major consumer of power, and we may see that happening here before long. NREL is well-suited to analyze and develop technologies at the energy/water nexus, and if you share my interest and concern in this area, would you consider establishing a center of excellence at NREL?

Answer: Currently EERE invests in a diverse set of performers in the Energy/Water Nexus interest area. Since March, EERE has supported the development of the Critical Water Issues Prize Competition RFI, announced the Solar Desalination FOA selections, and released the Notice of Intent to issue Energy-Water Desalination Hub FOA. The upcoming Energy-Water Desalination Hub FOA will be a competitive opportunity to which NREL and others will have the ability to apply. NREL is one of the National Laboratories that has experience addressing the Energy/Water Nexus and to date, EERE has leveraged NREL's modeling, analysis and High Performance Computing capabilities to address the energy/water nexus research priorities. EERE will consider exploring the feasibility of establishing a center of excellence on the Energy/Water Nexus.

Questions from Senator Mazie K. Hirono

Question 1: As recently as 2006, Hawaii relied on imported fossil fuels for 92% of its energy production. Research, technical assistance, and grants from the Department of Energy, particularly the EERE's State Energy Program, have been instrumental in supporting Hawaii's shift towards locally produced renewable energy. In 2014, the DOE renewed a memorandum of understanding with Hawaii to provide technical assistance and collaborate on the Hawaii's goals of energy technology innovation and eliminating the state's reliance on imported oil. Hawaii has increased renewable electricity production to 27.6% in 2017, progressing towards the state's goal of 100% renewable electricity by 2045. If you are confirmed, can the State of Hawaii count on

continued support from EERE as it seeks to become energy independent and a leader in the clean energy economy?

Answer: Remote states and communities have unique energy challenges. I will commit to following the guidelines in the MOU and working to ensure Hawaii has access to affordable, reliable, renewable electricity.

Question 2: While working for the Institute for Energy Research in 2013, you spoke against state renewable energy standards and incentives for renewable energy. Are those still your beliefs? And if so, do you believe that fossil energy sources should continue to get support, like the permanent support in the tax code, estimated by the Congressional Research Service to have a value of \$5.2 billion in 2016?

Answer: In the past, I have authored numerous articles that highlight how subsidies and mandates increase electricity rates and harm low and middle income families by increasing the amount of money they pay for energy. If confirmed as Assistant Secretary, it will be my job to lead early stage research and development of renewable technologies, not to alter current incentive structures for any generation source. My goal is to make renewable energy a more affordable option for American families and businesses while improving energy efficiency.

Question 3: The President's Budget for FY2019 called for a 66 percent cut to DOE's energy efficiency and renewable energy programs. Secretary Perry testified in support of the cuts, saying "We consider that to be meeting the goals that we put in place, and if you meet the goals — those are mature and they don't need to be funded going forward." If the DOE's renewable energy programs are so successful and being managed so well, isn't the appropriate response instead to give them new goals and new funding to further reduce costs for technologies like solar energy, energy storage, and energy efficiency?

Answer: I support the Department's shift to focus on early-stage research and development, which requires less taxpayer funding. This strategy focuses taxpayer funding on early stage technologies to further empower the private sector to drive innovation.

Question 4: To ensure the fitness of nominees for any of our appointed positions, I ask every nominee who comes before me to answer the following two questions:

a. Since you became a legal adult, have you ever made unwanted requests for sexual favors, or committed any verbal or physical harassment or assault of a sexual nature?

Answer: No

b. Have you ever faced discipline, or entered into a settlement related to this kind of conduct?

Answer: No

Questions from Senator Angus S. King, Jr.

Question 1: In the past, you have been a critic of subsidies for renewable energy. Have you also opposed subsidies for fossil fuels and other forms of energy? If so, could you please provide previous statements, speeches or other documents to demonstrate that?

Answer: Yes, I have consistently opposed subsidies for all forms of energy, including fossil fuels. In a January 6, 2011 blog post on the Institute for Energy Research website, I wrote: "Energy subsidies do one thing—they increase the price of energy of all Americans and line the pockets of the special interests that promote these discriminatory policies. To build a stronger economy and create more jobs, we should reduce all federal energy subsidies and set-asides—the [sic] means no subsidies for oil, coal, natural gas, wind, solar, or any other type of energy." https://instituteforenergyresearch.org/analysis/top-5-energy-issues-the-new-congress-should-tackle/

Question 2: Will you commit to continuing the goals previously outlined by the Department regarding the Offshore Wind Advanced Technology Demonstration Program, as directed by Congress, and will you visit the University of Maine to see the work being done there under the program?

Answer: If confirmed, I will commit to following Congressional direction regarding all programs within EERE. A couple weeks ago I had the opportunity to talk with Dr. Habib Dagher, the Executive Director of the University of Maine's Advanced Structures and Composites Center, at an offshore wind conference in Boston. He invited me to come to Maine to see the facilities. I told him that I would come and I very much look forward to fulfilling that commitment if confirmed. I will also work with your office to plan a visit the University of Maine.

Questions from Senator Tammy Duckworth

Question 1: I recently introduced the Energy Jobs for our Heroes Act of 2018 (S. 3088) with Senators Michael Bennet and Lindsey Graham. Our bipartisan bill would establish a U.S. Department of Energy program to prepare Veterans for careers in the low-carbon emissions

sectors or zero-emissions sectors of the energy industry, including solar, nuclear, wind and cybersecurity.

Mr. Simmons, if confirmed to be Assistant Secretary for Energy Efficiency and Renewable Energy, will you commit to working with our offices to pass and then effectively implement the Energy-Ready Vets Program to provide our recently discharged Veterans with standardized training courses and industry-recognized certification and training programs that are necessary to secure jobs and careers in the innovative clean energy industry?

Answer: If confirmed, I look forward to working with your staff on this issue. If the legislation is passed, I commit to following its direction.

Question 2: Mr. Simmons, your past work experience raises serious questions over your views and commitment to advancing renewable energy and energy efficiency initiatives. Prior statements questioning the reliability, cost and value of wind and solar power have proven incorrect. They also appear to contradict your recent statements made as the Principal Deputy Assistant Secretary at the Office of Energy Efficiency and Renewable Energy, such as your May 2017 statement, "I like renewables and efficiency."

Please provide clarity of how, if confirmed, you would lead the Office of Energy Efficiency and Renewable Energy. Will you promote and support development of renewable energy and energy efficiency technologies, including wind and solar power? In addition, do you disavow your previous statements questioning the value of wind and solar power?

Answer: The mission of EERE is to advance American leadership in renewable energy and energy efficiency. As my year of leading EERE shows, I believe in that mission. During the last year I have faithfully executed on EERE's mission of promoting renewable technologies. As stated during the hearing, since the budget deal in March EERE has issued new funding opportunity announcements and selections totaling over \$638 million, consistent with congressional direction. As for previous statements, the cost of technologies change over time, and I adjust my views to account for new information.

Questions from Senator Catherine Cortez Masto

Question 1: DOE has spent a lot of the last year considering the question of how to ensure electricity reliability and resiliency. Some of this focus has been on ensuring fuel availability, some has been on guaranteeing baseload resources. Many of the fuel and technology types within EERE also support a diverse and secure grid. Geothermal in particular, which is abundant and booming in Nevada, gets high marks across the board when it comes to resiliency attributes. It doesn't just have 30 days of fuel onsite – it has 100s of thousands of years. Any energy resiliency strategy that ignores this industry and these virtues for the grid is inadequate. As Assistant Secretary, will you take steps to make sure the baseload and fuel-secure attributes of geothermal are accommodated in any policies that are developed in the name of energy resiliency?

Answer: If confirmed, I commit to advancing the affordability and reliability of all renewable generating sources including geothermal.

Question 2: Will you support continuing the good work the National Renewable Energy Lab (NREL) has done, and is doing, on geothermal permitting and pathways to increase deployment?

Answer: Yes.

Question 3: EERE's Regional Test Centers (RTCs) for Solar Technologies is an integral part of the Sunshot Initiative. These facilities have the goal to reduce the price and increase the adoption of solar technologies. However, I was dismayed to hear that DOE is not planning to provide funding for the three (of five) RTC that are not located on DOE property – those in Nevada, Florida, and Vermont. The Nevada site, in particular, has characteristics that set it apart from the other facilities that many believe to be an asset in solar research and testing. Can I have your commitment to support these solar facilities, even those not located on DOE property, such as the one in Nevada?

Answer: Yes.

Question 4: DOE remains involved in the Section 201 Solar trade case that was brought on by concerns from manufacturers of residential-scale solar panels, and the subsequent solar tariffs that the President placed on imported solar cells and modules. However, those residential-scale panels involved in this dispute are very different from the panels used by utility-scale developers. And utility-scale panels aren't made domestically at anywhere near the levels required to meet demand in the U.S. Despite this fact, the President decided to impose tariffs on all panels. Since then, users of high-voltage panels have sought to be excluded. Can you tell us what you personally are doing to make sure that DOE's voice is heard in this interagency process with USTR and the Commerce Department in responding to these exclusion requests?

A. Can you tell us when we should expect a decision?

Answer: DOE has been intimately involved with providing USTR with information throughout this entire process and in meeting with USTR and the Commerce Department. The most important thing I have done is made sure that DOE's Solar Energy Technology Office has had a seat at the table to inform USTR and others about the various technologies at issue and group requests into categories that make sense. The Department expects a decision in the near future.

Questions from Senator Rob Portman

Question 1: A big piece of my energy efficiency legislation with Senator Shaheen, the Energy Savings and Industrial Competitiveness Act, is to develop and update model building codes. The

bill would require the Department of Energy to develop model building codes and would provide the states with technical assistance to adopt and implement building codes. Will you commit to working with me to advance building codes?

Answer: Yes.

Question 2: What are you doing to ensure that DOE remains engaged in the building code development process?

Answer: DOE participates in the industry model code development processes and provides technical assistance to support code implementation. In particular, EERE is actively engaged in the ANSI/ASHRAE/IES Standard 90.1 and International Energy Conservation Code (IECC) review and update processes, the statutory national model energy codes for commercial and residential buildings, respectively. DOE and its national laboratory staff provides analysis and support to these industry proceedings to help quantify the energy and economic impacts associated with code updates. DOE views these activities as critical to ensuring appropriate savings, cost-effectiveness and affordability to American home and business owners, and will continue to fulfill its statutory role surrounding building energy codes.

Questions from Senator Tina Smith

Question 1: Recently, the White House released a report reiterating the overwhelming scientific consensus that the climate is warming rapidly, with severe consequences for our country and the world. DOE contributed to that "Climate Science Special Report" and DOE concurred with the report's release.

Do you accept what scientists are telling us—that the climate is rapidly changing?

Answer: I believe the climate is changing and that humans play a role.

Question 2: Do you accept that this change is overwhelmingly driven by human emissions of greenhouse gases?

Answer: I believe that humans play a role in climate change by emitting greenhouse gases.

Simmons EERE Travel Details June 2017 to June 2018

| Name | Travel Start Date | Travel End Date | Travel City | Travel State | Travel Country | Duration (Days) | Purpose of Travel | Attachments | Costs |
|----------------------|----------------------|--------------------|-------------|-----------------|-------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|
| SIMMONS, DANIEL R | 6/13/2017 | 6/14/2017 | DENVER | СО | USA | 2 | Visit National Renewable Energy Laboratory in Golden, CO | NA | 1,212.62 |
| SIMMONS, DANIEL R | 7/17/2017 | 7/20/2017 | SAN DIEGO | CA | USA | 4 | Speaking Engagement to NARUC and ALEC events (San Diego) | https://www.naruc.org/ summer-policy- summit/2017-summer- policy-summit/ | 2,138.01 |
| SIMMONS, DANIEL R | 7/25/2017 | 7/26/2017 | KNOXVILLE | TN | USA | 2 | Visit Oak Ridge National Laboratory | 2017 July 25-26 Simmons Chalk EER! | 892.56 |
| SIMMONS, DANIEL R | 8/16/2017 | 8/17/2017 | ТАМРА | FL | USA | 2 | Speaking engagement: FEMP 2017 Energy Exchange event | PW: S1. speerking invibe: Emengy | 774.76 |
| SIMMONS, DANIEL R | 9/10/2017 | 9/12/2017 | LAS VEGAS | NV | USA | 3 | Solar Power International 2017 Convention (speaking engagement and media interviews) • MEDIA INTERVIEW - Christian Roselund, PV Magazine • MEDIA INTERVIEW: Rebecca Kern Bloomberg BNA • MEDIA INTERVIEW: Amy Harder, Axios • MEDIA INTERVIEW: Julia Pyper, Greentech Media | NA | 1,083.69 |

| | | | | | | | Global • Press Announcement | | |
|----------------------|----------------|------------|----------------|----|-----|---|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------|
| SIMMONS, DANIEL R | 10/2/2017 | 10/4/2017 | IDAHO FALLS | ID | USA | 3 | Visit Idaho National Laboratory | NA | 1,437.27 |
| SIMMONS, DANIEL R | 10/12/201 7 | 10/14/2017 | DENVER | СО | USA | 3 | To make a funding opportunity announcement (FOA) at 2017 Solar Decathlon and attend the U.S China Energy Efficiency Forum | FWA: EEF WS-Chimen EE Formum Renneriks | 1,648.61 |
| SIMMONS, DANIEL R | 10/22/201 7 | 10/26/2017 | RICHLAND | WA | USA | 5 | Visit Pacific Northwest National Laboratory (Richland, WA) and attended the Biomass Power Association annual meeting (SF,CA) | NA | 2,597.47 |
| SIMMONS, DANIEL R | 11/3/2017 | 11/3/2017 | CHICAGO | IL | USA | 1 | Attended the 2017 NAR Conference and Expo in Chicago. | NA | 463.92 |
| SIMMONS, DANIEL R | 11/8/2017 | 11/10/2017 | LONG BEACH | CA | USA | 3 | Attended the 2017 Fuel Cell Seminar and Energy Exposition (Long Beach, CA) | NA | 1,268.47 |

| SIMMONS, DANIEL R | 11/15/201 7 | 11/17/2017 | ANCHORA GE [INCL NAV RES] | AK | USA | 3 | 38th Annual Alaska Resource Conference | :With Ammuel Alaska Resounce Re: With Ammuel Alaska Resounc | 2,426.46 |
|----------------------|----------------|------------|---------------------------------|----|-----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------|
| SIMMONS, DANIEL R | 12/5/2017 | 12/13/2017 | NEW DEHLI | | IND | 9 | Please note Daniel received premium class approval due to HSST Hearing prep. On December 6-12, Daniel Simmons, EERE's Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy and Alex Fitzsimmons, EERE's Senior Advisor, with EERE's International and DOE-International Affairs will be in New Delhi and Bangalore, India, to conduct meetings with senior Indian officials in support of the Strategic Energy Partnership and EERE bilateral objectives and prep for S1's upcoming trip to India. Simmons will host 2-3 industry roundtables, and will discuss the U.SIndia Partnership for Clean Energy, and meet with EERE partners. | Daniel Simmons premium INDIA 12-1 HSST Hearing Advancing Solar Ene A. Schedule and Overview.pdf B. Meeting Memos Thur 12.7.2017.pdf | 12,025.59 |

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|----------------------|-----------|-----------|----------|----|-----|---|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------|
| | | | | | | | | E. Meeting Memo Tue 12.12.2017.pdf | |
| SIMMONS, DANIEL R | 1/28/2018 | 1/29/2018 | AUSTIN | TX | USA | 2 | Spoke at the Renewable Energy Law conference. Monday, January 29, 2018 – 9:00 a.m. to 10:00 a.m. (1.00 hr = 60 minutes) (Austin, TX) | NA | 1,132.48 |
| | | | | | | | | Oreft Oreft Agysmole_PSH v.is | |
| SIMMONS, DANIEL R | 2/6/2018 | 2/7/2018 | REYNOLDS | GA | USA | 2 | Toured the Lake Oconee Pumped Storage facility | Draft Agyanda PSHväs | 681.53 |
| SIMMONS, DANIEL R | 2/12/2018 | 2/15/2018 | LEMONT | IL | USA | 4 | Visited Argonne National Laboratory (Lemont, IL) and the USCAR facility (Detroit). | Feb 13 &NL Wish Agenda 102218 | 1,101.3 |

| | | | | | | | | Feb 14-15 Auto CEM Wisits Agam | |
|----------------------|-----------|-----------|----------------|---|-----|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------|
| SIMMONS, DANIEL R | 2/25/2018 | 3/3/2018 | TOKYO-TO | | JPN | 7 | On February 28, Daniel Simmons, EERE's Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy, will be a keynote speaker at the 2018 World Smart Energy Week in Tokyo, Japan. As a keynote speakers, Simmons will provide a high-level government perspectives on the Office of Energy Efficiency and Renewable Energy and Satyapal will provide an overview of hydrogen and fuel cells progress, status and opportunities, with a focus on early research and development and the H2@Scale concept as an enabler for energy security and resiliency across multiple energy sectors. The event is open press. | WSEW2018 Official Events Invitation Let 20180223172646330 .pdf | 6,999.85 |
| | | | | | | | Daniel Simmons attended a Wind Manufacturing Site Visit in Denmark, then spoke at the Kenan-Flagler Energy Center at UNC-CH at the Meeting the Challenges of Renewables Intermittency Conference. | | |
| SIMMONS, DANIEL R | 4/7/2018 | 4/13/2018 | COPENHA GEN | | DNK | 7 | On April 13, Daniel Simmons, EERE's Principal Deputy Assistant Secretary, will speak at the 2018 Renewables Intermittency Conference in Chapel Hill, NC. The event is organized by UNC's Kenan-Flagler Energy Center. The 20 minute speech will focus on "How the current debate on renewables intermittency is affecting Administration energy policy." A 10 minute Q&A will follow the speech. | 2018 Renewables Intermittency Confei Denmark_Schedule and Overview.pdf | 4,013.02 |
| | 1 | ' | 1 | 1 | 1 ' | 1 | · · | 1 | ' |

| | | | | | | | -On April 19, Daniel Simmons, EERE's Principal Deputy Assistant Secretary, will give the keynote at the E-Capital Summit, part of the EARTHx conference in Dallas, TX. He will be giving 15-20 minute remarks, followed by 0-15 minutes of Q&A. | | |
|----------------------|-----------|-----------|-----------------|----|-----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------|
| | | | | | | | -On April 20, Daniel Simmons, EERE's Principal Deputy Assistant Secretary, will give the welcome and introduction (30 minutes) at the EARTHx Policy - Energy Done Right forum, part of the EARTHx conference in Dallas, TX. | EARTHx Tick Tock Apr 18-22.docx | |
| SIMMONS, DANIEL R | 4/19/2018 | 4/20/2018 | DALLAS | TX | USA | 2 | -On April 20, Daniel Simmons, EERE's Principal Deputy Assistant Secretary, will give the keynote at the EARTHx Solar, part of the EARTHx conference in Dallas, TX. | EDR Invitation.docx | 893.68 |
| SIMMONS, DANIEL R | 5/13/2018 | 5/15/2018 | ALBUQUER QUE | NM | USA | 3 | Visit Sandia National Laboratory (Sandia, NM) | NA | 1,318 |
| SIMMONS, DANIEL R | 5/23/2018 | 5/25/2018 | MADISON | WI | USA | 3 | Speaking engagement at the WI Energy Innovation Summit on Thursday, May 24th (Madison) and then traveling to Ypsilanti, MI to meet with the American Center for Mobility. | Agyandla WII Emangy Immovati | 1,363.8 |
| SIMMONS, DANIEL R | 5/29/2018 | 6/1/2018 | FAIRBANKS | AK | USA | 4 | Attended National Lab Day in Fairbanks, AK | NA | 1,769.68 |
| SIMMONS, DANIEL R | 6/6/2018 | 6/7/2018 | BOSTON | MA | USA | 2 | Keynote Speaker at the 2018 US Offshore Wind Conference & Exhibition in Boston, MA | Sicheduling Proposel Keymot | 881.94 |

| | | | | | | ١ | WTTC; U.S | th Steve Pike at N. Offshore Wind Ovill follow 4:00 - 7 | Opening | USOW PDAS Invite Menno.docs US Offishare Wind 2008 Roochure | |
|----------------------|----------|--|--|---|---|---|-----------|---------------------------------------------------------|---------|----------------------------------------------------------------------|----------------|
| SIMMONS, DANIEL R | 6/4/2018 | | | | | | | | | VCH235409.pdf | |
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