SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

CASE NO. EL05-022

IN THE MATTER OF THE APPLICATION BY OTTER TAIL POWER COMPANY

ON BEHALF OF THE BIG STONE II CO-OWNERS

FOR AN ENERGY CONVERSION FACILITY SITING PERMIT FOR THE

CONSTRUCTION OF THE BIG STONE II PROJECT

DIRECT TESTIMONY

OF

MIKE MCDOWELL

GENERAL MANAGER AND CEO

HEARTLAND CONSUMERS POWER DISTRICT

MARCH 15, 2006

TESTIMONY OF MIKE McDOWELL

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BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

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I. INTRODUCTION

Q: Please state your name and business address.

A: Mike McDowell, 203 West Center Street, Madison, South Dakota.

Q: By whom are you employed and in what capacity?

A: I am the General Manager and Chief Executive Officer (CEO) of Heartland Consumers Power District (Heartland).

Q: What is your educational background?

A: I have a Bachelor of Science degree in political science and education, and a Master of Public Administration from the University of Kansas.

Q: What is your employment history?

A: I have served the past two years as general manager and CEO for Heartland. The previous three years I served as an economic development consultant to local governments in Kansas. I served for five years as CEO of Western States Power Corporation, and for 15 years as CEO of Southwestern Power Resources Corporation.

Q: What work experience have you had that is relevant to your testimony?

A: I have 22 years of experience as the chief executive officer of operating electric utility organizations.

Q: What professional organizations do you belong to?

A: The American Public Power Association; and the National Rural Electric Cooperative Association

Q: What classes and other training have you taken relating to your testimony?

A: All post graduate work relates to management of complex organizations. I have one academic year of undergraduate course work in electrical engineering courses.

Q: Have you submitted testimony in other administrative or judicial proceedings dealing with energy and related issues?

A: Yes, before the Federal Energy Regulatory Commission and two state regulatory bodies.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to provide information on Heartland and why it chose to participate in the Big Stone Unit II project at its level of participation. I am also providing information regarding our company.

Q: Please summarize your testimony.

A: This testimony will outline our decision-making processes in regard to Big Stone II and other energy resources needed to provide reliable power at the lowest possible cost to consumers consistent with sound business principles.

III. DESCRIPTION OF COMPANY

Q: Please describe your company.

A: Heartland Consumers Power District is a political subdivision and public corporation of the State of South Dakota. Heartland was created in 1969 under the Consumers Power District Law. Heartland's purpose is to supply electric power and energy to public entities within and outside the State of South Dakota.

Q: Please describe Heartland's service territory, its capability, and its generation and delivery resources.

A: Heartland's initial public power customers had allocations of hydroelectric power from Western Area Power Administration (WAPA). By the middle 1970's, these customers were exploring supplemental supplies because their load growth had exceeded their WAPA allocation. About the same time, Heartland became one of the six participants in the building of Laramie River Station as a part of the Missouri Basin Power Project (MBPP). Heartland is also one of three owners of the Integrated Transmission System (IS). The IS is a high-voltage system owned by WAPA, Basin Electric Power Cooperative, and Heartland. The IS is located in North Dakota, South Dakota, Minnesota, Montana, Iowa and Nebraska.

Heartland is authorized under state law to sell at wholesale both within and outside the State of South Dakota. On December 31, 2005, Heartland had long-term contracts for service to 18 municipalities in South Dakota, one in Iowa, and four in Minnesota, in addition to three State Institutions in South Dakota and part of one Rural Electric Cooperative in northeastern South Dakota.

As noted, Heartland is a co-owner in the MBPP. Heartland has an undivided ownership interest of 49.5 MW in MBPP. Additionally, Heartland has several participation power agreements for additional base load and peaking resources to meet its Customers' needs. Total capacity purchased through the participation power agreements is currently about 85 MW. Of the 85 MW under contract, 57 MW is from base load resources.

Q: Describe Heartland's governance structure.

A: Heartland is governed by a publicly elected, nonpartisan Board of Directors composed of ten members; one from each of the District's Subdivisions. Director terms are staggered and are for six years.

Q: How does HCPD structure its relationship with its wholesale customers?

A: Heartland has long-term power supply contracts with its customers.

Q: Does HCPD have a legal obligation to serve any particular customers?

A: Yes. The long-term power supply contracts require Heartland to provide all power and energy necessary to meet requirements above WAPA allocations, and full requirements where there is no WAPA allocation.

IV. HEARTLAND'S POWER SUPPLY OBLIGATIONS TO ITS CUSTOMERS

Q: What are the two paramount concerns Heartland must take into consideration with respect to power supply forecasting and planning?

A: The first is reliability. That is, ensuring that Heartland has enough reliable supply-side resources to meet the power and energy needs of its customers.

Q: What is the second concern?

A: Affordability. The end users and consumers of most of the power and energy Heartland supplies are farmers, small business operators and residents of small towns and cities in rural areas.

Q: What factors contribute to Heartland's concerns about the reliability of its future rent power supply?

A: There are several. The one that concerns Heartland the most (along with every other electric utility in the Mid-continent Area Power Pool (MAPP) region) is the fact that for many years, MAPPs' member utilities have consistently forecasted generation capacity shortages for the year 2011 and beyond. Estimates are that the region could be many thousands of mega-watts short by 2011.

Q: Explain the possible impacts of the projected capacity deficits.

A: A capacity deficit for MAPP refers to the aggregate number of megawatts of power, inclusive of a 15% capacity reserve requirement, that will be needed to meet the coincident peak demand of all MAPP-US region utilities in the year 2011, unless net additions to the MAPP region's firm power supply or "capability" are made between now and the year 2011. The MAPP region as a whole is a summer peaking system. Coincident peak demand refers to the point in time when the electrical loads of all MAPP region utilities, simultaneously, reach their highest level of demand ("peak demand"). This usually occurs in the summer – in July or August each year – when hot, sweltering temperatures prompt customers to rely heavily on their air conditioning. At the point when electrical usage "maxes out" on a system-wide and MAPP region-wide basis, blackouts and brownouts can occur unless MAPP's utilities have sufficient generating resources on-line and operating to meet the demand. As noted, at this point, unless many megawatts of "firm" power are added to the electric supply systems of MAPP's utilities by 2011, there could be blackouts and brownouts when those hot, sweltering days occur.

Q: Will these shortages only occur in the hot summer months?

A: Not necessarily. Some electrical systems in the Dakotas and Minnesota are winter peaking systems. That means the highest point of demand occurs in December, January or February, rather than in the summer. The electrical usage patterns of the customers of these electric systems suggest that many customers use electricity to heat their homes, businesses, and farms. Because of the absence of natural sunlight in the winter months in this region, demand for electricity for lighting is much higher in the winter than in the summer. Thus, for some

customers in some areas and for some electric systems, shortages of power and energy in the winter months could be life-threatening.

Q: You mentioned affordability of electricity. Please explain why this is such an important concern to Heartland in connection with its power supply planning activities.

A: As I noted earlier, Heartland supplies power and energy to towns and cities in predominately rural, sparsely populated regions of the state. Along with lots of wide-open spaces and fresh air, there is generally less money and capital in these areas than there is in bigger cities such as Sioux Falls or the Twin Cities. Heartland's customers, generally, live on less money than their counterparts in urban areas. On a monetary basis, Heartland's customers own less land, earn less income, and, consequently, are unable to pay as much for necessities as people who live in more urban areas.

Q: Please provide an example.

A: Heartland provides power and energy to the town of Madison in Lake County, South Dakota. According to publicly available demographic data, in 2003 the median household income for residents of Madison was only $38,349, compared with a median household income of $45,872 for residents of Sioux Falls, and $53,767 for residents of Minneapolis/St. Paul. The 2000 median home value for homeowners in Madison was only $73,800, compared with $101,200 in Sioux Falls homes and $143,400 in the Twin Cities. Also, the median age of these areas is markedly different. Not surprisingly, the residents of Madison are older than the more urban residents.

Q: Why are these statistics important to Heartland?

A: They reinforce what we know by our experience and our observations. The customers that depend on the power and energy we supply cannot afford to pay significantly more than they do now for electricity. They are on limited, fixed incomes, and have no prospects or means of finding additional resources to pay unnecessarily higher electric rates. And, of course, they have no alternative supply choices for electricity.

Q: Anecdotally, what is your experience with the electric usage practices and patterns of Heartland's customers?

A: For the most part our customers use electricity prudently and efficiently. As you can imagine, the basic economic laws of supply and demand affect usage patterns. Our customers who live on limited, fixed incomes, or who simply lack the income and resources to pay for electricity, are motivated by their economic predicaments to conserve their usage of electricity wherever and whenever possible. Heartland's experience is that those customers who have limited resources are careful users of electricity. They turn off lights where they are not needed. They turn down their thermostats in the winter. They turn on their air conditioners (if they have one) only when the heat and humidity become unbearable. They don't keep appliances running when they are not being used. By way of some contrast, users with relatively higher household incomes are not, as energy conscious. But overall, we have observed that electric usage patterns vary according to means. Which underscores how critical it is for Heartland to meet its customers' power and energy needs at affordable rates.

Q: Could Heartland lower the rates it charge its customers by using wind and other renewable resources, instead of power and energy supplied by the proposed Big Stone Unit II?

A: We continuously examine adding more renewable generation sources to Heartland's resource mix. On the surface, wind power may be attractive from an economic and environmental perspective. It does not burn any fuel and, therefore, does not emit air pollutants. For these reasons, wind power will be one of the generating resources that utilities, including Heartland, will seek to take greater advantage of in the near future and beyond. However, at the present time, because of the reliability concerns, Heartland cannot replace existing firm supply resources with wind. Wind generation is only accredited to be available 20% of the time for MAPP load and capability planning purposes. A resource that is available only 20% of the time, and that cannot be dispatched on a firm basis, cannot replace a utility's firm power, base load resources.

Q: What alternatives to Big Stone Unit II are available for Heartland's customers in the timeframe beginning in 2011 and beyond?

A: Heartland is participating in another base load project to provide diversity in its resource portfolio. Heartland seeks to own an 80 MW share in the Whelan Energy Center 2 project in Hastings, Nebraska. That resource is also planned to be operational in the 2011 time frame. The project, like the Big Stone Unit II, is fully subscribed and is not an alternative to Big Stone Unit II. The only alternative that Heartland has in the same time frame as Big Stone Unit II is to purchase capacity and energy from the market. Alternative base load resource is not available in that time frame. Beyond the 2011 time frame, Heartland is examining other base load projects that are under consideration, but are still in the preliminary planning stages and would not be operational until the 2015 time frame, if that early.

V. PARTICIPATION IN BIG STONE UNIT II

Q: What general factors did the company consider in determining there was a need for participating in the ownership of the proposed Big Stone Unit II?

A: The most significant factor was the need to replace the existing participation power agreements that would be expiring in about the same time frame. Heartland's evaluation of its load and capabilities showed a large deficit for capacity when the agreements expire. The power supply studies that were performed showed that the base load participation agreements that were expiring needed to be replaced with an equivalent or greater amount of base load capacity to meet Heartland's load requirements. Heartland explored several base load resource options including contracting with other utilities for their base load resources. The regional utilities that Heartland approached either did not have base load resources available or were unable to commit the resources that were available to long-term contracts. In order to meet its long-term base load capacity needs, Heartland determined that it would need to participate in a new base load resource. Heartland is also experiencing load growth that, by itself, will require additional base load resources.

Q: Why did the company become interested in participating in Big Stone Unit II?

A: Heartland was exploring options to replace non-extendable base load participation power agreements. The geographic location of the proposed project was ideal as well as the synergies of the participants. Otter Tail Power Company, the proposed operating agent for Big Stone Unit II, is well experienced in effectively managing and operating such a plant.

Q: What percentage of the output of Big Stone Unit II has your company become contractually committed?

A: Heartland has committed to 25 MW of the proposed 600 MW project, or approximately 4.2 %.

Q: How is your company going to pay its share of the construction and operating costs of the proposed Big Stone Unit II?

A: Heartland plans to pay for its share by issuing long-term tax-exempt electric revenue bonds.

Q: What benefits do you see Big Stone Unit II affording your company's customers?

A: Big Stone Unit II will provide diversity in Heartland's portfolio of base load resources. Big Stone Unit II will also provide a reliable, stable-price power supply to meet a portion of Heartland's base load resource needs well into the future. Big Stone Unit II should also be in-service at a time when some of Heartland's current purchase power contracts are expiring.

Q: Describe the rationale for Heartland's involvement with Big Stone Unit II?

A: As stated above, the primary reason for Heartland's involvement in Big Stone Unit II is the need for base load resources when the contracts Heartland has for nearly half of its base load resources expire. Heartland selected Big Stone Unit II as a viable resource to replace a portion of those base load contracts. Heartland's load factor is high due to large, industrial load, requiring that the existing base load contracts be replaced with comparable and economic base load resources.

The location of Big Stone Unit II in relation to our customers was also a consideration for our involvement. The regional transmission system has become increasingly constrained. Having a resource close to our customers will reduce the capital investment required for delivery of the plant output and minimize the impact of transmission system curtailments.

Big Stone Unit II has an independent cooling water supply, independent operator, distinct geographic location, rail route from the Powder River Basin, and separate transmission path. Having an base load resource also helps to mitigate Heartland's exposure to power shortages and market price spikes during unit outages and curtailments. Obviously, as a small utility, Heartland cannot afford to undertake large projects such as Big Stone Unit II on its own. Heartland decided to participate with others to take advantage of the economies of scale associated with a larger facility and the operating experience of other utilities. Heartland also decided to participate in Big Stone Unit II based on the synergies and common goals of the other participating utilities.

Heartland's primary base load resource, Laramie River Station, will be over 30-years old when Big Stone Unit II becomes operational. The last major expansion of the electric generation system occurred about 30 years ago. Heartland is taking advantage of a viable resource that is being proposed at this time to fulfill a base load resource need and to plan for its future.

Q: Explain the importance of rate stability to Heartland and its customers.

The projected cost of the proposed project compares well against Heartland's existing base load agreements, an important factor in terms of keeping Heartland's rates stable. The efficient development of an existing site with substantial infrastructure should also help keep development and operating costs low and minimize impacts to the region.

Q: Does this conclude your testimony?

A: Yes.