The Honorable Jeff Duncan

1. During the hearing, we heard that reliably planning and operating the system are increasingly more difficult when new reliable generation and accompanying infrastructure like pipelines are not being added. Despite state and federal policies that limit the ability to use existing resources and add new capacity, the importance of these resources is growing due to the intermittent nature and weather dependence of renewables like wind and solar.

a. What are the biggest challenges to adding new thermal infrastructure, like natural gas pipelines and generation? What can Congress do to reduce challenges to building this infrastructure?

In Arizona we see numerous threats to reliability. One of those threats are repeated and unrelenting opposition from special interest groups. These threats mainly come in the form of repeated and incessant legal challenges on environmental grounds. These lawsuits are based on broadly interpreted EPA regulations, state laws, and regulations. On the federal side, Congress can help by narrowing definitions of environmental protections. One somewhat routine expansion of a natural gas generation plant was denied in the recent past by a prior Commission and held up in state courts on the grounds of alleged "environmental racism." The current Commission was able to reverse this decision, allowing the expansion of the gas generation to proceed.

Second, while we have a fair amount of interest in building natural gas storage in Pinal County, there is no work being done to further this technology because of the current political environment, including the water shortage issues here in Arizona. Congress addressing a more equal and appropriate balance of Colorado river allocation would help on this front. California is dumping copious amounts of water directly into the ocean. If California were required to buffer this water behind dams, and when the dams are full, leave that water in Lake Mead instead of simply dumping the overflow, Arizona would likely be in a much more water stable environment. Politically, this would aid in the discussions about clearing the salt caverns needed for utility scale natural gas and hydrogen storage.

Third, Kinder Morgan has indicated the desire to increase pipeline size and capacity from Texas all the way to California. This process is expected to take 10 years or more. Much of that delay is due to dealing with federal regulations.

b. Can you explain the importance of prudence over pace with respect to adding renewables and explain how adding solar and wind resources requires additional thermal resource capacity?

Quickly adopting renewable energy without adequate storage has proven—specifically in California—that it has a massive destabilization impact on the electric grid. Last year, during one event, Arizona was unable to provide excess electricity to California during a particularly hot period. The panic expressed by California was predictable and real.

In addition to the technology simply not being ready to replace the thermal resources coming offline, currently most utilities are specifying renewable storage requirements of 2 to 4 hours as a "standard." This simply won't be adequate if an event such as Mt. St. Helens happens again, blocking out the sun across most of the United States for days. Thus, for every MW of reliable, 24/7 electricity taken off-line in favor of a renewable source, there must be a corresponding backup supply built in the

form of a thermal "peaker plant." That plant, while cheaper when not operating, is not without cost. Operations and maintenance costs are still applicable to a sitting plant, thus making the total costs of renewables much more than the highly touted cost of generation.

In Arizona we had a previous Commission that arbitrarily imposed renewable standards on our electric utilities. This mandate forced one of our utilities to enter a 30-year contract with Solana to develop a salt-based solar solution. This solution currently costs more than 4 times what traditional generation costs and ratepayers are stuck with this solution for another 15 to 20 years *with no recourse*. This is a perfect example of why early adoption is inappropriate and disastrous. To pour salt on this wound (pun intended) this plant has never reached more than about 80% of its expected efficiency and output numbers. By all standards it was a failed project that now must be paid for by future ratepayers, many who were not even born when the decision was made.

There are absolutely scenarios where solar/wind + battery solutions are the cheapest option and perform a significant role. There are even times when a relatively small investment in this technology may eliminate or significantly prolong the need to build additional generation or transmission, thus actually fulfilling the role they are touted to fill. However, this must be done in an intentional and calculated manner, *without* forcing utilities to adopt early and imprudently.

c. Is building redundant generation simply to meet aspirational policy goals prudent and cost effective? What effect does this have on customer bills?

As I mentioned in my testimony, the shutting down of reliable generation (e.g., coal) at an accelerated pace in favor of renewable resources is having a massive impact on customer bills. Instead of getting all value out of something already built, we are forcing the accelerated cost collection on the ratepayers to meet the shutdown time frames imposed by the EPA, either directly or indirectly. Second, the ratepayer must pay for the renewable sources. But because the renewable sources simply are not reliable without adequate storage and adequate storage technology is not available at the current time, the customers are also paying for backup thermal generation that struggles for approval as discussed above. That means we are exchanging the cost of reliable generation for three other costs, one of which is the remaining balance of the reliable generation that is being paid for regardless of the future generation technologies that may be added.

2. An increase in the number of data centers, new manufacturing, and electrification are expected to greatly increase electricity demand in the coming years. How are state commissions positioning themselves to handle this load growth while protecting ratepayers from unnecessary rate increases and the potential for stranded costs?

Like many states, Arizona is fully supportive of new nuclear technologies, just as soon as it is commercially viable. We believe this technology will provide a long-term, cost-effective solution to baseload problems. We are also looking at possible day-ahead-market solutions to take advantage of lower priced energy wherever possible. We are actively working with large customers on microgrid solutions, incentivizing customers with large electric load to partner with our utilities on demand-side management (DSM) programs to help ease load under heavy-grid-load days. Currently we are holding workshops to delve into the possibility of a future/hybrid test year for our ratemaking process. This might include formulaic ratemaking, which is expected to ease the burden of our utilities investing in new technologies while at the same time protecting ratepayers from rate shock. Finally, we are doing what we can to push back on burdensome regulation at all levels of government.

3. The Environmental Protection Agency's latest electric generating unit proposal requires coal and natural gas resources to retire or to employ carbon capture and storage or co-fire with hydrogen. In your opinion, are these technologies commercially viable and the best systems of emissions reduction?

Not even close. These systems are very much in their infancy and have virtually *no infrastructure* to support them. This would, at best, be a multiple decade solution, not something that can be done in a few years with any degree of affordability.

a. Are you able to estimate the costs to comply and would you be able to justify the costs to comply to your ratepayers?

The simple answer is no, not with any reasonable degree of certainty. I can almost guarantee that it will be significant enough that ratepayers will not be happy about the inevitable increase, and the ones taking the heat for this increase will be state officials and utilities, which are the two groups most actively opposing the regulation.

b. Is this proposed rule workable without causing severe and widespread reliability issues?

No. From a practical standpoint, the expense of these programs is incalculable. Therefore, the best path forward would be for EPA to retract its proposal. Imposing these non-commercially viable technologies at this time will cause severe and widespread reliability problems.

4. The Federal Energy Regulatory Commission (FERC) is considering changes to transmission planning and cost allocation. Among the most pressing concerns related to transmission projects is the question of "who pays," commonly referred to as cost allocation. Along with rates needing to be just and reasonable, assigning costs for transmission commensurate with the benefits received is a bedrock principle of the Commission's orders. However, the Commission's proposed transmission Rule appears to broaden what constitutes "benefits" as a means to socialize the costs of expensive transmission lines that will be paid by captive customers who may not actually "benefit" from the transmission lines and the electric energy flowing through them. In other words, customers likely will be required to pay for transmission lines built for the benefit of certain subsidized generation, special interests, and/or other state public policy goals rather than for reliability and a demonstration of need.

a. Who is best positioned, individual states or FERC, to determine overall end-use customer bill impacts of various energy policy choices?

Without question, this decision needs to be left up to the individual states. In Arizona we are so topographically diverse that we have a difficult job managing it at a state-wide level. FERC interfering can only have a negative impact. A government entity cannot possibly create a rule that applies equally across the nation when it comes to transmission planning. FERC has no "skin in the game" in Arizona and therefore should stay away. Broadening what constitutes a "benefit" is analogous to changing the definition of the word and is completely inappropriate.

b. Would FERC adopting policies that promote or presume a large transmission buildout result in FERC effectively choosing for all states what their generation resource mixes will or should be? Does the Federal Power Act give this authority to FERC or the states? If FERC is requiring large transmission buildout, FERC should be paying for it (without taxpayer funds). Otherwise, this is simply a large overreach of its authority. It certainly does have the potential for FERC to pick winners and losers with regards to generation mix, but to what degree is somewhat unknown.

c. Are you concerned that cost-causing states will shift costs to customers in states that have no interest in pursuing such transmission for other states' public policy decisions?

Yes. I am concerned that FERC policies might end up shifting costs to states that are not asking for the additional transmission. In my opinion, this is the *only* reason for FERC to become involved. Otherwise, transmission decisions would be left up to the states.

d. Should states be able to opt-out of cost allocation methodologies that either undermine their own valid state public policies, or that will result in their state's customers subsidizing the public policy choices of other states?

Yes, states should be able to opt-out of cost allocation methodologies that undermine their state policies or that will result in the state's customers subsidizing the policy choices of other states. I would go a step further and argue that this is a must under the Arizona Constitution, which states unequivocally, and confirmed by the *Johnson v. Arizona Corporation Commission* ruling, that the Arizona Corporation Commission has plenary authority to set rates.

5. How can states preserve their planning authority and autonomy while participating in wholesale markets? As Arizona explores participation in wholesale markets, are you concerned that some states and utilities may over rely on the power from other states and utilities to pursue their policy objectives? What impact does this have on ratepayers in your state and regional reliability?

This is the \$10 billion question Arizona has been dealing with as it explores its utilities participating in a day-ahead market. During the development of the tariff for Southwest Power Pool's (SPP) Markets+, retaining state autonomy has been a "Core Concern" for the Markets+ State Committee members, which is comprised of state commissioners. Appropriate governance is key so that states retain their autonomy and can advocate for needed changes if policies in one state are unfairly imposing costs on the other states.

For example, Arizona electric utilities are currently participating in CAISO's Energy Imbalance Market (EIM), but CAISO's governance is a major concern. Even though there is still a net benefit to Arizona ratepayers, we are somewhat at the mercy of the California market. With SPP's Markets+ there are built-in protections from the Western Resource Adequacy Program (WRAP) that will require equal accounting of resources as well as requirements for each state to bring enough of its own generation to cover the expected load. Therefore Arizona, and all other participating states, would not be able to rely on other states for their resource adequacy. Rather, they would use the market to capitalize on cheaper electricity as it is available. A day-ahead market is an economic benefit tool, not a reliability tool as a general principle (however, reliability can be a benefit, but this is more of an exception than a rule). All simulations from our utilities that I have seen suggest that Arizona ratepayers would benefit from Markets+ day ahead market under almost all scenarios. With all of this said, I am not convinced these benefits carry over to a full-blown RTO. In this case, the WRAP reliability requirements are no longer applicable. Additionally, much of the ratemaking may be taken out of the hands of Arizona, which could lead to state constitutional issues. Finally, as is prevalent in other RTOs, there are issues of cost allocation (i.e., "User Pays") that may be difficult or impossible to deal with. A full RTO will need to be fully evaluated at a later date.

a. How can wholesale markets in the west be structured so that states and utilities more responsibly plan for and operate their systems?

As mentioned above, having WRAP-like requirements at a state level would be a great start.

6. As Congress looks to identify relevant statutory provisions relating to reliability and resource adequacy, from the state commission perspective, are there any updates to the Public Utilities Regulatory Policies Act of 1978, the Federal Power Act, or Department of Energy Organization Act of 1977 that may assist you in your work to assure reliability and resource adequacy?

PURPA is an outdated law. It was written prior to transmission open access, the advent of largescale renewables, and the development of modern wholesale markets. It hinders state flexibility in determining their own resource acquisition needs. Even when state regulators determine customer needs could be met more reliably and affordably by other resources, PURPA requires the acquisition of small and mid-scale resources at prices that may not provide grid, energy or capacity value.

Aside from a full repeal of PURPA, it could be amended in several ways. It could provide that if a utility goes through an approved state integrated resource planning process or a competitive solicitation process for generation needs, it would be relieved of its PURPA mandatory purchase obligations. It could also provide that implementation is permissive and subject to the state's direction. It could specify that a utility that participates in a FERC-approved energy imbalance market, day-ahead market, or other wholesale market trading platform is relieved of mandatory purchase obligations (mirroring the relief granted utilities participating in full RTOs). It could also clarify that "super-sized" PURPA projects with nameplate capacities in excess of the threshold set in law (e.g., Broadview Solar's 160 MW project) are not Qualifying Facilities.

Regarding the Federal Power Act, any proposed changes should preserve maximum state jurisdictional flexibility and authority to ensure affordable and reliable energy for their residents. Any changes should shield utilities from claims stemming from utility-caused wildfires, except in the case of gross negligence or willful conduct. This statutory protection could be contingent on PUC approval of a utility wildfire mitigation plan that includes provisions for when and how proactive power shut offs will occur.

The Honorable Robert E. Latta

1. The reliability and security of our energy sources continues to be in flux due to changes in demand patterns and demand growth along with policies promoting certain resources. How do these changes put our energy at risk and harm the consumer?

Demand patterns are trending towards data centers and manufacturing facilities, which, by the nature of their business mean they typically operate 24/7. Favoring renewable energy, that is unreliable at best, creates a scenario where the load profile does not match the generation profile. This is a serious reliability concern.

a. When faced with scarce generation capacity, how does your state determine which new loads will be connected?

The answer to this question largely depends on who is in office at the Commission and can change from election to election. The current Commission does not appear to favor mandates, subsidies, nor incentives as a general rule. We believe the incentive should be the most reliable generation, at the best price. To the extent generation type enters the analysis it should not be at the cost of reliability and affordability. Reliability though is the highest priority.

2. It is my understanding that there are innovations and technological advancements that would allow us to utilize our existing infrastructure more efficiently, easing the draw on our electrical grid, and lowering energy prices across the board. It seems to me that we should be encouraging innovations like this to tackle the pressing global challenges of rising energy costs and a faltering grid infrastructure, not just picking winners and losers from our perches in DC. While this technology exists today, there is little support for these efforts. What can we do at the federal level, including through the states, to support further development of these innovations to lower our energy consumption and energy costs at the same time?

Those at the federal level can help advance the development and adoption of new technologies by removing regulation that artificially favors one technology over the other and therefore let the free market do what it does best.

a. Shouldn't we be focusing on market incentives instead of the heavy hand of federal energy and environmental regulators?

Personally, I believe in the free market. Government removing itself, and "getting out of the way" is the best method of allowing new technologies to gain traction. Necessity is the mother of invention. This is fundamentally how microgrids are emerging in the industry. The best solutions will naturally rise to the top.

The Honorable H. Morgan Griffith

1. Utility ratemaking requires a careful balance of principles, such as reliability and affordability. In response to the Environmental Protection Agency's proposed Greenhouse Gas Power Plant Rule, do you believe that a compliance waiver program administered by the EPA, another federal agency, or federal regulator, would be prudent?

Absent the ability to eliminate the program completely, yes, a waiver is the next best option as long as the waiver requirements are not overly stringent and burdensome.

The Honorable Debbie Lesko

1. Can you please elaborate on the significance of attributes that dispatchable resources like coal and gas provide the grid, such as ramping, operating reserves, frequency regulation, voltage control, system inertia for stability, buffering against variable energy sources, etc.?

Many devices on our grid rely on a steady 60-cycle frequency to operate correctly and efficiently. For example, I know of at least one clock that keeps time based on 60-cycle AC signal,

motor speeds are dependent on frequency regulation of the power supply, even the power supply on your laptop is generally optimized to provide power to the computer based on a specific frequency and the more outside of that frequency, the less efficient it operates. Additionally, voltage and frequency have a close working relationship, and a fluctuation in one may affect the other, further amplifying the efficiency problems with an unstable grid. Therefore, having large, physically spinning, generation resources on the grid are important to keep the electrical inertia constant when changes to the grid occur. When the grid frequency becomes unstable, most rooftop solar resources, as designed today, will trip offline for safety reasons. As you pointed out, having reliable, dispatchable *and baseload* spinning resources is crucial to grid stability.

a. Do you think that a mechanism put into place within the energy markets to compensate or ensure the availability of resources that possess such attributes would enhance grid reliability and affordability?

Absolutely, energy markets should compensate for dispatchable, reliable and affordable resources which enhance grid reliability.

2. Utility Commissions are responsible for assuring reliable utility service at fair, just, and reasonable rates. How do you consider factors like reliability and affordability when pursuing climate and emissions goals?

I was elected on a platform of reliability first, affordability second, and a distant third being clean energy, *in that order*. I am supportive of clean energy as long as it doesn't undermine affordability and, heaven forbid, reliability. In my view it is unfair and unreasonable to consider these factors in any other order.

a. How do you reconcile these factors with state goals when they conflict?

As a regulator of a constitutionally established body that has a modicum of control over state energy goals, I would work to change the goals that conflict with these factors (the current Commission has been effectively doing so). To the extent the goals are from governmental bodies we are legally required to follow, then we would do our best to maintain reliability and affordability within the bounds of their restrictions.

3. Although states set individual climate and emissions goals, actions by one state could affect other states due to the interconnected nature of the electric grid and the natural gas pipeline system.

a. How are individual states' energy policies affecting regional or national reliability? Resource adequacy?

I feel this question is best answered by looking at CAISO. California's climate and energy policies have created a scenario where they are saturated with solar generation to the point where they must push much of it off to neighboring states during the day. Then in the evening/night, they rely on other states to keep their lights on. Additionally, because California has gone down this renewable path, their reliance on natural gas has increased dramatically in order to maintain grid reliability. It is very telling that local municipalities are taking it in their own hands to use emergency clauses to bring natural gas to their localities for reliability.

b. How are your Commissions managing divergent state approaches to energy policy?

As the saying goes "The west is not like the rest." We value our independence and feel local control is essential to success.

4. EPA's power plant proposal effectively requires carbon capture and storage (CCS) or clean hydrogen, two commercially unproven technologies, to reduce carbon emissions by 90%. Given that these technologies are unproven, can you discuss the potential reliability problems EPA's proposal would create for Arizona?

As mentioned, these technologies are aspirational at best. It will take decades to get the technology proven to the point of having the desired affect at a reasonable price. Much of this depends on infrastructure that simply cannot be built overnight. Forcing the adoption of this technology is simply a way of forcing the shutdown of "undesirable" generation prematurely. The impact of this will be significant in that it comprises a substantial portion of our spinning mass technology discussed above. Additionally, this technology is what provides our power when the sun doesn't shine and the wind doesn't blow. Without this reliable generation Arizona will undoubtedly be looking at major black/brownouts on a regular basis.

5. What do you see as the biggest impediments at the federal level that hinder grid reliability?

To put it succinctly, the most significant impediment at the federal level that hinders grid reliability are EPA regulations that are already *way too overreaching*.

6. The Democrats are advocating for socializing the cost of new transmissions lines. Do you think Arizona rate payers should pay for new transmission lines if Arizona does not receive any electricity from the new lines?

This is a somewhat complicated answer as there may be economical benefits from being able to sell our excess energy. However, under no circumstances is socializing the cost of transmission lines appropriate. It needs to be a "user pays" model. I firmly believe that an appropriate "Cost of Service Study" (or equivalent methodology) should be done to determine what percentage of benefit can be appropriately allocated to the parties that benefit. Furthermore, I feel it is much more appropriate for states to handle transmission between themselves without involvement from the federal government "who has no skin in the game" and therefore will not have the best interest of Arizonans.

7. At the state level you regulate with a tool called an Integrated Resource Plan or IRP. It requires a utility to look into the future and plan for grid reliability and affordability. Arizona is not a member of an RTO/ISO which are regulated by FERC. Currently these RTOs/ISOs are not required to do this type of planning even though their territories span large regional areas of the U.S. Do you think it would be helpful for these RTOs/ISOs to provide FERC plans that are similar in scope to IRPs?

Possibly. I do believe IRPs are a good idea. However, requiring FERC to mandate it is not appropriate. I do believe an RTO with an appropriate governance structure will have input from their stakeholders that appropriately handle this situation, thereby FERC can only get in the way.

8. Should RTOs/ISOs have a similar policy such as "an obligation to serve"?

Yes, and to the extent they have that obligation, they must have the ability to perform that function. If they have no ability to build generation, then they cannot, by definition, fulfill an obligation to serve. Therefore, this discussion gets very complicated and ultimately gets to my concern of whether this is best for Arizona and whether it is even allowed under Arizona's constitution.

9. Do you think having financially healthy utilities is essential to maintaining effective reliability of the grid?

Absolutely. Utilities cannot provide ongoing safe, reliable and affordable service if they are not financially healthy.

10. Can you please discuss how the myriad of regulations impacting the energy sector from EPA, such as the Clean Power Plan 2.0, the Interstate Transport Rule, and the new PM2.5 standard, make the Arizona Corporation Commission's role more difficult and will increase electricity costs for the citizens of Arizona?

Every mandate requires compliance and compliance costs money. Those costs directly impact customer bills and are further increased by a constitutionally required Return on Equity to the utility. Many times (as could be the case with EPA's PFOS regulations for water utilities), the most reasonable approach to complying may quickly become obsolete when a more stringent requirement is introduced. Thus, the costs of compliance are further multiplied and passed on to the customer.

a. EPA is not a grid reliability expert and does not need to ensure electricity reliability and affordability for our citizens- yes or no, should there be increased coordination and consultation between EPA and reliability experts before promulgating regulations impacting power generation?

Yes, absolutely, without a doubt, and I might point out that the EPA should not just consult, but actively defer decision making at this point. An unreliable electric grid is much more dangerous than many, if not all, of the environmental concerns EPA is seeking to address.

11. The North American Electric Reliability Corporation (NERC) December 2023 Long-Term Reliability Assessment show that over 2/3's of the United States are in an "Elevated" or "High Risk" of not meeting Resource Adequacy Targets over the next 5 years. With the influx of intermittent resources, NERC recommends maintaining enough flexible resources to preserve the reliability of the grid. How can we get people to realize the importance of natural gas, including expansion of its infrastructure, as well as preserving and protecting the benefits we receive from renewable hydropower and stop trying to tear down dams?

Anyone suggesting that we should remove, decommission, or block construction of hydropower or natural gas generation should have to provide a proven alternative solution at an equal or lower cost, that is available today and does not have supply-chain issues. Theoretical, aspirational, and non-proven technologies will not suffice.

12. NERC also recommends the adoption of Bulk Power System planning to accommodate the realities of a more complex power system. Where should "Reliability" rank in this planning process? In other words, should we ensure reliability over natural gas plant retirements? You

are seeing countries in Europe (Finland and France) bring mothballed Coal Plants back online, even California is installing natural gas generators for backup power. How can we learn from their mistakes and maintain reliability in the US?

I agree with everything you said, and it perfectly illustrates that we cannot have reliability without naturally ramping down generation in a controlled and calculated manner. With respect to where reliability should rank, I will reiterate my response at the hearing. I was elected on a promise to make grid reliability my highest priority. This is evident even in highly "progressive" locations where they are backtracking on their policy in order to provide reliability. It should be noted that so-called "fossil fuels" were, and still are, the single most important technology in modern history to 1) bring people up from poverty, and 2) clean up our environment. Early retirement of these technologies without a *suitable* replacement is a recipe to end up in the stone age with significantly more pollution.

13. FERC recently approved 2 new natural gas pipelines. Would you say that more natural gas infrastructure is necessary to preserve the integrity of the grid?

Yes, more natural gas infrastructure is necessary to preserve the integrity of the grid. In Arizona, it is not only necessary but imperative at this point. Our utilities need to add natural gas generation resources in the coming years to complement intermittent renewable resources, but the current natural gas infrastructure in Arizona cannot provide all the natural gas that will be needed.

14. What role do regulators play in ensuring that reliability and affordability are not compromised as utilities continue to transition the generation fleet during times of rapid growth?

As state regulators, our job is to ensure the grid is stable and reliable, and that it's done at the most affordable cost. This includes planning for upcoming growth with the understanding that aspirational technologies cannot be counted on, and if the gamble is taken and lost, this growth will be stifled, or worse, contribute to the instability of the grid. We simply cannot take risks on technology that is not ready to fill the role needed. New technologies should be adopted when they are proven and market ready.

15. Maricopa County continues to experience some of the highest population growth in the nation. We are seeing a surge in electricity demand - and at the same time, coal plants are being retired. How do you see natural gas playing a role in the energy transition?

As a regulator, I can tell you that virtually all our utilities are either installing, or relying on a partner that is actively looking to install or planning the installation of new natural gas generation. There simply is no other choice. They are telling us that they need more gas generation to complement intermittent renewable resources. Batteries alone will not solve the reliability concerns.

16. This past summer, the Phoenix metro area experienced 31 straight days of high temperatures over 110 degrees, leading to a 7% increase in demand compared to the previous summer. What do you see as the appropriate role of regulators regarding grid reliability during extreme weather events?

As regulators, it is our job to make sure our utilities have enough reserve margin, whether it be market purchases or self-generation, to cover all scenarios. It is also incumbent on us to make sure redundant infrastructure is implemented where necessary and appropriate. This is done through our IRP process as well as reported on to us every year at our Summer Preparedness Workshops. 17. Commissioner Myers, the Bureau of Reclamation just last week released a proposal to mitigate the increase in smallmouth bass below the Glen Canyon Dam. Have you reviewed the draft supplemental environmental impact statement from the Bureau?

I have not.

18. There is concern that the proposal could remove Glen Canyon Dam hydropower from the Western Grid during the critical hot summer months. The 374-page proposal doesn't consider grid reliability and I'm curious why a proposal that could stop hydropower production at Glen Canyon Dam doesn't include an adequate grid impact analysis.

Presuming this is true, I would have to agree that not considering the full range of impacts is unwise at best. This dam has been in place for almost 60 years, and it seems odd that at the time when hydro is needed the most, there are proposals to take it offline. Hydro power is critical to our state like it is in much of the west. Those responsible for providing power and are "in the trenches" every day to meet the demand are actively looking to *increase* hydro power, not reduce it.

19. Will you work with me to ensure a proper grid impact analysis is conducted before any proposal is approved? Will you work with DOE and DOI to assess western interconnect impacts on this proposal?

Absolutely! Anything I can do to help! When do we start?

20. The Bureau of Reclamation recently released a proposal to mitigate the increase in smallmouth bass below the Glen Canyon Dam. Have you reviewed the draft supplemental environmental impact statement from the Bureau? The proposal focuses on "flow alternatives" that would release water through the bypass tubes, as opposed to releasing water through power generating penstocks. These "bypass flows" are experimental flows intended to cool river water temperature and disrupt smallmouth bass proliferation. These bypass flows will significantly reduce power production during the summer months when it is needed most. The 374-page Bureau of Reclamation proposal doesn't consider the potential impacts to grid reliability and I'm curious why a proposal that could disrupt hydropower production at Glen Canyon Dam doesn't include an adequate grid impact analysis. Similarly, I am curious why the flow alternatives included in the proposal.

a. Are any of the following alternatives being explored as options? Preventing entrainment through reservoir elevation manipulation, thermal curtain or barrier net, habitat modifications, or addressing the -12-mile slough where the smallmouth bass and other invasive fish spawn?

b. Will you work with me to ensure a proper grid impact analysis is conducted before any proposal is approved? Will you work with DOE and DOI to assess western interconnect impacts on this proposal?

c. Will you work with me to encourage alternative solutions that don't reduce power production?

As I said above, I absolutely will do whatever I can to help.