

**Statement of Gary L. Esslinger  
Treasurer-Manager, Elephant Butte Irrigation District**

**Before the  
Subcommittee on Water and Power  
Natural Resources Committee  
U.S. House of Representatives**

**On  
H.R. 795 – The Small-Scale Hydropower Enhancement Act of 2011  
June 23, 2011**

Mr. Chairman and members of the Subcommittee, I am Gary Esslinger, Treasurer-Manager of the Elephant Butte Irrigation District (“EBID”) in Southern New Mexico and a member of the Family Farm Alliance’s Low-Head Hydropower Committee. I am pleased to be here today to voice support for H.R. 795, the Small-Scale Hydropower Enhancement Act of 2011, as it represents a vital step to ensuring our nation can take advantage of this important source of renewable energy.

There are many potential benefits of low-head hydropower. Of primary importance, tapping this resource will allow local communities – particularly in rural areas – to contribute green power to the grid and maintain the low energy costs that are essential to economic growth. Additionally, low-head hydropower will provide an alternative revenue source for irrigation districts struggling to keep water assessments down while maintaining aging infrastructure and developing necessary water conservation measures.

EBID and other districts across the western United States are charged to protect the irrigation systems that are vital to the agricultural economy in our communities, but increasingly we do not have the financial wherewithal to do so, particularly as federal and state budgets continue to tighten. New revenue provided by sales of low-head hydropower to area electric utilities will give us the opportunity to better finance critical repairs and needed efficiency improvements.

Yet a major bureaucratic stumbling block is in our path. The Federal Energy Regulatory Commission’s (FERC) licensing process is outdated and slow-moving, despite the Commission’s repeated claims to the contrary. As I discussed in my testimony before this Subcommittee last year, EBID developed a low-cost turbine in-house that we installed on one of our check structures. We did this for a fraction of the cost of commercially available solutions and, thanks to a recent design modification, are now capable of generating 12 kWh per turbine with our gates open only five inches with 50 cfs of flow. This in itself has captured the attention of the Los Alamos National Laboratory, which is partnering with local farmers to stimulate economic growth.

However, we are unable to connect our turbines to nearby electrical transmission lines – despite demand for the power from our local utility – due to continued issues involved in processing our request to FERC for a conduit exemption from the labor intensive formal

licensing procedures. For months, we did not hear from FERC and only recently learned that our request was delayed because the staff felt we filed the wrong type of application. We were eventually told we may not even qualify for the exemption because FERC is concerned that our check structure looks like a dam, which makes no logical sense. Even more confounding, we have received conflicting answers from different FERC staff members regarding displaced energy, our ability to use the turbines without a license in front of the meter to power lift pumps used to carry water to farmers' fields.

The FERC process is set up for traditional hydroelectric generators impacting rivers and streams, and is not well suited for in-conduit hydro generation, which can actually be a system efficiency improvement since it aims at capturing energy that would otherwise be lost. These systems are implemented on existing manmade conduits, ditches or canals systems where fish or other aquatic organisms are not present. Hence, there are virtually none of the environmental impacts associated with traditional hydro generation.

My hope is that H.R. 795 will alleviate these administrative bottlenecks by effectively exempting low-head hydropower developed on structures like EBID's check from the FERC process altogether. This is necessary to ensure the already tenuous cost-benefit ratios of these projects are not further burdened by paperwork and bureaucratic red tape. There are too many other important issues the federal government faces to waste resources on something that provides no additional environmental assurance because the facilities constructed are already off-river on previously disturbed ground.

I also want to take the opportunity to discuss the benefits of Section 4 of this bill, as it will provide authorization for the Bureau of Reclamation to include sites with potential low-head hydropower capability in its catalog of available development opportunities. Until recently, Reclamation focused only on large hydropower opportunities. While more work is necessary surrounding federal lease of power privileges, H.R. 795 will provide a needed boost to Reclamation's efforts to inventory potential sites on federally titled projects.

Because EBID has already completed a title transfer, our district is not directly implicated by Reclamation's efforts. However, in my role with the Family Farm Alliance's Low-Head Hydropower Committee, I have seen the enthusiasm of other irrigation district managers operating federally owned projects for this opportunity. With federal and state dollars frozen as legislators confront the current budget crisis, giving districts the regulatory leeway to develop these opportunities will allow them to generate revenue to pay for aging infrastructure repairs at the local level.

Western irrigation infrastructure is beset by too many challenges to ignore the promise that low-head hydropower represents. New hydropower development has the potential to create thousands of new jobs during the next 15 years. It increases the clean energy generation of the United States and provides ancillary benefits that include grid reliability, energy storage, and integration services for variable renewable resources. H.R. 795 provides both the necessary regulatory framework and a boost to Reclamation's efforts to ensure irrigation districts can capitalize on this important opportunity.

Thank you for inviting me to provide this testimony. I am happy to answer any questions at the appropriate time.