

STAFF REPORT  
August 27, 2009

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**No. 09SR026 - SDCL 11-6-19 Review to expand a utility substation      ITEM 23**

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GENERAL INFORMATION:

APPLICANT	Black Hills Power
AGENT	Steven Dunn
PROPERTY OWNER	Kevin and Lori Lewis/ Black Hills Power
REQUEST	<b>No. 09SR026 - SDCL 11-6-19 Review to expand a utility substation</b>
EXISTING LEGAL DESCRIPTION	Lots 23 thru 26 with ten foot wide of an adjacent vacated alley of South Boulevard Addition, located in the NW1/4 of Section 12, T1N, R7E, BHM, Rapid City, Pennington County, South Dakota
PARCEL ACREAGE	Approximately 0.636 acres
LOCATION	East side of Fifth Street between Cleveland and Oakland Street
EXISTING ZONING	Low Density Residential District
SURROUNDING ZONING	
North:	Low Density Residential District
South:	Low Density Residential District
East:	Low Density Residential District
West:	Low Density Residential District
PUBLIC UTILITIES	City water and sewer
DATE OF APPLICATION	3/26/2009
REVIEWED BY	Travis Tegethoff / Ted Johnson / Marcia Elkins

RECOMMENDATION:

Staff **will recommend that the SDCL 11-6-19 Review to expand a public utility be approved and an exception granted to reduce the required front yard setback from 35 feet to 30 feet if the following information is provided for review and approval prior to August 27, 2009 Planning Commission meeting:**

- 1. Four copies of a full size landscape plan stamped and sealed by the landscape architect drawn to scale identifying the fence location including the pillars located outside of all site triangles, in addition to the proposed landscape materials;**
- 2. Complete site plans showing the limits of the proposed construction including the**

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substation improvements, underground cable alignment and installation, proposed structure(s) demolition/installation and any related construction improvements and documenting no conflict with the underground sewer, water and storm water utilities and the proposed underground electrical wires, cables and other appearances. The plans shall reflect the removal and abandonment of any unused water or sewer services in accordance with City requirements; and,

3. A grading and drainage plan as well as a storm water management plan shall be submitted.

GENERAL COMMENTS: (Update, August 20, 2009. All revised and/or added text is shown in bold.) This item was continued to August 27, 2009 Planning Commission meeting to allow the City Council to review the Fence Height Exception (09FV003). As previously noted, the applicant submitted a revised fence design identifying an 8 foot tall wrought iron fence panels with brick pillars surrounding the entire substation. A computer generated drawing of the appearance of the site has been included in the updated information provided by Black Hills Power and linked to this report.

(Update, July 30, 2009. All revised and/or added text is shown in bold print.) This item was continued previously to allow the City Council to review the related Fence Height Exception (09FV003.) Revised plans for the fence showing a wrought iron fence panel with brick pillars surrounding the entire substation site have been submitted. The applicant has requested that City Council consideration of the Fence Height Exception be continued to the August 17, 2009 City Council meeting. As such, staff is recommending that this SDCL 11-6-19 Review be continued to the August 27, 2009 Planning Commission meeting.

(Update, July 14, 2009. All revised and/or added text is shown in bold print.) This item was continued to the July 23, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. On July 14, 2009 the Public Works Committee recommended to continue the fence height exception to the July 28, 2009 Public Works Committee meeting to allow the applicant to submit additional information. As such, staff recommends that this item be continued to the August 6, 2009 Planning Commission meeting.

(Update, June 29, 2009. All revised and/or added text is shown in bold print.) This item was continued to the July 9, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. The fence height exception will be considered at the July 6, 2009 City Council meeting. In addition, based on the discussions at the neighborhood meeting additional information on the location of substation and noise data was requested for review. To date, no additional information has been submitted. As such, staff recommends that this item be continued to the July 23, 2009 Planning Commission Meeting.

(Update, May 26, 2009. All revised and/or added text is shown in bold print.) This item was continued to the June 25, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. On June 10, 2009, a neighborhood meeting was held to discuss this application and the associated fence height exception. The fence height

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exception will be considered at the July 6, 2009 City Council meeting. As such, staff recommends that this item be continued to the July 10, 2009 Planning Commission meeting.

(Update, May 26, 2009. All revised and/or added text is shown in bold print.) This item was continued to the June 4, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. On May 18, 2009, City Council scheduled a neighborhood meeting for June 10, 2009 to discuss this application and the associated fence height exception. As such, staff recommends that this item be continued to the June 25, 2009 Planning Commission meeting.

(Update, May 13, 2009. All revised and/or added text is shown in bold print.) This item was continued to the May 21, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. On May 12, 2009 the Public Works Committee recommended to continue the fence height exception to the May 26, 2009 Public Works Committee meeting. As such, staff recommends that this item be continued to the June 4, 2009 Planning Commission meeting.

(Update, April 28, 2009. All revised and/or added text is shown in bold print.) This item was continued to the May 7, 2009 Planning Commission meeting to allow the applicant to obtain a fence height exception or submit revised plans. On April 24, 2009 the applicant submitted a fence height exception that will be considered at the May 18, 2009 City Council meeting. As such, staff recommends that this item be continued to the May 21, 2009 Planning Commission meeting.

The applicant has submitted a SDCL 11-6-19 Review to expand a utility substation located on the east side of Fifth Street between Cleveland Street and Oakland Street. The property is currently zoned Low Density Residential District and a utility substation and single-family residence is currently located on the property.

South Dakota Codified Law 11-6-19 states that "...whenever any such municipal council has adopted a comprehensive plan, then no street, park, or other public way, ground, place, space, no public building or structure, no public utility, whether publicly or privately owned, if covered by the comprehensive plan or any adopted part thereof, shall be constructed or authorized in the municipality or within its subdivision jurisdiction until and unless the location and extent thereof shall have been submitted to and approved by the Planning Commission". As previously indicated the proposed construction is a public utility requiring that the Planning Commission review and approve the proposed construction.

**STAFF REVIEW:**

Staff has reviewed the South Dakota Codified Law 11-6-19 review and noted the following considerations:

**NOISE RATING:** At the June 10, 2009 neighborhood meeting there was considerable concern with the amount of noise generated from the proposed development. An acceptable noise rating of 65dB to 70dB is appropriate within a residential district. As such, staff is recommending that prior to Planning Commission approval, the applicant submit documentation

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providing existing noise reading on the existing structure with the fans operating and without the fans operating and demonstrate acceptable noise ratings within a residential district for the proposed equipment.

On July 1, 2009 the applicant submitted **information regarding noise level readings taken on the outside perimeter of the substation fence. A copy of this information is linked to this report. The information states that noise level readings were taken under normal operating conditions as well as with the fans on. A map is included with the information identifying the noise levels recorded at the various locations on the site. Along the eastern fence location adjacent to the nearest residential structure, the existing noise levels measured were 61.3dBA with the fans off and 62.1dBA with the fans on. The highest recorded noise levels were identified along the southern fence line with a 66.5 dBA measured when the fans were on. However, the noise level dropped to 62.7 dBA at the southern property line. The applicant has stated in the written material that the noise level of the reconstructed substation will not exceed 70dB at the property line. It should be noted that if the noise level does reach 70dBA at the property line as referenced by the applicant, this would constitute a significant increase in the noise levels experienced in the neighborhood.**

LOCATION: At the June 10, 2009 neighborhood meeting there was discussion about alternative locations for the proposed substation. As such, staff is recommending that prior to Planning Commission approval, the applicant demonstrate the need for a substation at this location and provide additional information on alternative sites, specifically including the area south of the Rapid City Regional Hospital. **The applicant has submitted information that indicates six other sites were investigated by the applicant.**

- **The information indicates that a site north of St. Thomas Moore School and south of Oakland Street was considered; however, St. Thomas Moore was not interested in selling the property.**
- **A site was investigated at Seventh Street, between Cleveland Street and Indiana Street and it was determined that the site could not replace the existing site and would result in an additional residential neighborhood being impacted with a second substation site.**
- **The applicant indicated that a site west of Fifth Street and south of Rapid City Regional Hospital was investigated. The information provided indicates that this alternative would require an upgrade to the Fifth Street site as well as the construction of a new substation. The information provided does not indicate why this is not an acceptable alternative.**
- **The property across from McDonalds on Cleveland Street was looked at; however, as this is a storm water detention cell, it was not considered a viable option.**
- **Reconstructing the Fifth Street substation on the existing property without expanding onto the existing residential lot was considered according to the information provided. However, the applicant indicates that the existing site is not large enough to accommodate the additional required facilities.**
- **The applicant has stated that the existing substation south of Catron Boulevard is “not practical” because of the distance to the load center.**

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**Based on the information provided by the applicant, at least one option (the area west of Fifth Street and south of Rapid City Regional Hospital) exists. Additionally, no information was provided by the applicant regarding the potential for acquiring property south of Rapid City Regional Hospital and east of Fifth Street, another alternative suggested by area residents.**

On July 1, 2009 the applicant submitted a letter identifying three alternative locations. However, the applicant stated that one of the sites the land owner was not willing to sell their property, one of the sites was located in an existing residential area and the other site would still require that this location be updated because the proposed site was too far from the existing load center.

**BUILDING PERMITS:** Staff noted that a building permit must be obtained prior to any construction and a certificate of occupancy obtained prior to occupancy.

**SETBACKS:** The applicant has requested to reduce the front yard setback along 5<sup>th</sup> Street and Cleveland Street from 35 feet to 30 feet to allow proper separation of the utility equipment. The existing and proposed equipment will be buffered from adjacent properties with the proposed landscaping and separated from surrounding residential uses by the 5<sup>th</sup> Street and Cleveland Street right-of-way. As such, staff recommends that an exception be granted to reduce the front yard setback from 35 feet to 30 feet.

**PARKING:**

The applicant has submitted a site plan as part of this application showing four parking spaces, including two van accessible handicap spaces. The minimum standard for this property is two parking spaces, including one handicap space. The submitted site plan meets the minimum requirements of Section 17.50.270 of the Rapid City Municipal Code.

**LANDSCAPING:** The applicant has submitted a landscaping plan showing 32,530 landscape points as part of this application. A minimum of 27,231 landscape points is required. The submitted landscaping plan meets the requirements of Section 17.50.300 of the Rapid City Municipal Code. **A scalable landscape plan has not been submitted to date. A reduced plan was submitted; however, staff cannot use the document to review site distance requirements and other features of the site. Staff recommends that prior to Planning Commission approval, that four full size copies of the landscape drawing drawn to scale be submitted for review and approval in accordance with the application requirements. In addition, the landscape architect's stamp should be signed.**

**FENCING:**

The applicant is proposing a 7 foot high chain link fence in the front, side and rear yards of the property. As per Section 15.40.040 of the Rapid City Municipal Code, fences and walls may be four feet in height in the front yard and six feet in height in the side and rear yards in the Low Density Residential Zoning District. As such, staff recommends that this item be continued to allow the applicant to obtain a fence height exception or submit a revised plan in compliance with Section 15.40.040 of the Rapid City Municipal Code.

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On April 24, 2009, the applicant submitted a fence height exception to allow an 8 foot high fence with barbed wire. The fence height exception is scheduled to be considered at the May 18, 2009 City Council meeting. As such, staff recommends that this item be continued to allow the applicant to obtain a fence height exception or submit a revised plan in compliance with Section 15.40.040 of the Rapid City Municipal Code.

On May 12, 2009 the Public Works Committee recommended to continue the fence height exception to the May 26, 2009 Public Works Committee meeting. As such, staff recommends that this item be continued to the June 4, 2009 Planning Commission meeting.

On July 14, 2009 the Public Works Committee recommended to continue the fence height exception to the July 28, 2009 Public Works Committee meeting to allow the applicant to submit additional information. As such, staff recommends that this item be continued to the August 6, 2009 Planning Commission meeting.

The applicant has requested that the City Council continue the related Fence Height Exception to the August 17, 2009 City Council meeting. As such, staff recommends that this SDCL 11-6-19 Review be continued to the August 27, 2009 Planning Commission meeting.

**On August 17, 2009, the Rapid City Council approved a fence height exception to allow an 8 foot wrought iron fence with brick pillars around the entire perimeter of the site. Prior to Planning Commission approval, the site plans including the scaled landscaping plan must be revised to identify the location of the fence and the brick pillars. Again, this will allow staff to review the plan and insure that the pillar locations do not interfere with the site triangles on the street or at the access drives onto Cleveland Street and on the alley.**

**FIRE PROTECTION:**

All applicable requirements of the International Fire Code will need to be continually met.

**REDLINE COMMENTS:**

Staff is recommending that prior to Planning Commission approval, all redline comments made on the construction plans must be addressed and resubmitted for review and approval. In addition, the red lined drawings must be returned to the Growth Management Department.

On April 24, 2009 the applicant submitted revised plans addressing all redline comments.

**SITE PLAN:**

**To date a complete site plan showing the limits of the proposed construction including the substation improvements, underground cable alignment and installation, proposed structure(s) demolition/installation and any related construction improvements have not been submitted. In particular, staff is concerned that there be no conflict between the underground sewer, water and storm water utilities and the proposed underground electric lines, cables and other appurtenances. The plans will need to reflect the removal and abandonment of any unused water or sewer services in accordance with City requirements. To date grading and drainage information has not been provided and a**

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storm water management plan has not been submitted. Staff recommends that prior to Planning Commission approval, complete site plans be submitted for review and approval.

**LAND USE/ZONING:** The property in question is zoned Low Density Residential District and is identified as appropriate for residential development in the adopted Future Land Use Plan. The Low Density Residential zoning district allows utility substations as a Conditional Use. The requested SDCL 11-6-19 application replaces the Conditional Use Permit application. The proposed utility substation appears to be in general compliance with the adopted Future Land Use Plan. Based on the information provided to date, the proposed development plan appears to comply with all requirements of the adopted Zoning Ordinance with the exception of the required front yard setbacks as identified previously in this report.

**PUBLIC INPUT:**

Considerable public objections have been expressed by residents of the neighborhood regarding the proposed expansion of the utility substation. As noted, a neighborhood meeting was held on June 10, 2009. Significant concerns expressed by area residents at that meeting and subsequently include the impact on property values as well as the quality of life for residents of the neighborhood, health concerns associated with electromagnetic fields, noise impacts of the existing facility and the proposed expansion, as well as concerns with the noise and dust impacts during construction. Residents of the area have indicated that while the substation was built in a similar time frame as the residences in the area, the substation has been expanded significantly on at least three occasions. The neighborhood residents, with the exception of the owner of the home proposed to be acquired for the expansion, have indicated significant objections to the proposed expansion.

The neighborhood residents have suggested that the existing substation remain and that the expansion be located in another area where it could be located further away from existing residential dwelling units and where adequate buffers could be provided. In particular, a number of residents have contacted staff regarding locating a second substation in the area south of Rapid City Regional Hospital on either side of Fifth Street. From the information provided to date, it is not clear why the applicant has not pursued the alternative of upgrading the existing substation and building a second substation facility south of Rapid City Regional Hospital.

The applicant has taken significant steps to mitigate the visual impact of the substation through the development of landscape buffers along Cleveland and Fifth Street with the provision of a revised and upgraded fence design and by eliminating some of the high profile equipment and overhead lines on the site. However, it does appear that the proposed expansion will impact the existing residential neighborhood beyond those impacts currently experienced as a result of the existing utility facility located on the site. In particular, the proposed expansion will most negatively impact visually the residential dwelling located directly east of the site approximately 20 feet. No landscape buffer is provided along this property line. Due to the location of the proposed equipment, it does

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not appear physically feasible to provide a landscape buffer along the east side of the site without scaling back the proposed expansion. Additionally, the property to the south of the site, across Cleveland Street will be visually impacted although two trees will be located along this frontage providing a buffer. In addition, the information provided by the applicant indicates that there may be a significant increase in the noise levels experienced at the site.

If the information referenced in this report is submitted for review and approval prior to Planning Commission approval, staff will recommend that the Planning Commission approve the SDCL 11-6-19 Review application authorizing the expansion of a public utility with the granting of an exception to reduce the front yard setback from 35 feet to 30 feet.