Subcommittee on Water, Power and Oceans
Doug Lamborn, Chairman
Hearing Memorandum

February 27, 2017

To: All Subcommittee on Water, Power and Oceans Members

From: Majority Committee Staff, Subcommittee on Water, Power and Oceans (x5-8331)

Hearing: Oversight Hearing on *"Modernizing Western Water and Power Infrastructure in the 21st Century"*

On Wednesday, March 1, 2017, at 10:00 am in 1324 Longworth House Office Building, the Water, Power and Oceans Subcommittee will hold a one-panel oversight hearing on *"Modernizing Western Water and Power Infrastructure in the 21st Century."*

Policy Overview:

- This hearing will examine ways to protect existing water and power infrastructure and help facilitate the construction of new water and power facilities.

- This will include measures aimed at modernizing federal regulations and bureaucratic barriers impacting these facilities.

- Implementation of the recently enacted Water Infrastructure Improvements for the Nation (WIIN) Act could be a key way to develop water storage and other water supply projects.

Invited Witnesses *(listed in alphabetical order)***:**

Mr. Andy Colosimo
Government and Corporate Affairs Manager
Colorado Springs Utilities
Colorado Springs, Colorado

Mr. Andy Fecko
Director of Resource Development
Placer County Water Agency
Auburn, California

Mr. Jonathan C. Kaledin
Executive Vice President/General Counsel
Natural Systems Utilities
Hillsborough, New Jersey

Mr. Robert S. Lynch
Attorney
Robert S. Lynch & Associates
Phoenix, Arizona

Background

The Development of Western Water and Power Supplies

The arid western United States (West), once sparsely populated due in large part to scarce water supplies, is now home to more than 70 million people and is one of the most productive agricultural regions in the world. This transformation of the West primarily occurred due to the development of multi-purpose surface water projects that stored water in mainstem rivers and their tributaries. The Bureau of Reclamation (Reclamation), a federal agency created in 1902, played a pivotal role in developing and maintaining much of the water infrastructure in the West.

Reclamation is the largest water wholesaler in the nation, providing water to 31 million people and helping irrigate 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.[1] Many of Reclamation's projects are multi-purpose in nature, and its reservoirs and dams further generate enough emissions-free electricity to serve at least 3.5 million homes annually.[2] This is accomplished through the operation of 53 hydroelectric power plants (see Figure 1 below) that annually produce, on average, 40 billion kilowatt-hours over the last 10 years.[3] It would take approximately 23.5 million barrels of crude oil or 6.8 million tons of coal to produce an equal amount of electricity.[4]

[1] http://www.usbr.gov/main/about/fact.html
[2] Id. note 1
[3] http://www.usbr.gov/main/about/fact.html
[4] Id. note 1

Figure 1: Bureau of Reclamation Large-Scale Hydropower Program
Source: U.S. Bureau of Reclamation

Water stored behind many of these facilities provides year-round flows and cold water fishery habitat. The vast majority of these projects are financed under the "beneficiary pays" principle, which requires users to re-pay the initial federal investment in these facilities through long-term contracts. The Columbia Basin Project in Washington state, the Central Valley Project in California and the Central Arizona Project are just some of the Reclamation's projects that have transformed regional economies. The majority of the Reclamation's projects (approximately 90 percent) were built more than fifty years ago. [5]

Overcoming Regulatory Obstacles to Meet Growing Demand

With a few exceptions, the construction of new multi-purpose surface water storage has largely stalled in the region. Except for the Animas-La Plata project in southwestern Colorado, Reclamation has not built any large multi-purpose dams and reservoirs over the last generation, due in part to environmental permitting and other regulatory requirements, cost and other factors. In light of inadequate federal funding on studies and eventual construction, non-federal ownership of major surface storage projects is becoming a trend. However, federal permitting of such facilities can be a major impediment. For example, in a House Water and Power Subcommittee hearing on water storage in 2012, Family Farm Alliance President and Wyoming rancher Pat O'Toole testified about the permitting challenges encountered during the non-federal

[5] https://www.usbr.gov/newsroom/presskit/factsheet/detail.cfm?recordid=2

High Savery Dam 22,400 acre feet project, which "was built in 2 years, but took more than 14 years to permit."[6]

Some investors have questioned the viability of new storage projects if they are unable to get permitted in a timely period.[7] As a result, some have suggested streamlining the current multi-agency permitting process for new or expanded surface storage by creating a "one-stop-shop" permitting process to help facilitate the construction of non-federal facilities.[8] In addition, some view the transfer of some Reclamation projects to local water users as a way to encourage new non-federal investment in water infrastructure, but the current title transfer process is too costly and time-consuming for some water users to pursue.[9] Witnesses will discuss some of these issues at this hearing.

The Water Infrastructure Improvements for the Nation Act

Although concerns remain over the hurdles to build new water infrastructure, the recently enacted "Water Infrastructure Improvements for the Nation Act" (WIIN Act or P.L. 114-322) could help facilitate the development of a number of western water projects, including water storage. The WIIN Act authorizes the Interior Secretary to participate in certain federally-owned and state-led storage projects while also authorizing funding for the design and construction of new surface storage facilities, the WaterSMART program and certain water recycling and desalination projects.[10] At a time of record participation in California and elsewhere in the West, some have urged the federal government and states to move forward expeditiously on new surface storage, including the proposed Sites Reservoir in northern California. Witnesses and Subcommittee Members will likely discuss WIIN Act implementation at this hearing.

Hydropower Development

Hydropower is renewable and emissions-free and can be adjusted quickly to match real-time changes in electricity demand. In specific regions of the nation, it constitutes a significant source of electricity (i.e. 70% in Washington state). Nationally, hydropower accounts for 7% of domestic electricity generation, divided equally between federal and non-federal output.[11] It not

[6] Testimony of Mr. Patrick O'Toole before the House Water and Power Subcommittee Legislative Hearing on February, 05, 2014, p. 3

[7] Testimony of Mr. Dan Keppen, before the House Water and Power Subcommittee Legislative Hearing on, September 10, 2014, p. 3.

[8] Testimony of Mr. Patrick O'Toole before the House Water and Power Subcommittee Legislative Hearing on February, 05, 2014, p. 4

[9] Testimony of Mr. Jeremy Sorensen, before the House Water, Power and Oceans Subcommittee Oversight Hearing on "Empowering States and Western Water Users Through Regulatory and Administrative Reforms," April 13, 2016, p. 1

[10] Sections 4007 and 4009 of P.L. 114-322

[11] Congressional Research Service, Relicensing of Nonfederal Hydroelectric Projects, April 25, 2007; Page 1

only provides power for baseload (full-time) needs and peak times, but also serves as a backup generation source for intermittent wind and solar power.[12] It is generally low-cost compared to other generation sources.[13] However, some believe hydropower projects can have negative impacts on migratory fish, wildlife and their habitats as well as water quality.[14] For a number of reasons, some have described hydropower's growth as "stagnant" when compared to other electricity sources.[15]

Reclamation is the second largest federal hydropower producer in the nation.[16] While there has not been recent large-scale federal hydropower development at Reclamation facilities, some third parties have viewed the agency's pipes and canals as opportunity for non-federal development. As a result of this interest, the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act (P. L. 113-24) was enacted to facilitate such development. A witness will testify about the implementation of this law at the hearing.

On non-federal facilities, there are approximately 1,035 active, non-federal hydropower licenses issued by the federal government.[17] Under the Federal Power Act (FPA), the Federal Energy Regulatory Commission (FERC) has authority to license these facilities. Over the next five years, 24% of all non-federal hydropower capacity will face relicensing.[18] Most licenses are valid for 30 to 50 years,[19] however the process to relicense facilities can be complex, expensive, lengthy and uncertain. During licensing (or relicensing if the original license is expiring or has expired), FERC must consider the power aspect of the project, but must give equal consideration to energy conservation, fish and wildlife, recreational opportunities and other federally mandated needs. While FERC has the authority to license these facilities, the resource agencies under the jurisdiction of the House Natural Resources Committee can have very significant impacts on the licenses and the process to grant them due to FPA and federal environmental statutes like the Endangered Species Act. These resource agencies include the National Marine Fisheries Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Bureau of Land Management, the Bureau of Reclamation and the Bureau of Indian Affairs. Specifically, under Section 4(e) of the FPA, federal land and water agencies can require "mandatory conditions" for

[12] http://www.vox.com/2015/6/19/8808545/wind-solar-grid-integration
[13] http://www.hydro.org/why-hydro/affordable/
[14] https://www.nwcouncil.org/history/DamsImpacts
[15] Testimony of Mr. J. Mark Robinson before the House Natural Resources Committee Oversight Hearing on "*Mandatory Conditioning Requirements on Hydropower: How Federal Resource Agencies are Driving Up Electricity Costs and Decreasing the Original Green Energy,"* June 27, 2012.
[16] https://www.usbr.gov/power//edu/majprod.html
[17] http://www.ferc.gov/industries/hydropower/gen-info/licensing/active-licenses.asp.
[18] www.ferc.gov/industries/hydropower/gen-info/licensing/relicenses2015-2030.xlsx
[19] Northwest Hydroelectric Association, Resources: Law and Regulations: Hydropower Licensing, www.nwhydro.org/resources/laws_regulations/hydropower_licensing.htm; Page 1

projects located on federal reservations under their jurisdiction, and FERC cannot reject such "mandatory conditions" regardless of cost or impact.[20]

Some find the current relicensing process difficult. For example, Mr. Einar Maisch of the Placer County Water Agency (PCWA) in northern California, testified that PCWA's ratepayers spent $37 million and would lose about 5% of average annual hydropower generation as a result of its pending relicensing effort on the Middle Fork American River Project (FERC No. 2079).[21] Some have proposed reforms to the current relicensing process, including establishing a defined process at FERC to avoid overlapping or conflicting authorities, developing a system to quickly identify issues and significant flaws early in the process, and expediting judicial review, among other recommendations.[22] A representative from PCWA will testify at this hearing.

[20] 16 U.S.C. §§ 797(e)

[21] Testimony of Mr. Einar Maisch before the Water and Power Subcommittee Oversight Hearing on "Mandatory Conditioning Requirements on Hydropower: How Federal Resource Agencies are Driving Up Electricity Costs and Decreasing the Original Green Energy," June 27, 2012, p. 3.

[22] Testimony of Ms. Debbie Powell before the Water, Power and Oceans Subcommittee Oversight Hearing on "Realizing the Potential of Hydropower as a Clean, Renewable and Domestic Energy Resources," April 27, 2016, p.4.