

**MONTANA ENVIRONMENTAL INFORMATION CENTER  
NATIONAL PARKS CONSERVATION ASSOCIATION  
SIERRA CLUB**

June 8, 2009

Brent Lignell  
Environmental Engineer  
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Montana Department of Environmental Quality  
P.O. Box 200901  
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RE: Southern Montana Electric Generation and Transmission Cooperative, Inc. Application for Highwood Generating Station, Montana Air Quality Permit #4429-00 and #OP4429-00

Dear Mr. Lignell:

The Montana Environmental Information Center, the National Parks Conservation Association, and Sierra Club would like to provide comments on Southern Montana Electric Generation and Transmission Cooperative, Inc.'s (SME) permit application to construct and operate a natural gas combustion turbine facility for electric generation at the Highwood Generating Station (HGS). SME's permit application, as submitted, deprives the public of the opportunity to meaningfully analyze and comment on the proposed project and fails to ensure compliance with statutory and regulatory requirements designed to protect public health, the environment and cultural resources. We therefore support DEQ's May 20, 2009 determination that the SME application submitted on April 24, 2009 was incomplete, its analysis insufficient and lacking in transparency, and appreciate the Department's request for additional and supplementary information.

These comments focus on Appendix G, "Environmental Assessment for Construction of the Highwood Generating Station Natural Gas Plant" (EA), submitted on April 24, 2009 as part of SME's air permit application. In sum, we find the proposed EA to be fundamentally inadequate and inconsistent with State law.

**The "Purpose and Need" must be Re-examined**

DEQ must reject Appendix G, Section 1.2 "Purpose and Need." This section is insufficient, incorrect, and fails to comply with the Montana Environmental Policy Act (MEPA) and its implementing regulations. Specifically, reference to, and reliance on, the May 2007 final environmental impact statement (FEIS) for HGS is inappropriate. The data and operating

environment have changed significantly since the 2007 FEIS, accordingly this section must be re-examined to accurately reflect existing circumstances.

Appendix G refers to many documents in the original FEIS that are being relied upon to justify the need for a natural gas plant at this site today. The proposed EA says, "Southern previously identified a need to replace a substantial portion of its electrical power generation portfolio when existing power purchase agreements expire." (Appendix G, p. 4) The 2004 Alternatives Evaluation Study forms the underlying basis for the purpose and need for the natural gas plant.<sup>1</sup>

Reliance on the 2004 Alternatives Evaluation Study is inappropriate. The operating environment for utilities has dramatically shifted since this study was conducted. Most of the variables in the study have changed. For example, the 2004 study found serious flaws with building a natural gas plant and power purchase contracts:

A review of the response Southern Montana received to its most recent RFP strongly indicates that the forward price of a power purchase agreement will closely track the forward price of natural gas. With the cost of natural gas fired generation constituting the future marginal cost for wholesale electric energy and related supply services, shadowed with the price volatility of natural gas, the price Southern Montana would pay for power supply would be nearly double its current costs for this service commodity. Based on the results of Southern Montana's RFP, and analysis of related transmission issues, negotiating an acceptable power purchase agreement does not appear to be a viable option.

(Alternatives Evaluation Study, 10/08/04, p. 1-8)

Long term projections of natural gas prices show no signs of the price of natural gas retreating to the point it can seriously be considered as an economic choice for fuel in the generation of base load electric production.

(Alternatives Evaluation Study, 10/08/04, p. 1-4)

SME's recent actions undermine the conclusions of this study. Not only is SME now proposing to build a natural gas plant, it recently entered into a power purchase agreement. The Billings Gazette reported on April 8, 2009, that SME signed a 10-year power purchase contract with PPL Montana. An SME official was quoted as saying PPL offered rates that are "very surprising, very acceptable."

There have been fundamental changes in the demand for power from HGS since completion of the Alternative Evaluation Study. Yellowstone Valley Electric Co-op, with 42% of SME's customer base, no longer is a partner in HGS. The legislature refused to allow residential and small business customers in Great Falls to leave the default supply of NorthWestern Energy and

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<sup>1</sup> Southern Montana Electric Generation and Transmission Cooperative, Alternative Evaluation Study. Prepared by Stanley Consultants for SME. October, 2004.

purchase power from SME. The City of Great Falls only gathered about 30 megawatts of demand instead of the previously assumed 65 megawatts.

National and regional trends demonstrate that the public's demand for power is declining. SME failed to account for these trends in evaluating the purpose and need for a natural gas fired power plant to serve rural cooperative energy customers. SME's reliance on out-dated and inaccurate energy demand forecasts prejudiced SME's evaluation of alternatives to the proposed action in the draft EA. See Native Ecosystems Council v. U.S. Forest Serv., 428 F.3d 1233, 1246-47 (9th Cir. 2005) (The reasonableness of the range of alternatives is evaluated in light of the purpose and need for the agency action.). By assuming that demand will continue to increase, SME has illegitimately foreclosed consideration of alternatives that may serve the actual, lesser power needs of its customers. See NRDC v. U.S. Forest Serv., 421 F.3d 797, 812 (9th Cir. 2005) (finding NEPA violation where Forest Service inaccurately doubled timber market demand, which prejudiced the assessment of logging alternatives for National Forest). To comply with MEPA, SME must provide updated and accurate energy demand forecasts and meaningfully evaluate project alternatives that may satisfy the revised purpose and need.

Financing and market forces have significantly changed since the 2004 Alternative Evaluation Study. For example, the Rural Utility Service denied funding to SME. As a result, SME was unable to find financing for its first electric generating unit. The cost of financing the facility could significantly alter the cost of the project to ratepayers. Accordingly, financial and market conditions must be reexamined, fully disclosed and accurately represented in this section's revisions.

SME's April 2009 application and the February 2007 FEIS indicate that the HGS natural gas plant will be constructed to meet the same "purpose and need" as the HGS coal plant. SME must clarify the overlapping and competing objectives of these facilities.

We note that in December 2008, DEQ determined that SME commenced construction of its coal plant. The Clean Air Act requires a continuous program of actual on-site construction of the source. Unless the coal permit is officially revoked, SME must explain the purpose and need for both facilities.

If the gas plant is permitted then it is reasonably foreseeable that both facilities will be built. The natural gas plant would result in a total of 370 megawatts of new electric generating capacity at this site. The purpose and need must consider the economics of creating this much generating capacity to serve a load that has decreased since the FEIS (and was inflated in the FEIS because it was based upon peak demand and not average demand as utilities typically use to determine need).

The economic analysis to determine the purpose and need must consider the cost per megawatt of electricity from HGS. The cost of the first 125 megawatts of power from this site must include both the cost of the coal plant as well as the natural gas plant. Both plants will be producing power for the same load, as indicated by the fact that they will not operate at the same time. The same customers will need to pay for the construction and fixed costs of both plants over a similar

loan repayment period. A valid economic analysis of the natural gas plant will therefore determine the cost to ratepayers from SME proceeding with both the coal plant and the gas plant.

SME indicates in Appendix G, §1.2 “Purpose and Need” that it may not build the coal plant because of changing conditions. This fact is irrelevant and cannot be considered by DEQ unless and until SME requests the coal plant permit be revoked and DEQ officially does so. Until that time, DEQ must proceed as if SME’s coal plant will serve the demand that the FEIS unequivocally said was necessary.

If the coal plant permit is revoked during the course of the current permitting process, then, at a minimum, a new stand-alone permit application must be filed. If the coal permit is revoked DEQ cannot rely on the permitting analysis and MEPA process for the coal plant. It is already inappropriate to rely on outdated studies. Revocation of the coal permit would only make that reliance even more misguided.

Appendix G, §1.2 also references a 2004 site location study in which SME determined that the current proposed location was the most appropriate for a coal plant.<sup>2</sup> Reliance on this study is ill-advised for many reasons as stated below.

The National Park Service (NPS) recently sent a letter to the U.S. Army Corps of Engineers detailing its concerns about locating an electric generation station on and adjacent to a National Historic Landmark (NHL). In fact, as well documented by the NPS, that study came to no such conclusion:

The FEIS does not adequately document how the Salem site at Sections 24 and 25 was chosen as the preferred alternative site. The “Salem site” mentioned in the Site Selection Study, ... was renamed “Section 36 Site” in the FEIS and was dropped from consideration as a viable alternative site because it could not be bought. The Site Selection Study does not identify Sections 24 and 25 as a potential site. Yet it is stated in the DEIS that the “new” Salem site ... is considered a reasonable location for the proposed generating station based on the results of the site selection study. **Nowhere in the Site Selection Study is there any comparison of a Salem site at Sections 24 and 25 to the other alternative sites.** (*Emphasis added.*)

(NPS E-mail to U.S. Army Corps of Engineers, May 19, 2009)

Again a stale, faulty study from 2004 cannot be relied upon to justify placing another electric generating station on and adjacent to an NHL.

### **MEPA requires preparation of a Supplemental EIS**

The law requires DEQ to prepare a supplemental environmental impact statement. MEPA requires state agencies to consider the environmental impacts of “major actions of state

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<sup>2</sup> Southern Montana Electric Generation and Transmission Cooperative. Site Selection Study. Prepared by Stanley Consultants for SME. October 15, 2004.

government significantly affecting the quality of the human environment..." prior to making a decision on the project or proposal. 75-1-201 1(b)(iv), MCA. DEQ's rules on supplemental EIS's make clear that a supplemental EIS is necessary in this instance: "The agency shall prepare supplements to either draft or final Environmental Impact Statements whenever: (a) the agency or the applicant makes a substantial change in a proposed action..." ARM 17.4.621(1). A supplement to the FEIS on HGS is necessary because the applicant is proposing a substantial change to its project at the Salem Site.

The Montana Supreme Court has addressed the issue of supplemental EIS's on a number of occasions. In one case, the Montana Department of Transportation had previously completed an FEIS for a highway interchange. The court found that sufficient changes had occurred between the time the FEIS was completed and when construction was set to commence that a SEIS was required: "We conclude that the change in traffic patterns, the development around the Capitol Interchange, the patterns of development in Helena, and the proposed alternatives to Forestvale, specifically the Montana Avenue alternative, were all significant new circumstances which required a supplemental EIS pursuant to ARM 18.2.247." Montana Environmental Information Center v. Montana Department of Transportation (2000), 994 P.2d 676, ¶29. The requirements of ARM 18.2.247, which applies to the Montana Department of Transportation, are identical to the requirements of ARM 17.4.621, which applies to DEQ.

In another case the Montana Supreme Court found that the agency must prepare a supplemental EIS for changed economic conditions in a timber sale after the completion of the FEIS. The court found that contrary to the state's assertions, there was no requirement in ARM 36.2.533 that a substantial change can only result from an environmental impact. Instead the court found that there is no limitation on what may be considered "substantial change." Accordingly, the court concluded that a substantial economic change in a project can serve as the basis for the supplemental EIS. Friends of the Wild Swan v. the Department of Natural Resources and Conservation, 2000 MT 209. The requirements of ARM 36.2.533, which applies to the Department of Natural Resources and Conservation, mirror ARM 17.4.621 for DEQ.

SME's proposed EA concludes: "The EA often references and draws liberally from information presented in the 2007 EIS when describing the affected environment for each affected resource. Any changes to the existing environment since 2007 are described in the EA." (Appendix G, p. 2) This statement is proof that the proposed EA is not a stand-alone document but is intended to be supplementary to the original FEIS for the coal plant. This language demonstrates a need to conduct this MEPA analysis as a supplemental EIS and not an independent EA.

Of great concern is the fact that the EA omits numerous documents and critical information that have occurred since the release of the FEIS and Record of Decision (ROD) in 2007. While many of those changes are detailed above, perhaps the most significant changes have occurred in relation to the Great Falls Portage National Historic Landmark (NHL).

Shortly after the release of the ROD in May 2007, the U.S. Department of Interior released a document entitled, "Secretary of The Interior's Report to The Advisory Council on Historic Preservation In Accordance with Section 213 of the National Historic Preservation Act: *Evaluation of the Impact of the Proposed Highwood Generating Station on the Great Falls*

*Portage National Historic Landmark.*” June 27, 2007. The 213 Report found that the NHL could be de-listed due to the impacts from the HGS.

The HGS would have wide-spread, profound, and adverse impacts on the NHL and would require a critical review of its integrity; a process which would likely lead to the loss of NHL status for most, if not all, of the route. Since the Portage Route is also part of the Lewis and Clark National Historic Trail (LECL), the HGS would have significant and adverse impacts to LECL, a unit of the National Trails System, administered under the authority of the National Trails System Act and the NPS Organic Act.

(Section 213 Report, Executive Summary, p. 2.)

Shortly after the release of the 213 Report, the Advisory Council on Historic Preservation sent a letter to the Rural Utility Service (RUS), the lead agency at the time on the FEIS and historic preservation issues. In the letter, the Council discussed the profound and irreversible impacts from placement of an electrical generating facility, on and adjacent to the NHL:

“The ACHP has reviewed the Section 213 report and feels that it provides an excellent review of the significance and integrity of the Great Falls Portage NHL. In the words of the Section 213 report itself, “no other site along the LECL (Lewis and Clark National Historic Trail) so aptly represents the extreme hardships of the Expedition while being so geographically accessible to the general visiting public.... Moreover, the expectation of the NPS that the NHL would be de-listed or its boundaries would be seriously reduced should the RUS continue to support the preferred alternative is of concern to the ACHP.”

(Letter from the Advisory Council on Historic Preservation to the Rural Utility Service. June 29, 2007)

Despite the findings by two federal agencies that the impacts to the NHL would be significant, irreversible, could not be mitigated, and could result in the delisting of a NHL, SME failed to disclose either finding in Appendix G.

Appendix G also fails to disclose the letter sent by the Montana Historic Preservation Review Board to Governor Brian Schweitzer on January 28, 2008. In that correspondence the Board told the governor that it was “opposing the development of the Highwood Generating Station as proposed in regard to its impact on the Great Falls Portage National Historic Landmark.” The letter concluded:

The integrity of this rare landscape, already compromised in parts, would be gravely threatened in two significant ways:

1. Rezoning of the land to industrial usage will have a direct impact on the integrity of the NHL by adding structures such as powerlines, wind turbines, roads, and rail lines, etc. on both sides of the boundary of the NHL. Rezoning also opens up additional lands within and adjacent to the landmark to future development that would further degrade the integrity of the NHL.

2. The construction of the power station along the edge of the NHL will degrade the viewshed and add disturbances to the landmark such as light and atmospheric pollution. It will destroy the sense of place that currently characterizes this cultural resource by adversely impacting several aspects of the property's integrity, including its setting, feeling, and association.

(Letter from H. Rafael Chacón, Ph.D., Acting Chairman, Montana Historic Preservation Review Board, to Governor Brian Schweitzer, January 28, 2008)

The very purpose of this review board is to advise state agencies on historic preservation related issues. 22-3-422, MCA. In the letter the Board makes its concerns clear – the coal plant would have permanent significant adverse impacts on cultural resources. It says that HGS would lead to additional development, such as that contemplated here, which would also negatively impact the NHL. The concerns of the state's primary historic preservation advisory board must be disclosed in a valid MEPA document.

In the ROD, the RUS said its decision was contingent on three factors. One of those factors was the good faith completion of the Section 106 consultation process under the National Historic Preservation Act:

SME will continue to participate in good faith as a consulting party in the NHPA, Section 106 process and will implement all measures agreed to by the signatories to the aforementioned Memorandum of Agreement. Said measures are intended to resolve and mitigate adverse effects of the Highwood Generating Station and associated wind turbines on the Great Falls Portage National Historic Landmark. Approval of the expenditure of federal funds is contingent on completion of the Section 106 process.

(ROD, May 2007, p. 19.)

Since release of the ROD, the RUS has denied funding for HGS and the U.S. Army Corps of Engineers (USACE) has assumed responsibility for completing the Section 106 consultation process. In March 2009, the USACE held a meeting in Great Falls with all consulting parties to discuss mitigation strategies for site. NPS and other consulting parties contend that the impacts from an electric generating station at this site cannot be mitigated.

A supplemental EIS is necessary to investigate and disclose these very important economic and cultural issues. The need to identify and disclose impacts to cultural resources is one of the primary reasons for MEPA. 75-1-103, MCA. Courts have found a need for a supplemental EIS when additional economic and environmental information becomes available after completion of an FEIS. Changed circumstances and recent studies dictate the need for a supplemental EIS for HGS.

### **Alternate Site Location Must Be Analyzed**

Appendix G indicates that SME may not build the coal plant. This discussion makes it incumbent upon DEQ to create an alternative that does not include the development of the coal plant. The EA says, "As discussed further in the alternatives section below, Southern continues to evaluate the viability of the permitted coal-fired generation plant at HGS. Depending on this evaluation, Southern may consider requesting that MDEQ revoke the coal-fired power plant air quality permit." (Appendix G, p. 1) SME's words indicate that it is possible that it will not build the coal plant. While it is necessary to analyze the project as if the coal plant will be completed, it is equally important to analyze the project without the coal plant.

DEQ cannot allow SME to subvert the MEPA analysis by attaching the natural gas permit to coal plant, in order to illegally limit the range of alternatives that should be considered in a valid MEPA analysis. DEQ must consider alternatives that are based solely on the construction of the natural gas plant. A valid analysis of alternatives will require that alternative locations be considered.

The ROD's conclusion that the Salem site is preferable to alternative sites is no longer valid if only a gas plant is to be built. The reasons stated in the ROD for rejecting the industrial site were almost exclusively based on infrastructure necessary for a coal plant:

"The Industrial Park alternatives would meet the proposal's purpose and need and provide similar benefits as the Proposed Act, but it has disadvantages compared to the Salem site. Disadvantages of the site include increase in local rail and truck traffic due to coal delivery through the City of Great Falls and hauling fly ash to the nearby landfill, presenting potential for increased traffic delays and/or accidents. Its proximity to other industrial and residential sources presents potential challenges in air quality permitting as well as noise. The disposal of the fly ash at the landfill will shorten its life requiring expansion of that facility or development of another facility to meet the solid waste needs for Cascade County. The Industrial Park site is not large enough to accommodate ancillary wind power development."

(ROD, p. 8.)

A natural gas plant will have significantly different impacts to water, solid waste, traffic, air quality and more. As stated in the ROD, these were the issues that made DEQ and RUS determine that a site outside of an urban area would be more appropriate. If SME does not intend to build the coal plant, MEPA requires a change in the alternatives analysis for a gas plant.

### **Cumulative Impacts Must be Adequately Analyzed**

"Cumulative effects analysis requires the Final Environmental Impact Statement to analyze the impact of a proposed project in light of that project's interaction with the effects of past, current, and reasonably foreseeable future projects." Lands Council v. Powell, 395 F.3d 1019, 1027 (9th Cir. 2005); see also Friends of the Wild Swan v. Dep't of Natural Res. and Conservation, 2000 MT 209, ¶¶ 31-39, 301 Mont. 1, 6 P.3d 972.



The proposed EA gives only cursory mention to cumulative impacts. Appendix G attempts to avoid a rigorous review of cumulative impacts by saying: "... [e]nvironmental impacts related to operation of the two portions of the facility would not be additive." (Appendix G, p. 1) Despite this claim, SME admits the following: "A new natural gas line would be installed to connect the Project to existing gas transmission pipelines north of the Missouri River." (Appendix G, p. 1) A natural gas line crossing the Missouri River is hardly insignificant.

Many of the impacts from the natural gas plant are likely to be additive or significantly different than the coal-plant EIS indicated. Some impacts will be additive unless the entire coal plant operation and all ancillary facilities are entirely shut down and non-operational prior to the initiation of start-up at the natural gas plant. Many of the impacts will be cumulative (lighting, noise, traffic, cost, water quantity, waste management) and will negatively impact recreation, aesthetics, cultural resources, neighboring property owners and the environment. All of these changes must be adequately addressed in the cumulative impacts analysis.

The permitting of 370 megawatts of electricity at one site to serve the same load will significantly alter the economic analysis and load forecast. A small number of rural electric cooperative members will struggle to finance two different electric generating stations to serve the same load. As costs increase to pay for both facilities, many members will decrease consumption. This will drive rates up for the remaining customers. These increased costs could dramatically alter the economics of building an additional natural gas plant and must be analyzed under MEPA.

#### **DEQ Must Notify the Office of the Consumer Council**

Finally, the 2007 Montana Legislature required that DEQ notify the consumer council upon receipt of an application for an air quality permit for an electric generation facility. 69-2-216, MCA. The consumer council must then complete an analysis of the fiscal impacts to ratepayers in Montana. That information must be incorporated into DEQ's environmental review and available for public comment. This additional economic information will be essential to the MEPA economic and cumulative impact analyses.

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Thank you for this opportunity to comment. If you have any questions, please do not hesitate to ask.

Sincerely,



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Enclosures:

NPS E-mail to U.S. Army Corps of Engineers, May 19, 2009

Secretary of The Interior's Report to The Advisory Council on Historic Preservation In Accordance with Section 213 of the National Historic Preservation Act: *Evaluation of the Impact of the Proposed Highwood Generating Station on the Great Falls Portage National Historic Landmark.* June 27, 2007.

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