

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

In the Matter of:	)	
	)	
	)	Docket No.: 40-9075-MLA
POWERTECH (USA), INC.	)	
	)	Date: December 19, 2014
(Dewey-Burdock In Situ Uranium Recovery	)	
Facility)	)	
_____	)	

**POWERTECH (USA), INC. RESPONSE TO THE ATOMIC SAFETY AND LICENSING  
BOARD'S REQUEST FOR ARGUMENT ON POTENTIAL NON-PUBLIC  
STATUS OF OGLALA SIOUX TRIBE'S EXHIBITS**

On December 10, 2014, the Atomic Safety and Licensing Board (Licensing Board) issued an Order closing the evidentiary record on Contention 3, effectively closing the evidentiary record on all admitted contentions in this proceeding. In this Order, the Licensing Board offered all parties an opportunity to submit argument regarding whether Exhibits OST-029 through 041 should be accorded non-public status. In its December 4, 2014, response to the Oglala Sioux Tribe's (Tribe) supplemental testimony and exhibits, Powertech (USA), Inc. (Powertech) offered preliminary arguments regarding the confidential nature of the exhibits submitted with Dr. Hannan LaGarry's supplemental testimony based wholly or in part on recently disclosed borehole data and documents either previously in Powertech's possession or purchased from Energy Fuels Resources (USA) Inc. (EFR). In support of the previously offered discussion, Powertech offers the following argument and respectfully requests that the Licensing Board continue to hold Tribe Exhibits OST-030 through 041 as proprietary and confidential information subject to the current Protective Order. Powertech does not take a position on the

non-public status of Tribe Exhibit OST-029, which is the supplemental testimony of Dr. Hannan LaGarry.

Initially, the Tribe and its expert Dr. LaGarry already have agreed to be bound by the Protective Order, as amended by the Licensing Board on September 12, 2014. Indeed, the amended Protective Order states that its scope covers “borehole data and documents or other information ordered to be disclosed by the Licensing Board in its September 8, 2014 Order.” September 12, 2014, Order Granting Motion to Amend Protective Order at 2. Based on this language, the Protective Order appears to cover the partial geophysical and lithology borehole logs contained in Exhibits OST-030 through 041. For example, Tribe Exhibits OST-030 and OST-041 are the headers of geophysical logs, which are exactly the type of logs/data discussed at the evidentiary hearing when the Licensing Board heard oral argument on the relevancy of such logs/data and whether they should be subject to mandatory disclosure. Additionally, Tribe Exhibits OST-031 through OST-040 contain partial lithology logs.<sup>1</sup> The lithological descriptions on these logs contain information regarding subsurface geology. As described by Powertech Chief Geologist Frank Lichnovsky, lithology logs provide information on the characteristics of the various subsurface geologic units:

“When a geologist identifies a unit from the geophysical log, the lithology log may be used to describe the characteristics of that unit. For example, for a shale identified on the geophysical log, the lithology log typically would describe the grain size, composition, and color of that unit.”

Powertech Exhibit APP-074 at 18, ¶ A.30.

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<sup>1</sup> While Dr. LaGarry refers to these as “drillers’ notes” they are in fact lithology logs as described by Messrs. Lichnovsky and Demuth: “Dr. LaGarry indicated in his testimony that his review primarily consisted of reviewing what he refers to as ‘drillers’ notes.’ Based on the limited exhibits provided, these apparently refer to lithology logs, which are handwritten lithological descriptions recorded by the field geologist based on his or her observations of the drill cuttings, or handwritten notes at the tops of geophysical logs.” Powertech Exhibit APP-074 at 3, ¶ A.5.

With regard to the color of the sandstones targeted for uranium ISR, Mr. Lichnovsky further describes how color allows a geologist to determine where the borehole is in relation to the oxidation/reduction boundary, which is critical to mapping uranium roll fronts:

“Color is particularly useful for sandstones, since it indicates the oxidation state of the sandstone, which allows the geologist to determine whether the borehole is within the oxidized interior of a roll front or in the reduced zone beyond the roll front.”

*Id.*

Powertech’s evaluation of the major confining units across the Dewey-Burdock Project license area primarily was based on interpretation of thousands of geophysical logs rather than lithology logs, since geophysical logs “provide ‘hard data’ that can be interpreted at any time by qualified and experience professionals,” while “[l]ithology logs ... are subjective observations by persons whose qualifications we know absolutely nothing about.” *Id.* at 3, ¶ A.5. Nevertheless, lithology logs may be used to fill in data gaps in instances where geophysical logs are absent:

“Powertech does not have a geophysical log for IHK2. Therefore, the lithology [in the geologic cross sections provided as Exhibits APP-078 and APP-079] is interpreted from the lithology log in Ex. OST-035. Although this is less precise than using geophysical logs, it is the best subsurface information available for this location.”

Powertech Exhibit APP-074 at 14, ¶ A.21.

In addition to containing information regarding subsurface geology, some of the lithology logs provided by OST as evidence also contain instrument readings that a qualified industry expert could use to derive additional information and draw additional conclusions regarding uranium mineralization. More specifically, Tribe Exhibits OST-033, 035, 036, and 037 contain handwritten “probe values” which are gamma measurements recorded at various depths. As testified by Errol Lawrence during the evidentiary hearing, gamma measurements, or gamma ray measurements, are valuable in identifying uranium mineralization:

“Gamma ray also is typically used to some degree, to a lesser degree for lithology definition or distinction. However, in the uranium industry, the gamma ray's primary role is to identify mineralization since it's measuring natural radiation, as you'd expect. If you run across a uranium mineralized zone, you're going to get a spike or a kick in terms of radioactivity. So that's the primary purpose that gamma ray logs are used for. And they're very good for that.”

Tr. at 930, Lawrence.

Each of the Tribe Exhibits OST-030 through 041 contain geologic data and “geophysical data” that could be used to develop uranium mineralization conclusions and, as such, this is exactly the type of information that is valuable to a company such as Powertech or a competitor when seeking to develop a specific ISR project.

Had the Tribe sought to have the admitted exhibits excluded from the Protective Order, the appropriate course of action should have been to file a motion to amend the protective order to exclude such exhibits. In this instant case, no such motion was filed and the Tribe offered no legal argument in its Motion to admit additional testimony and exhibits other than to say they do not concede that the admitted exhibits should be protected under the Protective Order. Tribe November 21, 2014 Motion at 2. The Tribe’s failure to follow appropriate administrative procedure to have these exhibits excluded from the Protective Order should result in maintenance of the confidential nature of these admitted exhibits.

Next, as stated in its December 4, 2014, pleading, Powertech asserts that the Tribe’s exhibits containing the disclosed borehole log data fall under the 10 CFR § 2.390(a)(4) exemption for confidential business information. As stated previously at the evidentiary hearing, in Powertech COO John May’s affidavit accompanying its August 26, 2014, response to the Tribe’s motion for mandatory disclosures and in the September 11, 2014, Joint Motion to amend the protective order, the borehole log data purchase (including geophysical logs and lithology logs or what Dr. LaGarry refers to as “drillers” notes) resulted in a significant company financial

expenditure, are not available in any public sources, and are data typically maintained as confidential for financial purposes. As stated by Mr. John Mays in his August 26, 2014, affidavit, the borehole log data that provides clues to the precise location and quantity of the uranium resource are preserved as confidential due to the fact that release of such data would offer a competitive advantage to other companies and would de-value such data in the event of a future corporate transaction between Powertech and another corporate entity. Accordingly, the borehole log data possessed and disclosed by Powertech, either from its own exploratory drilling or historical data in Powertech's possession prior to license application submission or acquired more recently from EFR, was costly to obtain and has significant financial value that would be of great importance to any company attempting to develop the Dewey-Burdock ISR Project. As stated above, the Tribe makes no attempt to refute the potential confidentiality of these data in its Motion other than to say they do not concede that they are confidential and that Dr. LaGarry's testimony addresses "inadequacies and omissions in NRC Staff and Powertech analyses and conclusions that are based on borehole logs and information Powertech provided in its application and which are already included in the hearing record." Tribe Motion at 2. Moreover, if the geophysical and lithology logs in Tribe Exhibits OST-030 through OST-041 were to be made publicly available, they would provide no tangible benefit to members of the public, since they relate to private property controlled by Powertech and an ISR project overseen by several regulatory agencies (e.g., NRC, the United States Environmental Protection Agency (EPA)); therefore, withholding the data will not harm members of the public, as oversight from these agencies is designed to ensure protection of public health and safety and the environment by statute.

Lastly, the Tribe admitted Exhibits OST-030 through 041 qualify for confidentiality protection under 10 CFR § 2.390(a)(9) as “geological and geophysical information and data, including maps, concerning wells.” 10 CFR § 2.390(a)(9). As stated above, Tribe Exhibits OST-030 through OST-041 contain “geophysical data” in the form of lithological descriptions and, in some cases, instrumentation readings. These data demonstrate that such logs/data fall squarely within the definition of “geological and geophysical information and data...concerning wells.” This type of geological and geophysical data also falls outside the contemplated scope of the *Black Hills Alliance* case where the court explored the legislative history of the exemption nine language (5 U.S.C. § 552(b)(9)) and determined that a plaintiff seeking to discover only the number, locations, and depths of a company’s exploration drill-holes did not result in such drill holes being subject to the exemption nine definition of “geological and geophysical information and data.” See *Black Hills Alliance*, 603 F.Supp 117 (1984). Despite contentions to the contrary that disclosure of seismic reports and other exploratory findings of oil companies would give speculators an unfair advantage over the companies which spent millions of dollars in exploration, the court narrowed the focus of the plaintiff’s request for disclosure to only the number, locations, and depths of exploration drill holes.

In the instant case, Intervenors have submitted borehole logs, including partial geophysical and lithology logs (or what Intervenors refer to as “drillers’ notes”) in an effort to identify potential subsurface features such as faults or fractures and to address potential confinement or lack thereof at the Dewey-Burdock ISR Project site. But, the scope of the data is what is relevant here and not what it is being used for in the Tribe’s supplemental testimony. As stated above, the presence of geophysical data and readings that could assist in development of uranium mineralization data and conclusions, as well as data regarding subsurface features of the

Project site, demonstrate that the *Black Hills Alliance* case does not apply here. Thus, the Licensing Board should maintain the protected status of Tribe Exhibits OST-030 through OST-041.

Dr. LaGarry's supplemental declaration in Exhibit OST-029 contains his opinions regarding his review and NRC Staff's review of the borehole log data and does not directly quote any of the information contained in the geophysical or lithology logs. Therefore, Powertech does not take a position on the non-public status of Tribe Exhibit OST-029.

Respectfully submitted,

**/Signed (electronically) by/ Christopher S. Pugsley**

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Dated: December 19, 2014

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**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing **“POWERTECH (USA), INC. RESPONSE TO THE ATOMIC SAFETY AND LICENSING BOARD’S REQUEST FOR ARGUMENT ON POTENTIAL NON-PUBLIC STATUS OF OGLALA SIOUX TRIBE’S EXHIBITS”** in the above-captioned proceeding have been served via the Electronic Information Exchange (EIE) this 19th day of December 2014, which to the best of my knowledge resulted in transmittal of the foregoing to those on the EIE Service List for the above captioned proceeding.

Respectfully Submitted,

**/Executed (electronically) by and in  
accord with 10 C.F.R. § 2.304(d)/  
Christopher S. Pugsley, Esq.**

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Dated: December 19, 2014