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TESTIMONY ON  
H.R. 1719 "ENDANGERED SPECIES COMPLIANCE AND TRANSPARENCY ACT OF 2011"

SEPTEMBER 22, 2011

Mr. Chairman, members of the Subcommittee, I am Leslie James, Executive Director of the Colorado River Energy Distributors Association (CREDA). I am pleased to have been asked to talk with you today regarding H.R. 1719, the Endangered Species Compliance and Transparency Act of 2011.

CREDA member utilities (firm power customers) have long-term, cost-based contracts with the Western Area Power Administration (WAPA), an agency within the Department of Energy, for purchase of federal hydropower generation from the Colorado River Storage Project (CRSP). My purpose today is to provide some background on the CRSP facilities, to describe environment-related impacts on the CRSP federal facilities, and to offer our support of H.R. 1719.

CREDA is a non-profit organization representing consumer-owned electric systems that purchase federal hydropower generation of the CRSP. CREDA was established in 1978, and serves as the "voice" for them in dealing with resource availability and affordability issues. CREDA represents its members in working with the Bureau of Reclamation (Bureau), as the owner and operator of the CRSP, and WAPA, as the marketing agency of the CRSP. CREDA members are all non-profit organizations, serving over four million electric consumers in the six western states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming. CREDA members purchase over 85% of the CRSP hydropower generation.

Attached is a listing of current CREDA members. When CREDA was formed, the key issue for its members was the increasing CRSP rate. CREDA members felt it would be more effective to have a single "voice" for them on rate, federal legislative and environmental issues impacting the CRSP.

CRSP contractors have been ensuring repayment of the federal investment for 40 years, by entering into long-term contracts to purchase the CRSP hydropower generation and by paying all of the federal investment in generation and transmission facilities (with interest), all power-related operation and maintenance costs, and associated environmental costs. In addition, the CRSP contractors are paying over 95% of the cost of the irrigation features of the CRSP -- the costs that are determined to be beyond the irrigators' "ability to pay". In fact, in the current CRSP rate, 21% of the total annual revenue requirement is due to irrigation assistance!

It is important to note that the CRSP rate includes costs other than those associated with generation of the hydropower and irrigation assistance. Specific examples of the environment-related costs assessed to the CRSP are the programmatic (i.e., "direct") costs of the Glen Canyon Adaptive Management Program (AMP) and the Upper Basin Endangered Fish Recovery Implementation Program (RIP). Since approximately \$743 million in purchased power costs have been incurred by WAPA since 2000, CREDA believes it is important that the customers have visibility of those costs, which are included in their firm power rates. More detail on these costs and programs will be provided below.

**I. H.R. 1719 AND THE CRSP**

The environment-related costs incurred by the Bureau and WAPA in the CRSP are significant. Those costs are borne almost exclusively by the power customers of the CRSP. By law,

these customers are not-for-profit entities; thus they have no option other than to pass those costs on to their consumers.

H.R. 1719 provides a mechanism for the power customers to readily receive information regarding the direct and indirect costs associated with the federal agencies' compliance with the Endangered Species Act (ESA) and other environmental requirements. These costs should also include those costs associated with mitigation and reasonable and prudent alternative compliance under the ESA. Each power customer would then have the ability to utilize that information in a manner that best fits its individual needs. It is our understanding that this information is readily available and can be provided at little or no incremental cost to the agencies. CREDA supports the additional transparency of these costs as a sound business practice.

In 1992, CREDA, the Bureau and WAPA entered into a contractual arrangement that gives CREDA the ability to review agency work plans and, through a defined process, provide customer input and perspective to the agencies. This contractual arrangement has been invaluable to fostering a partnership-type relationship among the three entities and has encouraged transparency in agency cost reporting. H.R. 1719 is consistent with that objective; it provides more information to the customers who ultimately are responsible for "paying the bills".

## **II. THE CRSP FACILITIES AND ENVIRONMENTAL IMPACTS**

CRSP was authorized in the Colorado River Storage Project Act of 1956 (P.L. 485, 84<sup>th</sup> Cong., 70 Stat. 50), as a multi-purpose federal project to provide flood control; water storage for irrigation, municipal and industrial purposes, in addition to the generation of electricity. This testimony will focus on the major generation features of the CRSP, although there are several irrigation projects authorized as part of the Project. The CRSP power features include five dams and associated generators, substations, and transmission lines.

### **GLEN CANYON DAM**

Glen Canyon Dam is located near Page, Arizona and is by far the largest of the CRSP projects. Glen Canyon Dam began operation in 1964. The water stored behind the dam is the key to full development by the Upper Colorado River Basin states of their Colorado River Compact share of Colorado River water. The Glen Canyon power plant consists of eight generators for a total of about 1300 MW, which is more than 76% of total CRSP generation.

The ability of the Bureau to generate, and WAPA to market, the total generating capability of Glen Canyon Dam has been impacted over a period of many years, by various processes and laws. In 1978 the Bureau began evaluating the possibility of upgrading the eight generating units at Glen Canyon. This was possible, primarily due to design characteristics of the generators and improved insulating materials. This upgrade was completed, and the generation was increased from about 1000 to 1300 MW.

To fully utilize the unit upgrades would require the maximum release of water from Glen Canyon to be increased from 31,500 cubic feet per second (cfs) to about 33,200 cfs. The Bureau also studied the possibility of adding new generating units on the outlet works to provide additional peaking capacity. The possibility of increasing maximum releases from Glen Canyon raised concerns with downstream users. After discussion with stakeholders, the Secretary of the Interior initiated the first phase of the Glen Canyon Environmental Studies.

In 1982, the Bureau began Phase 1 of the Glen Canyon Environmental Studies. These studies were primarily to analyze the impacts of raising the maximum release from 31,500 cfs to 33,200 cfs on

the transport of sediment downstream from the dam, recreation (including fishing and rafting), endangered species (including the humpback chub in the Lower Colorado River), and the riparian habitat along the river banks. The studies proceeded during the early 1980's and were concluded in 1987. The general conclusion of the Glen Canyon Environmental Studies Phase 1 was that the dam had blocked much of the sediment coming down the Colorado River and therefore beaches were not being replenished with sand. However, the impact on power and water economics was not fully explored.

After reviewing the Glen Canyon Environmental Studies Phase 1 and a review by the National Academy of Science, the Secretary of the Interior determined that the Glen Canyon Environmental Studies should be continued to address the economic impacts, particularly as they relate to power, and also to collect additional data to substantiate some of the conclusions in the Phase 1 report. The Glen Canyon Environmental Studies Phase 2 was initiated in 1989, which included a series of test flows to evaluate the impact of different operating conditions.

In July 1989, the Secretary of the Interior announced the start of an environmental impact statement (EIS) on the operation of the Glen Canyon Dam. No specific Federal action was identified for study. Meetings were held during 1990 to seek input into alternatives that should be considered, and the Bureau determined that nine alternatives (including a "no action" alternative) should be studied. Meanwhile, in 1992, the Grand Canyon Protection Act (GCPA) (106 Stat. 4672) was signed into law. Section 1804 of the Act required completion of the EIS within two years. The EIS was completed and the Record of Decision (ROD) signed in October 1996. As a result, Glen Canyon operations were changed to reflect a revised flow regime; approximately one-third of the generating capacity was lost (456 MW).

The cost of the Glen Canyon EIS was approximately \$104 million, and was funded by power revenues collected from the CRSP contractors. To date, over \$273 million has been spent on Glen studies, and paid by CRSP power revenues. This figure does NOT include the over \$105 million spent from 2000 to the current year for the Adaptive Management Program. The GCPA says that CRSP power revenues MAY be used to fund the Adaptive Management Program (emphasis supplied). It is not a mandate, but a permissive use of power revenues, which will be addressed in more detail below.

In 1991, the Department of the Interior estimated the expense from lost generation due to the changes in Glen Canyon Dam operation to be \$44.2 million annually (adjusted for inflation). Given what has occurred in the energy markets and hydrologic conditions (drought) since that time, the cost was higher. A recent study prepared by Argonne National Labs for the Western Area Power Administration (the "post-ROD study"), the average annual cost has been approximately \$50 million annually. The cost of replacing that power is borne by the CRSP customers.

In April of 2000, it was determined that due to hydrologic conditions and requirements of a 1994 USFWS biological opinion, a low steady flow summer experiment would be undertaken. The experiment included high spike flows in May and September, with low flat flows (8,000 cfs) all summer. The purpose was to gain information regarding endangered humpback chub conditions. The low, flat flows and hydrology, along with western energy market prices, had a severe impact on power generation, requiring CRSP customers and WAPA to purchase replacement power to meet their resource needs. The cost incurred by WAPA (and to be recovered from CRSP contractors) for this replacement power was \$26 million, during that summer. The cost of the experiment alone was over \$3.5 million, funded by CRSP power revenues. These figures do NOT include additional costs to CRSP contractors who had to purchase or supplement their CRSP resource with purchases from the energy market. A final report on the responses of key resources was finally issued in August 2011 (USGS Open File Report 2011-1220).

## **ASPINALL UNIT**

The Aspinall Unit includes three dams and generating plants along the Gunnison River near Gunnison, Colorado. Blue Mesa is the first dam on the river and has two units producing about 97 MW. Morrow Point is the second dam in the series and consists of two generators producing a total of 146 MW. Crystal is the final dam and has one 32 MW generator. Morrow Point and Crystal Reservoirs allow some regulation of the river flow so that releases from Crystal can be used to regulate downstream flows as necessary.

Since the early 1990's as part of the Upper Colorado River Endangered Fish Recovery Implementation Program, or RIP, studies have been undertaken to determine fish needs in this region. In November 2004, the Bureau held the first Cooperating Agency meeting, which they have opened to the public. One of CREDA's members, Platte River Power Authority (Colorado), is a cooperating agency in the process. This EIS process has been underway for about 8 years, and a draft preliminary final EIS was issued to the cooperating agencies in late August, 2011. Study costs to date total \$3.4 million. CREDA's view is that, while maintaining authorized project purposes, the Bureau may operate the facilities to benefit fish and wildlife and recreation resources. Their obligation, however, is to avoid jeopardy to endangered species, not a broader duty.

## **FLAMING GORGE DAM**

Flaming Gorge Dam is on the Green River, a major tributary of the Colorado River, and is located near Vernal, Utah. Flaming Gorge has three units producing about 152 MW of generation. In 1992, the USFWS issued a Biological Opinion on the operation of Flaming Gorge Dam. Approximately 26 MW of generating capacity have been lost to date due to changed operations to benefit endangered fish, estimated at approximately \$2 million per year. The Record of Decision on the operation of Flaming Gorge Dam was signed in February 2006. The cost of the EIS was approximately \$1.6 million. Two CREDA members from Utah have been "cooperating agencies" through this process. We expect the same level of operational expense to be incurred following issuance of the ROD.

### **III. THE ENVIRONMENTAL PROGRAMS IN THE CRSP**

#### **GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM**

CREDA participates on the Federal Advisory Committee charged with making recommendations to the Secretary of the Interior as to operations of Glen Canyon Dam pursuant to the Record of Decision and underlying laws. Funding for the program (Adaptive Management Program) is provided through CRSP power revenues. Proposed funding for this year's program is over \$10 million.

On October 27, 2000, President Clinton signed the FY 2001 Energy and Water Development Appropriations Act, which includes language (Section 204) capping the amount of CRSP power revenues that can be used for the Adaptive Management Program at \$7,850,000, subject to inflation. Without this cap, the annual program costs would have continued to increase more rapidly, with power revenues being the primary funding source. Over \$105 million of CRSP power revenues has been spent to date on direct program costs.

Science findings over the past 14 years indicate that some of the premises on which the EIS/ROD were based may have resulted in different or inconclusive resource impacts and that the current flow restrictions may not be beneficial to downstream resources (primarily humpback chub and sediment). For

instance, the endangered humpback chub population has continued to increase since 2000, albeit it is unclear whether this increase is due to current fluctuating operations, temperatures, or non-native fish interactions. It is imperative that these science findings be incorporated into recommendations to the Secretary of the Interior to implement flow changes and management actions to benefit the downstream resources and to maximize power production.

On February 15, 2006, ESA-related litigation was filed in Arizona District Court by the Center for Biological Diversity, Sierra Club, Living Rivers and Arizona Wildlife Federation against the Department of the Interior and the Bureau. This litigation was ultimately settled. Unfortunately, additional litigation was filed by the Grand Canyon Trust in December 2007 against the Bureau and Fish and Wildlife Service, seeking to impose an extreme operational shift to a steady flow regime. Although the District Court in Arizona found for the United States on all counts in March 2011, the case has been appealed to the 9<sup>th</sup> Circuit Court of Appeals. This litigation could have program and cost implications for the Adaptive Management Program.

CRSP contractors have paid, and continue to pay, the majority of costs at Glen Canyon, even while the dam's generating capacity has been depleted by about one-third, and there are significant operating constraints on the remaining available capability, as required by the 1996 ROD. Just since 2000, the replacement power cost (i.e., "indirect" cost) incurred by WAPA (and borne by CRSP power customers) totals \$239 million. This amount does not include costs borne by each CRSP power customer to "make up" any additional resource not provided by WAPA. These costs are significant and H.R. 1719 would enhance the ability of the power customers to be aware of the environmental costs associated with these programs.

#### **UPPER COLORADO RIVER ENDANGERED FISH RECOVERY IMPLEMENTATION PROGRAM (RIP)**

The RIP was established through cooperative agreements among States and federal agencies in 1988 for a 15-year period to help recover four endangered fish in the Upper Colorado Basin. Power revenues currently fund about 60% of the base research / study program. Federal legislation was passed in October 2000, which authorized a \$100 million capital improvements program. CREDA testified in support of this legislation in both House and Senate hearings. The legislation provides matching funds for the capital program so that, in the event State funding for the program ceases, power revenue funding also ceases.

The legislation requires CRSP power revenue funding for monitoring and research (currently \$7.2 million per year. In addition, the Upper Basin States and CRSP power customers each contributed \$17 million toward funding capital features. The legislation recognized that changes in operation of Flaming Gorge and Aspinall generation as a result of Biological Opinions cost CRSP contractors \$15 million. To date, \$84.5 million has been funded by CRSP power revenues for monitoring and research activities in this program.

#### **IV. RECOMMENDATION**

CREDA encourages passage of H.R. 1719 as a sound business practice and an important measure, which will provide transparency and cost information to the customers of the federal Power Marketing Administrations.

Thank you for the opportunity to appear today.

**COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION (CREDA)  
MEMBERSHIP**

**ARIZONA**

Arizona Municipal Power Users Association  
Arizona Power Authority  
Arizona Power Pooling Association  
Irrigation and Electrical Districts Association of Arizona, Inc.  
Salt River Project

**COLORADO**

Colorado Springs Utilities  
Intermountain Rural Electric Association  
Platte River Power Authority  
Tri-State Generation & Transmission Cooperative  
(also Nebraska, Wyoming and New Mexico)  
Yampa Valley Electric Association, Inc.

**NEVADA**

Colorado River Commission of Nevada  
Silver State Electric Association

**NEW MEXICO**

City of Truth or Consequences  
Farmington Electric Utility System  
Los Alamos County  
Navajo Tribal Utility Authority

**UTAH**

City of Provo  
City of St. George  
South Utah Valley Electric Association  
Utah Associated Municipal Power Systems  
Utah Municipal Power Agency

**WYOMING**

Wyoming Municipal Power Agency

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