

**Testimony of the Mid-West Electric Consumers Association**  
**North Dakota Legislative Council**  
**July 30, 2008**

Good morning, my name is Thomas Graves, executive director of the Mid-West Electric Consumers Association. Mid-West was founded in 1958 as the regional coalition of over 300 consumer-owned utilities (rural electric cooperatives, public power districts, and municipal electric utilities) that purchase hydropower generated at federal multi-purpose projects in the Missouri River basin under the Pick-Sloan Missouri Basin Program.

The Pick-Sloan Missouri Basin Program was established by the Flood Control Act of 1944, which authorized construction of the main stem dams in North and South Dakota. Pick-Sloan also includes Fort Peck and a variety of U.S. Bureau of Reclamation projects in the region. Pick-Sloan is a multi-purpose project serving flood control, irrigation, municipal and industrial water, recreation, irrigation, fish and wildlife and hydropower generation.

The hydropower generation of Pick-Sloan is an important energy resource for the rural electric cooperatives, municipal electric utilities, tribes, and states in the region. Pick-Sloan hydropower represents about 30% of rural electric cooperatives energy supplies and roughly 48% of municipal electric utilities' power supplies.

The Western Area Power Administration ("Western" or "WAPA") is responsible for marketing hydropower generated at Corps facilities. In eastern division Pick-Sloan, Western markets around 9,000 gigawatt hours and 2,000 megawatts of capacity to the preference customers in the region – the not-for-profit rural electric cooperatives, municipal electric utilities, tribes, and states.

When hydro generation is insufficient to meet Western's firm power contract obligations, Western must purchase power in the open market to meet its contract

responsibilities. The cost of those power purchases are passed on to firm power customers through power rates.

Western adopted a conservative marketing plan in deciding how much power to allocate to preference customers in the region. Western used 1961 to determine the river's adverse firm power capabilities. 1961 was the eighth year of an eight year drought.

The Corps of Engineers has attempted to balance project purposes with the Master Water Control Manual, the guide book for river operations. The Annual Operating Plan implements the guidelines of the Master Manual each year. This committee is studying how to pursue additional uses of Lake Sakakawea and the Missouri River for a variety of purposes – domestic and industrial water, recreation, fish and wildlife, and irrigation.

Casting a balance among these project purposes is a difficult task to say the least. Pick-Sloan's project purposes weave a complicated fabric. It's hard to pull on one string without unraveling others.

These project purposes sometimes complement one another, but more often than not compete for the uses of the river and main stem reservoirs. For example, in 1944, there was little recognition of the benefits and values of recreation at main stem reservoirs. Over the years, recreation has become a multi-million dollar business in upper basin reservoirs in Montana, North and South Dakota.

Hydropower is a fragile resource, susceptible to the whims of nature – whether flood or mud – and dependent on other project purposes for its operations.

Hydropower is not a project purpose that determines water releases from the main stem dams. Hydropower is only generated when the Corps is releasing water to meet other project purposes. The Western Area Power Administration can only provide input on shaping those already planned releases to maximize the generation available.

We find some irony in this circumstance since hydropower is the only project purpose in the Pick-Sloan Missouri Basin Program that repays with interest, 100% of the investment in hydropower equipment – along with the operations and maintenance costs of those facilities – as well as its share of the multipurpose costs of the project (the dam, the reservoir). On top of that, Pick-Sloan's firm power customers subsidize the development of Pick-Sloan irrigation projects in the region. All of these costs are repaid to the federal government through Pick-Sloan power rates paid by the consumer-owned electric utilities in the region.

Development of federal irrigation projects was originally intended to provide economic benefits throughout the region. However, the cost of developing and operating those projects was determined to be beyond the ability of the irrigators abilities to repay those costs. So, those costs beyond the ability of irrigators to repay have been added to power users repayment obligation. Pick-Sloan irrigation projects' power requirements are also subsidized by firm power users. Those projects only pay 2 ½ mills for pumping power. Firm power rates are almost 15 times higher than that. Irrigation development has also meant depletions of Missouri River water, reducing the hydropower potential of the river.

For a variety of reasons, irrigation has not been developed to the extent envisioned in the Flood Control Act of 1944. Congress has legislated inclusion of some irrigation projects not in the original Pick-Sloan plan; and some Pick-Sloan irrigation projects are still under development, most notably the Dakota Water Resources Act, a revision of the Garrison Diversion. Completion of that project will mean more water withdrawals, and additional subsidization of the costs of associated irrigation project development. Additionally, the U.S. Bureau of Reclamation has estimated that completion of Garrison will require 80 megawatts of Pick-Sloan power – power that is currently being used by the firm power customers in the region. Mid-West and its members recognize the importance of a vital economy for the region and supported the enactment of DWRA.



Development of a safe and dependable rural water supply has received increasing attention in the basin. Mid-West has supported use of Pick-Sloan power during the irrigation season as part of the power supply for many rural water systems. Yet, rural water means more depletions from the river. The planned diversion of Missouri River water to the Red River in order to provide a more reliable water supply for eastern North Dakota will mean a loss of generation, perhaps as much as one million dollars a year, since that water will not be moving through the main stem dams.

Changes in operations of the main stem system also affects hydropower generation. As part of its water conservation efforts, the Corps of Engineers is only supporting a navigation channel when there is barge traffic on the river. This year, the Platte has been providing ample flows into the Missouri, further reducing the Corps' need to release water from Pick-Sloan.

Drought is not the only adverse condition that hurts hydropower. What happens below the main stem dams can also affect hydropower generation. The flooding along the Mississippi River this year forced the Corps to sharply reduce releases from Gavin's Point, the last dam on the Missouri. This unexpected development, along with the 30 day shortening of the navigation season meant that the Western Area Power Administration has had to scramble to buy some 1,200 gigawatts of power at a cost of roughly \$80 million dollars to meet its firm power contract commitments. In July, Western has been spending one million dollars a day to meet its obligations. Those costs will have to be repaid through higher rates by the rural electric cooperatives, municipal electric utilities, tribes and states in Pick-Sloan.

Hydropower and other Pick-Sloan project purposes will be affected by the Endangered Species Act. The Corps of Engineers under the guidance of the U.S. Fish and Wildlife Service is responsible for instituting programs to recover three threatened or endangered species in the river: the piping plover, least tern, and pallid sturgeon.

Hydropower operations have already been affected by the two bird species, which have developed the unfortunate fondness for nesting at the water's edge on sandbars in the river. The Corps tries to balance the value of Gavin's Point peaking capabilities and the needs of the terns and plovers by fluctuating releases, alternating high and low flows in an effort to keep the birds higher up on the sandbars. That has helped preserve some of Gavin's Points' capabilities, but nevertheless reduces that benefit since it is no longer always available. The Corps has proposed other alternatives, but they have not been accepted by U.S. Fish and Wildlife.

U.S. Fish and Wildlife has insisted on two "spring rises" – mimicking the river's historical run off pattern – in an experiment meant to assist the spawning of the pallid sturgeon. While the bad water conditions on the river have precluded initiating both spring rises, the Corps has conducted one spring rise in each of the last two years. The amount of water needed to provide this rise in the river is beyond the power plant capacity at Gavin's, so some water has to be spilled going through the spillways rather than the generators. The Corps has done an admirable job in trying to temper adverse impacts but, once again, Fish and Wildlife is the final arbiter of what is acceptable.

Under the direction of the U.S. Fish and Wildlife Service, the Corps is instituting an adaptive management plan for the Missouri River to address the needs of these threatened and endangered species. That will undoubtedly mean more changes in river operations.

Drought has affected all of Pick-Sloan's project purposes, with the exception of its irrigation projects. Hydropower has been particularly hard hit. Western has had to purchase hundreds of millions of dollars in power to replace absent hydro generation. Those costs are being borne by the firm power customers. The effect on the firm power rate has been dramatic to say the least. The firm power rate has increased 107% in less than seven years.

Changing the balance among Pick-Sloan project purposes is a daunting task and may impact hydropower generation. As rural non-profit electric cooperatives and municipal electric utilities dedicated to service and not profit, Mid-West and its members are vitally interested in the economic well-being of their communities and the region. We recognize the importance of the multi-purpose nature of the Pick-Sloan Missouri Basin Program but also understand the importance of affordable power to the region's economic engines.

Senator Dorgan has recently included in the Senate's 2009 appropriations for water and power \$25 million for a Corps re-examination of Pick-Sloan and its project purposes. Mid-West supports this initiative but is concerned that the analytic tools of the Corps will not provide a meaningful analysis.

The National Economic Development model (NED) used in the revision of the Master Water Control Manual is simply not helpful. As but one example, it does not recognize the special nature of rural electric cooperatives', municipal electric utilities', tribes, and states' access to federal power. That other power may be available in the region overlooks the price of that power.

Mid-West supports a prudent re-examination of Pick-Sloan's project purposes that fully recognizes the value of hydropower and the rights of non-profit rural electric cooperatives, municipal electric utilities, states, and tribes to access this clean, renewable resource.