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January 21, 2008

Patricia Van Gerpen
Executive Director
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, SD 57501-5070

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Dear Ms. Van Gerpen:

Subject:

Semi-Annual Progress Report

December 31, 2007

EL05-022

The following Semi-Annual Progress Report is provided in conformance with the Final Decision and Order for the Energy Conversion Facility Permit for the Construction of the Big Stone II Project Docket EL05-022.

This is the project's third report and we would welcome comments on the format and/or content, which could be incorporated into future reports.

Sincerely,

Mark Rolfes Project Manager Big Stone II Project

Enclosure

# Semi-Annual Progress Report December 31, 2007

Final Decisions and Order Energy Conversion Facility Permit for the Construction of the Big Stone II Project

#### EL05-022

The following Semi-Annual Progress Report is provided in conformance with the Final Decision and Order for the Energy Conversion Facility Permit for the Construction of the Big Stone II Project Docket EL05-022.

The Commission's Final Decision and Order paragraph 2.C. includes the following condition:

C. The Co-owners shall submit semi-annual progress reports to the Commission that summarize the status of the construction, the status of the land acquisition, the status of environmental control activities, the implementation of the other measures required by these conditions, and the overall percent of physical completion of the project and design changes of a substantive nature. Each report shall include a summary of consultations with DENR (the South Dakota Department of Environment and Natural Resources), and other agencies concerning the issuance of permits. The reports shall list dates, names, and the results of each contact and the company's progress implementing prescribed environmental protection or control standards. The first report shall be due for the period ending December 31, 2006. The reports shall be filed within 31 days after the end of each semi-annual period and shall continue until the project is fully operational.

The following are the Applicant's responses to Order 2.C. for the reporting period ending December 31, 2007.

#### **Project Co-owner Update**

On or about September 21, 2007, Great River Energy and Southern Minnesota Municipal Power Agency announced they were withdrawing from participation in the Big Stone Project. The five remaining Big Stone Co-owners – Otter Tail Power Company, Central Minnesota Municipal Power Agency, Heartland Consumers Power District, Montana-Dakota Utilities Co., and Western Minnesota Municipal Power Agency through Missouri River Energy Services (collectively, the "Co-owners") – have elected to continue with the project. At present, the Co-owners intend to go forward with a supercritical pulverized coal plant at the Big Stone site that is essentially identical to the plant authorized by this Commission. The Co-owners are engaging in discussions with other utilities and power marketers, but the Co-owners do not anticipate a final decision regarding the involvement of another participant until after the Minnesota certificate of

need proceedings regarding the transmission facilities to be located in Minnesota are complete. If those discussions result in one or more entities joining the project within a reasonable time frame, the Co-owners intend to construct up to a nominal 580 MW plant to take advantage of the comparatively better economies of scale for the larger plant. In any event, the minimum size facility that the Applicants would build would be a nominal 500 MW plant.

Other than a change in the ownership with the withdrawal of GRE and SMMPA and a potential minimal downsizing in the size of the generation capacity, the Big Stone II facility would remain identical to what the Commission has permitted. The site location is unchanged offering the same benefits of co-locating Big Stone II on the existing Big Stone I site. Co-owners will use the same supercritical pulverized coal technology to generate power, and will use the same pollution control technology. All such benefits and technologies were described in the application, testified to at the hearings in this matter, and approved by the Commission. The Co-owners also intend comply with all of the commitments and conditions of the Commission's July 21, 2006 Final Decision and Order which was ultimately affirmed by the South Dakota Supreme Court on January 16, 2008, 2008 SD 5.

Co-owners believe that the change in ownership and minimal reduction in generation capacity is not material or contrary to the Commission's Order. The Commission exhaustively examined multiple aspects of the proposed Big Stone II Project. A review of the factors examined by the Commission, in light of the anticipated changes in ownership and generation capacity indicate the anticipated changes are immaterial and have no effect on the Commission's Order. Indeed, logic dictates that a minimal "downsizing" of the generation capacity of the plant can only contribute to a corresponding decrease in anticipated impacts examined by the Commission.

Despite anticipated changes in ownership or generation capacity, the Co-owners plan to implement pollution control devices that will benefit Big Stone II and Big Stone I remain unchanged. Two points are significant here: (1) the Co-owners will install the identical pollution control technology that they committed to install on the 600 MW plant, and (2) emissions will be less from a smaller facility.

With respect to mercury, the Co-owners renew the commitment to a site-wide cap of 189 lbs/year provided the facilities are allowed a period of three years after commercial operation date to test and implement commercially available, technically feasible mercury emissions control measures.

With respect to carbon dioxide, the Co-owners know that they will have to comply with any requirements that may be established at either the federal or regional level for addressing carbon dioxide emissions from power plants. For all of the reasons already entered into the record, a state of the art super-critical baseload coal plant like Big Stone II is consistent with potentially tighter regulations on carbon dioxide emissions.

Intervenors appealed the Commission's decision based solely on the issue of carbon dioxide emissions. Furthermore, during oral argument to the Supreme Court regarding the appeal of the Order, counsel for Intervenors, Janette Brimmer, advised the Court that the departure of GRE and SMMPA had no bearing on the issue on appeal. A smaller plant will result in proportionally decreased emissions of carbon dioxide.

With respect to sulfur dioxide, the Co-owners will install the identical pollution control technology that was proposed for the original unit. This technology will not only control emissions of sulfur dioxide from the new unit, but will also control emissions from Unit I. There was intended to be a huge reduction in sulfur dioxide emissions after Unit II went into operation, and that is still the case regardless of the final size of the plant. Similarly, a smaller facility will employ the same technology to minimize nitrogen oxides formation as was anticipated for the 600 MW unit.

Ultimately, despite any changes in ownership or minimal downsizing of the generation capacity, Big Stone II will continue to meet the terms and conditions upon which the permit was granted. Accordingly, Co-owners will continue to develop the Big Stone II Project as described in this report absent any further direction from the Commission.

#### Status of the Construction

Preliminary discussions with equipment suppliers and erectors have taken place and a general process for final negotiations has been reviewed, but the actual timeline will depend on permit status. The planned construction start will depend on permit status of the project.

## Status of the Land Acquisition

The Semi-Annual Progress Report for December 2007 incorrectly stated that the Coowners had purchased all of the property within the blue boundary as identified in Application Exhibit 1-2 Revised June 2006. At their October 25, 2007 meeting, the Coowners declined to exercise the options to purchase the W ½ of the NW ¼ and the W ½ of the SW ¼ of Section 15 in Township 121 North, Range 47 West. The remaining area bounded by the blue line has been purchased.

#### Status of Environmental Control Activities

The following is a discussion of the Big Stone II environmental control activities that have occurred during this reporting period.

#### I. PSD Construction Permit

Public notice of the draft PSD Construction Permit was provided on April 26, 2006 for a 30-day period. An updated application was submitted on June 20, 2006. The updates incorporated additional plant design changes and modeling in conformance with the ambient air quality standards for particulate matter less than 2.5 microns (PM<sub>2.5</sub>). In compliance with the Final Decisions and Order 2.B., the updated application also

included the voluntary commitment to limit mercury emissions to 189 pounds per year beginning three years after commercial operation of Big Stone II. On February 23, 2007, the Co-owners submitted additional PSD Construction Permit updates to address the most recent plant design changes as described in the December 31, 2006 Semi-Annual Progress Report to the Commission. PM<sub>2.5</sub> modeling results consistent with EPA's revised PM<sub>2.5</sub> standards as published in the October 17, 2006 Federal Register (FR 71 61144) accompanied the February 23, 2007 submittal. On July 12, 2007, the Co-owners provided additional revised PM<sub>2.5</sub> modeling results which included emissions from the adjacent Poet Biorefining – Big Stone, formerly the Northern Lights Ethanol Plant. Public notice of the draft PSD Construction Permit will occur again following incorporation of the permit application updates.

## II. Water Appropriations Permit

The Co-owners received Water Permit No. 6678-3 dated November 1, 2006 which was approved by the Water Management Board at its public hearing on July 12, 2006. The permit authorizes the construction of the surface water diversion system and the beneficial use of water for Big Stone II.

Condition 3 of the Final Decision and Order requires that the Co-owners conduct an evaluation of alternative water supply options to provide water to the plant site in the event that withdrawals from Big Stone Lake are curtailed for an extended period of time. The Co-owner's electronically filed a response to Condition 3 with the Commission on August 1, 2007 fulfilling Condition 3 of the Final Decision and Order.

The Co-owners completed a testing program to establish the quantity and quality of groundwater available in the vicinity of the Big Stone site. The groundwater would be used in lieu of the 450-acre makeup water storage for site drought protection. A Water Rights Application was submitted to the SD DENR requesting an appropriation of 10,000 acre-feet of groundwater for the Big Stone plant site on March 28, 2007. The SD DENR published a Notice of Hearing on April 11 and 18, 2007. The Board of Water Management held a public hearing in Milbank on July 11, 2007 and they approved issuance of the permit at that time. The Board adopted the Findings of Fact, Conclusions of Law, and Final Decision on August 23, 2007. There was no appeal of the Board's decision and on November 6, 2007, the SD DENR issued the Water Permit 6846-3 authorizing construction of the water diversion system and beneficial use of the water.

#### III. Solid Waste Permit

On February 2, 2007, Otter Tail Power Company submitted to the SD DENR an application for a revised Big Stone I Solid Waste Permit. The permit application incorporated the needs of Big Stone II that are consistent with the project design changes. The draft permit was public noticed on June 20, 2007. The SD DENR issued the revised permit on July 25, 2007.

## IV. Local Approvals

There were no local approvals initiated or received during this semi-annual reporting period.

# V. Federal Environmental Impact Statement

The Western Area Power Administration issued a Supplementary Draft Environmental Impact Statement (SDEIS) for public comment on October 26, 2007. The SDEIS addressed the impacts of changes to the project relative to cooling water alternatives and the use of groundwater as the backup water source. Western held a public meeting to solicit comment on the SDEIS in Milbank on November 13, 2007. The comment period was slated to close on December 10, 2007, but it was extended to February 28, 2008.

## Implementation of Other Required Measures

The following is a summary of the status of each of the required measures included in the Decision and Order as listed in paragraphs 1.A. through 1.D.

A. Applicants shall prepare a contingency housing plan for construction housing;

Status: An outline for the housing plan has been put together. Data taking has started and a survey of the needs of the expected work force has been completed.

B. Applicants shall fund an additional officer to the Grant County Sheriff's office for three years, implement a program of drug testing of potential workers and advise law enforcement of peak employment months;

Status: No activity this reporting period for funding of the additional officer to the Grant County Sheriff's office. The assurance of drug testing will be done on a contractual level which is included in Section 000453.5 of BSP II's contract specifications. This provision has not been implemented since construction contracts have not been signed.

Section 00453.5 of the Co-owners' construction contract specifications is the Drug Prevention Program and it is included in the following contract subsections.

- 435.5.1 Pre-Project Assignment Test
- 435.5.2 Post–Employment Test
- 435.5.3 Periodic Unannounced (Random) Drug Test
- 435.5.4 Drug/Alcohol Test Implementation
- 435.5.5 Training and Education

C. Applicants shall purchase for the Big Stone City Fire Department a high angle rescue kit and provide for the training of several of the Big Stone City Fire Department members in the use of the equipment; and

Status: No activity this reporting period.

D. Applicants shall provide a public liaison officer to facilitate the exchange of information between the project owners, contractors and the local communities and residents and to promptly resolve problems that may develop for local communities and residents as a result of the project. Applicants shall also implement a web site and conduct periodic meetings to update the public. The public liaison officer shall be afforded immediate access to the Applicant's project manager and to the contractors' on-site managers.

Status: The Co-owners have employed Sandy Christensen as the local public liaison officer who has immediate access to the Applicant's project manager and would have immediate access to the project's on-site managers. Ms. Christensen resides in the Milbank area and is a former Executive Director of the Milbank Chamber of Commerce. She has an excellent knowledge of the area. She has been making local contacts informing the public of her role on the Big Stone II project.

Ms. Christensen, along with Steve Schultz, has maintained close contact with both the local papers and radio stations. They have met with some of the local service clubs and will continue to meet with these organizations in the future.

Ms. Christensen has begun work with property owners and developers on plans for the construction period. She also has made local contacts to build support for the permitting process and has attended a number of local meetings regarding the project.

The Applicants have established a web site for the Big Stone II project. The web site address is the following:

http://www.bigstoneii.com/

#### Overall Percent of Physical Completion of the Project

Physical construction has not begun on the project.

#### Design Changes of a Substantive Nature

Notwithstanding the potential changes in generation capacity explained above, there were no substantive design changes that occurred during this reporting period.

# Summary of Consultations with the South Dakota Department of Environment and Natural Resources and other Agencies Concerning the Issuance of Permits

| Date               | Agency                           | Contact           | Substance of Contact                          |
|--------------------|----------------------------------|-------------------|---|
| 7/02/2007          | SD DENR – Air<br>Quality Program | Kyrik<br>Rombough | Provided comments to SD DENR on draft PSD Air |
|                    | Quanty Flogram                   | Komoougn          | Quality construction                          |
|                    |                                  |                   | Permit.                                       |
| 7/12/2007          | SD DENR – Air                    | Kyrik             | Submittal of revised PM <sub>2.5</sub>        |
| ~                  | Quality Program                  | Rombough          | air dispersion modeling                       |
| 10/00/0007         | an new n                         | 77 11             | results.                                      |
| 10/08/2007         | SD DENR – Air                    | Kyrik             | Provided notification of                      |
| 10/12/2007         | Quality Program                  | Rombough          | ownership change.                             |
| 10/12/2007         | SD DENR -                        | Mailing to        | Provided notification of                      |
|                    | Water Rights                     | Department        | ownership change.                             |
| 12/21/2007 and     | Program SD DENR Water            | Eric Gronlund     | E-mail exchange and                           |
| following          | Rights Program                   | Effe Gromund      | discussion of                                 |
| Tonowing           | Rights Frogram                   |                   | recommended procedure                         |
|                    |                                  |                   | for eliminating two                           |
|                    |                                  |                   | permitted well site                           |
|                    |                                  |                   | locations and for adding                      |
|                    |                                  |                   | two alternate locations.                      |
| Ongoing            | SD DENR – Air                    | DENR staff        | Contacts to determine                         |
|                    | Quality                          |                   | permitting status                             |
| Numerous occasions | Western Area                     |                   | Information exchange and                      |
|                    | Power                            |                   | discussion of the                             |
|                    | Administration                   |                   | Supplemental Draft EIS                        |
|                    | and R. W. Beck                   |                   | covering groundwater and                      |
|                    |                                  |                   | follow-up on the Final EIS                    |
| Ongoing            | Native American                  | Tribal Historic   | Consultation on cultural                      |
|                    | Tribes, Western                  | Preservation      | resources and the                             |
|                    | and Otter Tail                   | Officers and      | Programmatic Agreement                        |
|                    | Power Company                    | Tribal            | as part of the Section 106                    |
|                    | representing BSP<br>II           | Representatives   | process                                       |