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ATTORNEYS FOR BASIN ELECTRIC
POWER COOPERATIVE

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of:	)	
Basin Electric Power Cooperative	)	Docket No. 07-2801
Dry Fork Station,	)	
Air Permit CT – 4631	)	

BASIN ELECTRIC'S OPPOSITION TO PROTESTANTS' MOTION TO SUSPEND PERMIT

Protestants seek an Order "suspending" the Air Quality Permit to Construct the Dry Fork Station issued to Basin Electric by the Department of Environmental Quality on October 15, 2007. For the reasons set forth below, Basin Electric respectfully requests that the Motion be denied.

I. Introduction.

Protestants' Motion suffers from several practical and substantive legal flaws. First, there is no practical reason for this Council to suspend the permit. Basin Electric is proceeding with construction fully aware that a permit appeal could lead to changes that impact its project. The risk of later changes is always part of the decision to proceed while an appeal is pending. Basin

Electric has carefully weighed the arguments raised on appeal, the law applicable to those contentions, the thoroughness of the Department's decision, the costs of delay, the need for power, and the possible expense of change, and has concluded that the most reasonable decision is to proceed with construction despite the risk created by an appeal.

Basin Electric alone bears the consequences of any change required by an appeal. However, many will feel the impact if construction is stopped. Hundreds of people will lose their jobs and several communities in northeast Wyoming will suffer great loss. A billion dollar construction project cannot be halted without tremendous collateral consequences. Under these circumstances, there is no logical or practical reason why the Council should consider stopping the project. Doing so can only harm the public. Any harm to Basin Electric from proceeding with construction pending appeal is a risk Basin Electric is willing to take.

Second, there is no statutory authority for Protestants' Motion which is, in essence, a motion for a stay. Protestants' reliance on the Council's authority to suspend permits is misplaced where, as here, there is no assertion that Basin Electric has violated any of its permit conditions.

Third, there are no statutory or regulatory standards in place for a stay or "suspension" decision, which in a case of this magnitude means that any Order staying the permit would be arbitrary and capricious as a matter of law under existing Wyoming Supreme Court precedent. Deciding to stay or suspend a permit without standards for such a decision would also violate due process.

Finally, the Wyoming legislature's decision to make air quality permits final, even while on appeal, leaves the difficult decision of weighing the probability of success in the hands of the

party taking all of the risk, in this case Basin Electric. If Basin Electric believed the appeal had sufficient merit to make it likely that the Plant will have to be substantially modified after an appeal is completed, Basin Electric would not proceed until the appeals were concluded.

Rather than focus on specific alleged problems with the existing Permit, Protestants take a different tack arguing that construction should be halted so that the Council will have its own maximum freedom to rewrite the permit as part of its ground-up alleged *de novo* review authority. Protestants take the legal position that the existing permit is "as if no decision has been made," and argue that this Council will actually be writing the real permit and therefore needs to stop construction until it does so. This is a flawed effort to make the existing permit meaningless. Under Wyoming law the permit is final, which means the legislature intended the DEQ to thoroughly consider all of the complex technical and economic considerations before issuing the permit in the first place. That being the case, a permit holder like Basin Electric is entitled under the law to make a reasoned evaluation of the risks associated with proceeding with construction on the permit as issued, even when there is an appeal.

II. Argument.

A. Nothing is accomplished by staying the permit.

Protestants' principal argument is that a permit appeal may lead to the imposition of new standards which may require design changes in the plant. Reasoning that the Council may find itself reluctant to impose such changes if Basin Electric has already spent millions on plant construction, Protestants suggest that the appropriate step is to stop construction altogether so that financial impacts of the construction do not prejudice the Council's decision-making ability.

This argument suffers from two practical problems. First, it assumes that this Council cannot make reasoned and appropriate decisions under financial pressure. Basin Electric rejects that assumption. Arguments premised on the assumption that the Council will be intimidated from doing its job should be rejected for what they are: a lack of confidence in the Council's decision-making abilities.

Second, Protestants' argument assumes that the costs of delay are less than the costs of possible redesign. Aside from the fact that anticipating design changes at this point is largely speculation,[1] it is almost certainly not true that possible design changes could significantly overcome delay costs. The unfortunate reality of a billion dollar construction project is that delay costs can be crippling. Concrete prices escalate. Steel costs escalate. Labor costs escalate. Energy costs escalate. Basin Electric's current preliminary estimate is that an eight-month suspension could cost more than $180,000,000. All of this would be waste if the permit is affirmed on appeal, as Basin Electric expects, and this estimate does not even begin to count the costs of adverse ripples through the Gillette community caused by delay as construction workers are laid off and purchase orders are suspended, etc.

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[1] Basin Electric has carefully analyzed Protestants' substantive challenges to the DEQ permit, and is confident that those challenges will not result in major, high cost changes to the power plant. The Council does not need to consider the substance of those challenges, because the motion should be denied based on the absence of any authority for the Council to stay or suspend the permit pending the hearing, because there are no standards for granting such a stay or suspension, and because Basin Electric accepts the risk associated with continuing construction. However, to provide the context of its willingness to accept those risks, if the Council is interested Basin Electric has provided for the Council, in an Appendix, a summary of Basin Electric's analysis why a major redesign of the plant should not result from this proceeding.

Project delay does nothing to obviate the financial pressures of this project. Delay will not relieve the weight on the Council's shoulders occasioned by this appeal. It may cost Basin Electric as much—if not more—to delay this project than to redesign portions of it following an appeal.

Ultimately, under the law it is Basin Electric's responsibility to weigh the competing considerations between the financial risks associated with an appeal versus the costs and disruptions of delay. Basin Electric has carefully weighed these hard choices and decided to proceed, aware of the risks involved. If Basin Electric is wrong in that judgment, it alone will pay the price.

Protestants' Motion asks the Council to take the responsibility for making these hard financial choices. Protestants ask the Council to weigh the competing decisions and decide whether to construct or stop and put hundreds out of work. However, there is no need for the Council to take on this burden. Basin Electric looked at the constructions costs, the costs of delay, the critical need for power in the area and the arguments made by Protestants in their appeal, and decided after weighing these considerations to take the risk and proceed with construction, as allowed by law. Since Basin Electric has already made that decision and alone pays the costs if changes are required, why would the Council wish to second guess that decision and take the corresponding responsibility for putting hundreds out of work, perhaps needlessly, while this appeal proceeds?

The correct financial calculus is that millions of dollars **may** be wasted if Basin Electric proceeds and major permit changes are required, but millions of dollars **will** be wasted if the

permit is stayed, whether or not changes might be made later. Under these circumstances it would be illogical to stay the permit because nothing is accomplished by doing so.

B. The Council does not have statutory authority to stay the permit.

The second flaw in Protestants' Motion is that there is no statutory authority for the relief sought. In their prayer for relief in the Petition, Protestants ask the Council for an order "staying" the permit pending appeal. Now, Protestants seek an order "suspending" the permit. However, Protestants do not explain in their Motion, or in their Petition, what the law is with respect to a "suspension" or a "stay" of a permit. Protestants do not even explain what they mean by permit "suspension."

The reason Protestants do not address the law on "suspension" or "stay" is because it defeats their Motion altogether. Wyoming law recognizes a fundamental difference between a permit "suspension" and a "stay." The Environmental Quality Act (EQA) treats the concepts differently. A permit "suspension" is the outcome of a contested case proceeding in which an existing license or permit is suspended as a consequence of a finding that the permittee has violated the terms of its permit or license. That is not the case here, so Protestants are really seeking a stay. As explained below, the Council does have authority, in certain cases not applicable here, to suspend a permit after hearing. It does not have authority to stay a permit on the grounds that an appeal is pending.

The difference between suspension and stay is set forth in the statutes. Because a permit is a valid property right that cannot be taken or suspended without notice and hearing, the Wyoming Administrative Procedures Act (WAPA) contains a specific provision addressing the

requirement for a contested case hearing over suspension of a license, which under the WAPA specifically includes permits:

> No ... **suspension** ... of any license is lawful unless, prior to the institution of agency proceedings, the agency gave notice by mail to the licensee of facts or conduct which warrant the intended action, **and the licensee was given an opportunity to show compliance with all lawful requirements for retention of the license.**

W.S. § 16-3-113(c) (emphasis added); W.S. § 16-3-101(b)(iii) ("license" includes any agency permit). As this provision makes clear, permit suspension is the outcome of a contested case hearing where the permit holder has been given notice of facts or conduct giving rise to a suspension **by the agency that issued the permit** (not the Protestants) and then receives a contested case hearing.

This is a fundamentally different concept than "staying" the effectiveness of an existing permit or license pending an appeal by a third party who is not the agency involved. The Wyoming Supreme Court has made this difference clear in several different holdings in which the Court addressed whether a permit suspension proceeding should also cause the permit or license to be "stayed" pending the outcome of the suspension proceeding.[2] These decisions would make no sense if a "suspension" of a permit or license was the same thing as a "stay." A "stay" is therefore a temporary halt of legal authority while a "suspension" is an outcome or

[2] *See, e.g., Roush v. Pari-Mutuel Comm'n of State of Wyo.*, 917 P.2d 1133, 1141, n.2 (Wyo. 1996) (district court stayed the suspension of Roush's license); *Gerstell v. State ex rel. Dept. of Revenue and Taxation*, 769 P.2d 389, 392, 394 (Wyo. 1989) (request for hearing stays the suspension of a driver's license).

result that follows a disciplinary hearing seeking to suspend the permission granted by the permit as a result of violations.

The EQA follows this template. Under the EQA, permit suspensions are authorized in the following situations: § 35-11-306(k) (authorizing the Director to suspend an oil field waste disposal facility upon failure of the operator to provide substitute bond security); § 35-11-409 (authorizing the Director to show cause why a mining permit should not be suspended for violations of the EQA and then authorizing the Council to suspend the mining permit after a hearing); § 35-11-420 (authorizing the Director to suspend mining permit if surety is not substituted on a bond); and § 35-11-504 (authorizing the Director to suspend a solid waste management permit for failure to substitute surety on a bond). All of these provisions refer to actions initiated by the Director arising from violations of a permit or legal obligation, with an opportunity for the alleged violator to present its case to the Council before final action is taken. Suspension is the final outcome of this process, it is not a temporary cessation or delay granted at the instance of a third party. There is no statute authorizing permit suspensions merely because an appeal has been filed.

The EQA also follows the WAPA in requiring a contested case hearing for a permit suspension. Section 35-11-112 refers to the Council's authority to "conduct hearings in any case contesting ... the suspension of any permit...." This provision makes clear that the grant of authority to the Council to suspend permits in § 35-11-112(c) refers to the Council's authority to affirm a permit suspension by the Director following a contested case hearing before the Council. Under the EQA, therefore, permit "suspensions" arise only for a handful of events not applicable

here, and only after notice and hearing before the Council on the grounds for the Director's initial suspension decision. W.S. §§ 16-3-113(c); 35-11-112 (a)(iii).

What Protestants really seek is a stay of the final air permit. That was what they initially pled. Protestants ask the Council to stay the Director's decision to issue the permit the same way a court is empowered to stay a final agency decision while on appeal to the courts. *See, e.g.*, W.R.A.P. 12.05. However, Wyoming follows the principle of limited agency authority that "an administrative agency has only the powers granted to it by statute, and the justification for the exercise of any authority by the agency must be found within the applicable statutes." *French v. Amax Coal West*, 960 P.2d 1023, 1027 (Wyo. 1998). No provision of the EQA authorizes the Council to issue stays or injunctions. Even the very broad general grant of authority to the Council set forth in § 35-11-112 nowhere mentions a power to stay or enjoin any activity pending a hearing and final decision. There is no statutory authority to issue stays. That is why Protestants have recast their stay request as a "suspension." However, linguistic sleight of hand does not create agency authority where none exists.

The Wyoming legislature knew how to stay a final decision by the Director pending appeal to the Council. In Article 6 on variances, the legislature provided for an automatic stay of a variance granted by the Director when an appeal to the Council is filed:

> Any variance or renewal thereof granted by the director pursuant to this section **shall become final unless** within thirty (30) days after date of notice...an **aggrieved party**...in writing **may request a hearing before the council**. Upon the filing of such a request for a hearing, the variance **shall be stayed pending** the council's final determination thereon.

W.S. § 35-11-601(g) (emphasis added). In Article 7, the legislature also provided for an automatic stay of a cease and desist order by the Director when an appeal to the Council is filed:

> Any order *is* **final unless**, not later than ten (10) days after the date the notice is served, the person or persons named therein **request, in writing, a hearing before the council**. Upon the filing of a request, the order complained of **shall be stayed pending** the council's final determination thereon.

W.S. § 35-11-701(c)(ii) (emphasis added).

These provisions demonstrate the legislature knew when it wanted final decisions of the Director stayed pending review by the Council. In the statutes applicable to Basin Electric's permit, §§ 35-11-208 and 35-11-801, the legislature provided that permit decisions of the Director are "final action." However, unlike Articles 6 and 7, there are no provisions in the air quality permit Articles 2 and 8, which provide that the Director's final decision granting a permit "shall be stayed" or "can be stayed" pending an appeal to the Council. Nor is there any authority for staying a permit under the Rules of Practice and Procedure for the Department of Environmental Quality (DEQ) for permit appeals before the Council. *See* DEQ Rules of Prac. and Proc., Chapter I, § 16. The stay provisions of Articles 6 and 7, and the lack of any stay provisions in the air quality permits articles, Articles 2 and 8, demonstrate unequivocally that the legislature never intended, and thus did not authorize, air permits issued by the Director to be stayed pending an appeal.

Protestants attempt to fill this gap by relying upon federal law, in particular 40 C.F.R. § 124.15(b) and 40 C.F.R. § 124.19, which provide that PSD air permits issued by the EPA under federal law are not final until review of those permits is completed by the Environmental Appeals Board (EAB). These federal regulations, applying to permits issued by EPA, expressly provide

that such permits are not final pending appeal. With this argument, Protestants suggest that simply because federal regulations provide that federally-issued PSD air permits to construct are not final under federal law until an appeal to the EAB is completed, this Council should therefore follow that federal example and reach the same result by staying DEQ's air permits until this Council's review of those permits is completed. However, this argument is nothing more than a suggestion that the Council ignore governing Wyoming law that PSD air permits are final when issued by DEQ and adopt federal practice and procedure that is precisely the opposite.

C. The Council has not adopted rules setting forth standards for staying a permit because an appeal has been filed; therefore, any decision to stay a permit would be arbitrary as a matter of law and violate due process.

Even if it was assumed, for sake of argument, that § 35-11-112(c)(ii) is sufficient authority for this Council to entertain the Motion to Suspend by Protestants, the absence of regulatory standards for making this decision means any decision by the Council suspending a permit would be arbitrary and capricious as a matter of law.

This principle was firmly established by the Wyoming Supreme Court in another case involving a statute in the Environmental Quality Act. In *Matter of Bessemer Mt.*, 856 P.2d 450 (Wyo. 1993), the Supreme Court was confronted with a case where the Council had made a decision designating areas as "very rare or uncommon" under its statutory authority to do so under the EQA Section 112(a)(v), but without the benefit of rules defining exactly what was meant by "very rare and uncommon." Without such rules, the Council was left to make the decision without meaningful guidance or criteria to apply, rendering any decision necessarily arbitrary as a matter of law regardless how strongly the Council may have felt about its designation:

> In the absence of the appropriate criteria or factors adopted by administrative rulemaking, classifications **made on an ad hoc basis** are **inherently arbitrary and capricious**. *.*.*. We...hold the EQC cannot classify lands within the state as "very rare or uncommon" without first establishing by regulation the **criteria and factors which will set the standard** for that classification. *.*.*. When the legislative mandate is broad, as in this case, the administrative agency must invoke expertise to create standards, which will **furnish notice to the public of how the decision may be reached.**

Id. at 451, 453, 454 (emphasis added).

The same analysis applies here. Even if this Council considers the general grant of authority to "suspend" a permit the necessary statutory authority to stop construction on the Dry Fork Station pending appeal, the lack of any regulations providing for standards or criteria for such a decision renders any exercise of such authority arbitrary as a matter of law. Basin Electric has no notice about how this Council's decision to stay the permit might be reached and thus has no meaningful ability to address factors which the Council may ultimately find significant. When a motion is brought to stay a billion dollar construction project hundreds of people are immediately affected, jobs may be lost, major contracts may be breached or suspended, and hundreds of millions of dollars in delay costs alone may be incurred. These are an enormous set of consequences to consider imposing without standards or criteria to guide the decision; which is all the more reason why such a decision would be arbitrary as a matter of law. *Bessemer*, at 454; *Yeik v. Dept. of Revenue and Taxation*, 595 P.2d 965, 969 (Wyo. 1979) ("...failure to have such rules can be prejudicially fatal"; "Those wishing to seek review from the tax commission are given no guidance by the rules and regulations").

Protestants' Motion illustrates the problem. Nowhere do Protestants identify any legal standards or criteria that should be employed to make the requested suspension decision. Protestants identify no such standards because there are none. So, Protestants make up some standards. Protestants argue, for example, that suspension is warranted because the Council's judgment might be influenced by construction expenditures. Yet Protestants provide no support for why the potential effect on the Council's judgment is a relevant consideration under Wyoming law. Basin Electric responds that it is taking all of the financial risk knowingly, so there is no reason to suspend. Yet, even Basin Electric's response has no basis in any legal standard or consideration—it is merely responding to Protestants' made-up standard. A suspension will have tremendous adverse impacts on many persons and parties not before the Council. Is that relevant? No alleged possible harm can come to the environment until the plant begins emitting, which will not happen for years. Is that relevant to a stay motion? The simple truth is no one knows because there are no regulations setting forth the standards for issuing a stay.

As these questions illustrate, the Council cannot suspend major permits involving significant property rights on the grounds that an appeal has been filed unless and until rules are adopted defining the standards applicable to such a decision, even if it is assumed, for the sake of argument, that the Council has statutory authority to stay permits in these circumstances. The WAPA specifically provides that "each agency **shall**: (i) Adopt rules of practice setting forth the nature and requirements of all formal and informal procedures available in connection with

contested cases...." W.S. § 16-3-102(a)(i) (emphasis added).[3] The purpose of setting forth these requirements is to clarify to participants in contested cases the procedures that each participant is entitled to follow. *See Frankel v. Bd. of County Comm'rs of Teton County Wyoming*, 39 P.3d 420, 424 (Wyo. 2002). As stated in the *Frankel* case, "[i]n matters as important as the approval or disapproval of the use of person's property, it is **critical that all parties know the procedures in advance**...." *Id.* at 424 (emphasis added). The WAPA requires the Council, if it has the authority to do so, to set forth the procedures governing a suspension in a contested case prior to commencement of the case. Without procedural rules and regulations adopted pursuant to the WAPA governing a suspension, no permit may be suspended. *See Yeik*, 595 P.2d at 969 (holding that a statute is inoperative and void until such time as adequate procedural rules and regulations are adopted pursuant to the WAPA).

Indeed, a permit suspension pending appeal without published criteria for making such a decision would violate Basin Electric's due process rights. To satisfy the requirements of due process, laws and regulations must provide specific standards which avoid arbitrary and discriminatory enforcement. *See Sanchez v. State*, 567 P.2d 270, 274 (Wyo. 1977) (A procedural statute violates an essential principle of due process if "men must necessarily guess at its meaning and differ as to its application"); *State v. Gallegos*, 384 P.2d 967, 968 (Wyo. 1963);

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[3] *See also Yeik*, 595 P.2d at 969 ("...it is mandatory that rules and regulations be adopted."); *First Nat'l Bank of Thermopolis v. Bonham*, 559 P.2d 42, 47 (Wyo. 1977). "As far as practice procedure before an agency is concerned, that act [WAPA] provides only bare-bones direction and provides specially ... that each agency shall 'Adopt rules of practice setting forth the nature and requirements of all formal and informal procedures available in connection with contested cases.'" *Id.* (quoting W.S. § 9-4-102(a)(i) (1977)).

Giaccio v. State of Pa., 382 U.S. 399, 402 (1966) (Law fails to meet requirements of due process clause if it is so vague and standardless that it leaves public uncertain as to conduct it prohibits or leaves judges and jurors free to decide, without any legally fixed standards, what is prohibited and what is not in each particular case.); 16B Am. Jur. 2d CONSTITUTIONAL LAW § 916 ("To satisfy requirements of the Due Process Clause, laws and regulations must provide specific standards which avoid arbitrary and discriminatory enforcement"). Due process considerations are clearly applicable to the Council: "[w]hile it is a principle so obvious that it has received little attention in our jurisprudence, there can be no question that due process considerations are invoked in administrative proceedings." *Amoco Production Co. v. Wyoming State Bd. of Equalization*, 882 P.2d 866, 872 (Wyo. 1994), citing *ANR Production Co. v. Wyoming Oil and Gas Conservation Comm'n*, 800 P.2d 492 (Wyo. 1990) and *Jackson v. State ex rel. Wyoming Workers' Comp. Div.*, 786 P.2d 874 (Wyo. 1990). "Proper administrative procedure requires that the rights of parties and the procedure of the agency on hearings be made the subject of agency regulations so that the parties may be advised of their rights." *Adams v. Professional Practices Comm'n*, 524 P.2d 932, 934 (Okla. 1974), cited by *Yeik*, 595 P.2d at 969.

The provisions of the EQA which do provide for permit suspensions define when a suspension can be issued, which provides the criteria for the Council's decision. For example, a decision to suspend for failure to obtain a substitute surety on a solid waste management bond. W.S. § 35-11-504(g). There are no such standards, however, for a stay or suspension pending a permit appeal. Before the Council can order that any permit be suspended pending an appeal, therefore, it must promulgate regulations governing the grounds and procedures for suspension so that Basin Electric and the Protestants know their rights. Without regulations to govern the

Council's decision making no standards exist and the public has no notice of the issues to be decided, and thus a suspension order without such rules would violate the requirements of due process.[4]

D. Under Wyoming law, the permit is legal authorization to proceed with construction even pending appeal.

Protestants' argument is built upon the contention that Basin Electric's permit to construct is not really a final permit and therefore this Council should halt all construction so that it can preserve its ability to completely rewrite the permit from the ground up. The suggestion is expressly made that the extensive work of the Air Quality Division over the last two years, and the final permit decision of the Director, never really happened and mean nothing. *See* Protestants' Motion at n. 3 (*de novo* review means "as if no decision had been previously rendered"). Petitioners argue on page 10 of their Motion that "the Act entrusts the Council – not the DEQ – with final administrative decision-making authority when it comes to permits." Protestants thus assert that this Council is going to start the permitting process anew and may at the end of the day require a completely different technology, so all of the construction should be stopped until the actual permit is issued by the Council. This assertion is wrong on the law.

Under Wyoming law the permit issued by the Director is a final agency determination. That is exactly what the statutes say. W.S. §§ 35-11-208; 35-11-801 (Director's decision granting permit is "final action"). This authorizes Basin Electric to begin construction

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[4] The WAPA imposes basic procedural due process standards upon administrative activities, but also provides a requirement for agencies to adopt procedural rules, in order to guide agency decision making in a predictable manner. W.S. § 16-3-102(a)(i); *Thunderbasin Land, Livestock & Inv. Co. v. County of Laramie County*, 5 P.3d 774, 782 (Wyo. 2000), citing *First Nat'l Bank of Thermopolis*, 559 P.2d at 47.

immediately. In an effort to circumvent this law, Protestants cite federal law to suggest that the Council should view Basin Electric's permit as largely meaningless until the Council's *de novo* review is completed. Pointing to 40 C.F.R. § 124.15(b) and 40 C.F.R. § 124.19, Protestants note that federal law automatically provides that PSD air permits are not final until review is completed by the EAB. Protestants suggest this Council should adopt the same practice, staying permits to construct pending Council review. However, Wyoming's statutes provide that the permit is final when issued, and provide no authority for a stay of such permits while on appeal. W.S. §§ 35-11-208; 35-11-801. Protestants thus urge the Council to adopt a procedure based upon federal law that directly conflicts with Wyoming law.

Their argument ignores the fact that Wyoming has a federal EPA-approved State Implementation Plan (SIP) under which Wyoming has complete authority to administer the requirements of the federal Clean Air Act. Since Wyoming is an "approved state," it has primary jurisdiction over its air permit program and Wyoming's statutory and regulatory laws apply, not the federal procedures applicable to permits issued by the EPA or non-SIP approved states. The law Protestants cite has no application here. By analogizing this Council to the federal EAB, Protestants are asking this Council to ignore Wyoming's statutes and adopt selected portions of federal practice and procedure that are precisely the opposite of governing Wyoming law.

Nor are Protestants consistent with the federal laws from which they pick and choose. For example, they suggest that since federal law provides that PSD permits are not effective until any EAB review is complete, the same should apply here. Then, Protestants turn back to Wyoming law to argue for *de novo* review by the Council. However, this reaches far beyond the federal procedure for appeals. The EAB conducts appeals with **deferential review of the**

record, approaching appeals with the view that the power of review is "only sparingly exercised" and with the understanding that "most permit conditions should be finally determined at the [permit issuer's] level..." 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); *accord In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997). *See In re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997).

Protestants also cite a Wyoming case involving a mining permit, *Rissler & McMurry Co. v. State*, 917 P.2d 1157 (Wyo. 1996). Once again, however, mining permits are fundamentally different than air permits under the EQA, by express design of the Legislature. Section 35-11-406(p) expressly provides that when objections are filed, a mining permit is not final until after a hearing by the Council. No such provision is applicable to an air permit which, as Basin Electric argues in its Motion to Dismiss, is proof the Legislature intended air permits issued by the Director to be final without Council review. Air permits issued by the Director are final; mining permits are not. By citing to mining permit cases Protestants are once again casting about for inapplicable law to support their false premise that a final air permit is really not final until the Council conducts a hearing. Because the *Rissler* case involved a mining permit under W.S. § 35-11-406, the Supreme Court found that "the Legislature has charged the Environmental Quality Council with the responsibility for approving or denying applications for mining permits." *Rissler*, 917 P2d at 1162; s*ee also* W.S. § 35-11-406(k). However, the mining permit provisions in the EQA are an exception to the general Wyoming rule under the EQA that permits are final action under W.S. § 35-11-801.

E. An order suspending the final permit will have extreme consequences on hundreds of people not present in this appeal, and will severely impact the project cost and the supply of critically needed power.

Suspending the final permit will have immediate and severe impacts not only to Basin Electric in terms of enormous additional costs, but also to the people whose jobs are taken away, to Basin Electric in trying to replace those people and trying to retain their housing, to the local and state economies affected by the project and tax revenues from the project, and to customers in northeast Wyoming critically requiring electricity. There is a reason Basin Electric is building this plant near Gillette, and it has much to do with the projected electric power deficits rapidly growing in northeast Wyoming.

The attached affidavits summarize some of the immediate impacts of a suspension Order. This list is not complete, but should give the Council a more informed sense of the real world impacts of a decision to suspend a $1.35 Billion project requiring over 4 million man-hours and approximately 42 months of uninterrupted construction activities. The project is massive in terms of lead time, planning, construction activity, engineering design and oversight, costs, and manpower.

1. Basin Electric will lose over $124 million in direct project costs alone.

Assuming the permit would be suspended on May 1, 2008, until the Council issues a decision December 31, 2008, Basin Electric estimates an additional six months until July 1, 2009, to regain its position and progress existing on May 1, 2008. This 14-month delay in the commercial operating date is estimated to result in additional direct project costs to Basin Electric totaling approximately **$124,170,000**, broken down as follows:

Equipment movement, storage, maintenance costs	$19,860,000

Materials movement, storage, management costs	$3,420,000
Equipment escalation and manufacturing restart costs	$5,900,000
Materials escalation costs	$650,000
Equipment purchase delay costs	$1,920,000
Demobilization, remobilization of construction contractors for work in progress on May 1, 2008	$12,930,000
Demobilization, remobilization of construction contractors for work not in progress on May 1, 2008	$15,710,000
Construction Contracts entered into after May 1, 2008	$14,870,000
Site security; demobilization and remobilization of engineers and staff on site	$2,740,000
Move engineers and staff in home offices off and back on project	$9,930,000
Additional interest during construction costs	$36,240,000

See Affidavit of Robert Williams, Ex. A.

2. Hundreds of people will lose their jobs

As of May 1, 2008, approximately 300 workers will be on-site at the Dry Fork Station. This number of workers will grow to over 700 by the end of 2008. These workers, including insulation workers, boiler makers, carpenters, cement masons, electricians, iron workers, laborers, mill wrights, equipment operators, pipe fitters, sheet metal workers, and teamsters, will lose their job with Basin Electric during the time of a permit suspension and the time to gear up for operations after a suspension. Moreover, Basin Electric would lose the skilled workers required to construct a power plant when those easily employable workers move on to other employment during the suspension period.

To accurately determine the amount of jobs and wages lost due to a suspension, Basin Electric requested the Wyoming Department of Employment, Research and Planning to provide an economic impact analysis. The analysis determined an estimate of the wages and benefits paid to the forecasted Dry Fork Station construction workforce and the estimated additional jobs created in the local economy consisting of Campbell, Crook, Weston, Johnson and Sheridan Counties. This analysis was conducted for 8, 12 and 14-month periods, beginning on May 1, 2008, based on an assumed 8-month suspension of construction. The State's analysis results quantifying lost jobs and lost wages/benefits follows:

Months	Construction Wages	Construction Workers	Indirect Jobs	Induced Jobs	Total Jobs
8	**$25,260,000**	501	97	102	**700**
12	**$45,232,135**	598	116	122	**836**
14	**$58,506,751**	663	128	135	**926**

See Affidavit of Curt Pearson, ¶¶ 2, 6-8, Ex. B.

3. Retaining Gillette housing contracts will cost Basin Electric another $2.6 million to $5.4 million

To attract and retain specialized construction workers in the tight Gillette housing market, Basin Electric contracted with area hotels, contracted with two apartment complex developers, and leased and renovated the site of a former mobile home park to provide housing for the Dry Fork Station workers. After negotiating contracts for this housing Basin Electric would likely retain its contracts during a suspension of construction, although it may be forced to hold the housing longer than the suspension period itself. As already noted, Basin Electric believes it would lose the skilled workers required to construct a power plant when those easily employable

workers move on to other employment during the suspension period. The additional costs to retain contracts housing for construction workers while construction is on hold or restarting are as follows:

Months	Additional Costs to Hold Housing
8	**$2,609,500**
12	**$4,350,040**
14	**$5,396,555**

See Affidavit of Curt Pearson, ¶¶ 3-5, Ex. B.

4. A suspension will result in lost tax revenues.

Basin Electric calculated the following lost tax revenues for Campbell County and the State of Wyoming based on an eight-month suspension of construction:

2009 Property Taxes	**$600,000**
2008 Sales and Use Taxes	**$1,500,000**

These figures do not include the far more harmful cuts in tax revenues if the project would be cancelled. *See* Affidavit of Curt Pearson, ¶ 9, Ex. B.

The Council does not need to speculate about the level of community support for the Dry Fork Station project. Attached to the Affidavit of Curt Pearson is a listing of public involvement activities and the letters and proclamations from numerous communities and local governments across northeast Wyoming expressing overwhelming support for the project, including the economic and social benefits the project will provide to the local area and to the State of Wyoming. *See* Affidavit of Curt Pearson, ¶ 10, Ex. B, and Exhibits 1 – 32 to that Affidavit.

5. A suspension will aggravate electrical power deficits and the need for costly electricity replacement.

Perhaps the most harmful consequence of a suspension to parties other than Basin Electric is the denial of needed electricity to be generated by the Dry Fork Station on time in 2011 and the need to replace that electricity from somewhere else at significant cost.

Several local governments as well as organizations to be served by Dry Fork Station have recognized the critical need for this power plant. For example:

> - Powder River Energy Corporation: "**Unprecedented electrical growth** related to energy development projects and **growth of residential customers** has created the need for [Dry Fork Station]." (December 22, 2005 letter)(emphasis added).
>
> - Wyoming Municipal Power Agency: "Whereas, Basin Electric Power Cooperative has granted the Agency a right to participate in the Dry Fork Station ... **to meet our** present and **future power supply responsibilities**." (Resolution 2005-4)(emphasis added).
>
> - Wyoming Rural Electric Association: "This proposed power plant is **vital not only to the cooperative utilities served by Basin Electric but to the region, state of Wyoming**, and the country as a whole." (December 15, 2005 letter)(emphasis added).

See Affidavit of Curt Pearson, Ex. B, Exhibits 14, 19, and 20, respectively, to that Affidavit.

In 2004 and 2005, Basin Electric conducted a thorough study of the growing need for electrical power in its western service area (including Wyoming) and how that need for power would be best met, concluding that a coal-based plant with a high baseload capacity, although not meeting all of Basin Electric's needs across the system, would meet the need in the western service area, and specifically in northeast Wyoming where there are major transmission constraints that limit the ability to bring power into this area. The power deficit in the western service area is persistent and increasing without the power generated from the Dry Fork Station.

In 2011, a deficit of 265 megawatts (MW) will exist, and in 2012, the system deficit will grow to 309 MW without the Dry Fork Station. See Affidavit of David Raatz, ¶ 3, Ex. C.

The Dry Fork Station is critical to meet Basin Electric's power obligations and needs in northeast Wyoming. The northeast Wyoming loads are industrial-type loads that require large amounts of electricity, delivered on a near-continuous basis, which is best served by a high capacity baseload facility. Without the Dry Fork Station becoming commercially operational as planned in 2011, Basin Electric is anticipated to be short 200-300 megawatts (MW) of electrical power every day in 2011 in the western service area, a shortage that will affect northeastern Wyoming. An 8-month suspension, causing a 14-month delay in commercial operations of Dry Fork Station means that Basin Electric will have to spend **$60,400,000** to purchase replacement power during that time to meet its obligations to supply wholesale power. As a non-profit cooperative, this **$ 60 Million cost will be passed along** to Basin Electric's members and consumers, including the 146,000 consumers in Wyoming. However, despite the enormous costs, Basin Electric has serious concerns about needed replacement power even being available; finding that power may be "difficult or impossible." *See* Affidavit of David Raatz, ¶¶ 4-6, Ex. C.

F. Hearing on the motion.

Because there are no standards or criteria governing a request for permit suspension under these circumstances, Basin Electric cannot determine what additional evidence or argument the Council may deem relevant or appropriate to a decision suspending the permit. Beyond the affidavits submitted with this Brief, Basin Electric is not sure how to respond. As a consequence, Basin Electric reserves the right to present testimony at any hearing on this Motion

to address whatever the Council might deem relevant, rather than file lengthy technical affidavits in connection with this response.

However, Basin Electric contends there are no legal or practical grounds for a permit suspension, and the lack of legal authority for the Motion is sufficient to defeat the Motion without engaging in a hearing on the merits. This is obviously an important issue, because as long as it remains outstanding, Basin Electric's project is held hostage in some respects to this Motion. If this Council agrees with the arguments made here, the Council should deny the Motion immediately without a further evidentiary hearing, since there is no need for one.

III. Conclusion.

Basin Electric has undertaken construction after a careful evaluation of the risks of proceeding during an appeal and has concluded that the construction should go forward. Having accepted that risk, there is no reason why the Council should suspend the Permit as doing so is unnecessary to preserve this appeal and it is not authorized by the law. Basin Electric therefore requests that the Motion to Suspend be denied.

DATED March 12, 2008.

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ATTORNEYS FOR BASIN ELECTRIC POWER COOPERATIVE

CERTIFICATE OF SERVICE

I hereby certify that on March 12, 2008, I served the foregoing BASIN ELECTRIC'S OPPOSITION TO PROTESTANTS' MOTION TO SUSPEND PERMIT by electronic service and by placing a true and correct copy thereof in the United States mail, postage prepaid and properly addressed to the following:

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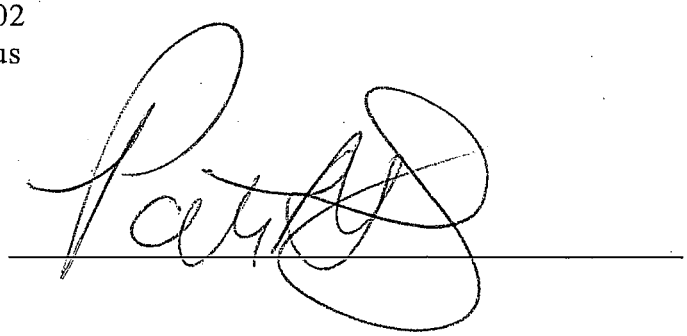

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APPENDIX – DISCUSSION OF THE SUBSTANTIVE ISSUES

BASIN ELECTRIC HAS FULLY CONSIDERED THE RISK OF AN ADVERSE DECISION AND PROTESTANTS' CLAIMS DO NOT CHANGE BASIN ELECTRIC'S DECISION TO PROCEED WITH CONSTRUCTION

Protestants contend that continued construction of Dry Fork will "undermin[e] the role of the Council and render[] the appeals process meaningless." They suggest this Council may require wholesale changes to the Plant design that will become impossible if the Plant is built. However, Basin Electric has made a detailed evaluation of the contentions made by Protestants and weighed their merits against the costs and consequences of lengthy delay during the appeal process. In particular, Basin Electric has examined the contentions on appeal to evaluate the likelihood that these contentions may require sufficient major plant changes to counsel against construction beginning now. For the reasons set forth below, Basin Electric believes that its decision to proceed is sound, despite the issues raised on appeal, and for that reason accepts the risk that changes to the plant might be required later.

First, contrary to what Protestants suggest, the law will not require this PSD permit review process to force a fundamental change in the selected emissions source, such that Basin Electric should wait until the appeal is exhausted. Second, as shown on the Affidavit of Joseph J. Hammond and the accompanying spreadsheet, attached as Ex. D, the permit for Dry Fork is among the most stringent issued for any coal-fired power plant in this country. The DEQ has imposed extremely strict emissions standards for the regulated pollutants that equal or exceed those recently issued elsewhere in the country for both conventional and supercritical coal fired

boilers, so it is unlikely that the emission standards set in the permit will change dramatically enough to force a major plant redesign.

1. The law does not allow this project to be fundamentally redefined and redesigned.

Protestants suggest that their appeal may lead to the imposition of two radical changes in plant design: IGCC technology or supercritical technology. Neither contention has merit, and no evidence supporting either contention has been advanced by the Protestants.

First, with respect to IGCC, Protestants argue that technologies like integrated gasification combined cycle plants may be required because CO_2 is, in their view, a "regulated pollutant" for which a BACT analysis is required. However, the law is to the contrary. The DEQ has no authority to include BACT limits for CO_2 or other greenhouse gases in the Dry Fork Station permit for the reasons set forth in the DEQ's Motion to Dismiss those claims. BACT is required only for pollutants that are regulated under the Clean Air Act, and neither CO_2 nor other greenhouse gases are regulated.[1] The Supreme Court's recent decision in *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007) held that CO_2 emitted from vehicles is a **pollutant**, but did not decide it is a **regulated pollutant**—it remanded the case to EPA for EPA to decide whether and how to regulate it.

---

[1] *See* the DEQ's Motion to Dismiss and Basin Electric's Memorandum in Support of the DEQ's Motion, citing numerous authorities, including *In the Matter of: North County Resource Recovery Associates*, 2 E.A.D. 229, 230 (EPA Adm'r 1986) ("EPA lacks the authority to impose [BACT] limitations or other restrictions directly on the emission of unregulated pollutants."); *Inter-power of New York*, 5 E.A.D. 130, 151 (EAB 1994) (ruling that CO_2 was an unregulated pollutant and thus not subject to regulations designed to control emissions); *Kawaihae Cogeneration Project*, 7 E.A.D. 107, 132 (EAB 1997) (finding that CO_2 was not "a regulated air pollutant for permitting purposes.").

Moreover, even if CO_2 and other greenhouse gases were considered regulated pollutants for purposes of BACT, IGCC still could not be required because it would constitute a redefinition and redesign of the project. The BACT process cannot be used for that purpose. *E.g., In re Prairie State Generating Co.*, 13 E.A.D. __, PSD Appeal No. 05-05 (EAB Aug. 24, 2006), slip op. at 27 ("We have specifically stated that 'EPA has not generally required a source to change (i.e., redefine), its basic design'".); *Sierra Club v. United States EPA*, 499 F.3d 653, 655 (7th Cir. 2007) (upholding the Environmental Appeals Board's decision in *Prairie State* and observing that if BACT could require a coal-fired plant to be redesigned , a nuclear power plant or hydroelectric dam could be required in its stead.).[2]

IGCC is not an emission control technology, but rather a fundamentally different way to generate electricity than a pulverized coal plant such as Dry Fork Station. They have virtually nothing in common with one another. One burns coal to heat steam to generate electricity. The other turns coal into a gas that is combusted in a combined cycle power block similar to a natural gas-fired plant.[3] Therefore, IGCC would unlawfully redefine the Dry Fork Station plant. Longstanding EPA guidance states that BACT does not require construction of a natural gas-fired turbine instead of a pulverized coal plant, because that would redefine the source. Draft New Source Review Workshop Manual, at B.13. ("[A]pplicants proposing to construct a coal-

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[2] *See* Basin Electric's Memorandum in Support of the DEQ's Motion to Dismiss (Basin Electric's Memo) for additional authorities.

[3] *See* "A Comparison of PC, CFB and IGCC Technologies for Basin Electric Power Cooperative's Dry Fork Station," submitted as part of Responses of the Basin Electric Power Cooperative to EPA, NPS and Environmental Group Comments Regarding the Wyoming Department of Environmental Quality's Permit Application Analysis for the Dry Fork Station, June 2007, (Basin Electric Responses) excerpt of pp. 1-7, attached as Ex. E.

fired electric generator have not been required by EPA as part of a BACT analysis to consider building a natural gas-fired electric turbine although the turbine may be inherently less polluting per unit product (in this case electricity)"). In 2005, EPA determined that "the IGCC process would redesign the basic design" of a coal-fired plant, and therefore EPA "would not require an applicant to consider IGCC in a BACT analysis" for that plant" Letter from Stephen Page, Director, Office of Air Quality Planning and Standards, U.S.E.P.A., to Paul Plath, E3 Consulting, December 13, 2005. [4]

There is no case in which a PSD permit for an electrical generation facility has required the substitution of IGCC technology for a proposed coal-fired power plant. Basin Electric believes the legal authority is compelling that BACT does not require control of CO_2 or other greenhouse gas emissions and that BACT does not require redefinition of a proposed source, and relies on that authority in proceeding with construction and accepting associated risks.

Protestants' unsupported assertion that this appeal could lead to a requirement that Basin Electric change its boiler design to supercritical is also without substantial merit. Even if supercritical technology were not considered a redefinition of the source, as the DEQ suggests in its findings, a supercritical boiler would still make no sense for this project because this technology would not increase efficiency and therefore would not significantly reduce emissions of CO_2 or other pollutants at Dry Fork Station. The project, at 422 MW, is just too small for

[4] Available at http://epa.gov/Region7/programs/artd/air/nsr/nsrmemos/igccbact.pdf. A lawsuit challenging this letter was settled on procedural grounds and, as a result, EPA withdrew the letter. However, the settlement did not reflect a change in EPA's substantive position as indicated by EPA's issuance of a PSD permit for the Bonanza coal-fired power plant in Utah without requiring BACT limits for CO_2 or other greenhouse gases. The permit is available at http://www.epa.gov/region8/air/permitting/deseret.html.

supercritical technology. Efficiencies are only achieved for supercritical boilers above 500 MW. Basin Electric would have preferred to use this technology, but it simply adds no value below the 500 MW level. Below 500 MW, supercritical technology provides no significant efficiency gains and increases costs by two to four percent.[5] For these reasons, it is not a meaningful option under the law or under a BACT analysis.

2. Protestants' other claims are unlikely to lead to major plant redesign.

Protestants' other claims, even if successful, do not require the project to be totally revamped. Even in the worst case, they would entail far less significant changes in design. Nor do the other claims have merit. For example, Protestants assert that the mercury provisions of the permit do not constitute BACT because the permit sets an interim emission limit, not a final limit, and provides for a one-year study to determine what the final mercury limits should be. However, the permit provides for the study period because it is uncertain what level of mercury reductions can be achieved at Dry Fork Station. In the face of uncertainty, it is valid to defer setting a final BACT limit until additional data is obtained. *In re Prairie State Generating Co.*, 13 E.A.D. __, PSD Appeal No. 05-05 (EAB Aug. 24, 2006); *In re AES Puerto Rico, L.P.*, 8 E.A.D. 324 (EAB 1999) (in the face of uncertainty, "the use of an adjustable limit, constrained by certain parameters, and backed by a worst case air quality analysis, is a reasonable approach."). And even if mercury BACT had to be determined without the benefit of the one-year study, there is no evidence that continuing construction would result in increased costs for mercury controls.

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[5] *See* June 11, 2007 memorandum from Sargent & Lundy regarding "Subcritical—Supercritical Boiler Comparison" for Dry Fork, submitted as Exhibit 7 to Basin Electric Responses, a copy is attached as Ex. F.

Protestants also challenge the lack of a permit limit for PM2.5 emissions. However, although EPA has adopted national ambient air quality standards (NAAQS) for PM2.5, it has not adopted PSD rules for PM2.5 and, until it does, EPA has instructed that PM10 be used as a surrogate for PM2.5. Memorandum from John Seitz, Director, EPA Office of Air Quality Planning and Standards, entitled *Interim Implementation for the New Source Review Requirements for PM2.5*, October 23, 1997. The Dry Fork permit contains surrogate PM10 emissions limits. On September 21, 2007, EPA proposed PSD rules for PM2.5 and affirmed the continued applicability of the 1997 guidance and the directive that, for PSD, PM10 would continue to be a surrogate for PM2.5 emissions. 72 Fed. Reg. 54112, 54116. Permit limits on PM10 will serve to control ambient concentrations of PM2.5 until the proposed rule is finalized. And even if permit limits on PM2.5 were required, there is no evidence that this would result in significant technology changes or increased costs as a result of continuing construction.

Protestants complain that the permitted PM10 limits include only the filterable fraction of PM10 and not the condensable fraction. The WDEQ did not include limits on condensables due to uncertainty regarding the methods for testing the condensable fraction, and because of limited available information regarding condensable emissions from coal-fired power plants. Also, there is no available technology to control the condensable fraction and therefore a PSD permit need not include limits on condensables. *In re Newmont Nevada Energy Investment, LLC, TS Power Plant*, 12 E.A.D. 429, [54 from slip op] (EAB 2005) ("TS Power Plant"). Protestants do not suggest that different or additional control technology be installed for condensable PM. The majority of condensable emissions at Dry Fork are comprised of sulfuric acid mist (H2SO4), and there is a permit limit on H2SO4 which serves as a surrogate for the condensable fraction.

Additionally, the impact of estimated condensable emissions on air quality was modeled and the permit provides that if actual tested levels of condensables are higher than previously modeled, the DEQ may reassess the need for further modeling. Finally, there is no reason to believe that a limit on condensables, if required, likely would result in technology changes or increased costs due to continuing construction.

Protestants claim that the Dry Fork Station permit limits on NOx and SO_2 emissions are not BACT, and that a wet scrubber should be used for SO_2 control instead of a dry scrubber. The evaluation of candidate BACT technologies involves complex technical analysis. The DEQ did a thorough analysis and reduced the permit limits from the limits initially proposed by Basin Electric. Protestants offer nothing but speculation to support their claim that the limits should be lower. Dry Fork Station emission limits compare favorably with limits in other permits issued for coal-fired power plants in recent years. *See* Affidavit of Joseph J. Hammond and accompanying spreadsheet, attached as Exhibit D. BACT limits are not supposed to be set at the lowest levels that can be achieved during optimal operating conditions. The limits must be met under all operating conditions, and should be set at levels that can be achieved at all times. *TS Power Plant at* 442; *In re Steel Dynamics, Inc.*, 9 E.A.D, 165, 188 (EAB 2000).

In addition to the lack of a legal foundation for their claims, Protestants offer nothing to indicate that if they succeed in obtaining permit changes regarding mercury, PM2.5 or condensable PM emissions those changes would require significant equipment changes or cost increases at the Plant. Dry Fork's NOx and SO_2 emission limits are among the lowest listed for other coal-fired power plants. For these reasons, Basin Electric strongly believes that stopping construction would be more detrimental than any potential impacts from an adverse decision in

this case and therefore accepts the risk of continuing construction. While final judgment on the merits awaits this Council's full consideration, the analysis summarized above and the DEQ's thorough review of the permit leads Basin Electric to reject Protestants' mere speculation that the plant will eventually have to be completely redesigned, and accept any risk related to continuing construction, in order to avoid the certain and severe impacts the would flow from shutting down construction.

Basin Electric has concluded that the Permit is sound, valid and fully defensible. This Council may have the final say on that evaluation, but Basin Electric is entitled under the law to evaluate the risks and proceed with construction. Protestants seek to overcome that assessment and shut the construction down with nothing more than a thin argument, based upon inapplicable federal law, that this Council might independently decide, *de novo*, to require a completely different plant. Such unlawful and unsupported speculation is no basis for stopping this billion dollar and much needed plant.

Exhibit A

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ATTORNEYS FOR BASIN ELECTRIC
POWER COOPERATIVE

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of:	)	
Basin Electric Power Cooperative	)	Docket No. 07-2801
Dry Fork Station,	)	
Air Permit CT – 4631	)	

AFFIDAVIT OF ROBERT T. WILLIAMS

Robert T. Williams, having been duly sworn, states as follows:

1. I have worked for Basin Electric Power Cooperative (Basin Electric) for 26 years. I have been the Dry Fork Station Project Engineer for 3 years. I am responsible for all of the engineering efforts required to construct and complete the Dry Fork Station power plant. This includes all Basin Electric staff engineering and all outside engineering. I have personal knowledge of the matters set forth herein.

2. I have evaluated the effect a delay of the project would likely have on the timing and costs associated with completing the project. The following analysis and additional cost estimates, based on my best professional judgment, is based on the assumption that project construction work would be suspended starting May 1, 2008 and would be able to restart after an 8 month suspension.

3. In my professional opinion, an 8 month suspension would actually result in another 6 month delay to restart construction halted on May 1, 2008, for an approximate 14 month delay in completion of the project and thus a 14 month extension of the Commercial Operating Date (COD) of the power plant.

4. Based on a 14 month delay of the completion of the project caused by an 8 month suspension, the following additional direct project costs would be incurred by Basin Electric.

a. Equipment which has already been contracted for delivery this year or early next year would be delivered to Basin Electric and would have to be stored somewhere off the plant site. This equipment would have to be moved to a storage site, managed and maintained during storage, and then moved to the plant site after the suspension ends. – Estimated additional cost - **$19,860,000.**

b. Some materials would have to be delivered, moved to storage, managed and then moved to the plant site. – Estimated additional cost - **$3,420,000.**

c. Supply of other equipment that has already been contracted for but not to be delivered before early next year would be delayed. Additional costs incurred for this equipment include stopping or delaying manufacturing, escalation cost of this equipment, and cost to restart the manufacturing process. – Estimated additional cost - **$5,900,000.**

d. Some material purchases would have to be delayed and later purchased at an escalated cost. – Estimated additional cost - **$650,000.**

e. Some equipment purchases would have to be delayed and later purchased at an escalated cost. – Estimated additional cost - **$1,920,000.**

f. Construction contractors which, by May 1, 2008 would have work in progress on site, would have to stop all work, secure in progress work for safety, and demobilize the work force as of that date. After the suspension ends, they would have to re-staff and mobilize. All of these contracts would have to be restructured in order to compensate the contractors for these changes and for lost opportunity, inefficiency and escalation. – Estimated additional cost - **$12,930,000.**

g. The existing contracts for construction contractors who have not started work by May 1, 2008 would have to be restructured to compensate them for lost opportunity, inefficiency and escalation. – Estimated additional cost - **$15,710,000.**

h. Other construction contracts which will be entered into after May 1, 2008 because of a suspension would be delayed until the suspension is ended at an escalated cost. – Estimated additional cost **$14,870,000.**

i. Site security would be required during the suspension period, and the Owner's and Engineer's (Sargent & Lundy) current on-site staff (approximately 20 total) would have to be demobilized. After the end of the suspension the Owner's and Engineer's site staff would have to be remobilized. Additional escalated cost for these staff would be incurred. – Estimated additional cost - **$2,740,000.**

j. The Owner's and Engineer's staff would have to organize and store the design and contract data. Most of these staff (approximately 120 total) would have to be moved off the project during the suspension and then moved back onto the project after the suspension ends.

Some staff would have to be kept on the project as needed to manage and restructure contracts which are already in place. Additional escalated cost for these staff would be incurred. – Estimated additional cost - **$9,930,000**.

k. The project interest expense would increase related to the 14 month delay. – Estimated additional cost - **$36,240,000**.

5. In summary, based on my estimates, which I believe to be conservative, and my best professional judgment, the total estimated direct additional project costs to Basin Electric associated an 8 month suspension which results in a 14 month delay in project completion is approximately **$124,170,000**.

FURTHER, AFFIANT SAYETH NAUGHT,

Robert T. Williams

STATE OF NORTH DAKOTA)
)
COUNTY OF BURLEIGH)

The foregoing instrument was subscribed and sworn to before me this 10th day of March, 2008, by Robert T. Williams.

Witness my hand and official seal.

My commission expires: _____

Notary Public

MICHELLE WIEDRICH
Notary Public
State of North Dakota
My Commission Expires Aug. 6, 2009

Exhibit B

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ATTORNEYS FOR BASIN ELECTRIC POWER COOPERATIVE

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of:	)	
Basin Electric Power Cooperative	)	Docket No. 07-2801
Dry Fork Station,	)	
Air Permit CT – 4631	)	

AFFIDAVIT OF CURT PEARSON

Curt Pearson, having been duly sworn, states as follows:

1. I am the Project Coordinations Representative for Basin Electric Power Cooperative (Basin Electric). I have held this position since May 29, 2005, and I have worked for Basin Electric for over 30 years. In my current position for Basin Electric, I have direct personal responsibility for the Dry Fork Station housing program and the socioeconomic and impact alleviation activities relating to the Dry Fork Station. I have analyzed the socioeconomic impacts that an 8 month suspension of construction of Dry Fork Station would have and have had others study the socioeconomic impacts of such a suspension. I have personal knowledge of the matters set forth herein.

2. Dry Fork Station will cost approximately $1.35 Billion and take over 4 million man-hours to construct. As of May 1, 2008, over 300 workers are

forecasted to be on-site at the Dry Fork Station. This number of workers will peak at over 700 before the end of 2008. These workers include a variety of specialized crafts, including insulation workers, boiler makers, carpenters, cement masons, electricians, iron workers, laborers, mill wrights, equipment operators, pipe fitters, sheet metal workers, and teamsters.

Economic Impact of Retaining Construction Workforce Housing

3. In the planning for the construction of the Dry Fork Station, Basin Electric recognized that the tight housing market in the Gillette, Wyoming area would be a factor in attracting and retaining specialized construction workers. To provide housing for the projected incoming construction workforce, Basin Electric has contracted with area hotels and two apartment complex developers, and leased the site of a former mobile home park which was renovated to provide accommodations for workers bringing their personal motor homes or 5th wheel campers. To manage the mobile home park and assist incoming workers on a day-to-day basis, Basin Electric also contracted with a local property management firm.

4. Assuming these housing accommodations must be retained and contractual obligations maintained during an 8-month shut-down of construction of the Dry Fork Station, from May 1, 2008 through December 31, 2008, and to assure adequate housing for the workforce when construction restarts, my estimation of the direct additional cost to Basin Electric would be **$2,609,500** to retain the housing for which Basin Electric has already contracted.

5. Should construction on the Dry Fork Station be shut down for any extended period, the construction workers would necessarily relocate to other construction projects, to make a living wage and provide for themselves and their families. Dry Fork Station project management believes that an 8 month shutdown of construction would affect the project's ability to restart necessary contracts and attract a suitable workforce for a longer period of time, estimated to be 12 to 14 months. Should this be the case, the direct additional cost to Basin Electric of retaining these accommodations for a 12 month period is estimated at **$4,350,040**, and the estimated cost for a 14-month period is estimated at **$5,396,555.**

Economic Impact Analysis of Construction Wages and Jobs Lost

6. On February 29th, 2008, the Wyoming Department of Employment, Research and Planning provided me an economic impact analysis to determine the job impacts of a suspension of Dry Fork Station construction. The analysis determined an estimate of the wages and benefits paid to the forecasted Dry Fork Station construction workforce, and the estimated additional jobs created by this construction in the local economy. This analysis was conducted for 8, 12 and 14-month periods, beginning on May 1, 2008, based on an assumed 8-month suspension of construction.

7. The local affected economy is defined as the counties of Campbell, Crook, Weston, Johnson and Sheridan. The projected construction workforce provided to the Wyoming Department of Employment, Research and Planning

was the latest projection of the construction workforce used in Basin Electric's housing planning, prior to the start of construction. Much of this workforce is highly skilled, and there is a serious risk of losing many of these employable workers to other jobs during suspension of construction, even for a short time.

8. The analysis prepared by the Wyoming Department of Employment, Research and Planning shows the total impact of construction wages in three parts; the direct effect, the indirect effect, and the induced effect. Direct effects are those associated with the compensation paid directly to workers. Indirect effects are business-to-business transactions as a function of where workers spend their compensation. Induced effects are increases in household expenditures because of the compensation workers receive. The analysis also computes the number of indirect jobs created in the local economy during the construction phase.

a. Eight Month Analysis, Scenario 1. The average of the 8-month (May 1, 2008 – December 31, 2008) projected construction workforce, 501 workers, was used as the basis for this modeling scenario. The impact of construction worker wages is **$25,260,000**. The average construction workforce of 501 jobs during this eight month period is calculated to create 97 new indirect jobs, and an additional 102 induced jobs. These **700 jobs** would be lost during an 8-month suspension period.

b. Twelve Month Analysis, Scenario 2. The average of the 12 month (May 1, 2008 – April 30, 2009) projected construction workforce, 598

workers, was used as the basis for this modeling scenario. The impact of construction worker wages is **$45,232,135**. The average construction workforce of 598 jobs during this twelve month period is calculated to create 116 new indirect jobs, and an additional 122 induced jobs. These **836 jobs** would be lost during the 12 month period.

c. Fourteen Month Analysis, Scenario 3. The average of the 14-month (May 1, 2008 – June 30, 2009) projected construction workforce, 663 workers, was used as the basis for this modeling scenario. The impact of construction worker wages is **$58,506,751**. The average construction workforce of 663 jobs during this fourteen month period is calculated to create 128 new indirect jobs, and an additional 135 induced jobs. These **926 jobs** would be lost during the 14 month period.

Economic Impact of Lost Tax Revenue

9. On February 28, 2008, Don Boehm, Basin Electric's Supervisor of Multi-State Taxes, provided an analysis of the tax revenue implications of an eight month project shut down of construction, as well as the tax revenue implications of a total project cancellation.

a. The property taxes due for a given tax year are based on the investment in the Dry Fork Station during the previous year. As such, an eight month construction shut down (May 1, 2008 – December 31, 2008) would affect the amount of property tax paid for the 2009 tax year. If the Dry Fork Station

construction were to shut down for the final eight months of 2008, the property tax reduction for the 2009 tax year is estimated to be **$600,000**.

b. Sales/use tax is paid on the tangible personal property used to construct the Dry Fork Station. Since the vast majority of the equipment will not be received until 2009, the expected 2008 sales/use tax impact is estimated to be approximately **$1,500,000** ($1,150,000 paid to the State and $350,000 paid to Campbell County).

c. Should the Dry Fork Station project be cancelled, long-term tax revenue streams would be lost. Based on estimates of tax revenues prepared in the Dry Fork Station Socioeconomic Impact Analysis (CH2M Hill, April 2006), Don Boehm estimates that sales/use taxes during construction totaling **$9,600,000**, due to the State of Wyoming, would be lost, and **$3,000,000** due to Campbell County would be lost. Additionally, following the completion of construction, an estimated annual operational sales/use tax revenues lost to the State would be **$400,000**, with an estimated **$125,000** annual loss to Campbell County. With project cancellation, the annual tax revenue loss for property taxes is estimated to be **$1,500,000**.

Resolutions and Letters of Support

10.The Dry Fork Station project enjoys substantial support and confidence from local governments and organizations who were provided informational briefings on the project (listing at Exhibit 1 to this Affidavit) and who in turn

provided Basin Electric letters and proclamations of support for the project (attached as Exhibits 2 - 32 to this Affidavit).

FURTHER, AFFIANT SAYETH NAUGHT.

Curt Pearson

STATE OF NORTH DAKOTA)
) ss.
COUNTY OF BURLEIGH)

The foregoing instrument was subscribed and sworn to before me this 12 day of March, 2008, by Curt Pearson.

Witness my hand and official seal.

DEBORAH LEVCHAK
Notary Public
State of North Dakota
My Commission Expires Sept. 26, 2009

My commission expires: _____.

Notary Public

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Index

PEARSON AFFIDAVIT
INDEX OF EXHIBITS

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1.	06/23/05 – 03/30/06, Wyoming Industrial Siting Act – Waiver of Permit Application Basin Electric Power Cooperative Dry Fork Station Summary List of Public Involvement Activities
2.	12/19/05 Resolution No. 2103, A Resolution Expressing Support for Basin Electric Cooperative's Dry Fork Station Project from City of Gillette
3.	11/18/05 Letter from Gary Anderson, Mayor of Guernsey, Wyoming, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
4.	12/06/05 Resolution 05-006, A Resolution by the Town Council of the Town of Guernsey, Wyoming, Declaring Their Statement of Support for the Dry Fork Station Power Project
5.	12/13/05 Letter from Gerald E. Fink, Chairman of Johnson County Commissioners expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
6.	12/07/05 Resolution, A Town of Lingle Resolution to Support the Planned Dry Fork Station Project
7.	12/06/05 Resolution, A Resolution of the Governing Body of the Town of Lusk, Wyoming Committing its Support to Basin Electric Power Cooperative in its Construction and Operation of the "Dry Fork Station" Near Gillette, Wyoming
8.	10/27/05 Letter from the Mayor and Town Council, Town of Moorcroft, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
9.	11/07/05 Letter from Ed Wagoner, Mayor of Newcastle, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
10.	12/05/05 Resolution 05-009, Resolution of the Town of Pine Bluffs supporting the Dry Fork Station Project
11.	12/01/05 Letter from Judy Hurrle, Clerk/Treasurer of the Town of Pine Haven providing Resolution (see # 12 below)
12.	11/28/05 Resolution 25, 2005, A Resolution supporting the proposed Basin Electric Dry Fork Power Plant from the Town of Pine Haven
13.	12/05/05 A Resolution In Support of the Proposed Dry Fork Station from the City of Powell

EXH	DESCRIPTION
14.	12/22/05 Letter from Michael E. Easley, Powder River Energy Corporation, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
15.	12/20/05 Resolution 2005-07, A Resolution In Support of the Dry Fork Station from Powder River Energy Corporation
16.	11/08/05 Letter from Ron Esquivel, Mayor of Upton, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
17.	11/01/05 Letter from Ted Ertman, Chairman of the Weston County Commissioners, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
18.	12/12/05 Resolution, A Resolution of Support by the Town of Wheatland for Basin Electric Power Cooperative's Dry Fork Station
19.	Undated Resolution, Wyoming Municipal Power Agency Resolution 2005-4 expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
20.	12/15/05 Letter from Shawn Taylor, Executive Director of the Wyoming Rural Electric Association, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
21.	12/14/05 Letter from Ralph Kingan, Mayor of the Town of Wright, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
22.	12/21/05 Letter from Wyoming Building and Construction Trades Council expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
23.	11/15/05 Resolution of Support for the Basin Electric Power Cooperative – Dry Fork Station Power Plant and the Hughes Transmission Project from the Campbell County Chamber of Commerce Board of Directors
24.	11/16/05 Letter from Marilyn Mackey, Chair of the Campbell County Commissioners, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
25.	11/15/05 Resolution #1534 of the Board of Campbell County Commissioners, A Resolution of Support of the Dry Fork Station Coal-Powered Electric Generation Facility
26.	10/25/05 Letter from Gene K. Balzer, Ph.D. Chief Executive Officer of the Campbell County Memorial Hospital, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
27.	12/13/05 Resolution of Support of Basin Electric Power Cooperative's Dry Fork Station Coal-fired Power Generating Facility from Campbell County Economic Development

EXH	DESCRIPTION
	Corporation
28.	12/06/05 Resolution 2005-11, Resolution of the City of Cody in support of Basin Electric Power Cooperative's efforts to design, construct and operate the Dry Fork Station
29.	12/16/05 Letter from Bobbe Fitzhugh, City Administrator for the City of Douglas, expressing support from the Converse County Commissioners, Douglas City Council and Converse Area New Development Organization for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
30.	12/07/05 Letter from the Converse County Board of County Commissioners expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project
31.	12/12/05 Resolution No. 1261, A Resolution of Support for the Basin Electric Dry Fork Project from the City Council of the City of Douglas
32.	12/5/05 Letter from Steve Cielinski, Mayor of Glenrock, expressing support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project

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Table 5

Summary List of Public Involvement Activities

Date	Organization	Individual(s)	General Discussion
June 23, 2005	City of Gillette	Mr. Tom Langston	Housing in Gillette
June 28, 2005	Campbell County Chamber of Commerce	Members and Guests	Overview of Proposed Project
July 9, 2005	Department of Environmental Quality	Mr. Tom Schroeder	ISA Application
July 13, 2005	City of Gillette	City Council and four Staff	ISA Permit and Project Overview
July 13, 2005	Campbell County Economic Development	Ms. Susan Bigelow	Housing and ISA Permit
July 14, 2005	Campbell County	Staff Directors	General Overview of Basin Electric, Proposed Project, and ISA Permit
July 25, 2005	Campbell County Emergency Management	Emergency Management Staff and Mr. David King	Overview of Proposed Project, Security and Buffer Zone
July 25, 2005	Town of Moorcroft	Mayor and four Council members	General Overview of Basin Electric, Proposed Project, and ISA Permit
July 28, 2005	City of Gillette	City Administrator	Lance-Fox Hills Water Wells and Potable Water Line Extension
August 2, 2005	Crook County	Chairperson, two Commissioners and two staff members	General Overview of Basin Electric, Proposed Project, and ISA Permit

Date	Organization	Individual(s)	General Discussion
August 5, 2005	Campbell County Ambulance Service	Staff	General Overview of Basin Electric, Proposed Project, and ISA Permit
August 8, 2005	City of Gillette	City Administrator	Lance-Fox Hills Water Wells and Housing
August 8, 2005	Town of Wright	Chairperson, four Commissioners, two Staff, and 12 members of the Public	General Overview of Basin Electric, Proposed Project, and ISA Permit
August 10, 2005	Cam-Plex Manager	Mr. Dan Barks	Potential new Recreational Vehicle (RV) Park Development and Current Situation
August 15, 2005	Town of Pine Haven	Town Council and Staff	General Overview of Basin Electric, Proposed Project, and ISA Permit
August 16, 2005	Campbell County	Commissioners and Staff	General Overview of Basin Electric, Proposed Project, and ISA Permit
August 16, 2005	Town of Buffalo	Town Council	General Overview of Basin Electric, Proposed Project, and ISA Permit
August 22, 2005	Campbell County Housing Group	City Council, Media, Public, and Housing Consultant	Attended Overview of Housing Study by Consultant
August 30, 2005	Sheridan County	County Commissioners	General Overview of Basin Electric, Proposed Project, and ISA Permit

Date	Organization	Individual(s)	General Discussion
September 6, 2005	Johnson County	County Commissioners	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 6, 2005	Weston County	County Commissioners	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 6, 2005	Town of Newcastle and Weston County	Town Council and County Commissioners	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 7, 2005	Converse County	County Commissioners	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 20, 2005	City of Gillette	Housing Committee	Participated in Housing Committee Meeting
September 23, 2005	WREA Statewide	Mr. Shawn Taylor, Executive Director	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 24, 2005	Powder River Energy Annual Meeting	Cooperative Members	General Overview of Proposed Project and Q&A in Display Booth
September 26, 2005	City of Douglas	Mayor and four City Council members	General Overview of Basin Electric, Proposed Project, and ISA Permit
September 26, 2005	Town of Glenrock	Mayor and four Town Council members	General Overview of Basin Electric, Proposed Project, and ISA Permit

Date	Organization	Individual(s)	General Discussion
October 3, 2005	Town of Upton	Ms. Connie Montgomery	General Update of Dry Fork Station
October 3, 2005	Town of Sundance	Ms. Joanne Bruski	General Update of Dry Fork Station
October 3, 2005	Campbell County Emergency Management	LEPC and Planning Committee for FEMA Grant	Security and Buffer Zone Protection Program
October 5, 2005	Campbell County Economic Development Corporation	Ms. Susan Bigelow	Project Update
October 6, 2005	Campbell County Ambulance Service	Mr. Gregg Mentzel and Mr. Gene Balzer, CEO of County Hospital	Project Overview and Medical/Ambulance Service during Construction
October 6, 2005	Campbell County	County Assessor, Ms. Charlotte Terry, and Ms. Marilyn Mackey	Project Financing (Issuance of Bonds)
October 13, 2005	City of Sheridan	Mayor and Staff	Project Update and Overview of Basin Electric
October 18, 2005	Campbell County	County Commissioners	Project Update and Financing (Issuance of Bonds)
October 21, 2005	City of Gillette Housing Committee	Mr. Bret Jones, Committee Chair	Review of Housing Consultant's Draft Document
October 25, 2005	Campbell County Engineer	Mr. Mike Coleman, County Engineer	Project Update, Transmission routing, and Northern Drive Issues

Date	Organization	Individual(s)	General Discussion
November 1, 2005	City of Gillette Housing committee	Bret Jones leader of committee	City council workshop on housing with public and city council
November 7, 2005	City of Gillette Administrator and City Council	Bret Jones and Charles Anderson, city attorney; full city council plus public	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 9, 2005	Town of Moorcroft	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 14, 2005	Town of Wright	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 15, 2005	Campbell County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 15, 2005	Johnson County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation

Date	Organization	Individual(s)	General Discussion
November 15, 2005	Town of Buffalo	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 16, 2005	Town of Newcastle	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 16, 2005	Weston County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 17, 2005	Town of Sundance	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 17, 2005	Crook County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 21, 2005	Town of Douglas	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation

Date	Organization	Individual(s)	General Discussion
November 21, 2005	Converse County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 21, 2005	Converse Area New Development Organization	Director	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 21, 2005	Sheridan County	County Commissioners	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 22, 2005	Town of Pine Haven	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
November 28, 2005	Town of Glenrock	Town Council	PowerPoint presentation on DFS project including socioeconomic impact and 3D model presentation
December 1, 2005	Cities and Counties within the six-county Impact Area	Mailed to representatives	Early release of socioeconomic impact analysis released for informational purposes

Date	Organization	Individual(s)	General Discussion
December 5, 2005	Campbell County	County Commissioners	Discussion of RUS Environmental Impact Statement process.
December 6, 2005	City of Sheridan	City officials and general public	Dry Fork Station and Hughes Transmission Project Environmental Impact Statement Public Scoping Meeting
December 7, 2005	City of Gillette	City officials and general public	Dry Fork Station and Hughes Transmission Project Environmental Impact Statement Public Scoping Meeting
December 8, 2005	Johnson County Economic Development Group	Group officials	Power Point presentation on the Dry Fork Station
December 8, 2005	Gillette Cam-Plex	Dan Barks and staff	Discussions with the Gillette Cam-Plex for possible partnership on RV pads for temporary construction workforce.

Date	Organization	Individual(s)	General Discussion
December 15 – 16, 2005	Wyoming state agencies: Department of Workforce Services, Department of Transportation, Department of Fire Prevention and Electrical Safety, Department of Health, State Engineer's Office, Wyoming State Geological Survey, Department of Environmental Quality, Game and Fish Department, Office of Consumer Advocate, Industrial Siting Council, Public Service Commission, Attorney General's Office, Department of Revenue, and the Office of the Governor		Informational PowerPoint presentation on the Dry Fork Station
December 19, 2005	Crook County	Commissioners and Area Mayors	Discussion with county commissioners and mayors of four towns in Crook County regarding their concerns about the construction and operation of the DFS

Date	Organization	Individual(s)	General Discussion
January 3, 2006	Town of Hulett	Town Council	Informational PowerPoint presentation on the Dry Fork Station
January 4, 2006	Crook County	County Commissioners	Discussion on the Dry Fork Station
January 4, 2006	Campbell County School District	Dr Richard Strayhorn	Discussion with Dr. Strayhorn and staff on DFS
January 5, 2006	Wyoming Workforce Services	Management and staff	Begin to establish a working relationship between the two organizations
January 10, 2006	Campbell County Economic Development Corporation	Board of Directors	Informational presentation on the Dry Fork Station
January 10, 2006	Campbell County School District	School Board and Staff	Informational presentation to the Board of the Campbell County School District
January 13, 2006	Campbell County	Commission staff	Conference call with three commissioner staff and Steve Johnson to discuss bonding
January 17, 2006	Powder River Energy Corporation (PRECorp)	Directors	Informational presentation to the PRECorp Board

Date	Organization	Individual(s)	General Discussion
January 17, 2006	Department of Education and Wyoming Business Council	Agency representatives	Informational presentation on the Dry Fork Station to state agencies that did not attend the December presentations
January 20, 2006	Wyoming State Emergency Response Commission	Agency representatives	Informational presentation on the Dry Fork Station
January 30, 2006	Presentation to Union Representatives	Henry McCoy, Dave Clark, Mike McEwin, Harvey Humphrey	Dry Fork Station presentation and housing questions for union representatives
February 7, 2006	Campbell County	Campbell County Commissioners	Presentation by Bob Boettcher and Steve Johnson primarily on bonding
March 1, 2006	Wyoming Rural Electric Association	Board of Directors	Information presentation on the Dry Fork Station
March 2, 2006	Wyoming Partnership Office of Fannie Mae	Darwin Pace	Discuss the Gillette housing market and employer assisting housing
March 2, 2006	Wallick and Volk, mortgage company headquartered in Cheyenne	Ann Weber, Laura Edwards, and Michael Groff	Discussion on the housing situation in the Gillette-area and gain their perspective on housing opportunities in Gillette

Date	Organization	Individual(s)	General Discussion
March 6, 2006	Wyoming State Agencies: Department of Revenue, Department of Fire Prevention and Electrical Safety, Department of Transportation, Department of Workforce Services, Game and Fish Department, Department of Agriculture, State Engineer's Office, Public Service Commission	Wyoming State Agency Representatives	Present information on the revised peak construction workforce estimate
March 7, 2006	Wyoming State Agencies: Department of Health, Office of Consumer Advocate, Department of Environmental Quality, and the Office of the Governor	Wyoming State Agency Representatives	Information presentation on the Dry Fork Station
March 10, 2006	KFx Inc. (coal beneficiation company)	Keith Schick, Andy Clark, Robert Hanfling	Discussion of possible housing partnerships
March 21, 2006	Campbell County	County Commissioners	Presentation on environmental impact statement process
March 30, 2006	Wyoming Geological Survey	Agency Staff	Presentation on the Dry Fork Station

2

RESOLUTION NO. 2103

A Resolution Expressing Support for Basin Electric Cooperative's
Dry Fork Station Project

WHEREAS, Basin Electric Power Cooperative has proposed to construct a 422 megawatt coal-fired power plant approximately 7 miles north of Gillette; and

WHEREAS, Basin Electric Power Cooperative has, as a result, requested a permit waiver from the State of Wyoming's Industrial Siting Council; and

WHEREAS, the City of Gillette supports continued energy development projects that contribute to not only the Campbell County economy, but are designed to meet the energy needs of the region and the nation; and

WHEREAS, the project will create in excess of 500 temporary construction jobs and 75 permanent jobs in the Gillette and Campbell County area; and

WHEREAS, the project will benefit the community through significant capital investment and economic diversification; and

WHEREAS, the process administered by the Wyoming Industrial Siting Council will recognize and provide for the mitigation of the impacts of the project on the Gillette and Campbell County area;

NOW, THEREFORE, BE IT RESOLVED, the City of Gillette supports the development of Basin Electric Power Cooperative's Dry Fork Station project.

Passed, Approved and Adopted on this 19th day of December, 2005.

CITY OF GILLETTE, WY

Duane Evenson

Duane Evenson, Mayor

ATTEST:

Margo Rhoades

Margo Rhoades, City Clerk

3

TOWN OF GUERNSEY
P.O. Box 667 • Guernsey, WY 82214
Phone (307) 836-2335 • Fax (307) 836-2601
TTY/TDD 800-877-9965

November 18, 2005

Wyoming Municipal Power Agency
PO Box 900
Lusk, WY 82225

Dear Larry;

The Town of Guernsey Mayor and Council are in full support and feel strongly that the negative short-term impacts involved with the construction of the Dry Fork Station will be far out-weighed by the long-term economic and social benefits to the area and to the state of Wyoming.

The conversion of our valuable coal resources to electrical power within the state supports the desires of Wyoming state and local officials to utilize our valuable minerals to create jobs for Wyoming residents and add to the tax base, both very desirable for the area and the state of Wyoming.

The Town of Guernsey appreciates the opportunity to meet with representatives of Basin Electric Power Cooperative and provide any input early in the planning process.

The Town Council of the Town of Guernsey believes that it would be beneficial to the citizens of Wyoming if the state's valuable coal reserves are converted to electrical energy within Wyoming, as this process provides additional long-term employment for Wyoming residents. The Town Council of the Town of Guernsey fully supports the efforts of Basin Electric to utilize these resources at the planned Fry Fork Station.

The Town Council of the Town of Guernsey will meet on their regular schedule date of December 6, 2005 in which a resolution to support the Dry Fork Station will be presented. A copy of this resolution will be immediately forwarded to you upon approval.

Sincerely,

Gary L. Anderson

Gary L. Anderson, Mayor
Town of Guernsey

4

RESOLUTION 05-006

A RESOLUTION BY THE TOWN COUNCIL OF THE TOWN OF GUERNSEY, WYOMING, DECLARING THEIR STATEMENT OF SUPPORT FOR THE DRY FORK STATION POWER PROJECT.

NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF GUERNSEY, WYOMING THAT; the Town Council supports economic growth in northeast Wyoming; and

WHEREAS, the Town Council of the Town of Guernsey, Wyoming encourages the productive use of Wyoming's bountiful coal reserves; and

WHEREAS, the conversion of Wyoming's bountiful sub bituminous coal reserves to electrical energy adds value to a natural resource and creates much needed jobs in Wyoming; and

WHEREAS, Basin Electric Power Cooperative has announced its intention to construct the Dry Fork Station, a coal-powered electric generation facility near Gillette; and

WHEREAS, the Dry Fork Station will provide 75 new, quality jobs; and

WHEREAS, the Wyoming Industrial Siting process provides for the allocation of a portion of sales and use taxes during the construction period to offset community impacts during construction; and

WHEREAS, The Town Council of the Town of Guernsey, Wyoming has deemed that the planned Dry Fork Station meets the goals of capital investment, economic diversification and job creation in northeast Wyoming.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Town Council of the Town of Guernsey, Wyoming is in full support of the planned Dry Fork Station project.

PASSED, APPROVED AND ADOPTED this 6th day of December, 2005.

Gary Anderson, Mayor

Mike Pettigrew, Council

Sarah Sellars, Council

Jim Barnes, Council

Shawn Kelley, Council

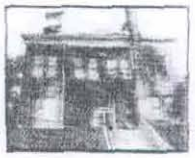
Attest:

Leslie Zynda, Clerk/Treasurer

5

Johnson County Commissioners

Buffalo, Wyoming 82834



76 North Main Street
Phone: (307) 684-7555
Fax: (307) 684-5146

Gerald E. Fink
James I. Mader
Robert L. Thompson

December 13, 2005

Curt Pearson, CCC
Basin Electric Power Cooperative
1717 East Interstate Avenue
BISMARCK ND 58503

Dear Mr. Pearson,

The information Basin Electric Power Cooperative has provided to the Johnson County Board of Commissioner regarding the proposed Dry Fork Power Plant has been very helpful. We feel the proposed power plant located in northeast Campbell County will have an impact on Johnson County.

Developing Wyoming's natural resources as well as providing new employment to Wyoming residents will be provided by the proposed Dry Fork Power Plant. Not only will the Dry Fork Power Plant draw some employees from Johnson County; Johnson County will also provide recreation opportunities such as camping, fishing, boating and hunting.

We look forward to the proposed Dry Fork Power Plant becoming a reality.

Sincerely,

Gerald E. Fink

Gerald E. Fink, Chairman
Johnson County Commissioner

6

A TOWN OF LINGLE RESOLUTION TO SUPPORT THE PLANNED DRY FORK STATION PROJECT

WHEREAS, the Town Council of the Town of Lingle, Goshen County, Wyoming ("Town Council"), supports economic growth, job creation and the productive use of Wyoming's coal reserves; and

WHEREAS, converting instate coal reserves into electrical energy will certainly add value to our natural resource and add jobs and economic benefit to the state; and

WHEREAS, Basin Electric Power Cooperative intends to construct the Dry Fork Station plant near Gillette and the Wyoming Industrial Siting process provides for the allocation of a portion of the sales and use taxes during construction of offset community impacts during construction; and

WHEREAS, the Town Council deems the planned Dry Fork Station meets the goals of capital investment, economic diversification, job creation and continued power being made available at reasonable prices to Wyoming Municipal Power Agency;

NOW THEREFORE, BE IT RESOLVED by the Lingle Town Council fully supports the planned Dry Fork Station project.

ADOPTED AND APPROVED this 7th day of December 2005.

Mayor George Siglin

Council Member

Council Member

Council Member

Council Member

SEAL:

TOWN OF LINGLE, WYOMING
CORPORATE SEAL

ATTEST:

7

A RESOLUTION OF THE GOVERNING BODY OF THE TOWN OF LUSK, WYOMING COMMITTING ITS SUPPORT TO BASIN ELECTRIC POWER COOPERATIVE IN ITS CONSTRUCTION AND OPERATION OF THE "DRY FORK STATION" NEAR GILLETTE, WYOMING.

WHEREAS, the Town of Lusk is a Municipal Corporation existing under and by virtue of the laws of the State of Wyoming; and

WHEREAS, the Town of Lusk and its inhabitants have benefited greatly by the Town's membership in the Wyoming Municipal Power Agency (WMPA) which provides affordable electricity to them; and

WHEREAS, Basin Electric Power Cooperative has granted WMPA a right to participate in the "Dry Fork Station" an electricity generation plant to be constructed near Gillette, Wyoming and said participation will assure sufficient generation of electricity to enable WMPA to continue to meet the demand of its members; and

WHEREAS, said generation plant will utilize Wyoming coal, create Wyoming jobs and benefit Wyoming consumers;

NOW THEREFORE BE IT HEREBY RESOLVED that the Governing Body of the Town of Lusk, Wyoming fully supports the efforts of Basin Electric Power Cooperative in its efforts to construct and operate the "Dry Fork Station", and

BE IT FURTHER RESOLVED that the Town of Lusk respectfully requests the State of Wyoming to lend its support and assistance to this worthwhile project.

DATED this 6th day of December, 2005.

GOVERNING BODY OF THE TOWN OF LUSK, WYOMING:

Peter W. Pier

Mayor

(Seal)

ATTEST:

Town Clerk

Councilman

Councilman

Patricia K Smith

Councilman

8

TOWN OF MOORCROFT
PO BOX 70
MOORCROFT, WY 82721
(307) 756-3526
FAX: (307) 756-3323
Email: townm@rtconnect.net

October 27, 2005

To Whom It May Concern:

The Mayor and Town Council of the Town of Moorcroft would like to express our support for the Basin Electric Power Cooperative's Dry Fork Power Plant Project.

We feel that this project would benefit the Town of Moorcroft and surrounding areas and we fully support the impact it would have on this community.

Respectfully,

Dick Claar, Mayor

Steve Blakeman, Council

Jay Kiplinger, Council

Dale Petersen, Council

Jim Rexford, Council

9

City of Newcastle

10 W. Warwick
Newcastle, WY 82701
307-746-3535

November 7, 2005

Curt Pearson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, North Dakota 58503-0564

To Whom is May Concern,

As you may be aware the City of Newcastle has been contacted by Basin Electric Cooperative as part of their permitting process for their Dry Forks Project. Mr. Bob Boettcher and Mr. Curt Pearson have been diligent in their efforts to inform the City Council of Newcastle regarding the impacts on our city from the building of this power plant.

On behalf of the residents of the City, I and all the members of the Newcastle City Council realize that this power plant will have a certain socioeconomic impact on our city. We have already begun to see impact in the loss of workers to Campbell County industries and at times have trouble retaining an adequate workforce for our needs. At the same time we are realizing a greater need for housing which has an impact on the infrastructure of our city. We have recently begun needed infrastructure work to our streets that has been delayed for several years due to financial constraints. We also have added staff in our police department to handle the increased load from the influx of people we are beginning to see move into Newcastle.

At the same time, we see great opportunities through this to improve the future of Newcastle. Added people in our community will provide added business and financial opportunities to the businesses within our city. Therefore, we offer this letter of support on behalf of Basin Electric's proposal to build their Dry Forks Power Plant. We feel that even though our resources will be "stretched to the limit" this additional industrial site Basin Electric proposes will have a positive long-run effect on our city.

Sincerely,

Ed Wagoner

Ed Wagoner, Mayor
City of Newcastle

10

RESOLUTION 05-009

WHEREAS, the Town of Pine Bluffs supports economic growth in northeast Wyoming; and

WHEREAS, the Town of Pine Bluffs encourages the productive use of Wyoming's bountiful coal reserves; and

WHEREAS, the conversion of Wyoming's bountiful sub bituminous coal reserves to electrical energy adds value to a natural resource and creates much needed jobs in Wyoming; and

WHEREAS, Basin Electric Power cooperative has announced its intention to construct the Dry Fork Station, a coal-powered electric generation facility near Gillette; and

WHEREAS, the Dry Fork Station will provide 75 new, quality jobs; and

WHEREAS, the Dry Fork Station will provide the southern region of Wyoming, Pine Bluffs, with it's current use of electrical power needs and the future growth in the area; and

WHEREAS, the Wyoming Industrial Siting process provides for the allocation of a portion of sales and use taxes during the construction period to offset community impacts during construction; and

WHEREAS, the Town of Pine Bluffs has deemed that the planned Dry Fork Station meets the goals of capital investment, economic diversification and job creation in northeast Wyoming;

NOW, THEREFORE, BE IT RESOLVED that the Town of Pine Bluffs fully supports the planned Dry Fork Station Project.

Accepted and approved this 5th day of December, 2005 by the Pine Bluffs Town Council.

Leonard Anderson

Leonard Anderson, Mayor

Attest:

Dema Jo Gilbert

Dema Jo Gilbert, Clerk

11

Town of Pine Haven

24 Waters Drive
Pine Haven, WY 82721-9761

Telephone (307) 756-9807
Fax (307) 756-3378

December 1, 2005

Attn: Curt Pearson, CCC
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, North Dakota 58503-0564

Dear Mr. Pearson:

Enclosed please find a Resolution supporting your proposed Dry Fork Power Plant project.

If you have, any questions please call.

Thank You,

Judy Hurrle, Clerk/Treasurer

12

RESOLUTION 25, 2005

A Resolution supporting the proposed Basin Electric Dry Fork Power Plant.

WHEREAS, Basin Electric has proposed building the Dry Fork Power Plant approximately seven (7) miles northwest of Gillette..

WHEREAS, this Power Plant will be a benefit to Northeastern Wyoming and the Town of Pine Haven.

NOW THEREFORE, be it resolved by the Town of Pine Haven that we support the Basin Electric Dry Fork Power Plant.

Dated this 28 day of November 2005.

Town of Pine Haven

Dan Blakeman, Mayor

(Seal)

Attest:

Judy Hurrle, Clerk/Treasurer

13

A RESOLUTION IN SUPPORT OF THE PROPOSED DRY FORK STATION.

WHEREAS, the governing body of the City of Powell, Wyoming is a participating member with the Wyoming Municipal Power Agency (Agency) Joint Powers Board formed under the statutes of and existing wholly within the State of Wyoming, and;

WHEREAS, the Agency has informed its members that it no longer has sufficient generation resources to meet the existing electrical demand of its members, and;

WHEREAS, Basin Electric Power Co-operative has granted Agency the right to participate in the Dry Fork Station being constructed near Gillette, Wyoming in order to meets the Agency's present and future power supply responsibilities, and;

WHEREAS, the City of Powell believes that it is in the best interest of the citizens of Powell, for the Agency to develop coal resources within the State of Wyoming for use by and betterment of the people of Wyoming, and;

WHEREAS, the City of Powell believes that construction of the Dry Fork Station will provide positive economic development within the State of Wyoming.

NOW, THEREFORE, BE IT RESOLVED that the Governing Body of the City of Powell, Wyoming strongly supports the Basin Electric Power Co-operative in its efforts to design, construct and operate the proposed Dry Fork Station to be located near Gillette, Wyoming, and;

BE IT FURTHER RESOLVED that the Governing Body of the City of Powell, Wyoming, urges the State of Wyoming to facilitate the development of the Dry Fork Station to the extent possible and prudent, as being consistent with the best interest of the State and its citizens.

DATED this 5 day of December, 2005.

CITY OF POWELL PARK COUNTY MUNICIPAL SEAL WYOMING

CITY OF POWELL

BY: _____
R. Scott Mangold, Mayor

ATTEST:

Andrea Rushton

14

POWDER RIVER ENERGY CORPORATION

221 MAIN STREET
P.O. BOX 930
SUNDANCE, WY 82729-0930
FAX: (307) 283-3527

200 GARNER LAKE ROAD
P.O. BOX 937
GILLETTE, WY 82718-0937
FAX: (307) 682-0733

1095 BRUNDAGE LANE
P.O. BOX 5087
SHERIDAN, WY 82801-1387
FAX: (307) 674-9018

1-800-442-3630

December 22, 2005

Bob Boettcher
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503-0564

Dear Mr. Boettcher:

Powder River Energy Corporation strongly supports Basin Electric Power Cooperative in its efforts to design, construct and operate the Proposed Dry Fork Station. Unprecedented electrical growth related to energy development projects and growth of residential customers has created the need for this development.

Please find enclosed Powder River Energy Corporation's Resolution 2005-07 - In Support of the Dry Fork Station. Our board voted unanimously to support this endeavor at our December board meeting.

Sincerely,

Michael E. Easley
CEO

15

POWDER RIVER ENERGY CORPORATION

221 MAIN STREET
P.O. BOX 930
SUNDANCE, WY 82729-0930
FAX: (307) 283-3527

200 GARNER LAKE ROAD
P.O. BOX 937
GILLETTE, WY 82718-0937
FAX: (307) 682-0733

1095 BRUNDAGE LANE
P.O. BOX 5087
SHERIDAN, WY 82801-1387
FAX: (307) 674-9018

1-800-442-3630

Resolution 2005-07
In Support of the Dry Fork Station

WHEREAS, Powder River Energy Corporation is an electric distribution cooperative serving northeast Wyoming: and

WHEREAS, Powder River Energy Corporation and other electric cooperatives in the region are experiencing unprecedented electrical growth related to energy development projects and the influx of residential customers; and

WHEREAS, Powder River Energy Corporation is an all-requirements wholesale power customer of Basin Electric Power Cooperative; and

WHEREAS, Basin Electric Power Cooperative has announced its intention to construct the Dry Fork Station, a coal-fired electric generation facility near Gillette, Wyoming to provide power to its member cooperatives; and

WHEREAS, the conversion of Wyoming's bountiful sub bituminous coal reserves to low cost electricity adds value to a natural resource and creates economic growth in the area.

NOW THEREFORE BE IT RESOLVED, that the board of directors of Powder River Energy Corporation strongly supports Basin Electric Power Cooperative in its efforts to design, construct, and operate the proposed Dry Fork Station to be located near Gillette, Wyoming.

IN WITNESS THEREOF, I have hereunto set my hand and affixed the seal of the Corporation this 20th day of December 2005.

POWDER RIVER ENERGY CORPORATION

Tom L Dan
President

(corporate seal)

John P Ewalt
Secretary/Treasurer

16

THE TOWN OF UPTON • UPTON • WYOMING 82730 •
PHONE 307/468-2441 BOX 203

November 8, 2005

To Whom It May Concern:

Bob Boettcher of Basin Electric Power Cooperative attended our council meeting on October 3, 2005 and presented information regarding a new power plant that the company would like to build north of Gillette, Wyoming. Having considered the information that Mr. Boettcher presented to us, Councilwoman Jennie Loberg made a motion at the November 7th meeting that the Town of Upton write a letter of support for this project, and Councilman Paul Douglas seconded the motion. All voted "aye".

The Town of Upton welcomes this business in our area. Therefore, please accept and consider this letter of support for the construction of the Dry Fork Station power plant located near Gillette, Wyoming.

Sincerely,

Ron Esquivel
Mayor
Town of Upton

17

COUNTY OF WESTON

1 WEST MAIN STREET
NEWCASTLE, WYOMING 82701

November 1, 2005

Basin Electric Power Cooperative
Curt Pearson
Project Coordination Representative
171 E Interstate Ave.
Bismarck, ND 58503

Dear Mr. Pearson:

Weston County Commissioners support the Dry Forks Station project. This project is a construction project for a coal-powered electric generation facility to be located in Northeast Wyoming. Whereas, in the short term Weston County will feel the impact of the construction, we believe the long term benefits will also be shared by Weston County.

Weston County plans to participate in the Industrial Siting process and to request funding for the initial impact we anticipate we will see during the construction period. We also believe that some of the 75 new jobs will be filled by people who will locate in our county.

Thank you for the opportunity to comment on this project.

Sincerely,

WESTON COUNTY COMMISSIONERS

Ted J. Ertman
Chairman

18

RESOLUTION

A RESOLUTION OF SUPPORT BY THE TOWN OF WHEATLAND
FOR BASIN ELECTRIC POWER COOPERATIVE'S DRY FORK STATION

WHEREAS, the Town of Wheatland is located in Platte County, Wyoming, and

WHEREAS, the Missouri Basin Power Project, a 1650 MWN coal based power project operated by Basin Electric Power Cooperative is located approximately seven miles northeast of Wheatland, and

WHEREAS, the Missouri Basin Power Project has provided, and continues to provide, economic stability for the Town of Wheatland and Platte County, and

WHEREAS, Basin Electric Power Cooperative is a good corporate citizen through its continuing support of a variety of governmental, civic and individual projects, and

WHEREAS, the Town of Wheatland is a member of the Wyoming Municipal Power Agency (consisting of eight Wyoming communities), one of the owners of the Missouri Basin Power Project, and

WHEREAS, the Missouri Basin Power Project has created and continues to create excellent employment opportunities for the citizens of the Town of Wheatland and surrounding areas. The Dry Fork Station proposed by Basin Electric Power Cooperative will do the same in northeast Wyoming,

WHEREAS, Basin Electric Power Cooperative's construction of the Dry Fork Station will provide an additional source of energy for the Wyoming Municipal Power Agency, and

WHEREAS, the conversion of Wyoming's bountiful sub bituminous coal reserves to electrical energy adds value to a natural resource and creates much needed jobs in Wyoming;

NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF WHEATLAND, WYOMING, that the Town of Wheatland fully supports the planned Dry Fork Station.

THIS RESOLUTION being approved by the governing body of the Town of Wheatland, Wyoming, on the 12th day of December, 2005.

Mayor

Councilperson

Councilperson

Councilperson

Councilperson

Attest:

Town Clerk-Treasurer

19

WYOMING MUNICIPAL POWER AGENCY
RESOLUTION 2005 – 4

Whereas, the Wyoming Municipal Power Agency (Agency) is a Joint Powers Board formed under the statues of and existing wholly within the State of Wyoming, and is the electric power supply agent for the Cities of Cody and Powell and the Towns of Ft. Laramie, Guernsey, Lingle, Lusk, Pine Bluffs, and Wheatland serving some 22,000 residents of the State, and;

Whereas, the Agency no longer has sufficient generation resources to meet the existing electric demand of its members, and;

Whereas, Basin Electric Power Cooperative has granted the Agency a right to participate in the Dry Fork Station being constructed near Gillette, Wyoming in order to meet our present and future power supply responsibilities, and;

Whereas, the Agency believes it is in the best interest of the citizens of our communities to develop coal resources within the State of Wyoming for use by and betterment of the people of Wyoming, and;

Whereas, the construction of Dry Fork Station provides positive economic development both short and long term for the Agency, its member systems, and the State of Wyoming.

Now Therefore Be It Resolved, that the Board of Directors of the Wyoming Municipal Power Agency strongly supports Basin Electric Power Cooperative in its efforts to design, construct, and operate the proposed Dry Fork Station to be located near Gillette, Wyoming, and;

Be it further resolved, that the State of Wyoming is urged to facilitate the development of Dry Fork Station, to the extent possible and prudent, as being consistent with the best interest of the State and its peoples.

WYOMING MUNICIPAL POWER AGENCY

By: ZANE LOGAN, Chairman

ATTEST:

DOUGLAS WEAVER, Secretary
(Seal)

20

WREA
Wyoming Rural Electric Association

2312 Carey Avenue
Cheyenne, Wyoming 82001
(307) 634-0727 Fax: (307) 634-0728

December 15, 2005

Curt Pearson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismark, ND 58503-0564

RE: Support for Dry Fork power plant project

Dear Mr. Pearson:

On behalf of the Wyoming Rural Electric Association's (WREA) board of directors I am writing in support of the proposed Dry Fork power plant in northeast Wyoming.

This proposed power plant is vital not only to the cooperative utilities served by Basin Electric but to the region, state of Wyoming, and the country as a whole.

WREA applauds your efforts in keeping the public informed and asking for their input at virtually every step of the way. This upfront and forthcoming approach should be a model for any future power plant development in Wyoming.

Best of luck with this endeavor and please let me know if there is anything WREA can do to support you in the future.

Sincerely,

Shawn Taylor
Executive Director
Wyoming Rural Electric Association

21

Town of Wright
P.O. Box 70
Wright, Wyoming 82732
(307) 464-1666

December 14, 2005

Curt Pearson, CCC
Basin Electric Power Cooperative
1717 East Interstate Ave.
Bismarck, ND 58503-0564

Dear Mr. Pearson:

On behalf of the Wright Town Council and myself, we want to express our support of Basin Electric Power Cooperative's efforts in building the Dry Fork Station. We feel strongly that the long-term economic and social benefits to the area and to the state of Wyoming will far out-weigh the negative short-term impacts involved with the construction of the Dry Fork Station.

The conversion of our valuable coal resources to electrical power within the state supports the desires of Wyoming state and local officials to utilize our valuable minerals to create jobs for Wyoming residents and add to the tax base, both very desirable for the area and the state of Wyoming.

The Town of Wright appreciates the opportunity to meet with representatives of Basin Electric Power Cooperative and provide input early in the planning process.

Sincerely,

Ralph Kingan

Ralph Kingan, Mayor

22

WYOMING BUILDING
AND CONSTRUCTION TRADES COUNCIL
P.O. BOX 1807
ROCK SPRINGS, WY 82901-1807

TIM WELLS
President
(307) 382-2484
Fax: (307) 362-4156
wytrades@sweetwater.net

December 21, 2005

Dear Sir:

The Wyoming Building Trades Council heartily endorses the building of the Dry Fork Station Project. Basin Electric has estimated that up to 74% of the workforce would be provided by local workers. By utilizing the local workforce, this project will help the local economy and the local tax base as well as adding new apprentice training opportunities for the youth of the community. Local workingmen and women raise their families in the area and send them to local schools. They spend their money in the communities they work in. Basin Electric has been an excellent employer in the past and we are confident this will continue in the future. The Wyoming Building Trades Council sees this project as great opportunity for the State of Wyoming as well as its citizens.

We would like to request to be notified and participate in the ISC permitting process.

Sincerely;

Tim Wells

Tim Wells, President

Michael E McEwin

Mike McEwin, Vice-President

23

CAMPBELL COUNTY
CHAMBER of COMMERCE
Working for You

November 15, 2005

Resolution of Support
For the
Basin Electric Power Cooperative – Dry Fork Station Power Plant and the
Hughes Transmission Project

The Campbell County Chamber of Commerce Board of Directors, representing over 550 members, fully supports the proposed Basin Electric Power Cooperative – Dry Fork Station coal-fired power generating facility and the Hughes Transmission Project to be constructed in Campbell County, Wyoming.

This project fits within our Chamber mission by enhancing the business environment, promoting success, prosperity and economic vitality, and by improving the quality of life in Campbell County by providing additional employment opportunities, increased tax base, economic diversification and by adding value to our natural resources.

We, the Campbell County Chamber of Commerce Board of Directors hereby resolve on this 15th day of November, 2005, to fully support the project.

Kevin King, Public Policy Chairman &
Member of the Board of Directors

Attest:

Julie Simon, Interim President

ACCREDITED

314 South Gillette Avenue • Gillette, Wyoming 82716 • Phone: (307) 682-3673 • Fax: (307) 682-0538 • E-Mail: frontoffice@gillettechamber.com

24

Campbell County
wyoming

OFFICE
500 South Gillette Avenue
Suite 1100
Gillette, Wyoming 82716
(307) 682-7283
(307) 687-6325 FAX

Administration ~ Grants

BOARD OF COMMISSIONERS
Marilyn Mackey, Chair
L. Alan Weakly
Craig Mader
Roy Edwards
Christopher Knapp

November 16, 2005

Curt Pearson
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, North Dakota 58503-0564

Dear Mr. Pearson:

The Campbell County Commissioners fully support Basin Electric Power Cooperative's proposed Dry Fork Station coal-powered electric generation facility. We believe that the negative short-term impacts involved with the construction of this facility will be far outweighed by the long-term economic and social benefits to the area and to the state of Wyoming.

The conversion of our coal resources to electrical power within the state supports the desires of Wyoming local and state officials to utilize our valuable minerals to create jobs for Wyoming residents and add to the tax base.

The Board of Campbell County Commissioners unanimously approved a resolution of support for the Dry Fork Station at our November 15, 2005 meeting and are providing you with a copy of that resolution.

We appreciate the opportunity to meet with the representatives of Basin Electric Power Cooperative and provide input early in the planning process.

Sincerely,

Marilyn Mackey

Marilyn Mackey
Chair

cc Bob Boettcher

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RESOLUTION OF SUPPORT
Dry Fork Station
Coal-Powered Electric Generation Facility

#1534

WHEREAS, the Board of Campbell County Commissioners supports economic growth in Campbell County; and

WHEREAS, the Board of Campbell County Commissioners encourages the productive use of Wyoming's bountiful coal reserves; and

WHEREAS, the conversion of Wyoming's bountiful sub bituminous coal reserves to electrical energy adds value to a natural resource and creates much needed jobs in Wyoming; and

WHEREAS, Basin Electric Power Cooperative has announced its intention to construct the Dry Fork Station, a coal-powered electric generation facility near Gillette; and

WHEREAS, the Dry Fork Station will provide 75 new, quality jobs; and

WHEREAS, the Wyoming Industrial Siting process provides for the allocation of a portion of sales and use taxes during the construction period to offset community impacts during construction; and

WHEREAS, the planned Dry Fork Station will benefit Campbell County with capital investment, economic diversification, and job creation.

NOW, THEREFORE, BE IT RESOLVED that the Board of Campbell County Commissioners fully supports the planned Dry Fork Station project.

RESOLVED this 15th day of November 2005.

BOARD OF COUNTY COMMISSIONERS
CAMPBELL COUNTY, WYOMING

Marilyn Mackey, Chair

Christopher R. Knapp

Roy Edwards

L. Alan Weakly

Craig G. Mader

ATTEST:

County Clerk Deputy

26

Campbell County
Memorial Hospital
Dedicated to Caring for You

October 25th, 2005

Curt Pearson, CCC
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58501

Dear Mr. Pearson;

Thank you for visiting with me today and keeping me informed of the direction and progress of the Dry Fork Station. As you know, I have previously met with members of the Basin Electric Power Cooperative regarding our involvement in providing interim emergent and urgent care services during the construction phase of this facility and to be the community health care facility providing for the health of the continued workforce.

I greatly appreciate Basin Electric Power Cooperative's willingness to open communication regarding this project; the economic and environmental impact, and acceptance of personal and community input.

I support this project's intent of providing greater employment opportunity to residents of Northeast Wyoming, specifically Campbell County, with good paying and technically rewarding jobs.

Again, thank you for the opportunity for input and your commitment to our community and it's natural resources. I am

with best personal and professional regards,

Gene K. Balzer, Ph.D.
Chief Executive Officer

P.O. Box 3011
Gillette, WY 82717-3011
307.688.1000
www.ccmh.net

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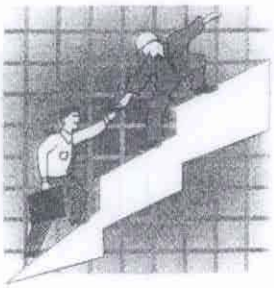

We've Got Energy.

Campbell County Economic Development Corporation

201 W. Lakeway Road, Suite 1004 – P.O. Box 3948 – Gillette, WY 82717

TEL 307-686-2603 FAX 307-686-7268

www.gillettewyoming.com – ccedc@vcn.com

RESOLUTION OF SUPPORT

Basin Electric Power Cooperative's Dry Fork Station
Coal-fired Power Generating Facility

WHEREAS, the Campbell County Economic Development Corporation supports economic growth in Campbell County; and

WHEREAS, the Campbell County Economic Development Corporation encourages added value to local coal reserves; and

WHEREAS, the Basin Electric Power Cooperative has announced its intention to construct Dry Fork Station, a coal-fired power generation facility near Gillette; and

WHEREAS, the Basin Electric Power Cooperative has requested a permit waiver from the State of Wyoming; and

WHEREAS, operation of the Dry Fork Station will provide 75 quality jobs in Gillette; and

WHEREAS, the Wyoming Industrial Siting process provides for impact assistance funds during the construction period to impacted communities to offset community impacts; and

WHEREAS, the Campbell County Economic Development Corporation has deemed that the proposed Dry Fork Station project meets the economic development goals of capital investment, economic diversification and job creation;

NOW, THEREFORE, BE IT RESOLVED by the Campbell County Economic Development Corporation to support the proposed project.

Passed, approved and adopted this 13th day of December, 2005.

Tom Hammerquist, CCEDC President

Attest:

Susan Bigelow, Executive Director

Come Join The Adventure!

28

CITY OF CODY
RESOLUTION 2005 – 11

Whereas, the City of Cody is an incorporated city within the State of Wyoming and is the electrical distribution provider for nearly 9000 residents and thousands of visitors, and;

Whereas, the City of Cody has been working cooperatively with other cities and towns to purchase power at a reasonable cost for distribution, and no longer has sufficient wholesale power supply to meet the existing electric demand of its residents, businesses and visitors, and;

Whereas, the City of Cody is a member of the Wyoming Municipal Power Agency, a Joint Powers Board formed under the statues of and existing wholly within the State of Wyoming, to supply electric power to the cities of Cody and Powell, and the Towns of Ft. Laramie, Guernsey, Lingle, Lusk, Pine Bluffs, and Wheatland serving some 22,000 residents of the State, and;

Whereas, the Agency no longer has sufficient generation resources to meet the existing electric demand of its members, especially the current and future needs of the City of Cody, and;

Whereas, Basin Electric Power Cooperative has granted the Agency a right to participate in the Dry Fork Station being constructed near Gillette, Wyoming in order to meet our present and future power supply responsibilities, and;

Whereas, the Agency believes it is in the best interest of the citizens of our communities to develop coal resources within the State of Wyoming for use by and betterment of the people of Wyoming, and;

Whereas, the construction of Dry Fork Station provides positive economic development both short and long term for the Agency, its member systems, and the State of Wyoming without harming the environment.

Now Therefore Be It Resolved, that Mayor Roger Sedam and the Cody City Council strongly supports Basin Electric Power Cooperative in its efforts to design, construct, and operate the proposed Dry Fork Station to be located near Gillette, Wyoming, and;

Be it further resolved, that the State of Wyoming is urged to facilitate the development of Dry Fork Station, to the extent possible and prudent, as being consistent with the best interest of the State and its peoples.

Dated this 6th day of December, 2005.

Roger Sedam
Mayor

Attest:
Kelly Jensen
Administrative Services Director

CITY OF CODY INCORPORATED 1901 WYOMING

29

City of Douglas Wy
HOME OF THE JACKALOPE

101 N. 4th Street
P.O. Box 1030
Douglas, WY 82633
307-358-3462
FAX: 307-358-6447

December 16, 2005

Bob Boettcher
NE Wyoming Generation Project Rep.
Basin Electric Power Cooperative
2201 S. Douglas Hwy., Suite 160
Gillette, WY 82718

RE: Support of Dry Ford Project

Dear Bob:

Enclosed you will find the original joint letter of support for the Dry Fork Station and Hughes transmission line from the Converse County Commissioners, Douglas City Council and Converse Area New Development Organization (CANDO). I have also enclosed a copy of the City's Resolution No. 1261, passed at their December 12th meeting, which expresses again the City's support of the Basin Electric Dry Fork Project.

Copies of these documents are being provided to Curt Pearson per your request. Should you have any questions or need additional information please do not hesitate to call.

Sincerely,

Bobbe Fitzhugh
City Administrator

BF/cle
Enclosures

Cc: Mayor/Council
Converse County Commissioners
Joe Coyne, CANDO

30

Board of Commissioners
Converse County, Wyoming

107 No. 5th St., Suite 114 • Douglas, WY 82633-2448 • 307-358-2244 • Fax 307-358-5998

Commissioners: Frank G. Eathorne, Jr., Chair • Sharon Kay Lovitt, Vice-Chair • Mark Cash, Member

December 7, 2005

Bob Boettcher
Project Representative – NE Wyoming
Basin Electric Power Cooperative
2201 S. Douglas Highway – Suite 160
Gillette, WY 82718

Dear Mr. Boettcher,

On behalf of the entities listed below, this letter is submitted to show our support for the Dry Fork Station and Hughes transmission line.

We in Converse County firmly believe that future growth and economic vitality for all communities in Wyoming hinges on adequate infrastructure and planning for the future. Both of your projects fall squarely into these critical elements by supplying electricity to a growing demand area and strengthening the transmission infrastructure across Northeastern Wyoming. In addition, these projects will present new good paying jobs and assist in helping other companies maintain and grow their employment as well.

We are confident that Basin Electric Power Cooperative will continue to be a good corporate neighbor in Wyoming and help mitigate any adverse affects that may develop as a result of this growth. We are pleased that your company has sent representatives to our county and communities to discuss the potential for impacts and are ready and willing to assist with mitigation efforts. Because the proposed development will have adverse impacts in Douglas and Converse County, our support of this project will be contingent upon a favorable determination by the Industrial Siting Council to allocate to Douglas and Converse County an adequate share of the impact dollars generated by this project. It is gratifying to see that your company recognizes the far-reaching impact that your projects have and that you will be considering our area for assistance.

Sincerely,

BOARD OF COUNTY COMMISSIONERS

Frank G. Eathorne, Jr., Chair Sharon Kay Lovitt, Vice-Chair Mark Cash, Commissioner

Sherri Mullinnix, Mayor of Douglas

Joe Coyne, Executive Director
Converse Area New Development Organization

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RESOLUTION NO. 1261

A RESOLUTION OF SUPPORT FOR THE BASIN ELECTRIC DRY FORK PROJECT

WHEREAS, Basin Electric Power Cooperative has announced plans to construct a 376 megawatt coal-burning power plant in northern Campbell County; and

WHEREAS, the City of Douglas believes that future growth and economic vitality for all communities in Wyoming hinges on adequate infrastructure and planning for the future; and,

WHEREAS, Basin Electric Power Cooperative's proposed project will supply electricity to a growing demand area and strengthen the transmission infrastructure across Northeastern Wyoming; and,

WHEREAS, these projects present new good paying jobs and assist in helping other companies maintain and grow their employment as well; and,

WHEREAS, Basin Electric Power has met with Converse County governmental entities and has pledged to continue to be a good corporate neighbor and help mitigate any adverse affects that may develop as a result of this growth.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DOUGLAS, WYOMING, that the City supports the Basin Electric Dry Fork Station and Hughes transmission line proposed projects and authorizes the Mayor to sign a joint letter of support from Converse County and the Converse Area New Development Organization (CANDO).

BE IT FURTHER RESOLVED that the City of Douglas' support is contingent upon a favorable determination from the Industrial Siting Council to include Douglas and Converse County in the allocation of impact dollars generated by this project.

PASSED, APPROVED AND ADOPTED THIS 12th **day of** December, **2005.**

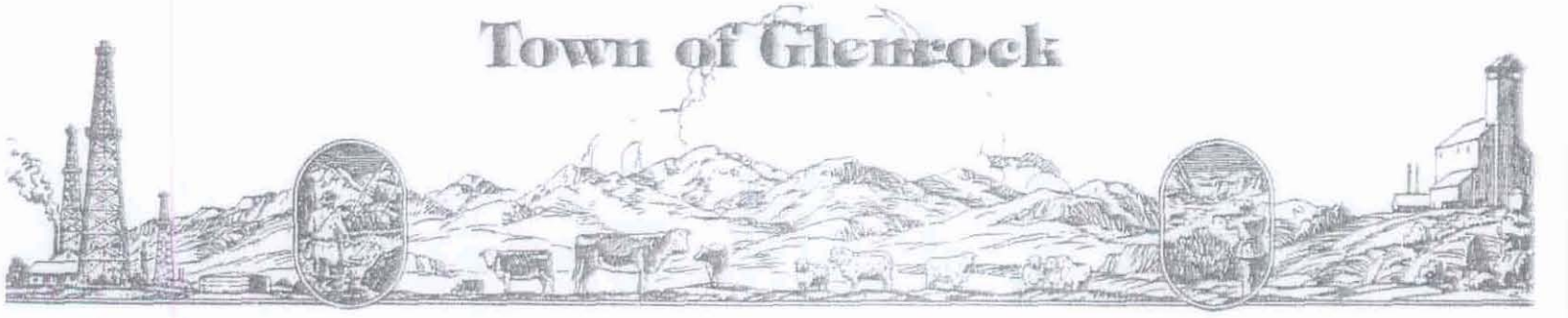
Sherri Mullinnix
Mayor

Attest:
Cheryl L. Ewing
City Clerk

I:\comdoc\resolut\temp\admin\basin elec - dry fork support.doc

32

Town of Glenrock



Phone (307) 436-9294 • Fax (307) 436-5729 • Glenrock, Converse County, Wyoming 82637 • P.O. Box 417

5 December 2005

Mr. Bob Boettcher
Basin Electric Power Cooperative
2201 S. Douglas Hgwy. - Suite 160
Gillette, WY 82718

RE: DRY FORK STATION

Dear Mr. Boettcher:

We would like to thank you for the efforts made to educate us on the construction of this facility. We support this project and feel that any negative impacts involved will be short lived. The long-term economic benefits by far out-weigh any negative impacts to our community.

The Town of Glenrock appreciated the opportunity to meet with representatives of Basin Electric Power Cooperative and provide input in the planning process, and we support their efforts to construct a electrical power plant north of Gillette.

Sincerely,

Steve Cielinski
Mayor

Exhibit C

Patrick R. Day, P.C.
Mark R. Ruppert
HOLLAND & HART LLP
2515 Warren Avenue, Suite 450
P.O. Box 1347
Cheyenne, WY 82003-1347
Telephone: (307) 778-4200
Facsimile: (307) 778-8175

ATTORNEYS FOR BASIN ELECTRIC
POWER COOPERATIVE

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of:	)	
Basin Electric Power Cooperative	)	Docket No. 07-2801
Dry Fork Station,	)	
Air Permit CT – 4631	)	

AFFIDAVIT OF DAVID RAATZ

David Raatz, having been duly sworn, states as follows:

1. I have worked 28 years with Basin Electric Power Cooperative (Basin Electric), 11 of those years in my current position as Manager of Marketing and Power Supply Planning. As Manager of Marketing and Power Supply Planning, my responsibilities include the following:

a. Develop comprehensive short and long-term forecasts of Basin Electric's member power requirement needs.

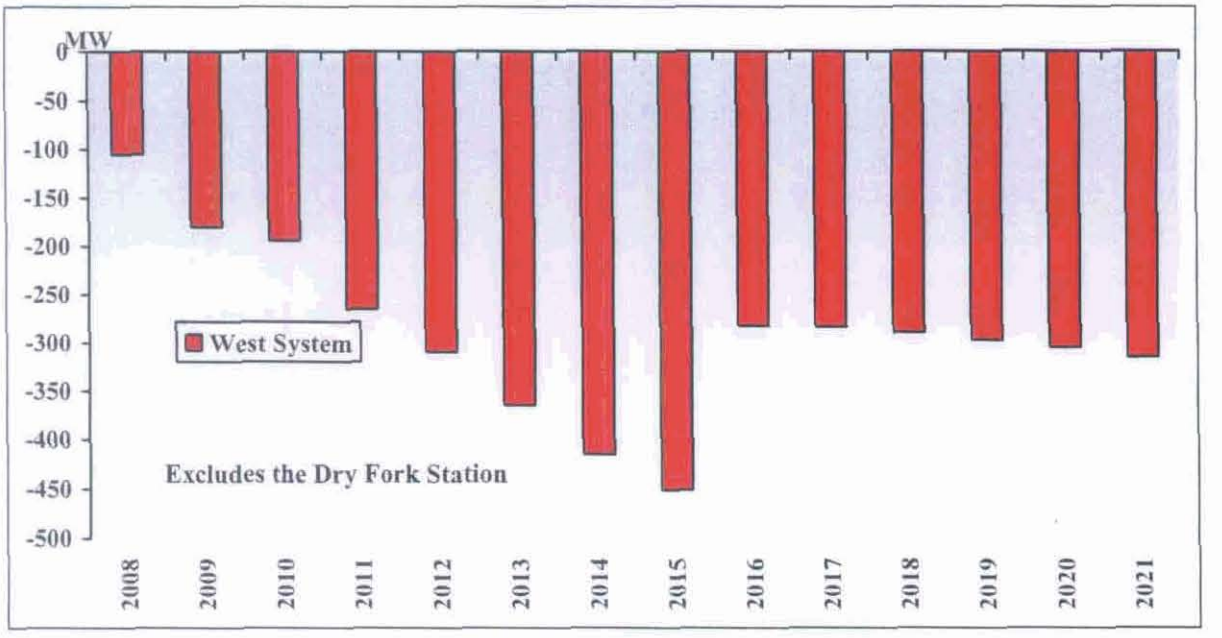
b. Develop and coordinate plans for the acquisition of power and transmission/wheeling resources, through purchase and/or construction, to meet the requirements of Basin Electric's members and wholesale power sales.

c. Manage the scheduling and coordination of the Basin Electric generation resources and contracted resources so that all contracted obligations to supply power are met.

2. Basin Electric Power Cooperative provides wholesale, supplemental electric service for 125 member cooperatives in the states of Colorado, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota, and Wyoming. Approximately 2.5 million consumers are served by Basin Electric's member cooperative systems, including approximately 146,000 consumers in Wyoming. Basin Electric's service territory is split electrically into an eastern service area (eastern electrical grid) and a western service area (western electrical grid), with Wyoming in the western service area. The Dry Fork Station power plant will primarily provide electrical power to consumers in Northeast Wyoming through Basin Electric coop member Powder River Energy Corp.

3. The following graph shows the western service area's deficit situation given the growing power needs of the Basin Electric membership, considering existing and committed generation projects, excluding the Dry Fork Station.

Western Service Area Deficit



As shown in this graph, the power deficit in the western service area is persistent and increasing without the power generated from the Dry Fork Station. In 2011, there is a deficit of 265 megawatts (MW), and in 2012, the system deficit is 309 MW without the Dry Fork Station power plant. In 2004 and 2005, Basin Electric conducted a thorough study of the growing need for electrical power in the western service area and how that need for power would be best met, concluding that a coal-based plant with a high baseload capacity, although not meeting all of Basin Electric's needs across the system, would meet the need in the western service area, and specifically in Northeast Wyoming where there are major transmission constraints that limit the ability to bring power into this area.

4. The Dry Fork Station is critical to meet the baseload nature of Basin Electric's power obligations and needs in Northeast Wyoming. The Northeast Wyoming loads are industrial-type loads that require large amounts of electricity, delivered on a near-continuous basis, which is best served by a high capacity baseload facility. Without the Dry Fork Station becoming commercially operational as planned in 2011, Basin Electric is anticipated to be short 200-300 megawatts (MW) of electrical power every day in 2011 in the western service area, a shortage that will affect Northeastern Wyoming.

5. Assuming an eight month delay in construction of the Dry Fork Station will result in a 14-month delay in the commercial operation date of the Dry Fork Station (July 1, 2011 to September 1, 2012), I have estimated the costs to Basin Electric of purchasing replacement power during that time to meet its obligations to supply wholesale power. This 14-month delay will cost Basin Electric approximately **$60,400,000** to meet its power supply obligations. This cost considers the avoided fixed and variable cost of operating the Dry Fork Station, the cost of additional power purchases to meet Basin Electric's existing power supply obligations, and expected power sales revenue losses. I have based the value of lost power sales revenue and increased power purchase costs on a third-party's market price estimates. As a non profit cooperative, this $60 Million cost will be passed along to Basin Electric's members and consumers, including the 146,000 consumers in Wyoming.

6. This estimated additional cost of over $60 Million in required power purchases to replace Dry Fork Station generated power for 14 months assumes that power would be available to purchase at the estimated market prices. However, I have serious concerns about the availability of power to be purchased if the Dry Fork Station is not available, due to the decreasing levels of power capacity margins in the Basin Electric service territory. The North American Electrical Reliability Corporation (NERC) 2007 Long-Term Reliability Assessment states that capacity margins will be declining and without additional new power plants, the ability to buy power will diminish, and the cost of purchasing power will increase. In my judgment, these factors suggest that finding needed replacement power will be difficult or impossible during the 14 months Dry Fork Station would be delayed in its operation due to an 8 month suspension of construction.

FURTHER, AFFIANT SAYETH NAUGHT.

David Raatz

STATE OF NORTH DAKOTA)
) ss.
COUNTY OF BURLEIGH)

The foregoing instrument was subscribed and sworn to before me this 17th day of March, 2008, by David Raatz.

Witness my hand and official seal.

My commission expires: _____.

Michelle Wiedrich
Notary Public

MICHELLE WIEDRICH
Notary Public
State of North Dakota
My Commission Expires Aug. 6, 2009

Exhibit D

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ATTORNEYS FOR BASIN ELECTRIC
POWER COOPERATIVE

BEFORE THE ENVIRONMENTAL QUALITY CONTROL COUNCIL
STATE OF WYOMING

In the Matter of:	)	
Basin Electric Power Cooperative	)	Docket No. 07-2801
Dry Fork Station,	)	
Air Permit CT – 4631	)	

AFFIDAVIT OF JOSEPH J. HAMMOND

Joseph J. Hammond, being first duly sworn, states as follows:

1. I am a Senior Technologist with the engineering firm of CH2M Hill and I have been employed in that capacity for more than six years. My responsibilities include the siting, permitting and engineering of coal-fired power plants in many states in the United States, and I have participated in the siting, permitting and engineering of at least eight coal-fired power plants for CH2M Hill during the past six years.

2. I have a BS degree in Environmental and Water Resources Engineering from Vanderbilt University.

3. I have more than 25 years of experience in the engineering, operation, and permitting of coal-fired power plants. Before joining CH2M Hill, I was the Electric Department Environmental Manager for Colorado Springs Utilities (CSU) and in that

capacity was responsible for the environmental operations for the Ray Nixon and Martin Drake coal-fired power plants for CSU.

4. In order to serve the needs of our clients who are operating, constructing, or seeking to construct coal-fired power plants, my colleagues and I at CH2M Hill maintain a data base concerning permits that have been issued or proposed for coal-fired power plants in the United States, and terms and conditions of those permits. I have consulted our data base, supplemented that data base with updated information, and conferred with Mr. Ken Snell of Sargent & Lundy LLC, an engineering firm with expertise regarding coal-fired power plants, in order to prepare the attached spreadsheet, entitled "Pulverized Coal Electric Utility Boilers Recently Issued PSD Permits, March 6, 2008." This spreadsheet lists coal-fired power plants for which permits or proposed permits have been issued during the past several years and information about those plants, including, as available, the type of boiler, generating capacity in megawatts, emission limits for NOx, SO2, VOCs, CO and H2SO4, and types of equipment for controlling emissions. The information in this spreadsheet is derived primarily from reviewing copies of the permits for these facilities and, to the best of my knowledge, is accurate.

FURTHER, AFFIANT SAYETH NAUGHT.

Joseph J. Hammond

STATE OF COLORADO)
)ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was subscribed and sworn to before me this 11 day of March, 2008, by Joseph J. Hammond.

Witness my hand and official seal.

My commission expires: 10/17/09.

Notary Public

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Pulverized Coal Electric Utility Boilers
Recently Issued PSD Permits, March 6, 2008

						NO_x Limit		SO_2 Limit		CO Limit		VOC Limit		PM_{10} Limit			H_2SO_4 Limit		Comments	
Utility/Unit Name/Location	Date	Permit Action	Boiler Type	Heat Input (MMBtu/hr)	Unit Size (MW)	30-day rolling avg lb/MMBtu	Other	30-day rolling avg lb/MMBtu	Other	Emission Limit lb/MMBtu	Other	Emission Limit lb/MMBtu	Other	Emission Limit lb/MMBtu	Other	Opacity Limit (%)	Emission Limit lb/MMBtu	Other	General Equipment	Other
Basin Electric Power Cooperative Dry Fork Station Unit 1 Wyoming	10/15/2007	Final Permit	Subcritical	3,801	422		190.1 lb/hr (30-day rolling) 0.05 lb/MMBtu (12 month rolling)		380.1 lb/hr (3-hr block) 285.1 lb/hr (30 day rolling) 0.070 lb/MMBtu (12 month rolling)	0.15	570.2 lb/hr (30 day rolling)	0.0021	14.1 lb/hr	0.012	45.6 lb/hr	20	0.0025	9.5 lb/hr	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Unit in construction CEMS required for CO Limit is filterable PM10 only
Associated Electric Cooperative Norborne Generating Station Missouri	2/22/2008	Final Permit	Supercritical	6,872	780	0.065	0.05 lbmmBtu (annual average)		0.08 lb/mmBtu (if fuel S > 0.4%); 0.074 (if fuel S <0.4 but >0.2%); and 0.07 lbmmBtd (if fuel S < 0.2%)	0.15		0.0036		0.012	0.012 lbmmBtu (filterable PM10) and 0.018 lb/mmBtu (filterable + condensible)	20	0.0039		Low-NOx Burners with SCR Dry Lime FGD (SDA) Fabric Filter	AECI announced the the project would be postponed.
Duke Energy Carolinas, LLC Cliffside Unit 6 North Carolina	1/28/2008	Final Permit	Supercritical		800		Project was able to net-out of PSD for NOx. Must meet Subpart Da NSPS (1.0 lb/MWh gross output)		Project was able to net-out of PSD for SO2. Must meet Subpart Da NSPS (1.4 lb/MWh gross or 95% reduction)	0.12		0.007		0.012	0.012 lbmmBtu (filterable PM10) and 0.018 lb/mmBtu (filterable + condensible)	20	0.095		Low-NOx Burners with SCR Dry Lime FGD (SDA) Fabric Filter and Wet FGD	Status - not known
Longleaf Energy Associates/LS Power, LLC Longleaf Energy Station Georgia	9/14/2007	Final Permit			800 each	0.07	0.05 lb/mmBtu (annual average)		156.0 lb/hr (3-hr block avg) 117.0 lb/hr (30-day rolling) 0.09 lb/MMBtu (12 month rolling)	0.15	0.30 lb/mmBtu (1-hour average)	0.0036		0.012	0.012 lbmmBtu (filterable PM10) and 0.030 lb/mmBtu (filterable + condensible)	20	0.005			Status - "under development" construction has not started
Black Hills Power & Light WYGEN Unit 3 Wyoming	2/5/2007		Subcritical	1,390	100		65.0 lb/hr (30-day rolling) 0.05 lb/MMBtu (12 month rolling)		uncontrolled SO2 >1.0 lb/mmBtu); 0.08 lb/mmBtu (if uncontrolled SO2 >1.0<1.25); and 0.105 lbmmBtu (if uncontrolled SO2 >1.25 lbmmBtu)	0.15	196.0 lb/hr			0.012	15.6 lb/hr	20		No Limit	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	CEMS not required for CO. Stack test used for CO compliance Limit is filterable PM10 only
Western Farmers Electric Cooperative Hugo Unit 2 Oklahoma	1/29/2007	Final Permit	Supercritical	7,125	750	0.07	0.05 lb/MMBtu (annual avg)	0.065		0.15		0.0036		0.025		20	0.005		Low-NOx Burners with SCR Wet Limestone FGD Fabric Filter	Construction of the facility has not commenced Limit includes filterable and condensable PM10 Status: Construction has not commenced, project is on hold
Sithe Global Power, LLC Desert Rock Units 1 and 2 New Mexico	11/19/2006	Draft Permit	Supercritical	6,360	750 each		0.06 lb/MMBtu (24-hr avg) 408 lb/hr (3-hr avg) 378.5 lb/hr (365 day rolling avg)		612 lb/hr (3-hr avg) 0.05 lb/MMBtu (24-hr avg) 378.5 lb/hr (365 day rolling avg)		680 lb/hr (3-hr avg) 0.10 lb/MMBtu (24-hr avg) 631 lb/hr (365 day rolling avg)[1]		20.4 lb/hr (3-hr avg) 0.0030 lb/MMBtu (24-hr avg)		132.9 lb/hr (6-hr avg) 0.02 lb/MMBtu (24-hr avg)	10		26.6 lb/hr (3-hr avg) 0.004 lb/MMBtu (3-hr avg)	Low-NOx Burners with SCR Wet Limestone FGD Fabric Filter	Startup emission limits CEMS used for CO compliance Stack test used for VOC & PM10 compliance Initial stack test used for H2SO4 compliance Limit includes filterable and condensable PM10
Sandy Creek Energy Associates, L.P./LS Power Sandy Creek Energy Texas	7/18/2006	Final Permit			800	0.07	0.05 lb/MMBtu (12-month rolling avg)	0.12	0.10 lb/MMBtu (12-month rolling avg)		0.015 lb/MMBtu (12-month rolling avg)		0.0036 lb/MMBtu (annual avg)		0.04 lb/MMBtu (annual avg)	20		0.0037 lb/MMBtu (annual avg)		Status: financing is complete and construction has commenced
Thoroughbred Generating Company, LLC Thoroughbred Units 1 and 2 Kentucky	4/14/2006	Final Permit	Supercritical	7,443	750 each	0.07		0.167	0.41 lb/MMBtu (24-hr avg)	0.10			0.0072 lb/MMBtu (30 day rolling avg)	0.018	0.018 lb/MMBtu (3-hr avg)	20	0.0040?		Low-NOx Burners with SCR Wet Limestone FGD Electrostatic Precipitator	CEMS used for CO compliance Compliance with CO limit used to demonstrate compliance with VOC limit Limit is filterable PM10 only
Kansas City Power & Light Iatan Generating Station Missouri	1/31/2005	Final Permit			850 MW	0.10		0.10		0.16		0.0036		0.024	filterable + condensible					Status: under construction
City Public Service J.K Spruce Unit 2 Texas	12/28/2005	Final Permit		8,000	750	0.089	0.05 lb/MMBtu (12-month rolling avg)	0.10	0.08 lb/MMBtu (12-month rolling avg)	0.15	0.15 lb/MMBtu (12-month rolling avg)		0.0025 lb/MMBtu (3-hr rolling avg)		0.022 lb/MMBtu (annual avg) (filterable + condensible)	20		0.0037 lb/MMBtu (annual avg)		Status: under construction
Louisiana Generating, LLC Big Cajun II Unit 4 Louisiana	8/22/2005			6,568	675	0.071		0.10		0.135		0.0035		0.018		20		No Limit	Low-NOx Burners with SCR Wet Limestone FGD ESP and Fabric Filter	Status: not known
Black Hills Power & Light WYGEN Unit 2 Wyoming	11/1/2005	Revised Permit	Supercritical	1,390	100	0.07		0.10	0.12 lb/MMBtu (3-hr block avg)	0.15		0.01		0.012		20		No Limit	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Unit in operation Unit size reduced to 100 MW CEMS not required for CO. Stack test used for CO compliance Initial Stack test used for VOC Limit is filterable PM10 only

Pulverized Coal Electric Utility Boilers
Recently Issued PSD Permits, March 6, 2008

						NO$_x$ Limit		SO$_2$ Limit		CO Limit		VOC Limit		PM$_{10}$ Limit			H_2SO_4 Limit		Comments	
Utility/Unit Name/Location	Date	Permit Action	Boiler Type	Heat Input (MMBtu/hr)	Unit Size (MW)	30-day rolling avg (lb/MMBtu)	Other	30-day rolling avg (lb/MMBtu)	Other	Emission Limit (lb/MMBtu)	Other	Emission Limit (lb/MMBtu)	Other	Emission Limit (lb/MMBtu)	Other	Capacity Limit (%)	Emission Limit (lb/MMBtu)	Other	Control Equipment	Other
Public Service Company of Colorado Xcel Comanche Unit 3 Colorado	7/5/2005	Final Permit	Supercritical	7,421	750	0.08		0.10		0.13	0.13 lb/MMBtu (8-hr rolling avg) 0.3 lb/MMBtu (during startup)	0.0035		0.012	0.012 lb/MMBtu filterable (3-hr rolling avg); 0.07 lb/MMBtu filterable & condensable (3-hr rolling avg)	15	0.0041		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Status: Under construction Specific startup provisions CEMS used for CO compliance Stack tests used for VOC compliance Annual stack tests used for PM10 compliance Operator during startup limited to 25%
Newmont Nevada Energy Investment, LLC Newmont Mining Unit 1 Nevada	5/5/2005	Final Permit	Subcritical	2,030	200		0.067 lb/MMBtu (24-hr rolling avg); 595.7 TPY (12 month rolling avg)		0.09 lb/MMBtu (24-hr rolling avg) 182.9 TPY (3-hr rolling avg)	0.15	0.15 lb/MMBtu (24-hr rolling avg) 304.5 lb/hr		8.1 lb/hr		0.038 lb/MMBtu filterable (24-hr rolling avg); 77.1 lb/hr filterable & condensable	20		2.06 lb/hr	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	CEMS used for CO compliance Stack tests used for VOC compliance Initial Stack test used for PM10 & H2SO4 compliance CDCS used for monitoring opacity
Prairie State Generating Company, LLC Prairie State Generating Station Units 1 and 2 Illinois	4/28/2005	Final Permit	Supercritical	7,450	750 each	0.07		0.182	Facility is also required to achieve 98% reduction with Wet FGD control system (30-day average)	0.12	0.12 lb/MMBtu (24-hr block avg)		0.004 lb/MMBtu (3-hr rolling avg)	0.035	0.035 lb/MMBtu (3-hr block avg)	20		0.005 lb/MMBtu (3-hr batch avg)	Low-NOx Burners with SCR Wet Limestone FGD Electrostatic Precipitator/Wet Limestone FGD/Wet Electrostatic Precipitator	CEMS used for CO compliance Stack tests used for VOC, PM10 & H2SO4 compliance Limit is filterable PM10 only Status: Under construction
Omaha Public Power District Nebraska City Unit 2 Nebraska	3/9/2005	Final Permit			600	0.07		0.095			0.018 lb/MMBtu (3-hr rolling avg)		0.0034 lb/MMBtu (annual avg)		0.018 lb/MMBtu (annual avg)	20		0.0042 lb/MMBtu (annual avg)		Status: Under Construction
Intermountain Power Service Corporation Intermountain Power Project Unit 3 Utah	11/15/2004	(Permit on Appeal)	Supercritical	9,050	950	0.07	633.6 lb/hr (24-hr block avg)	0.09	0.10 lb/MMBtu (24-hr block avg) 1,357.5 lb/hr (3-hr block avg)	0.15	3,000 lb/hr (8-hr block avg)		0.0027 lb/MMBtu (3 test run avg)	0.012	0.012 lb/MMBtu (3 test run avg) 221 lb/hr filterable & condensable (24-hr block avg)	10		0.0044 lb/MMBtu (24-hr block avg)	Low-NOx Burners with SCR Wet Limestone FGD Fabric Filter	Specific startup plan CEMS (or equivalent) used for CO compliance Annual stack test for VOC, PM10 & H2SO4 compliance Status: Appears that the project was cancelled
City Utilities of Springfield Southwest Power Station Unit 2 Missouri	10/28/2004	Final Permit	Subcritical		275	0.08		0.095		0.16		0.0036		0.018		20		No Limit		Status: Under Construction
Wisconsin Public Service Corporation Weston Power Plant Unit 4 Wisconsin	10/18/2004	10/18/2004	Supercritical	5,173	500	0.07	0.06 lb/MMBtu (12 month rolling avg)	0.10	0.09 lb/MMBtu (12 month rolling avg)	0.15	0.15 lb/MMBtu (1 day avg); 3,399 TPY (12 month rolling avg)		0.0036 lb/MMBtu (1 day avg); 81.6 TPY (12 month rolling avg)	0.020	0.020 lb/MMBtu (3-hr rolling avg)	20		0.005 lb/MMBtu (24-hr avg)	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	12 month rolling avg NOx and SO2 limits includes periods of startup and shutdown CEMS used for CO compliance Stack tests used for VOC & PM10 compliance Initial stack test used for H2SO4compliance Limit includes filterable and condensable PM10 Status: Under Construction
Santee Cooper Cross Generating Station Units 3 and 4 South Carolina	8/5/2004	Final Permit		5,400	660 each	0.06		0.25	0.13 lb/MMBtu/hr (365 day rolling avg)	0.16		0.0024			0.018 lb/MMBtu (30 day rolling avg)	20		0.0014 lb/MMBtu (365 day rolling avg)	Low-NOx Burners with SCR Wet Limestone FGD Electrostatic Precipitator	CEMS not required for CO. Stack test used for CO compliance Initial Stack test used for VOC, PM10 & H2SO4 compliance Limit includes filterable and condensable PM10
Hastings Utilities Whelan Energy Center Unit 2 Nebraska	3/30/2004	Final Permit	Subcritical	2,210	220	0.08		0.12		0.15	0.15 lb/MMBtu (3-hr avg)		No limit	0.018	0.018 lb/MMBtu (3 test run avg)	20		No Limit	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	CEMS used for CO compliance Under PSD threshold for VOC & H2SO4
Longview Power, LLC Longview Power Unit 1 West Virginia	3/2/2004	Final Permit		6,114	800	0.07	0.08 lb/MMBtu (24-hr rolling avg); 0.065 lb/MMBtu (annual avg)		0.12 lb/mmbtu (24 hour rolling avg) 0.15 lb/mmbtu (3 hour rolling avg) 0.095 lb/mmbtu (annual avg)	0.11	0.11 lb/MMBtu (3-hr rolling avg)		0.004 lb/MMBtu (3-hr rolling avg)		0.018 lb/MMBtu (8-hr rolling avg)	10		0.0075 lb/MMBtu (24-hr rolling avg)	Low-NOx Burners with SCR Wet Limestone FGD Dry Sorbent Injection/Fabric Filter	CEMS used for CO compliance Stack tests used for VOC, PM10 & H2SO4 compliance Limit is filterable plus condensable PM10
WE Energies Elm Road Generating Station Units 1 and 2 Wisconsin	1/14/2004	Final Permit	Supercritical	6,180	615 each	0.07		0.15	1,050 lb/hr (24-hr rolling avg); 1,150 lb/hr (24-hr rolling avg)	0.12	0.12 lb/MMBtu (24-hr rolling avg) 742 lb/hr (24-hr rolling avg) 2,400 lb/hr (1-hr avg) 3,250 tons (12 month rolling total)		5.0035 lb/MMBtu (24-hr rolling avg)	0.018	0.018 lb/MMBtu (3-hr rolling avg)	20		0.01 lb/MMBtu (24-hr avg)	Low-NOx Burners with SCR Wet Limestone FGD and Wet ESP Fabric Filter	Must comply with 0.07 lb/mmbtu NOx limit 12 month rolling average that includes startup and shutdown SO2 Emission limit includes normal operation, startup and shutdown CEMS used for CO compliance Initial Stack test used for VOC compliance CO Emission limit includes startup and shutdown Stack tests used for PM10 & H2SO4 compliance (initial and every 24 months thereafter) Test Methods 5/5B and 202 to be used to demonstrate PM10 compliance Status: Unit 3 is complete and has commenced operation. Unit 4 is under construction
Plum Point Energy Associates, LLC Plum Point Energy Station Unit 1 Arkansas	8/20/2003	Final Permit			590 – 800	0.08			0.16 lb/MMBtu (3-hr rolling avg)	0.15		0.0?		0.018		10	0.0061		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	CEMS used for CO compliance Initial Stack test used for VOC compliance Limit is filterable PM10 only Status: Financing is complete and construction has commenced
Roundup Power Bull Mountain Roundup Units 1 and 2 Montana	7/21/2003	Final Permit	Supercritical	5,727	390 each		0.07 lb/MMBtu (24-hr avg); 0.10 lb/MMBtu (1-hr avg)		0.12 lb/MMBtu (24-hr avg); 0.15 lb/MMBtu (1-hr avg)	0.15		0.002		0.015		20	0.0064		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	CEMS not required for CO. Stack test used for CO compliance Stack tests not required for VOC. PM10 limit may be reduced to 0.012 lb/MMBtu based on performance test Condensable PM10 not specified Status: permit to construct has expired

Pulverized Coal Electric Utility Boilers
Recently Issued PSD Permits, March 6, 2008

Utility/Unit Name/Location	Date	Permit Action	Boiler Type	Heat Input (MMBtu/hr)	Unit Size (MW)	NO_x Limit: 30-day rolling avg (lb/MMBtu)	NO_x Limit: Other	SO2 Limit: 30-day rolling avg (lb/MMBtu)	SO2 Limit: Other	CO Limit: Emission Limit (lb/MMBtu)	CO Limit: Other	VOC Limit: Emission Limit (lb/MMBtu)	VOC Limit: Other	PM_{10} Limit: Emission Limit (lb/MMBtu)	PM_{10} Limit: Other	Opacity Limit (%)	H2SO4 Limit: Emission Limit (lb/MMBtu)	H2SO4 Limit: Other	Comments: Control Equipment	Comments: Other
MidAmerican Energy Company Council Bluffs Energy Center Unit 4 Iowa	8/17/2007	Final Permit	Supercritical	7,571	756	0.07	2,083 TPY	0.15	3,362 TPY	0.154	0.154 lb/MMBtu (1 day avg) 5,177 TPY	0.0035		0.025		5 (3 hr avg)	0.0040		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Status: Unit has commenced operation CEMS used for CO compliance If CO and NOx lims cannot be met simultaneously, State will revise CO lim Initial Stack test used for VOC compliance Lims is filterable plus condensable PM10
Tri-State G&T Holcomb Unit 2 Kansas	10/5/2002	(Permit on Appeal)		6,501	660	0.08		0.15		0.15		0.0035		0.015		20	0.0042)		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Initial NOx lims of 0.12 lb/mmbtu for first 18 months CEMS not required for CO. Stack test used for CO & VOC compliance If CO and NOx lims cannot be met simultaneously, State will revise CO lim If VOC and NOx lims cannot be met simultaneously, State will revise VOC lim PM10 compliance based on 3 2-hr stack tests. Condensable PM10 not specified Under PSD threshold for H2SO4
Rocky Mountain Power, Inc Hardin Unit 1 Montana	6/11/2002	6/11/2002	Subcritical	1,304	113	0.09		0.15		0.15		0.0034		0.015		20		No Limit	Low-NOx Burners with SCR Wet Lime FGD Multiclones and Wet Lime FGD	CEMS not required for CO. Stack test used for CO compliance Stack tests not required for VOC Limit is filterable PM10 only Under PSD threshold for H2SO4
Tucson Electric Power Company Springerville Units 3 and 4 Arizona	4/29/2002	4/29/2002	Subcritical	4,200	450 each	1.6 lb/gross MWh	9,600 tpy Units 1, 2, 3 & 4		8,448 lb/hr Units 1, 2, 3 & 4 (3-hr rolling avg) 10,800 TPY Units 1, 2, 3 &4	0.15			0.05 lb/ton coal (3-hr avg)	0.015	0.015 lb/MMBtu (PM) (3-hr rolling avg) 0.055 lb/MMBtu (PM_{10}) (3-hr rolling avg)		15	0.0115		Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Unit 3 in operation Netted with Units 1 and 2 – no increase in facility NOx or SO2 emissions CEMS used for CO compliance Stack test used for VOC compliance PM10 compliance based on annual test. PM limit is filterable only PM10 test includes filterable & condensable Status: Unit 3 is complete and has commenced operation; Unit 4 is under construction
Kansas City Power & Light Hawthorne Unit 5 Missouri	8/17/1998	8/17/1998	Subcritical	6,300	570	0.06	0.1 lb/MMBtu (24-hr avg)	0.12	0.13 lb/MMBtu (3-hr avg)	0.16		0.0038		0.018		20		No Limit	Low-NOx Burners with SCR Dry Lime FGD Fabric Filter	Unit in Operation Initial NOx limit of 0.12 lb/mmbtu for first 36 months. CEMS not required for CO. Stack test used for CO & VOC compliance PM10 compliance based on annual test. Condensable PM10 not specified

Exhibit E

A Comparison of PC, CFB and IGCC Technologies for Basin Electric Power Cooperative's Dry Fork Station

PREPARED FOR: Basin Electric Power Cooperative

PREPARED BY: Steve Jenkins / Gary Brown

DATE: June 26, 2007

This technical memorandum provides our response to some of the key issues addressed by the National Park Service and the environmental groups on the draft air permit for the pulverized coal (PC) unit proposed for the Dry Fork Station.

1. WYDEQ is not required to consider IGCC in the BACT analysis for Dry Fork

Step 1 of the Best Available Control Technology (BACT) analysis involves identifying all potentially applicable emission control options. However, it does not require the project sponsor to redefine the design of the source. Redefining the design of the source relates to meeting the purpose and need for the project, and/or in changing the fundamental constituents of the project's design.

The BACT process is set up to identify the emission control technologies available to reduce emissions from the source as defined by the applicant. The BACT process, coupled with PSD increment and ambient air quality modeling, will ensure that emissions from the proposed facility will be minimized and that the proposed facility will not cause or contribute to any violation of an ambient air quality standard.

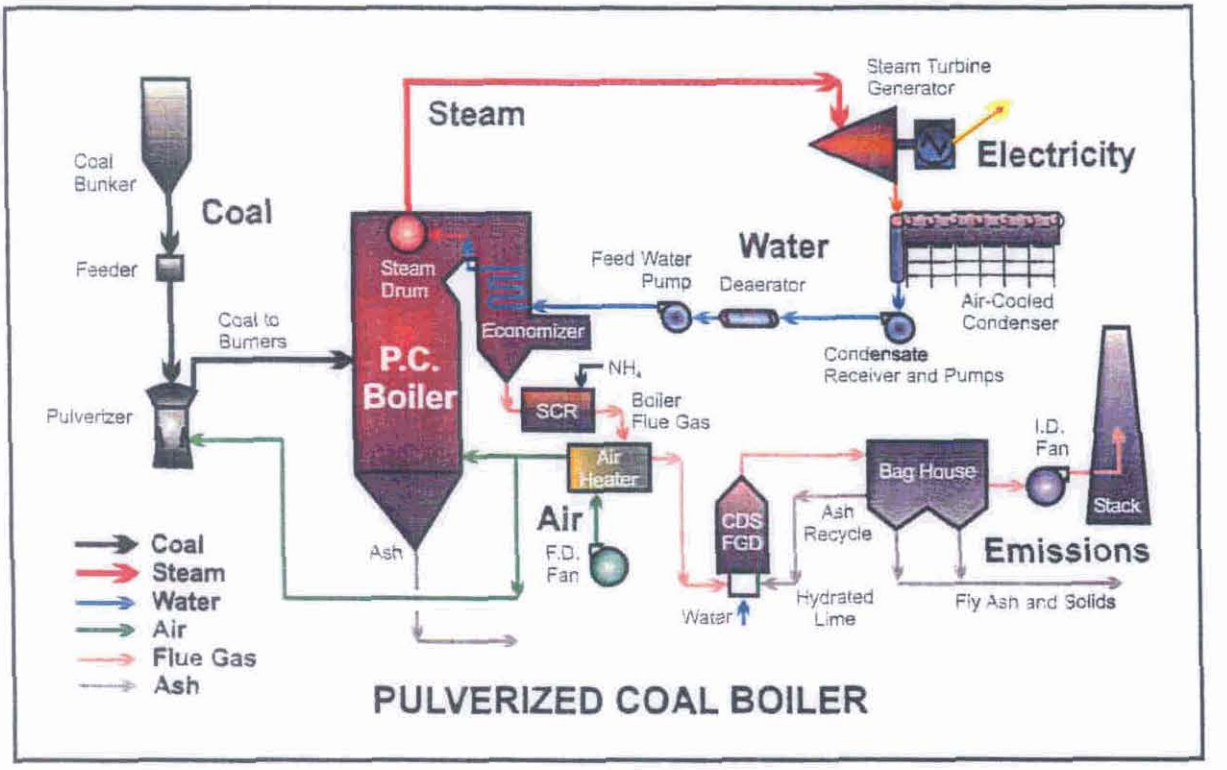
1.1 IGCC would constitute a fundamental redefinition of the Dry Fork Plant

Integrated Gasification Combined Cycle (IGCC) is a fundamentally different process and design than a PC or circulating fluidized bed (CFB) boiler. In PC and CFB boilers, the fuel is coal, which is combusted. In IGCC, the coal is not the fuel. It is a chemical feedstock used in a series of chemical reactions called gasification. In gasification, the coal is not combusted, but is thermally converted in a series of chemical reactions, to create a synthetic gas, or syngas, which is the fuel for a separate combustion turbine power plant. An IGCC plant is more akin to a chemical plant, and has little in common with the combustion, steam generation and air pollution control (APC) systems utilized in PC and CFB boilers.

Pulverized Coal Process

PC plants represent the most mature of coal-based power generation technologies considered in this assessment. Modern PC plants generally range in size from 80 MW to 1,300 MW and can be designed to use coal from various sources. Units operate at close to atmospheric pressure, simplifying the passage of materials through the plant, reducing vessel and ductwork construction cost, and allowing onsite fabrication of boilers. A typical process flow diagram for a PC unit is shown in Figure 1.

FIGURE 1
Pulverized Coal Unit Process Flow Diagram



The concept of burning coal that has been pulverized into a fine powder stems from the fact that if the coal is made fine enough, it will burn almost as easily and efficiently as a gas. Crushed coal from the silos is fed into the pulverizers along with air preheated to about 580°F. The hot air dries the fine coal powder and conveys it to the burners in the boiler. It is important that as much moisture as possible be removed from the coal, so that it can flow freely and not become sticky, as that would cause plugging. The burners mix the powdered coal in the air suspension with additional pre-heated combustion air and force it out of nozzles similar in action to fuel being atomized by fuel injectors.

Combustion takes place at temperatures from 2,400-3,100°F, depending largely on coal rank (i.e., lignite, subbituminous, bituminous, anthracite). In order to ensure complete combustion, excess air is blown in with the coal and into the burners. Particle residence time in the boiler is typically 2-5 seconds, and the particles must be small enough for complete burnout to take place during this time. The heat of combustion is transferred to the boiler tubes, which contain circulating water. The water in the boiler tubes is turned into steam, which is piped to the steam turbine generator, where the steam's thermal energy is converted into mechanical energy. The steam turbine then turns the generator to produce electricity.

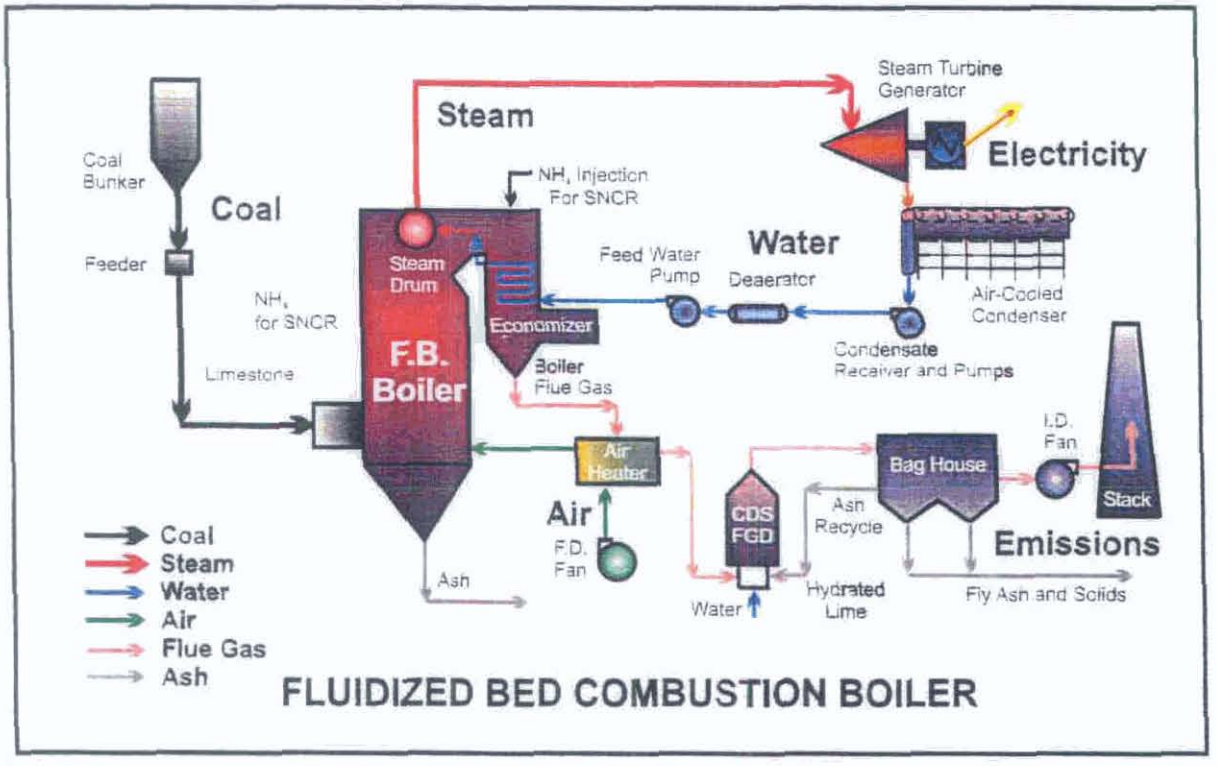
The combustion of the coal produces combustion gases which must be treated before exiting the exhaust stack to remove fly ash, nitrogen oxides (NO_x), and sulfur dioxide (SO_2). The APC systems include a fabric filter or electrostatic precipitator (ESP) for particulate control (fly ash), Selective Catalytic Reduction (SCR) system for control of NO_x, and a Flue Gas

Desulfurization (FGD) system for removal of SO_2. Limestone is required as the reagent for the most common wet FGD process. A spray dryer FGD process, which is more commonly used on lower sulfur western coal, uses lime as the reagent and provides significant savings in water consumption compared to wet FGD systems. A lime or limestone storage and handling system is required in the design of FGD systems. Depending on the type of FGD system used, the byproduct may or may not be commercially saleable. If not, sufficient storage area on site must be included in the plant design.

Circulating Fluidized Bed Process

The CFB fuel delivery system is similar to that of a PC unit, but somewhat simplified to combust a coarser material which is more difficult to burn completely. The plant fuel handling system unloads the fuel, stacks out the fuel, crushes or otherwise prepares the fuel for combustion, and reclaims the fuel as required. The fuel is usually fed to the CFB by gravimetric feeders. The bed material is composed of fuel, ash, sand, and the sulfur removal reagent (typically limestone), also referred to as sorbent. In the CFB, the fuel is combusted with excess air to produce steam in the boiler tubes. Steam is piped to the steam turbine generator, which converts the steam's thermal energy into mechanical energy. The steam turbine then drives the generator to produce electricity. A typical process flow diagram for a CFB unit is shown in Figure 2.

FIGURE 2
Circulating Fluid Bed Unit Process Flow Diagram



CFB combustion temperatures of 1,500 to 1,600°F are significantly lower than a PC boiler, which results in lower NO_x emissions and reduction of slagging and fouling concerns that are characteristic of PC units. In contrast to a PC unit, SO_2 can be partially removed during

the combustion process by adding limestone to the fluidized bed. This is because the reaction of sulfur dioxide (SO_2) with limestone (calcium carbonate) peaks at about 1,500 °F, which is in the range of CFB boiler combustion.

Circulating beds use a high fluidizing velocity, so the particles are constantly held in the flue gases, and pass through the main combustion chamber and into a particle separation device such as a cyclone, from which the larger particles are extracted and returned to the combustion chamber. Individual particles may recycle anywhere from 10 to 50 times, depending on their size, and how quickly the char burns away. Combustion conditions are relatively uniform throughout the boiler, although the bed is somewhat denser near the bottom of the combustion chamber. There is a great deal of mixing, and residence time during one pass is very short.

One of the main advantages of CFBs is that they have the ability to efficiently combust a wide range of low quality fuels. CFBs are often recommended for low grade, high ash coals which are difficult to pulverize, and which may have variable combustion characteristics. CFBs are also suitable for co-firing coal with low grade fuels, including some waste materials, as well as petroleum coke, which has low volatile matter content. The advantage of fuel flexibility often mentioned in connection with CFB units can be misleading; the combustion portion of the process is inherently more flexible than PC, but material handling systems must be designed to handle larger quantities associated with lower quality fuels. Once the unit is built, it will operate most efficiently with whatever design fuel is specified.

CFB design must take into account ash quantities and ash properties. While combustion temperatures are low enough to allow much of the mineral matter to retain its original properties, particle surface temperatures can be as much as 350°F above the nominal bed temperature. If any softening takes place on the surface of either the mineral matter or the sorbent, then there is a risk of agglomeration or fouling.

The CFB produces combustion gases, which must be treated before exiting the exhaust stack to remove fly ash and SO_2. NO_x emissions can be mitigated through use of selective non-catalytic reduction (SNCR) using ammonia injection, usually in the upper area of the combustor. The emission control equipment external to the CFB includes either a fabric filter (baghouse) or ESP for particulate control (fly ash). A polishing FGD system is often required for additional removal of SO_2 to achieve similar emission levels to PC units with FGD systems. Limestone is required as the reagent for the most common wet FGD process, and also as sorbent for the fluidized bed. A spray dryer FGD process, another option for low SO_2 concentration flue gas streams, uses lime as the reagent. A limestone storage and handling system is a required design consideration for CFB units. A lime storage and handling system is required if a lime spray dryer is used for the polishing FGD system. Due to the method of SO_2 control, the byproduct is not typically commercially saleable. Therefore, sufficient byproduct storage area must be planned for the CFB unit.

IGCC Process

The gasification portion of an IGCC plant for use in coal-based power generation combines a chemical feedstock, coal, with steam and oxygen or air at high temperature and pressure to produce a gaseous mixture consisting primarily of hydrogen and carbon monoxide. This gaseous mixture, called syngas, is the result of a thermal conversion process, and not combustion. Where PC and CFB boilers use excess air to assure combustion, gasification

occurs in an "oxygen-starved" environment, in order to assure that combustion is precluded. Where the product of combustion in a PC or CFB is hot flue gas that, after transferring its heat to boiler tubes, has no further use and must be exhausted through a stack, the product of gasification is a usable syngas, the intermediate step in providing a fuel for power generation in a combustion turbine, or for the production of chemicals. Where PC and CFB boilers are based on the Rankine thermodynamic cycle (steam production and use in a steam turbine), IGCC uses the Brayton cycle, based on firing a fuel, syngas, in a rotating combustion turbine. These two thermodynamic cycles are completely different.

The syngas requires cooling and cleanup to remove contaminants to produce a synthesis gas (syngas) suitable for use in the combustion turbine portion of a combined cycle unit. The combined cycle portion of the plant is similar to a conventional natural gas-fired combined cycle plant. The most significant differences in the combined cycle are modifications to the combustion turbine to allow use of a low heating value, 250 Btu/scf syngas (about 1/4th that of natural gas), which is then mixed with nitrogen for NOx reduction, resulting in a heating value of about 125 Btu/scf. The nitrogen is added in order to cool the flame and lower NOx emissions, as well as providing additional mass flow in the combustion turbine to boost power output. The fuel mixing system and burners for combusting syngas (CO and H_2) are very different than those used for burning natural gas (methane). Combustion turbines designed for natural gas firing utilize a dry low NOx burner design, which has been optimized for burning methane at a heating value of about 1,000 Btu/scf. However, syngas combusts very differently, since it contains a high concentration of hydrogen. Combustion of syngas requires a diffusion burner design, which accounts for the lower heating value of the syngas and higher flame speeds of hydrogen. It also allows for the injection of nitrogen for cooling the flame and reducing the production of NOx. While natural gas can be used as a supplemental fuel in syngas combustion turbines, it does not combust as efficiently as in combustion turbine designed for natural gas use as the primary fuel.

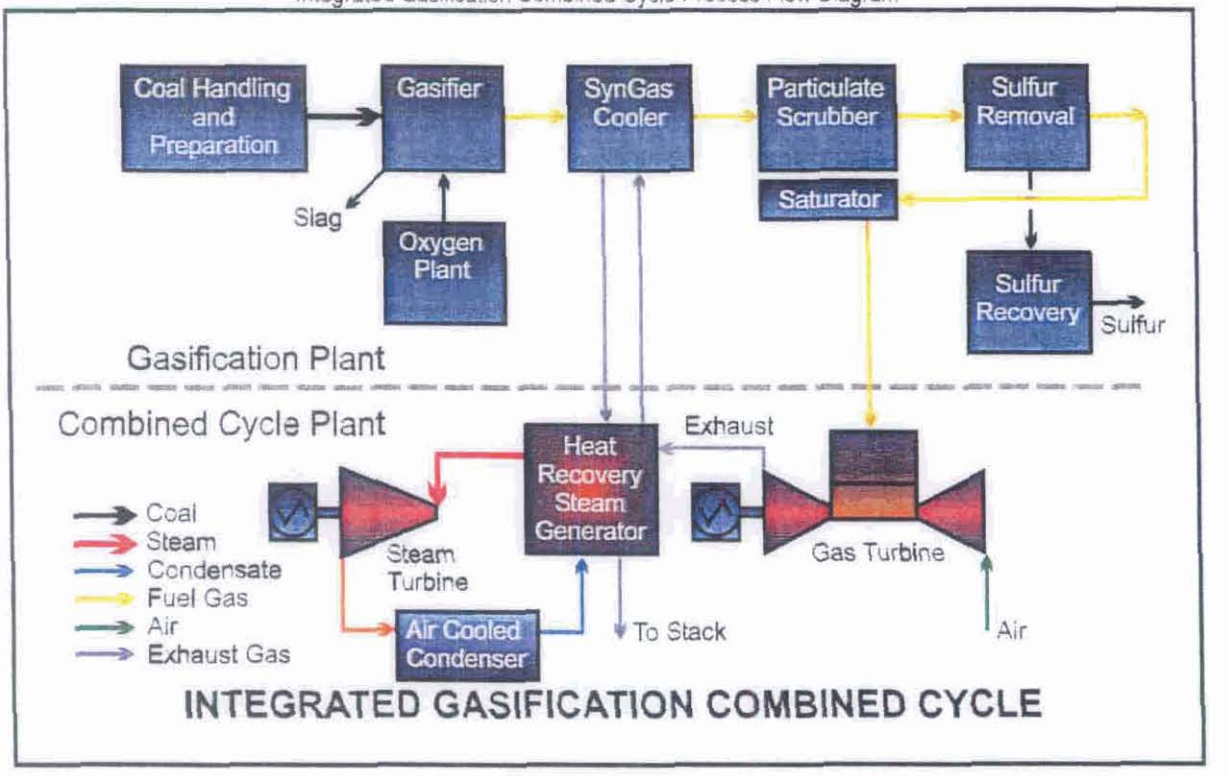
In addition, the steam turbine portion of an IGCC unit is much larger than that of a natural gas-fired combined cycle unit, since a majority of the steam production in IGCC comes from the syngas coolers in the gasification portion of the plant, versus all of it being produced in the heat recovery steam generator (HRSG) in a gas-fired combined cycle plant. Specifics of a plant design are influenced by the gasification process and matching coal supply, degree of heat recovery, and methods to clean up the syngas. A typical process flow diagram for an IGCC unit is shown in Figure 3.

Coal gasification takes place in the presence of a controlled "shortage" of air/oxygen, thus producing reducing conditions, whereas combustion of coal in a PC or CFB creates an oxidizing environment. The process is carried out in an enclosed pressurized reactor, and the syngas product is a mixture of CO, H_2 and CO_2. Prior to use, the syngas must be cleaned. It is important to note here that in gasification it is not the coal that is cleaned. Rather, it is the syngas, the product of gasification reactions, which is cleaned so that it can be used as a fuel in a separate process.

The sulfur present in the feedstock mainly forms hydrogen sulfide (H_2S) but there is also a small amount of carbonyl sulfide (COS). The H_2S can be more readily removed than COS in syngas cleanup processes; therefore, a hydrolysis process is typically used to convert COS to H_2S. The syngas is cleaned and then burned with air in the combustion turbine, generating combustion products at high temperature and pressure. Although no NO_x is formed during

gasification, some is formed when the syngas is subsequently burned in the combustion turbines.

FIGURE 3
Integrated Gasification Combined Cycle Process Flow Diagram



Three basic gasifier designs are used: fixed beds (not normally used for power generation), fluidized beds and entrained flow gasifiers. Fixed bed units typically use lump coal, fluidized bed units use a feed of 3-6 mm size, and entrained flow gasifiers typically use a pulverized coal slurry feed or dry feed, depending on the gasification technology supplier. Oxygen-blown, entrained-flow gasifiers are used in modern IGCC plants, although several new technologies under development plan to use air as the oxidant.

In PC and CFB, the moisture must be removed from the coal for combustion to occur efficiently. In coal gasification, moisture is an important part of the coal feedstock. Without water, the chemical reaction that is the basis of gasification cannot occur. That is why low moisture coal must be ground up and made into a slurry, and then pumped into the gasifier. Some gasification technologies use a dry coal feed, usually for high moisture coals, i.e. subbituminous and lignite. The coal is milled and dried, and then fed with nitrogen into the gasifier. If there is not sufficient inherent moisture left in the coal to provide the needed water for gasification reactions, steam can be injected into the gasifier.

The coal-based IGCC plants that are in operation use different process designs, and are demonstrating the practicalities and economics of different degrees of integration. The syngas is produced at temperatures up to 2,900°F (in entrained flow gasifiers), so that the syngas must be cooled sufficiently to utilize conventional acid gas removal systems (for removal of sulfur compounds), which operate at about 100°F. The acid gas cleaning

processes used are variants of well proven natural gas sweetening processes to remove acid impurities and any sulfur compounds present.

Large radiant and convective heat exchangers are required to accomplish this reduction in syngas temperature; in doing so, a large amount of high pressure steam is produced, which is used in the combined cycle portion of the plant for power generation. In the heat exchangers, solids deposition, fouling and corrosion may take place. This has been a significant cause of low availability at Tampa Electric Company's (TECO) Polk Power Station. The plant must be brought down every few months just to clean out the convective syngas coolers.

Conclusion

EPA's NSR Manual states clearly that a proponent of a coal-fired power plant is not required to consider converting its proposed plant to a natural gas-fired turbine as part of a BACT analysis, because that would be redefining the design of source. Where PC and CFB combust coal to produce steam and electricity using the Rankine thermodynamic cycle, an IGCC plant generates electricity by means of converting coal to a syngas in a chemical reaction and burning it in a combustion turbine using the Brayton thermodynamic cycle, like a natural gas-fired combustion turbine. Clearly, changing from the Rankine thermodynamic cycle of PC and CFB to the Brayton cycle of IGCC would be redefining the fundamental design of the source.

1.2 Purpose and Need for Project

BEPC desires to identify the most prudent power generation technology for this new coal-fired power plant. That identification process is guided by these requirements for the proposed generating unit:

- Providing Base Load Capacity with High Reliability and Availability
- Assuring Environmental Compliance
- Utilizing Commercially Available and Proven Technology
- Generating Electricity at a Reasonable Cost

Coal-based power generation technology selected for this project must be capable of meeting all of the desired characteristics listed above to meet the purpose and need for the project.

Providing Base Load Capacity with High Reliability and Availability

Basin Electric requires the Dry Fork Station to be a base load plant with high reliability and availability. This relates directly to the ability of the power generation station to provide the electricity to the Basin Electric customers when they need it. If the Dry Fork plant is not reliable, and has low availability, its generation must be made up by other sources of power generation, if available; these are likely to be less efficient, more costly sources of generation. Both PC and CFB technologies are technically and commercially mature and are used for baseload power plants. The overall plant availability of well-designed and maintained base load PC and CFB units is over 90 percent. A good example of the high availability of PC units is BEPC's own Laramie River Station. Over the last six years, the availability of the three PC units at that plant has been 91.4%. During some years, units achieved as high as 99.4%. This underscores the performance of this well-proven technology for meeting the

Exhibit F

Date: June 11, 2007

Project: Dry Fork Unit 1 – Construction Air Permit Application

Subject: Subcritical – Supercritical Boiler Comparison

The purpose of this memorandum is to provide additional information comparing the technical and economic feasibility of designing the proposed Dry Fork boiler as either an advanced subcritical boiler or a supercritical boiler.

Background

The Dry Fork permit application, dated November 2005, described the proposed Dry Fork boiler as an indoor-type pulverized coal (PC) fired boiler designed for baseload operation. The unit will have a maximum heat input of approximately 3,801 MMBtu/hr, a maximum gross generation output of approximately 422 MW, and a net generation output of approximately 385 MW at annual average conditions. Average net generation will be slightly lower during summer maximum ambient temperature conditions due to the use of an air cooled condenser. The proposed boiler is being designed to be capable of developing main steam turbine throttle pressures and temperatures in the range of 2,520 psig and 1,050 °F, respectively, and a reheat steam temperature at the inlet of the intermediate pressure turbine of approximately 1,050 °F. The proposed main steam turbine throttle pressure is below the critical point of water, therefore, the boiler will be classified as a subcritical PC boiler.

The decision to propose a PC boiler for Dry Fork Unit 1 was based on an engineering evaluation of the available coal-based electricity generating technologies conducted by CH2MHill prior to submittal of the air construction permit application ("Coal Power Plant Technology Evaluation for Dry Fork Station," CH2MHill, November 1, 2005). That report provided a conceptual level technology evaluation to address the advantages and limitations of PC boilers, circulating fluidized bed (CFB) boilers, and integrated gasification combined-cycle (IGCC) power generating technologies. The various generating technologies were evaluated with respect to Basin Electric's defined needs for baseload capacity, environmental compliance, reliability and availability, commercial availability, and economic criteria. The evaluation concluded that "PC technology is capable of fulfilling Basin Electric's need for new generation, and is recommended for the NE Wyoming Power Project [Dry Fork]."

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The technology evaluation included a review of the advantages and disadvantages associated with subcritical and supercritical PC steam cycles and the associated equipment, and concluded that:

> "[a] Basin Electric 250 MW PC unit would use a subcritical steam cycle design. The additional capital cost for a supercritical cycle is typically only justified by the efficiency improvement for PC units of 350 MW and larger. There is also a minimum 350 MW size limitation due to the first stage design of the steam turbine." (Technology Evaluation, page 18).

Subsequently, Basin's projected baseload power requirements increased from 250 MW to 385 MW (net), and the gross electrical output of the proposed boiler increased to 422 MW (gross). This report updates the comparison of subcritical and supercritical PC steam cycles at the proposed 422 MW (gross) level.

Subcritical and Supercritical PC Units

Coal-fired units can be classified by their main steam turbine operating pressure and temperature. Units operating at a main steam pressures and temperatures above the critical point of water (approximately 3,208 psia and 705°F) are termed "supercritical" units. Units operating below the critical point of water are termed "subcritical" units.

In a subcritical boiler, water circulating through tubes that form the furnace wall lining absorbs heat generated in the combustion process which, in turn, generates steam by the evaporation of part of the circulated water. Saturated steam produced in the boiler must be separated from the water before it enters the superheater. Subcritical units utilize a steam drum and internal separators to separate the steam from the water circulating in the boiler tubes. The temperature of the boiler steam is increased in the superheater above the saturated temperature level. As steam enters the superheater in an essentially dry condition, further absorption of heat sensibly increases the steam temperature. The reheater receives superheated steam which has partially expanded through the turbine. The role of the reheater in the boiler is to re-superheat the steam to a desired temperature.

Modern subcritical units have a maximum turbine throttle pressure of approximately 2,520 psig. Turbines for 2,400 psig operation are usually designed for steam pressures of 2,520 psig at the turbine throttle – a condition of 5% overpressure. A boiler-drum operating pressure of between 2,750 and 2,850 psig is required to allow for pressure drop through the superheater and the main steam line. Main steam pressure and temperature, and reheat temperatures of new subcritical units (2,520 psig / 1050°F / 1,050°F) are significantly higher than pressures and temperatures achievable with older units (typically in the range of 2,400 psig, 1,000°F / 1,000°F). Increased pressures and temperatures have improved the plant heat rate of subcritical units by approximately 2%.

Supercritical boilers operate at a main steam pressure above the critical point of water (3,208 psia). When water is heated at a pressure above 3,208 psia it does not boil; therefore, it does not have a saturation temperature nor does it produce a two-phase mixture of water and steam. Instead, the water undergoes a transition in the enthalpy range between 850 and 1,050 Btu/lb. In this range its physical properties (including density, compressibility and viscosity) change continuously from those of a liquid

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(water) to that of a vapor (steam), and the temperature rises steadily. Supercritical steam boilers are "once-through" boilers and do not require the use of a boiler drum to separate steam from water. In a supercritical boiler all of the boiler feedwater is turned into steam. Supercritical PC units are typically designed to develop a main steam turbine throttle pressure and temperature in the range of 3,500 to 3,600 psig and 1,050°F, and a reheat steam temperature of 1,050°F.

Unit Efficiency

The efficiency of the thermodynamic process of a coal-fired unit depends upon how much of the heat energy that is fed into the cycle is converted into electrical energy. The throttle pressure and temperature of a subcritical cycle is limited by the properties of water, which limits the amount of heat energy that can be converted into working steam. The throttle pressure and temperature of a supercritical cycle is not limited by the properties of water, but by the capabilities of the materials used in the boiler, piping, and turbine. Therefore, more heat energy can be utilized in a supercritical cycle. If the energy input to the cycle remains constant, output can be increased with elevated pressures and temperatures for the water-steam cycle. Output is increased with increase steam flow (at high pressures) through the steam turbine.

There are several turbine designs available (unique to each supplier) for use in supercritical power plants. Turbines designed for use in supercritical applications are fundamentally similar to turbine designs used in subcritical power plants. For a single reheat supercritical unit with a power output in the range of 600 – 1,000 MW, a typical turboset design would consist of three separate turbine modules operating at different pressure and temperature levels.[1] These three modules are the high pressure (HP) turbine, the intermediate pressure (IP) turbine, and the low pressure (LP) turbine section (which will have one, two or three sections depending on the unit size). The generator is directly coupled to the last LP turbine.

In the HP turbine steam is expanded from the main steam turbine throttle pressure to the pressure of the reheat system. Because of the high pressures associated with supercritical cycles, the inlet volumetric flow to the HP turbine is significantly lower than the inlet volumetric flow to the HP turbine on a subcritical unit. Turbine manufactures have designed HP turbine blades specifically for use with supercritical cycles to account for this reduced volumetric flow. One HP turbine design capable of handling supercritical main steam conditions is the barrel type outer casing design, shown as a cross-section below. The high temperature components of the supercritical HP turbine, such as the inlet nozzle, rotor, and inner casing must be made with advanced types of steel (e.g., 9-12% CrMoV steel).

The steam flow is further expanded in the IP turbine section. In both subcritical and supercritical cycles there is a trend to increase the temperature of the reheat steam that enters the IP turbine section in order to raise the cycle efficiency. In the LP turbine section the steam is expanded down to the condenser pressure. There are no significant differences between the IP and LP turbine sections of a supercritical and subcritical plant.

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[1] Rosenkranz, J., Wichtmann, A., "Balancing Economics and Environmental Friendliness – The Challenge for Supercritical Coal-Fired Power Plants with Highest Steam Parameters in the Future," Siemens-Westinghouse, Study supported by funds provided by the German Federal State of North Rhine-Westphalia (European Regional Development Fund – ERDF), [registration number 85.65.69-T-138].

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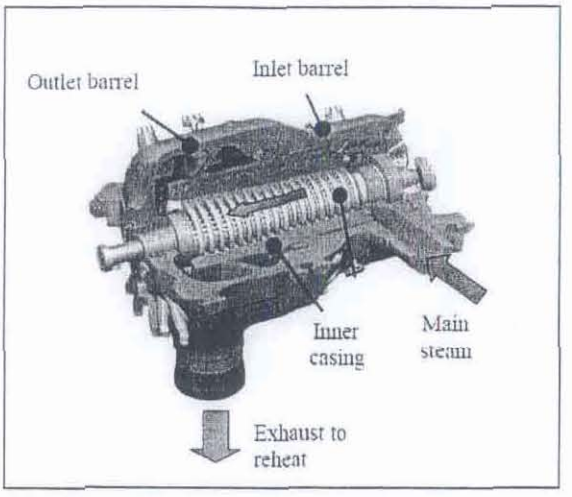

Source: Siemens-Westinghouse

Supercritical Efficiencies and Unit Size

Efficiencies achievable with supercritical cycles are a function of the pressures and temperatures that can be developed in the boiler and the steam flow through the HP turbine. Although a few supercritical units have been built at outputs in the range of 300 – 500 MW, the vast majority of the supercritical units that have been built have been at a 500 MW gross rating or larger. At the larger sizes, volumetric steam flow through the HP turbine is large enough to accommodate larger HP first stage blades. Blade size and design is one of the most important components of overall turbine performance. For unit sizes of 500 MW or more, cycle efficiency improvements will be in the range of 1.5 – 2.0% with supercritical units. Depending on other parameters affecting plant efficiency (e.g., auxiliary power requirements), this difference in cycle efficiency results in a gross plant heat rate (Btu/MW-gross) improvement of approximately 2 to 3%. In other words, less fuel needs to be burned to generate the same electrical output.

Low inlet volumetric flow to the HP turbine (associated with supercritical pressures) is one of the main reasons supercritical units have not been typically considered for sizes less than approximately 500 MW. As size decreases below 500 MW, efficiency improvements associated with the higher inlet pressures are reduced. Some of the decrease in efficiency is due to the necessary application of very short turbine blading in the early HP stages due to the reduced volumetric flow associated with the higher inlet pressure. The shorter blades used with high pressure cycles will still be mounted on relatively high base diameters so that acceptable rotor dynamics can be achieved. This results in a high ratio of seal clearance area to nozzle flow area as compared to a higher MW rated unit with taller blades. The

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increased pressure and reduced volumetric flow results in increased nozzle edge friction loses and seal loses, reducing efficiency improvements in the HP turbine.

Furthermore, since there is very little demand for supercritical equipment at sizes below approximately 500 MW, OEMs typically apply available HP turbine elements at the low end of their application range (which would be larger than necessary) to avoid one time engineering costs for new one-of-a-kind smaller units. This approach would result in the HP blades being set on a higher base shaft diameter than would be used if the elements were designed specifically for the high pressure low output condition. The resulting design would not be optimal thermodynamically, further increasing nozzle edge losses and seal losses.

Technical issues associated with high pressure, low volumetric flow, and short turbine blading in the early HP stages will significantly reduce efficiency improvement gains in the HP turbine associated with supercritical cycles. Reduced efficiency gains in the early HP stages will reduce expected cycle efficiency improvements from the 1.5 – 2.0% range on larger units (500 MW and larger) to approximately one-half that benefit as unit output is reduced down toward the 250 MW level. Discussions with the OEMs conducted as part of the technology review process were consistent on two important issues; (1) the commonly accepted break point to justify the increased costs for the efficiency gains associated with a supercritical unit is above 500 MW; and (2) in the smaller MW sizes the cycle efficiency improvements would diminish to less than one-half of the gains achievable with larger units.

Auxiliary Power Requirements

Auxiliary power requirements will also affect the gross plant heat rate of the unit. Everything else being equal, fan requirements for supercritical units are slightly less than the requirements for a similarly sized subcritical unit because of the reduced combustion air and flue gas flows. However, other project unique design requirements will impact the auxiliary power and overall unit efficiency.

As noted earlier, an air cooled condenser (ACC) is being used at Dry Fork, primarily due to a lack of sufficient water to support a water cooled condensing system. Air cooled condensing systems require greater auxiliary power than water cooled condensing systems, and result in greater variations in turbine backpressure compared to water cooled condensing systems. In addition, turbine driven feedpumps, which are often applied to improve overall unit efficiency, are typically not used with an ACC because the additional steam flow from the feedpump turbine would require a larger condenser (and associated auxiliary power consumption) and would not operate as efficiently as motor driven feedpumps because turbines operate efficiently only within a relatively narrow backpressure range. Therefore, motor driven feedpumps have been selected for Dry Fork.

For large supercritical units (e.g., >500 MW) with turbine-driven boiler feed pumps, base auxiliary power requirements will be slightly less than the auxiliary power requirements of a similarly sized subcritical unit because of the efficiency of the turbine-driven feed pumps and the reduced fan requirements. However, for the Dry Fork design, which uses motor driven feedpumps, the auxiliary

power requirements for supercritical units would be in the range of 3.14 % of gross generator output compared to approximately 2.17% for subcritical units. This difference more than offsets the slight reduction in fan requirements.
Although the Dry Fork unique design considerations indicate that higher pressures associated with a supercritical unit will not significantly improve efficiency, higher steam temperatures can still be used. The Dry Fork boiler is being designed with the advanced subcritical steam cycle conditions inlet to the turbine of 2,520 psig, 1050°F / 1050°F. These increased pressures and temperatures will improve the heat rate of the plant by approximately 2% compared to subcritical conditions of 2,400 psig / 1,000°F / 1,000°F.

Commercial Availability at 422 MW

Supercritical units being planned for the U.S. are in the 500 MW gross rating or larger size. Although a few supercritical units have been built at sizes below 500 MW, turbine suppliers do not offer turbine designs for smaller supercritical steam flows. Based on discussions with OEMs conducted during the technology review process, suppliers advised that supercritical turbine designs below approximately 500 MW would be a one-of-a-kind application, and would require significant up-front design and engineering that OEMs are unable to provide in a competitive environment. Since there is very little demand for supercritical equipment at sizes below approximately 500 MW, turbine vendors would likely apply available HP turbine elements at the low end of their application range to avoid the one-time engineering costs. These HP turbine elements would be larger than necessary, further reducing potential efficiency gains with the supercritical cycle.

Likewise, given current market conditions, the boiler suppliers would not be interested in bidding a one-of-a-kind application, and concern regarding their ability to prepare a competitive offering on a small supercritical unit.

Given this feedback, it was determined to be impractical to obtain competitive bids on the two major pieces of equipment, further increasing the cost penalty for selecting a supercritical cycle.

Conclusions

Although some supercritical units have been built at output levels below 500 MW, a larger majority of the supercritical units that have been built have had a gross output rating of 500 MW or more. At larger output ratings, volumetric steam flow through the HP turbine is large enough to accommodate larger first stage blades in the HP turbine, and achieve cycle improvement efficiencies in the range of 1.5 – 2.0%. The smallest application limit for supercritical boiler/turbine designs would be defined by the HP blading design (i.e., blade height), and would be in the in the range of approximately 200 to 300 MW-gross. However, below approximately 500 MW, efficiency differences between sub- and supercritical cycles become smaller because the low volumetric flows to the HP turbine. Finally, auxiliary power

requirements for a supercritical unit at Dry Fork are higher than the auxiliary power requirements for subcritical units due to the use of motor-driven boiler feed pumps.

Sargent & Lundy (S&L) prepared heat balances and performance calculations for both subcritical and supercritical units using Dry Fork specific design criteria (e.g., fuel specifications, ambient conditions, air cooled condensing system, feedpump drivers, etc.). Heat balances and performance calculations were prepared taking into consideration expected HP turbine efficiency gains and auxiliary power requirements. The calculations indicate that net plant heat rates for either the sub- or supercritical cycle would be approximately the same. This occurs because of the minimal efficiency gains expected with small supercritical steam flows (in the range of 0.75% because of the small first stage HP turbine blades) and the impact of additional auxiliary power requirements associated with the motor driven boiler feed pumps. The table below summaries the performance data for this case.

		Subcritical	Supercritical
Gross Turbine heat rate(Annual Average conditions)	Btu/kW -gross	7436	7269
Aux Power	%	8.41	9.30
Boiler efficiency	%	86	86
Net Plant Heat Rate (no margin included)	Btu/kw-hr -net	9440	9319
Plant efficiency	%	36.14	36.61
Difference	%	Base	0.47
Note, this difference is less than the estimated 0.75% due to the application of motor - driven feedpumps, as mentioned earlier. Based on the feedback from the turbine vendors, stated earlier, it's reasonable to estimate that the 0.47% difference shown would be even less, due to the turbine's HP-section inefficiency on smaller size units.			

Therefore, there is no technical basis, nor environmental justification, for designing the proposed Dry Fork boiler as a supercritical unit. Finally, the costs associated with designing the unit for a supercritical cycle would increase overall plant costs by approximately 2 to 4%, and most likely closer to the high value due to the reverse economy of scale effect.

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