Written Statement of

Mark Crisson, President and CEO of the

American Public Power Association (APPA)

For the

House Natural Resources Committee's Hearing on

"The Chu Memorandum: Directives Could Increase Electricity Costs for over 40 Million Families and Small Businesses"

September 11, 2012

Thank you for the opportunity to testify at this hearing to examine the impacts of Department of Energy Secretary Chu's March 16, 2012, memorandum on the federal Power Marketing Administrations (PMAs) and the steps that DOE has taken since release of the memo almost five months ago. My name is Mark Crisson, President and CEO of the American Public Power Association (APPA). APPA, based in Washington, D.C., is the service organization for the nation's more than 2,000 not-for-profit, community-owned electric utilities. Collectively, these utilities serve more than 46 million Americans in 49 states (all but Hawaii).

APPA was created in 1940 as a non-profit, non-partisan organization to advance the public policy interests of its members and their customers, and to provide member services to ensure adequate, reliable electricity at a reasonable price with the proper protection of the environment. Since two-thirds of public power utilities do not generate their own electricity and instead buy it on the wholesale market for distribution to customers, securing low-cost and reliable wholesale power is a priority for public power. Most public power utilities are owned by municipalities, with others are owned by counties, public utility districts, and states. APPA members also include joint action agencies (state and regional consortia of public power utilities) and state, regional, and local associations that have purposes similar to those of APPA.

APPA advocates for policies that: ensure reliable electricity service at competitive costs; advance diversity and equity in the electric utility industry; promote effective competition in the wholesale electricity marketplace; protect the environment and the health and safety of electricity consumers; and safeguard the ability of communities to provide infrastructure services that their consumers require.

Approximately 600 public power utilities in 33 states purchase hydropower from the four federal Power Marketing Administrations (PMAs). The PMAs market the hydropower produced at large federally-owned dams operated by the U.S. Army Corps of Engineers (Corps) and the Bureau of Reclamation (BOR). Each of these public power utilities has a unique contractual arrangement with the PMA from which they receive power. Some of these utilities get all of their power needs met through the PMA, while others only get a portion – augmenting the federal hydropower with their own generation sources or those purchased from others, which include natural gas, coal, nuclear, other hydropower facilities and non-hydro renewable sources such as wind, solar, geothermal and biomass. What they have in common is that the rates they pay for the PMA-marketed hydropower cover *all* of the costs of generating and transmitting the power, interest on the federal investment in the project, and ongoing operation and maintenance. In some cases, the power customers also subsidize other purposes of the dams, such as irrigation and recreation.

For the public power utilities that purchase hydropower marketed by the PMAs, this system of repayment of the federal investment, through rates charged to electricity customers has worked well for decades. As modifications

and updates are made to federal dams, the power customers who receive the benefits of these upgrades repay the government for such upgrades. This principle, long-referred to as "beneficiary pays," is a core underpinning of the PMAs' operations. Another principle is that of "preference" which is essentially a "right of first refusal" to access PMA power that has been granted under federal law to not-for-profit utilities – public power and rural electric cooperatives – and a few other not-for-profit entities such as military installations and publicly-owned universities. This sound public policy principle is based on the concept that our nation's river systems, and many of the dams that have been built on them, are public goods, and thus the benefits of these facilities must flow broadly to consumers on a cost-based, not-for-profit basis. This concept has had bipartisan support since the inception of federal hydropower in the early 1900s.

The four PMAs – Bonneville Power Administration (Bonneville or BPA), Western Area Power Administration (Western or WAPA), Southwestern Power Administration (Southwestern or SWPA) and Southeastern Power Administration (Southeastern or SEPA) – market wholesale power to approximately 1,180 public power utilities and rural electric cooperatives in 33 states, serving over 40 million electricity end-users. These 1,180 public power utilities and rural electric cooperatives are often referred to collectively as the "PMA customers." They in turn serve their end-use electric consumers who are located in the following states, by PMA region: BPA: Washington, Oregon, Idaho, Montana (part). WAPA: Arizona, California, Colorado, Iowa, Kansas (part), Minnesota, Montana (part), North Dakota, Nebraska, New Mexico, Nevada, South Dakota, Texas (part), Utah, Wisconsin, Wyoming. SWPA: Arkansas, Kansas (part), Louisiana, Missouri, Oklahoma, Texas (part). SEPA: Alabama, Florida, Georgia, Illinois, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia.

APPA members, as purchasers of significant quantities of wholesale power marketed by the PMAs, are directly impacted by changes to the "federal power program" (the policies and laws that collectively govern the PMAs). The PMAs are based on a system of cost "pass-throughs," whereby federal investment is repaid, plus interest, through electricity rates. As the costs to the federal government to provide these hydropower services increase, wholesale and retail electricity rates are raised correspondingly. As a result of this relationship, APPA has consistently opposed unnecessary changes to the structure and mission of the PMAs that would have resulted in higher electricity rates for its members and their customers. These changes have often been attempts to either privatize the PMAs, or to raise the federal wholesale rates to market-based rates, as opposed to the cost-based rate methodology under which the PMAs have operated successfully for decades, at no cost to the federal government. Today, however, PMA customers face a more subtle, yet equally problematic, challenge.

Background on Department of Energy Secretary Chu March 16, 2012, Memo on the PMAs and Initial Customer and Congressional Response:

On March 16, 2012, Department of Energy (DOE) Secretary Steven Chu released a six-page memorandum outlining several proposed changes to the PMAs ("March 16 Memorandum"). As APPA testified at the April hearing held by this Committee, portions of the March 16 Memorandum contain admirable goals, at least in the abstract. But these proposals, which promise to impose unnecessary and inappropriate cost increases on federal hydropower customers, and therefore on millions of retail electricity customers, were crafted without any consultation with the very customers they would most directly affect. Customer consultation at the regional level has long been a core principle of PMA operations. In all PMA projects, customers have paid for improvements to the systems that provide them with hydropower and will continue to do so, as required by the various PMA authorizing statutes. The lack of coordination by DOE with PMA customers -- the group that will be primarily impacted -- in crafting these proposed changes, was therefore startling. When combined with the secretive process by which the March 16 Memorandum was created and the lack of specific directives, the entire effort was, and continues to be, quite troubling.

Included in the changes proposed in this March 16 Memorandum were concepts such as construction of new transmission through third-party financing mechanisms and new borrowing authorities; "improvement" of the PMAs' rate designs; the institution of an energy imbalance market for the West; the creation of revolving funds for transmission improvements, and other changes described in the sections below.

These plans, as introduced, were very short on specificity. They were described by Ms. Lauren Azar, the DOE Senior Advisor working on these issues, in written testimony to this Committee as "foundational goals." APPA and its PMA-customer members had hoped that more specificity would soon be forthcoming. However, the March 16 Memorandum's rollout was only the first step in a confusing and secretive process that could be described as, at best, poorly organized, and, at worst, misleading and misinformed. DOE has consistently shifted its rationale for its proposed changes to the PMAs. While DOE has used words such as "collaboration" and "transparency" to describe its intentions for the PMA-change process, APPA believes this process has been full of shifting justifications and opaque processes. For example, below is a short timeline outlining DOE's shifting public justifications for undertaking this effort:

<u>Initial justification</u> – March 16, 2012: The March 16 Memorandum from Secretary Chu is released, having been crafted with no customer input. As primary justification for these proposals, Secretary Chu cites a need for greater integration of renewable resources (wind and solar power) and a need to upgrade the nation's transmission grid.

<u>Second justification</u> – May 31, 2012: At a meeting of PMA customers in Denver, Colorado, hosted by APPA and the National Rural Electric Cooperative Association (NRECA), Ms. Azar reads aloud from a May 30 blog posting by Secretary Chu. This statement cites "global competitiveness" and enhancing transmission to avoid repetition of the September 2011 blackouts in the Southwestern United States (see below) as further justification for the proposed PMA changes (http://energy.gov/articles/america-s-competitiveness-depends-21st-century-grid).

<u>Third justification</u> – July 9, 2012: In response to a letter to Secretary Chu signed by 166 Members of Congress expressing concerns about his plans for the PMAs, Secretary Chu cites blackouts that occurred as part of a "derecho" weather pattern in Washington, D.C., as further evidence of the need for an upgrade of the PMAs' transmission systems.

<u>Fourth justification</u> – July 24 through August 2, 2012 (during the regional WAPA workshops – see below): Inappropriately characterizing her conversations with the CEOs of APPA and the National Rural Electric Cooperative Association (NRECA), Ms. Azar cites her attendance (she appeared unannounced) at a meeting of electric and nuclear utility CEOs who were discussing emergency preparedness with the Secretaries of the Department of Homeland Security and the DOE as an indication that these CEOs, including APPA's and NRECA's, fully supported the objectives of the March 16 Memorandum. She publicly cites her involvement in this meeting, which was organized after 18 months of effort to discuss coordinated processes in the event of a national disaster, as justification of the need for the proposed PMA changes.

In the hearing held on this topic in April, Members of the Committee sought to better understand the specific plans and rationales for the effort announced in the March 16 Memorandum. And, as mentioned above, so did 166 members of the House and Senate, as well as PMA customer representatives from public power utilities and co-ops at a meeting in Denver. These three processes— the hearing, a broadly-bipartisan letter, and direct questions from PMA customer representatives to DOE and PMA staff—did little to enhance APPA's PMA-customer members' understanding of DOE's specific plans for the PMAs. We did learn, however, that the first PMA to be overhauled would be WAPA, and that a series of workshops would be held over the summer to garner stakeholder input. Much of the rest of this statement will focus on this process, including the topics related to the March 16 Memorandum that were discussed in the workshops. The statement will conclude by making recommendations to DOE and the Committee based on the process and substance of these workshops.

WAPA Workshops:

WAPA markets wholesale power to approximately 287 public power systems in Arizona, California, Colorado, Iowa, Kansas (part), Minnesota, Montana (part), North Dakota, Nebraska, New Mexico, Nevada, South Dakota, Texas (part), Utah, Wisconsin, and Wyoming. WAPA serves over 5.5 million electricity end-users in the public power communities in these states.

Six regional listening sessions/workshops were announced as part of DOE's processes for overhauling WAPA. APPA was immediately concerned when hearing of this announcement because these workshops were cast as including all PMA "stakeholders," a term Ms. Azar had described as meaning any person or group with a past, current, or future/potential interest in changes to the PMAs. For decades, PMA customers have paid for PMA operations and would bear the most direct impact of any cost increases caused by these changes. Hence, the customers regard themselves as more than mere "stakeholders" of the PMAs. DOE's lack of understanding that PMA customers are, in effect, the founding partners of the PMAs was apparent in its release of the March 16 Memorandum. This ignorance was further highlighted as DOE announced it would allow anyone with any interest whatsoever to attend workshops designed to discuss its vague PMA plans. Without first confirming its plans with the very PMA customers that agreed, decades ago, to enter into a partnership to create the PMAs, DOE effectively demonstrated its intention to move forward with or without PMA customer cooperation. This left the strong impression with the PMA customers that these regional meetings were more form than substance, intended as a "check the box" exercise.

In similar fashion to the (lack of) introduction of the March 16 Memorandum, DOE's webinar explaining the details for the upcoming workshops did little to inspire confidence that these meetings would be useful. In fact, it contained slides that had incorrect information about the PMAs' operations. The sign-up process for these workshops was confusing and was highlighted by changed registration dates, conflicting guidelines, and an overall lack of organization. So many questions were left unanswered that workshop attendees were forced to ask direct questions of the meeting organizers. It was only through these questions that customers learned that their contributed funds—\$100,000 or more—were being used to fund the very workshops they had been given so little information about and from which they had largely been excluded from the planning. To learn this at the beginning of the three-week workshop process was a further insult to PMA customers.

The workshops and listening sessions did allow PMA customers and other stakeholders to discuss their views on several specific topics, as elaborated on below. Prior to providing more detail on this process, however, it is important to clarify WAPA's mission. In materials provided by DOE prior to the WAPA workshops, WAPA's historical mission is described as "to market and deliver reliable, renewable, cost-based hydroelectric power and related services to its customers." Secretary Chu earlier stated in his May 30 blog post that "the fundamental mission of the PMAs to provide electricity at cost-based rates – equal to the cost of generation and transmission – will not change."

The mission of the PMAs is not simply to provide wholesale electricity from hydropower at cost-based rates. Instead, any new actions taken by the PMAs must be in accordance with the standard established in Section 5 of the Flood Control Act of 1944, which provides that sales of wholesale electric power to PMA customers are to be made "at the lowest possible rates to consumers consistent with sound business practices." The distinction between this language and the broader "cost-based rates" verbiage is critical. Without a standard specifying that rates are to be the "lowest possible," the concept of cost-based rates allows for boundless, and potentially duplicative, mandates from DOE to the PMAs that would drive up the costs included in the rates. *Therefore, any new initiative undertaken by WAPA must have an objective consistent with the obligations of WAPA to its customers, and must represent the lowest-cost means to achieve that objective.*

Each of the five regional workshops featured three break-out sessions with specific working groups. APPA will discuss each breakout and the topics covered in it separately.

Transmission Planning and Operations:

This working group addressed the following two topic areas of the March 16 Memorandum: "Improving PMA Existing Infrastructure" and "Improving Collaboration with Other Owners and Operators of the Grid." The comments below focus on each of these issue areas.

Improving PMA Infrastructure:

DOE statements made at the workshops and listening sessions with regard to the WAPA transmission system imply that the transmission system is in a greater state of disrepair than other parts of the national grid. Such a portrayal has served as a distraction from any actual evaluation of transmission improvements that might in fact be needed, and raises questions about DOE's understanding of WAPA's infrastructure.

Examples of statements made by DOE on the state of the PMA infrastructure include Secretary Chu's statement in his May 30 blog, with regard to the PMAs, that "[m]ost of the transmission lines and power transformers we depend upon are decades old and in many cases nearing or exceeding their expected lifespan." The Secretary's blog post further states that "the PMAs will need *to make many of the same types of investments that other privately held electric utilities will need to make, and in some cases are already making*, if the United States is to remain economically competitive." (Emphasis added.)

There is no evidence that WAPA and the other PMAs are out of step with other utilities or somehow not in compliance with federal policy regarding transmission investments. These statements ignore the large number of transmission upgrades WAPA has constructed, as detailed on its web site and in annual or quarterly reports. For example, WAPA's 2011 Annual Report lists 47 transmission upgrade projects and three Transmission Infrastructure Program (TIP) projects totaling over 1,000 miles. WestConnect, a transmission planning organization which includes WAPA along with a number of public power and cooperative customers among its members, regularly releases detailed ten-year transmission plans. According to WestConnect's 2012 Ten-Year Transmission Plan, there are almost a billion dollars of upgrades and new facilities planned for WAPA's system between 2012 and 2020. It is questionable whether DOE took into account in its statement these documented, planned upgrades.

As discussed previously, the rationale for the Secretary's PMA directives has shifted from the integration of renewable energy to the prevention of power outages. In his July 9 response to the June 5 letter from 166 Members of Congress, Secretary Chu stated:

As of July 6, 400,000 customers remained without power in sweltering heat due to the June 29, 2012 *derecho* storm that swept through the mid-Atlantic and East Coast. Blackouts not only cause significant economic losses, they are also a threat to human health, especially when they occur during extreme weather events.

The Secretary further points to the San Diego blackout as "a good example of what can happen when our Nation's electric sector is slow to respond to needed reforms." APPA agrees that blackouts, regardless of the causes, impose an immense burden on the public, whether these originate at the bulk power (wholesale) level or are the result of the effects of extreme weather on local distribution systems. However, conflating the June 29, 2012, *derecho* storm outages that brought down thousands of trees and the September 2011 blackout is not helpful in enhancing either public or congressional understanding of recent power outages or the measures that can and should be taken in response. Moreover, the storm outages that took place in the Midwest and Mid-Atlantic states beginning on June 29, 2012, were *distribution system* (as opposed to wholesale, bulk power system level) events that took place over a wide area. WAPA and the other PMAs do not own or operate significant distribution facilities, but instead operate bulk power system facilities (nor is there any significant PMA presence in these regions – note list of PMA states on page 2 of this statement).

With regard to the September 2011 outages, the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) investigation into the outage concluded that this bulk electric

system outage stemmed primarily from weaknesses in two broad areas – operations planning and real-time situational awareness, which are both essential to ensure reliable system operation. FERC and NERC, in their report "Arizona-Southern California Outages on September 8, 2011, Causes and Recommendations" specifically recommended, among other items, improved data sharing and communications between neighboring balancing authorities and transmission operators, improving real-time tools to constantly monitor internal and external contingencies, better identifying and planning for external contingencies, and accounting for the impact of facilities below 100 kV (kilovolts) on reliability. Secretary Chu in his May 30 Blog post notes that DOE will be investigating "the exchange of real time data with neighbors for situational awareness and the exchange of scenarios and models for operational planning." While this is a commendable effort and should be pursued, simply restating the FERC/NERC recommendations in the blog post does not, however, mean that a broad array of DOE directives to the PMAs will improve reliability. Also, broad institutional "reforms" are not needed to respond to these events. Rather, existing system operators, particularly entities with responsibility for wide-area coordination and system operations, such as the Western Electricity Coordinating Council (WECC) Reliability Coordinator and California Independent System Operator, need to improve the execution of their responsibilities and keep local area system operators (such as WAPA) fully informed when extreme events take place.

As John DiStasio, general manager and CEO of the Sacramento Municipal Utility District, stated in the July 29, 2012, *The Sacramento Bee*:

The directives in the DOE memo would lessen reliability, all in the name of efficiency. It's akin to increasing the number of airplanes that can land on a runway in a given hour in the name of efficiency, without taking into consideration unintended side effects such as a reduction in safety.

Ms. Azar added to this unrealistic portrayal of the PMA infrastructure at the workshops by repeatedly citing irrelevant statistics on the age of the wood poles on WAPA's transmission system. Ms. Azar's data is based in part on the age of the line and not the poles themselves. If a line is 50 years old, it does not mean that all of the poles are 50 years old. *Poles are replaced as necessary*. Moreover, there is a fundamental distinction between the economic and useful age of equipment. It would be cost-prohibitive to replace poles and equipment due to age only. What is important is how the system is performing. Like most utilities, WAPA has a program that, on a regular basis, inspects each and every pole on a given line. All poles that fail the inspection are replaced, and the reliability of the line is maintained at the high level that is expected. This standard utility practice implemented by WAPA ensures its system remains at a high level of reliability, with just one or two temporary outages on each line per year. Such outages are typically either momentary in nature (less than one second) or quickly returned back to service (a couple of minutes). According to the WAPA 2011 Annual Report, just 27 outages of consequence were reported on WAPA's *entire* system in 2011, most lasting less than 35 minutes.

Not all miles of a transmission system can be new all the time. Prudent management of the system entails replacing the parts that are in the worst shape or the most overloaded, which are not necessarily the oldest. WAPA has continually replaced the equipment and wood poles that require replacement due to performance-related issues, while balancing the impacts on rates to keep the system reliable and affordable. Detailed data is available in WestConnect's Ten-Year Transmission Plan on a number of projects involving replacement of wood structures with steel 230 K monopoles. This Plan was released in February 2012, one month prior to the March 16 Memorandum.

For transformers, the manufacturer plans for a 40-year life *at full load*. The life expectancy is directly related to the heavy continuous loading which causes the transformer to run at its maximum rated temperature. At that temperature, the heat eventually deteriorates the insulation, causing a failure. But most transformers idle along at far less than their full load rating and are only fully loaded during extremely high loading or during outages. Transformers that have regular oil testing and monitoring, along with other testing, have provided reliable service for decades after the 40 year "expected" life.

Any formulation of new policies needs to be based on an accurate understanding of the *status quo*. The use of selected statistics to mischaracterize the current reality regarding WAPA's transmission system does not contribute positively to the debate. Rather, it raises additional concerns that the intent of DOE is to achieve predetermined policy outcomes, regardless of the facts "on the ground." This is a flawed basis for determining optimal policies to provide electric power at the lowest possible rates to consumers consistent with sound business practices, as the statute requires. Formulating policies for the PMAs based on this incorrect assessment of WAPA's infrastructure raises a significant risk of layering additional costs on WAPA's customers without any establishment of the need to incur them.

Improving Collaboration with Other Owners and Operators of the Grid:

Secretary Chu's March 16 Memorandum directs "the PMAs to capture economies through partnering with others in planning, building, and operating the grid," including the implementation of an Energy Imbalance Market (EIM). The Secretary claims an EIM will "capture many of the potential efficiencies that remain untapped in the Western Interconnection."

Although later communications from Secretary Chu do not mention the EIM, this concept was a topic at all of the workshops, and is actively being discussed by the PUC EIM, a taskforce established by the Western Governors' Association and comprised of state public utility commissioners (state utility commissions regulate retail -- or distribution rates -- and functions of investor-owned and cooperative utilities in most states). In contrast to Secretary Chu's foregone conclusion that an EIM will capture untapped efficiencies, there are significant uncertainties regarding the benefits and costs of an EIM. Such uncertainties indicate the need to proceed very cautiously on this measure, and to carefully evaluate other alternative methods to integrate variable energy resources.

Thus far, the only fully completed analysis of the costs and benefits of an EIM in WECC was commissioned by the WECC staff and finalized last October - entitled "WECC Efficient Dispatch Toolkit Cost-Benefit Analysis." The results of this analysis presented a range of the present value of net benefits over a 10-year period, with a high of a net benefit of \$941 million and a low of a net cost of \$1.25 billion. Not only was the ability of an EIM to produce net benefits not proven, but there were a number of flaws in the analysis that could have reduced the projected benefits or raised the costs. The benefit analysis, performed by Energy and Environmental Economics, Inc. (E3), found the largest category of benefits to be the reduction in the need for "flexibility reserves," which are generation resources standing by to come on line quickly when wind or solar resources drop off sharply, as often occurs. The reduction in flexibility reserves needs was assumed to result from access to a larger geographic array of renewable energy resources and a corresponding reduction in the overall variability of such resources. For example, if the wind or sunlight is low in one region of the EIM it might be greater in another area, thus reducing the total variability. But this benefit can only be fully achieved if there is adequate transmission capacity throughout the entire region, a highly unrealistic assumption. An April 2012 analysis by Argonne National Laboratory noted that the presence of transmission congestion could negate this benefit. Hence, the cost of the transmission facilities needed to reduce/eliminate such congestion would have to be assessed and included in the cost/benefit analysis.

The measurement of the costs of an EIM, also commissioned by WECC and performed by Utilicast, LLC, was limited to the infrastructure (*i.e.*, software, hardware, facilities, and equipment), rent, supplies, travel, and staff costs incurred by the market operator and market participants, which include local utilities, balancing authorities, generation owners and transmission providers. These costs, however, ignore the likelihood for an EIM eventually to evolve into a full Regional Transmission Organization (RTO), a construct that has been imposed in the East, California, Texas, and most of the Mid-West, but has been resisted in the Southeast, and all of the West, except California, because of the costs associated with such a construct and the skepticism in these regions about the competence of the Federal Energy Regulatory Commission (FERC) to prevent skyrocketing costs and market manipulation such as was seen in the western electricity crisis of 2000-2001. The complexities of the constantly changing market rules, lengthy stakeholder meetings, FERC proceedings, and settlement talks that are an

inevitable part of an RTO would produce much greater infrastructure, labor and time costs than estimated by Utilicast. Consumers would also bear the additional cost of potential price increases from an EIM or eventual RTO. An APPA analysis of retail price data provided by DOE's Energy Information Administration found that, in 2011, deregulated states located within RTOs had average retail electric rates that exceeded that of the remaining states by 42 percent. (Report available at <u>http://publicpower.org/files/PDFs/RKW_Final_-2011_update.pdf.)</u>

Another technical change that has already been implemented, but is not accounted for in this study or others that have been commissioned by WECC and the PUC EIM recently, is the use of what is known as "intra-hourly" scheduling of transmission lines in order to more precisely dispatch generation from power plants where necessary. Since electricity is generated and consumed instantaneously, grid operators must constantly balance the supply and demand. With power generation that is variable (i.e., cannot be dispatched and controlled in the same manner as conventional sources of power) like wind and solar, more precise scheduling of transmission lines becomes necessary. Therefore, WAPA implemented intra-hourly scheduling in July 2011, and FERC, which regulates bulk power system activities, ordered in June 2012 that public utility (i.e.; investor-owned utilities} transmission providers offer such scheduling. Many of the benefits of an EIM will be captured by these new requirements for more precise scheduling and, conversely, many of the additional technical aspects to an EIM are likely to have significant costs. As FERC stated in Order No. 764, Paragraph 98:

The Commission appreciates that implementation of other reforms, such as intra-hour imbalance settlement, an intra-hour transmission product, increasing the frequency of resource commitment through sub-hourly dispatch, or the formation of intra-hour imbalance markets, could yield additional benefits for public utility transmission providers and their customers. *However, these additional reforms can have significant costs. The Commission's review of the record in this proceeding suggests that a more measured approach is appropriate to take at this time.* (Emphasis added.)

In the midst of the attention given to the conflicting and dubious benefits estimates, little attention has been paid to the costs. The only data collected by the PUC EIM on costs consists of the incremental market operator costs that would be incurred if one of two existing RTOs, the Southwest Power Pool or the California ISO, were to operate the EIM. These estimates ignore individual utility infrastructure and labor costs, not to mention the additional eventual likely cost of moving to a full RTO. APPA is greatly concerned that these underestimated costs will be paired with the overestimated benefits to justify implementation of an EIM.

Although APPA agrees that FERC is unlikely to unilaterally impose an RTO on the West, the history of existing RTOs reveals a step-by-step evolution into more complex and problematic markets, rather than a "grand design" from the outset. In recent years, FERC has even overturned carefully negotiated settlements regarding the rules applicable to such RTO markets, to the detriment of consumers. For a more detailed discussion, see *RTO Capacity Markets and Their Impacts on Consumers and Public Power*, APPA Fact Sheet, February 2012 available at <u>http://www.publicpower.org/files/PDFs/RTOCapacityFactsFeb2012FS.pdf.</u>

In "Corporate Structure and Governance of Western Energy Imbalance Market," a paper prepared by Wright & Talisman, PC, possible measures to guard against an unwanted RTO or RTO-like markets or characteristics are proposed. Although APPA greatly appreciates Wright & Talisman's efforts in this area, we remain concerned that an EIM will move forward based on an overreliance on such illusory safeguards. Two measures are proposed in this paper. First, the paper proposes that the structure of the EIM would assure that the market administrator would not assume control of any entity's transmission facilities, meaning that the EIM would not meet the definition of an RTO; it would, however, be administering a wholesale power market, which would presumably be subject to FERC's jurisdiction over sales for resale of electric power in interstate commerce. Second, the membership agreement would include a provision protecting against "mission creep" and the evolution of an EIM. This second tier safeguard is crucial, but unlikely to hold up.

The Wright & Talisman paper offers only the following description of this secondary safeguard:

It is feasible to address this matter in the Members Agreement, either by including restrictive provisions or by establishing voting levels to allow mission expansion. If participants favor restrictions, such restrictions could be at the heart of providing assurance that the EIM will be only an EIM, until and unless there is broad consensus for change. Until and unless such expansion of the organizational role is approved, the scope and services of the EIM in Western markets would remain unchanged.

This language is hardly an assurance that the region would be adequately protected from the development of an RTO. First, there would need to be an agreement among all of the prospective members to include such language in the Members Agreement upon formation of an EIM, hardly a certainty. Second, the paper acknowledges that there could be an undefined "broad consensus for change." How would such a consensus be defined? Would public power have adequate representation in the decision-making? Would public power and other similarly-situated entities have sufficient staff and other resources to participate in the lengthy proceedings leading up to the determination of such a consensus? The past experience of APPA and its members in RTO regions is that what happens in one RTO does not stay in that RTO; rather, "innovations" jump from one to another. Moreover the lop-sided resources that generators and their allies bring to RTO stakeholder processes mean that consumers and those who serve them often are steam-rolled, and they bear the consequences in the form of increased rates and decreased supply options. Hence, while the measures set out in this paper are no doubt well-intentioned, they should not be "taken to the bank."

There are also factors specific to WAPA that may impede the development of an EIM, and that are not being explored by DOE or the PUC EIM. First, transmission constraints and the absence of adequate interconnections with some regions, such as WAPA's Sierra Nevada region, may limit the ability to dispatch resources across the region. Second, there are statutory and other constraints on the availability of hydropower for dispatch under an EIM. Water delivery and maintaining water quality have priority over the generation of electricity from hydropower, and electricity from the hydropower must then be made available *first* to public power and rural electric cooperative preference customers. Also, the role of BOR is critical, as it operates and maintains the hydropower projects, and they, therefore, must agree to the participation of these facilities in an EIM. To APPA's knowledge, DOE has not asked the BOR (or to the Corps) its views about participation by hydropower in an EIM, and possible issues that could arise.

Design of Transmission Services/Integration of Variable Energy Resources:

It should first be noted that the development of wind and solar power is not part of WAPA's historical mission. Nevertheless, WAPA has made substantial efforts to integrate renewable energy in consultation with the PMA customers. As discussed previously, WAPA has implemented intra-hourly scheduling. WAPA and a number of balancing authorities (electric utilities or other entities charged with "balancing" the availability of generation and transmission in a given sub-region) in the region are also developing and implementing a number of highly technical processes to enhance the integration of variable wind and solar power.

WAPA's customers are also taking significant steps to expand their use of electricity generated from renewable sources. In 2011, WAPA customers provided 13.8 million megawatt-hours of renewable power, almost one million megawatt-hours more than in 2010. These efforts are not acknowledged by Secretary Chu or Ms. Azar, outside of the following statement made by the Secretary in a footnote to his Memorandum: "I recognize that, in some cases, one or more of the PMAs may already be accomplishing the directive." No further details are included with this vague acknowledgement.

Energy Efficiency and Demand Response:

The March 16 Memorandum directs the PMAs to create rate structures that incentivize programs for energy efficiency and demand response, the integration of variable resources, and preparation for electric vehicle deployment.

APPA is concerned that these "incentives" and any restructuring of the PMA rates to incorporate them will artificially and inappropriately raise the cost of providing federal hydropower to preference customers, resulting in wholesale and retail rate increases. This proposal could well mean that PMA customers would be subsidizing wind development and energy efficiency and demand response programs, whether or not they receive any benefits from these programs.

Furthermore, energy efficiency, demand response, and electric vehicle integration are primarily retail issues, not wholesale. As discussed above, the PMAs provide power at wholesale, while retail decisions are made at the local and state levels. Secretary Chu's proposal would thus substantially encroach on the jurisdiction of state and local decision-making bodies, including public utility districts, municipalities, and cooperative boards of directors. Moreover, there is no evidence that such encroachment is warranted given the increasing levels of customer activities in this area. As with renewable energy, WAPA's annual report provides summary data on the achievements of its customers in the area of demand-side management, which includes both energy efficiency and load-management (i.e., shifting energy demand to different time periods to reduce costs). In 2011, WAPA customers reported a savings of 2.7 million megawatt-hours from demand-side management, an increase of one million megawatt-hours from 2010.

Transmission Authorities:

Section 1222 of Energy Policy Act of 2005 (EPAct05) authorizes WAPA and the Southwestern Power Administration (SWPA), and the Transmission Infrastructure Program (TIP) created in the 2009 American Reinvestment and Recovery Act (ARRA) authorizes WAPA, to partner with non-customer groups to develop transmission on their systems.

The Section 1222 authority has rarely been used (although WAPA and SWPA are currently evaluating applications for its use). However, initial experiences with these applications reveal that even the administration of Section 1222 can impose significant burdens on the PMAs. For example, APPA understands that the processing of the Clean Line application by SWPA has consumed a significant portion of budget and staff time, which must come out of SWPA's own budget and, in turn, the electric customers of public power and cooperative utilities. This diversion of staff time and resources has greatly constrained SWPA staff's availability to review proposals for new power contracts, leading SWPA staff to simply renew preference customers' existing contracts coming up for renewal for one-year time frames. Finally, there appear to be conflicting interpretations as to whether the 2015 sunset provision applies merely to the cap on funding or applies more broadly to the ability to take contributed funds or to the program itself. APPA's position is that Congress intended the sunset of the cap at the end of 2015 before accepting any third-party funds contributed after that date.

There are also reasons for concern with the TIP, the implementation of which was criticized in a DOE Inspector General report released in November 2011 (<u>http://energy.gov/sites/prod/files/OAS-RA-12-01.pdf</u>). That report cited instances of mismanagement and inefficiency within the program, including a lack of timely, integrated cost and schedule information that would allow WAPA to adequately monitor progress of the first project funded (the Montana Alberta Tie Line) and the absence of a risk-based management reserve to fund unanticipated cost overruns.

Despite both the explicit flexibility in Section 1222 for the relevant PMAs to exercise discretion regarding the use of this authority and the problems identified with the TIP program, Secretary Chu apparently seeks to mandate the use of these programs by administrative fiat. EPAct05 and the ARRA authorized, but did not mandate, third-party financing mechanisms, clearly allowing the PMAs, in collaboration with their customers, to balance the interests of the statutory preference customers with other interests in developing third-party financing proposals.

In a new centralized mandatory regime directed from DOE headquarters, however, PMA customers could potentially be required to take on the costs of system-wide transmission upgrades not needed to serve them. Any benefit they would receive from these improvements would certainly not be commensurate with the costs they would be forced to pay. This would be a blatant violation of the "beneficiary pays" principle, discussed above.

PMA Customers Expect and Deserve Transparency Throughout This Process:

As noted above, the development and release of the March 16 Memorandum and the subsequent workshops and listening sessions have not allayed the concerns of APPA and the PMA customers. A webinar held this past Friday, September 7, by the Joint Outreach Team comprised of three paid consultants and numerous WAPA staff, was troubling given the breadth of staff and resources being dedicated to this effort -- which is to be finalized by the end of the calendar year for no practical reason. In addition, a recent incident in the SWPA region undermines our faith in the process even further: DOE notified PMA customers in the SWPA region in mid-August that they would be hosting a session to discuss Section 1222 of the Energy Policy Act of 2005 (mentioned above) today, September 11, in Branson, Missouri. Despite the short notice and the limited details about the meeting, many SWPA customers made plans to attend – in many cases rearranging schedules, purchasing plane tickets, and reserving hotel rooms. Less than two weeks out from the meeting, these same PMA customers were informed by DOE that it had been cancelled because other "stakeholders" were unable to attend given the short notice. To date, the meeting has not been rescheduled.

Given the course of the proceedings up until now, we find it hard to believe that DOE is genuinely seeking customer input, or that it does not have a predetermined policy agenda it wishes to pursue, regardless of the views of the customers or the actual facts "on the ground." We are also concerned that the WAPA process could be a template for the other regions. The scheduling of the SWPA meeting on short notice then the abrupt cancellation of that meeting is also troubling.

To change this dynamic, APPA urges DOE to be transparent throughout the remainder of this process. To that end, the public should be provided and allowed to comment on both the draft and final versions of the recommendations of DOE and WAPA staff to the Secretary. DOE's failure to grant this request would not be in keeping with the Administration's commitment to new levels of openness and transparency in government.

In the pre-read materials for the WAPA workshops, DOE stated that, at the workshops' conclusion, it would use the feedback received when developing draft recommendations to Secretary Chu regarding the application of the March 16 Memorandum to WAPA. DOE states further that, "[a]fter developing draft recommendations, the JOT will again seek stakeholder input on the draft recommendations before finalizing and submitting its recommendations to Secretary Chu sometime in the fall." DOE has made clear in the pre-read materials that it will make public its staff's draft recommendations for comment. In the webinar held on September 7, staff stated that there will be a 30-day comment period on the draft recommendations after publication in the Federal Register. APPA believes that a 60-day comment period is the minimum that due process would require, given the significant number of hours the PMA customers devoted to the process and the extensive record that was established.

DOE staff has not, however, made clear that it will make public the final recommendations submitted to Secretary Chu. Asking the PMA customers and others to participate in this time-consuming and resource-intensive process and then not sharing the final recommendations publicly would represent a grave disregard for those who took the time to participate, and would further bolster the view that the entire series of meetings and comment process were mere "check the box" exercises. If these final recommendations are expected to be the precursor to any proposed changes to WAPA's operations or rates, DOE staff should make public the final recommendations submitted to Secretary Chu.

Finally, any recommendations from DOE staff to Secretary Chu, in and of themselves, cannot result in any changes to WAPA's operations or rates. WAPA and DOE must operate within the statutes applicable to the

PMAs. DOE cannot propose to make any changes affecting the operations of the PMAs without complying with the relevant legal and rulemaking processes, including those required by the DOE Reorganization Act and the Administrative Procedure Act. Depending on the actual recommendations, congressional action may well be required.

Conclusion and Recommendations:

The PMAs' are an ideal example of a successful public/private partnership. They were created in coordination with the customers they still serve today, which in turn repay the federal investment in these projects. They are subject to many congressional authorities and must help their customers meet many obligations, all while keeping costs at the "lowest possible" level. Rather than demonstrating problematic performance records, the PMAs are examples of government projects successfully accomplishing their statutory requirements. Instead of targeting a specific and necessary fix, DOE's proposals for WAPA and the other PMAs are simply solutions in search of problems. Instead of coordinating with PMA customers to improve PMA operations within their congressionally mandated framework, DOE seeks to institute a new regime for the PMAs, outside the scope of their original purposes altogether.

Some broad goals laid out in the March 16 Memorandum for the PMAs, from modernizing and increasing the efficiency of the grid to integrating renewable power to preventing future blackouts in all regions of the country, are admirable. The process by which they have been announced and initiated, however, has been characterized by DOE's apparent unwillingness even to acknowledge, much less evaluate and incorporate, the accomplishments of the PMAs in these areas. Similarly, DOE seems to have paid little more than lip service to the PMAs' statutory obligations to their customers, and the costs and need for these directives. Finally, DOE has "moved the goal posts" several times in terms of the stated purpose of the March 16 Memo such that it is difficult to ascertain the true impetus and goals of the proposals. If the most recent statements by Secretary Chu and Ms. Azar are to be followed, then the impetus of the memo is for the PMAs to better prevent blackouts (also known as improving "reliability"). While laudable, there are numerous, well-established processes in place to address electric reliability at the bulk power system level. In addition, the PMAs' total transmission footprint only encompasses eight percent of the entire transmission system of the continental U.S. This limited ability to impact bulk power system reliability underscores that the PMAs must work through existing processes and institutions to ensure regional reliability. This is another case where a new process is neither necessary nor appropriate.

APPA therefore recommends that the DOE step back and start this process anew, and essentially "plug in" to the long-established processes that identify the needs and objectives for each PMA. First, DOE should examine, in conjunction with the PMAs and their customers, where needs exist within each system. Then, it should allow the PMAs to work with their customers to articulate clear goals and plans to address these needs. These steps should build upon the PMAs' ongoing activities, without saddling the PMA customers with excess costs. This process should be led by the PMAs and the primary "stakeholders" -- PMA customers. APPA and its PMA customer members urge DOE to take the time to engage in a dialogue with the groups that will be primarily affected by any changes to the PMAs. Only through steps such as these can DOE hope to foster meaningful change in this area.

Should DOE refuse to pull back from the path they have taken thus far, APPA would ask the Committee to consider legislative remedies, including language similar to a provision in Chairman Hastings' new hydropower bill, the Saving Our Dams and New Hydropower Development and Jobs Act, which would prohibit DOE from implementing the March 16 Memo and/or language such that was included in the House-passed version of the Energy and Water Development Appropriations bill for FY 2013 to prohibit the use of funds to implement the memo. While the latter is outside of this Committee's direct jurisdiction, we recognize that a strong dialogue on this issue has occurred between this Committee and the Appropriations Committee, and would urge such dialogue to continue as opportunities arise when the appropriations process is reengaged in 2013.

We greatly appreciate the Committee's interest in this important issue and the efforts you have undertaken to date.