# STATEMENT OF JON C. WORTHINGTON ADMINISTRATOR SOUTHWESTERN POWER ADMINISTRATION U.S. DEPARTMENT OF ENERGY

# BEFORE THE

# SUBCOMMITTEE ON WATER AND POWER COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

MARCH 4, 2010

Madame Chairwoman and Members of the Subcommittee, I am Jon Worthington,

Administrator of Southwestern Power Administration (Southwestern). I appreciate this
opportunity to share with you today how Southwestern continues to promote our Nation's energy
security by effectively marketing and reliably delivering Federal hydroelectric power. This past
year, in the midst of notable successes, we've identified objectives and priorities for the near
future and for years to come that will allow us to continue operating in the most efficient,
cost-effective manner possible for you and the American people.

# **SOUTHWESTERN PROFILE**

As one of four Power Marketing Administrations in the United States, Southwestern markets hydroelectric power in Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas from 24 U.S. Army Corps of Engineers (Corps) multi-purpose dams with a generating capacity of approximately 2,174 megawatts (MW).

By law, Southwestern's power is marketed and delivered primarily to public bodies and rural electric cooperatives. Southwestern has over one hundred such customers, and these entities ultimately serve another nine million end-use customers.

Southwestern operates and maintains 1,380 miles of high-voltage transmission lines, 25 substations and switching stations, and a communications system that includes microwave, VHF radio, and state-of-the-art fiber optics. Staff members work from offices located in Gore, Oklahoma; Jonesboro, Arkansas; Springfield, Missouri; and Tulsa, Oklahoma. Around-the-clock power scheduling and dispatching are conducted by staff in the Springfield Operations Center.

#### SYSTEM RATES AND COST RECOVERY

As previously stated, Southwestern markets and delivers cost-based power from 24 Corps hydroelectric projects. To successfully carry out its mission of providing this power while ensuring repayment of the Federal investment, Southwestern performs annual Power Repayment Studies (PRS) for each of our three rate systems in our marketing area: the Integrated System, the Robert D. Willis Hydropower Project, and the Sam Rayburn Dam.

In each PRS, Southwestern studies the projected and actual costs of operating and maintaining the generation and transmission facilities and makes sure that sufficient revenues are being collected to repay these costs, including all operating costs plus principal and interest on the Federal investment. As is true for most utilities, Southwestern's rates are often sensitive to unexpected events that require the outlay of significant expenditures. Two such recent events are the drought of 2005-2006 and the ice storm of 2009.

#### **Drought of 2005-2006**

Drought conditions in the Integrated System projects during 2005 and 2006, combined with significant increases in Corps hydropower plant equipment replacement costs, triggered the need for a 27.7 percent revenue increase for the Integrated System. Due to the magnitude of the increase, Southwestern worked with its customers and employed a three-year, phased-in approach, with fixed incremental increases becoming effective in fiscal years (FY) 2007, 2008, and 2009. Southwestern is proud to report that it has fully recovered the cost of the 2005-2006 drought.

#### Ice Storm of 2009

In January of 2009, nearly a third of Southwestern's transmission system was rendered inoperable following a two-day ice storm in northeast Arkansas and southeast Missouri that left thousands of people without power. Over 400 of Southwestern's transmission structures, along with associated conductor and fiber optic shield wire, were in need of repair or replacement. Southwestern's sister agency, the Western Area Power Administration (Western) sent three maintenance crews to our aid. The men and women of the Southwestern and Western maintenance crews worked side by side for 16 hours a day, seven days a week, for almost three weeks straight. In the end, less than 21 days after the ice storm hit, Southwestern had reconnected all of its customers to the grid and initiated a plan to strengthen its 69-kilovolt (kV) system, which bore the brunt of the damage. I am happy to say that work to completely reconductor Southwestern's 69-kV system is underway, and the system should be fully installed and energized by this fall. Not only will this make Southwestern's 69-kV system much stronger, it will add capacity and decrease line losses, which in turn will add to the reliability and efficiency of Southwestern's transmission system and ultimately that of the region and the Nation.

#### **Cost Recovery**

Regardless of the cause of the expenditure – power purchased during drought conditions, repairs and replacement of equipment damaged during ice storms, rising costs related to maintaining aging hydropower and transmission facilities – all costs related to Federal hydropower must be recovered through our rates. Each year, Southwestern works diligently with its customers, the Corps of Engineers, and other Federal power stakeholders to assess the cost of

doing business and successfully completing its mission. Beginning January 1, 2010, we implemented a 10.8 percent revenue increase to recover the cost of the ice storm repairs, pay for much needed replacements at the Corps-owned projects, and provide additional resources to address compliance with the reliability initiatives of the North American Electric Reliability Corporation (NERC).

#### **SYSTEM CONDITIONS**

Drought conditions and ice storms aside, in general over the past few years, conditions have been normal and even a little wetter than normal. In an average year, Southwestern markets 5.6 billion kilowatt-hours (kWh) of power and energy with an average annual revenue of \$177.6 million. However, beginning in March of 2008 and continuing through late that year, water inflows to the river systems in Southwestern's marketing area were triple and sometimes even quadruple of median. In FY 2008, Southwestern marketed 7.3 billion kWh of energy which, along with transmission related services provided by Southwestern and capacity sales, generated revenues of \$192.5 million.

In FY 2009, inflows were good but were less abundant than in the previous year. While audited numbers are still being finalized, pre-audit numbers place the quantity of energy marketed as 6.2 billion kWh, with revenues of \$181.9 million from the sale of energy, capacity, and transmission services. To date, Southwestern has repaid approximately 61 percent of the \$1.3 billion in capital investments attributable to Federal power within our region.

Even as Southwestern tries to capitalize on good system conditions to market as much environmentally sound and renewable energy as possible for the Nation, we realize that hydropower is not the only Congressionally authorized purpose at the Corps projects within our

marketing area. Our day-to-day operations are conducted in concert with other project purposes such as water supply and flood control. Southwestern is proud of the relationships it has forged with other water users, and we look forward to many more years of continued cooperation so that the best use of this valuable resource can be attained for the American people.

#### **FUNDING FOR HYDROPOWER PLANT REPLACEMENTS**

As I speak, four of the 24 hydropower plants within Southwestern's marketing area are undergoing major rehabilitation; and of the approximately \$200 million provided to the Corps to date for these four rehabilitation projects, nearly half of it – almost \$100 million – has been funded directly by Southwestern's customers. Since 1999, customer funding has allowed a significant portion of the Corps' generation to remain available, which creates revenue for the U.S. Treasury, reduces our Nation's use of fossil fuels, and keeps Southwestern on track in meeting its contractual obligations to its customers. I believe the decade we have spent analyzing non-routine maintenance needs at Corps hydropower plants has given us a unique perspective from which to prioritize spending to achieve the most benefit for the least amount of money. The process we've developed works, and that's called doing business according to sound business principles, which is the core of Southwestern's mission and something that I, personally, believe the agency has the obligation and responsibility to do.

# EXPANSION OF CORPS SWITCHYARD MAINTENANCE

In addition to customer funding and working with the Corps to prioritize spending,

Southwestern also has arrangements in place which allow us to perform maintenance as
requested in Corps-owned switchyards. This work is often highly technical in nature, requiring
electric transmission expertise and resources not always available to the Corps. In November

2008, we executed an agreement with the Tulsa District Corps to take this arrangement one step further. The Tulsa District agreed, on a switchyard by switchyard basis, to transfer ownership and maintenance responsibilities of transmission equipment directly to Southwestern. The benefit of the transfer is twofold. First and foremost, Southwestern, a registered transmission owner with NERC, will assume ownership and maintenance responsibility for these assets that are integral to the reliability of the regional – and national – transmission grid. Second, Southwestern will have the opportunity to replace outdated control and monitoring equipment with new digital technology and upgrade existing oil-filled equipment with more environmentally friendly alternatives. Again, as with all Federal hydropower-related activities, and in accordance with Southwestern's statutory authorities and obligations, repayment of expenditures associated with these transfers will continue to be repaid, with interest, to the U.S. Treasury.

### RELIABILITY AND COMMUNICATIONS

Southwestern's transmission system is an integral part of our region's power delivery infrastructure. To ensure that our system continues to be reliable, efficient, and able to meet regional and national standards, we perform regular maintenance and replacements of our equipment, and, when planning such work, we are always looking for opportunities to make our system better. For example, with our transmission and substation equipment, we upgrade components and incorporate new technologies when feasible to reduce energy losses and enable a greater use of the Federal transmission resource by all consumers within our marketing area. With our communications equipment, we strive to increase redundancy to make critical

communications more robust and thus able to withstand natural or man-made events which may threaten regional reliability and the bulk electrical grid.

#### CYBER AND PHYSICAL SECURITY

Southwestern's overarching mission is to promote our Nation's energy security by marketing and delivering Federal hydroelectric power. Our success in achieving this mission is largely dependent on keeping our assets secure from physical and cyber attacks. With this in mind, in FY 2009, we implemented significant new security measures. For example, Southwestern made improvements to its substation entryways and gate systems, and increased the use of video monitoring at its sites. We also implemented new cyber encryption techniques to prevent the loss of personally identifiable information and to strengthen our password protection scheme. Finally, in response to the threat of a pandemic or other event that may affect normal operations, we implemented computer software to allow employees to support Southwestern's operations from off-site locations.

# **WORKFORCE PLANNING**

For the past several years, Southwestern – along with utilities across the Nation – has faced the issue of an aging workforce. For an industry that's highly specialized and technical, this can make finding qualified candidates difficult. Fortunately, Southwestern has taken steps to recruit and train qualified people to replace those who are or will be retiring. We regularly attend career fairs, including those sponsored by organizations which support diversity in the workplace. In addition, this past year, we established a workforce planning initiative as a top priority for the agency. Within this initiative is a formalized student hiring program which actively seeks to attract, recruit, and retain high-caliber students throughout our region. With

this program in place in addition to our regular recruitment efforts, we have hired several employees into technical positions. I am happy to say that these new hires have already made a positive impact in Southwestern's day-to-day operations.

#### JOBS FOR SMALL AND DISADVANTAGED BUSINESSES

It is Southwestern's acquisition policy to provide the most opportunities possible to small businesses, historically underutilized businesses, small disadvantaged business concerns, women owned small business concerns, service disabled veteran owned small businesses, and veteran owned small businesses.

In support of this, we are continuing our productive partnership with Bearskin Services (formerly Wyandotte Net Tel) to provide information technology support. In FY 2009, we also contracted with Chickasaw Nation Industries for administrative support. Both are Native American owned small and disadvantaged businesses who provide employment to hundreds of regional workers and whose profits benefit Native American tribes.

#### **OFFSETTING COLLECTIONS**

Beginning with the FY 2010 budget, Southwestern asked for, and received, offsetting collections of its receipts to fund Southwestern's operations and maintenance costs. I want to personally thank those of you on the Committee who worked with Southwestern, DOE, and OMB to achieve this milestone. The advantages of this funding method are myriad: It reduces pressure on Congressional appropriations; it allows for better program planning and ultimately more reliability for the region; it improves funding certainty; it allows Southwestern to operate in a more business-like manner because expenditures for expenses are directly tied to receipts; and it maintains oversight of Southwestern's budget by Congress and Southwestern's customers.

FISCAL YEAR 2011 BUDGET REQUEST SUMMARY

	FY 2009 Current Appropriation	FY 2010 Current Appropriation	FY 2011 Request
Operation and Maintenance			
Program Direction (PD)	24,330	27,153	28,381
Operations and Maintenance (O&M)	12,865	13,775	13,676
Construction (CN)	5,991	6,016	8,073
Purchased Power and Wheeling (PPW)	46,000	48,000	49,000
Subtotal, Operation and Maintenance	89,186	94,944	99,130
Offsetting Collections, PPW <sup>1</sup>	-35,000	-38,000	-39,000
Offsetting Collections, PD (annual expenses)	0	-26,247	-26,880
Offsetting Collections, O&M (annual expenses)	0	-5,621	-6,733
Alternative Financing, PD	-2,200	0	-281
Alternative Financing, O&M	-9,381	0	-1,537
Alternative Financing, CN	-3,191	-2,000	-2,000
Alternative Financing, PPW	-11,000	-10,000	-10,000
Total, Operation and Maintenance	28,414	13,076	12,699

#### **BUDGET HIGHLIGHTS**

Southwestern's budget request reflects a 2.9 percent decrease in appropriations; however, Southwestern's overall program shows an increase of 4.4 percent due to the use of alternative financing and offsetting collections for annual expenses. Both the use of alternative financing and the authority to use offsetting collections for annual expenses are essential in enabling Southwestern to operate a reliable Federal power system, produce power at the lowest cost-based rates possible consistent with sound business principles, repay the American taxpayers, provide economic benefits to the region, and ensure that our Nation receives as much clean, renewable, and domestically produced power and energy possible.

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<sup>&</sup>lt;sup>1</sup> Southwestern's budget request for the Purchased Power and Wheeling subprogram reflects anticipated needs to ensure adequate funding to fulfill its 1200-hour peaking power contractual obligations based on volatile market prices, limited availability of energy banks, and all but the most severe hydrological conditions.

# **ENERGY FOR TODAY AND TOMORROW**

It is an exciting and crucial time in the electric utility industry. As a whole, we've been tasked with reducing our Nation's carbon footprint while keeping energy costs in line. For Southwestern, which has been marketing and delivering affordable, reliable, and emissions-free Federal hydropower for over 65 years, this is not only achievable, it is the core of our business model. With the support of Congress, the Administration, and our customers, we pledge to continue this good work for many years to come.

Madame Chairwoman, this concludes my testimony. I would be pleased to address any questions that you or the Subcommittee may have.