

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the matter of)	
)	
POWERTECH (USA) INC.)	Docket No. 40-9075-MLA
)	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility))	October 9, 2014

DECLARATION OF DR. HANNAN LAGARRY

I, Dr. Hannan LaGarry, hereby declare as follows:

1. I am an expert in the above-captioned proceeding; my testimony, CV and area of expertise are already in the record. To summarize, I am a stratigrapher, geologic mapper, and full-time professor at Oglala Lakota College in Kyle, South Dakota. In preparing this declaration, I relied on expertise gained through training and experience in reviewing and interpreting borehole logs and other geologic data to create and review narratives, representations, and maps of subsurface geology.
2. From September 12-14, 2014, during my trip to Powertech offices in Edgemont, S.D., I reviewed the borehole logs that the Board ordered disclosed. It is my understanding that the information in this declaration may be disclosed in accordance with the Board's Orders and the Protective Order I signed in order to gain access to the data.
3. The data I reviewed consisted of an array of digital borehole data, minilogs, handwritten drillers' notes, and full-sized electronic logs. These data are standard for subsurface geological work, and I have reviewed and compiled such data many times while employed as an intern at the National Soil Survey Laboratory and as a Research Geoscientist at the Nebraska Geological Survey.
4. It took me about 4 hours to inventory the available data. I determined that the boxed drillers' notes and full-sized electronic logs are likely to be of most value in my analysis. As was discussed in the hearing in Rapid City during the week of August 19, 2014, the review and analysis of these paper logs is a time and effort-intensive process, requiring detailed inspection of each log individually and the comparison of multiple logs in a side-by-side comparison. It took me about 10 hours to review ½ box of drillers' notes and electronic logs. I estimate that, now that I'm familiar with the task at hand, that I can double my work rate and complete an entire box in about 8 hours.
5. I counted 27 ½ boxes and 5 file cabinets (holding about 4 boxes worth each) remaining

to review, for a total of about 47 ½ boxes.

6. For the initial review of the data, I traveled from my home in Chadron, NE, to the Powertech offices in Edgemont, SD. This required that I drive 4 hours (round trip) and resulted in out of pocket costs of about \$200/day (\$40 gas, \$20 food, \$140 motel).

7. Based upon my expertise and familiarity with the material, I believe it will take me, working alone at a rate of about 8 hrs/box, about 48 days to complete a scientifically competent review. I could work 2-3 days/week, and complete the task after about 20 weeks. This assumes that my research appointment is redirected to this task with the approval of Oglala Lakota College's Vice President for Instruction and my Department Chair. Leave from my job is out of the question, as my expertise at the college is unique and no replacement is available. I have asked for, but not yet received, approval for this activity.

8. Working with the help of 2 paid student assistants, at a rate of 4 hrs/box, it should take about 24 days to complete the task. We could work 2 days/week and complete the task in 12 weeks. This assumes that my research appointment is redirected to this task with the approval of Oglala Lakota College's Vice President for Instruction and my Department Chair. As discussed above, leave from my job is out of the question, as my expertise at the college is unique and no replacement is available. I have asked for, but not yet received, approval for this activity. This option is only available if the work occurs in Rapid City, as my assistants have families and are full-time students with college classes to attend.

9. It is my professional opinion that the type of data contained in these 47 ½ boxes and digital files are likely to be highly relevant to Contentions 2 and 3 and may provide a sufficient number of data points for me to create stratigraphic cross sections and geologic maps that support the Oglala Sioux Tribe and Consolidated Intervenor's position that there is a lack of adequate containment. Accordingly, it is essential that this data be pored through box by box, sheet by sheet, with professional efficiency and accuracy to ascertain a better understanding of the stratigraphy and geology of the proposed project area.

10. It is also my professional opinion that the Final Supplemental Environmental Impact Statement lacks modern geological maps that are typically used by professional geologists to communicate analysis of the borehole data under current review to other professionals, the public, and decisionmakers.

I declare under penalty of perjury that the foregoing is true and correct of my own knowledge. Executed in accord with 10 CFR 2.304(d).

Executed in Chadron, Nebraska on October 9, 2014.

Hannan LaGarry

Dr. Hannan LaGarry