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Sent: Thursday, June 20, 2013 12:04 PM
To: Diaz, Marilyn
Cc: LINK Bob (AREVA); KOGLIN Wade (AREVA)
Subject: Increases to DFP Cost Estimate

Marilyn,

Pursuant to our phone conversation earlier this week, you requested additional information relative to two cost increases that will be reflected in the next version of AREVA's DFP, over and above the increases that were already in the triennial update version that you received in January 2012. The one increase is the approximately 3% increase in the costs originally reflected in Tables 35 and 36 of the January 2012 version and now reflected in Tables 35-42, which were created by the disaggregation of Tables 35 and 36 into a format more consistent with the rest of the DFP. The other cost increase involves correcting errors in how we derived our steam cleaning and sand blasting costs. I'll address them individually below.

1. The disaggregated Table 35/36 costs went up around \$21K (I'm going to use round numbers for both issues so as to not make this an exact accounting exercise.) Approximately \$11K of this is related to engineer and safety engineer time for the development of work plans and safety plans respectively; approximately \$4K stems from pre-job training involving the safety engineer, the backhoe operator, the laborers, and the health and safety technicians (HSTs); approximately \$4K involves HST coverage for portions of the work formerly covered in Table 35; and approximately \$2K was an adjustment necessitated by some differences in labor rates in the original Table 35 estimate versus the labor rates in Table 7 of the original DFP submittal. Spreading out the Table 35 and 36 costs into a series of tables consistent with the balance of the DFP required us to re-think the cost estimate for this work and resulted in the changes discussed above.
2. In our January 2005 DFP submittal AREVA transitioned to steam cleaning and sand blasting rates based on information derived from an environmental remediation/demolition cost estimating manual published by R.S. Means, a nationally recognized source for such data. A very recent AREVA Corporate question relative to our steam cleaning cost per square foot figure in our current DFP led us to go back to our original transition to the R.S. Means data. In doing so we discovered both an error and an omission in how the data in the manual was applied. The error involved the misinterpretation of a figure in a cost table and the omission involved not recognizing that the data were applicable to work in non-hazardous environments and therefore failing to apply a safety level correction factor set forth elsewhere in the manual. These errors occurred in both the steam cleaning and sand blasting cost rates, albeit in different directions and magnitudes. You'll note that in our 2012 DFP update we applied a 1.5 multiplier to our rates to account for the extra challenges of working in a radioactively-contaminated environment. Although this was a step in the right direction relative to the safety level correction omission, it was insufficient in magnitude when compared to the R.S. Means correction. The misinterpretation of the R.S. Means cost table data was a more significant error, particularly relative to steam cleaning costs where it erroneously and significantly reduced the cost per square foot. The parallel misinterpretation error caused an erroneous, but much less significant, increase in the sand blasting cost per square foot. These erroneous rates had been carried forward, escalated for inflation, in subsequent revisions of the DFP. Corrected (recalculated) rates are as follows:
 - steam cleaning---\$1.29/sq. ft., compared to the \$0.415/sq. ft. rate in the January 2012 DFP submittal,

-sand blasting-----\$3.75/sq. ft., compared to the \$4.15/sq. ft. rate in the January 2012 DFP submittal.

These corrected rates will translate into an approximate \$478K increase in the combined steam cleaning and sand blasting totals in Table 12 of the DFP, which when escalated by the DFP's 25% contingency factor, will increase the cost estimate by approximately \$600K.

I hope this provides your reviewers with the information they need relative to these two cost estimate increases. We regret, but are pleased to have found, the significant errors in the surface decontamination costs. My understanding is that you will notify AREVA when the NRC is fully satisfied with AREVA's RAI responses, conveyed via our initial March 12, 2013 letter and subsequent e-mail correspondence. At that time we will proceed to revise the DFP in accordance with our RAI responses, incorporating the cost increases discussed above. Financial assurance instruments will fully reflect the new cost estimate total. Please contact me if you have questions or concerns at this time.

Loren