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ATTN: Document Control Desk
Director, Office of Federal and State Materials and
Environmental Management Programs
United States Nuclear Regulation Commission
Washington D.C. 20555-0001

Re: Hematite Decommissioning Project (License No. SNM-00033, Docket No. 070-00036)

Response to Westinghouse's "Request for Review of Approach for Unrestricted Release of Soil in the Vicinity of the Former Evaporation Ponds that Structurally Support an 8-Inch Diameter High Pressure Natural Gas Pipeline at the Hematite Decommissioning Project" (ML14352A415)

Dear Sir/Madam,

This communication contains the comments of Laclede Gas Company ("Laclede"). The comments are offered in opposition to Westinghouse Electric Company, LLC's ("Westinghouse") "Request for Review of Approach for Unrestricted Release of Soil in the Vicinity of the Former Evaporation Ponds that Structurally Support an 8-Inch Diameter High Pressure Natural Gas Pipeline at the Hematite Decommissioning Project" (the "Proposal") in which Westinghouse proposes to leave in place contaminated soil beneath Laclede's natural gas pipeline ("NGP") at the Hematite, Missouri plant. In support of its Proposal, Westinghouse has provided (i) a cover letter dated December 17, 2014 signed by Ms. Gay M. Fussell together with Attachment 1 which is entitled "Radiological Unrestricted Release Assessment of Soil Under the Natural Gas Distribution Pipeline" dated December 18, 2014 (collectively, the "December 2014 Assessment") and (ii) a supplemental submission provided under cover letter signed by Gay M. Fussell, dated January 15, 2014 (the "January 2015 Supplement").

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A. Westinghouse Failed to Consider All Appropriate Options.

In the December 2014 Assessment, Westinghouse discussed concerns about worker safety in connection with excavating in and around Laclede's NGP. December 2014 Assessment pp 4-5. The discussion focused on the potential safety concerns in excavating soil down to and beneath the NGP, and concluded that leaving substantial quantities of contaminated soil in place, in a pyramid-like form underneath the pipeline, is a safer option. The December 2014 Assessment also referenced prior discussions with Laclede about the necessary soil support required to stabilize the NCP during excavation so that the structural integrity of the NGP is not compromised. The impression conveyed to the reader is that leaving significant quantities of contaminated soil in place beneath the NGP is an approach that is acceptable to Laclede. It is not.

Laclede respectfully submits that the focus of Westinghouse's discussion - whether is it safer to excavate around and under the NGP or to leave large quantities of contaminated soil in place - creates a false choice. While the option suggested by Westinghouse certainly offers Westinghouse substantial cost savings (at the expense of Laclede and the rate-paying public), Westinghouse's analysis fails to address or even consider the safest option by far – relocating the impacted segment of the NGP. The relocation approach is a far safer approach than either of the alternatives considered in the December 2014 Assessment. A new pipeline that bypasses the contaminated area can and should be constructed. Once the bypass is completed, the bypassed segment of the existing NGP can be disconnected and Westinghouse can excavate all the contaminated soil, if and to the extent it is required to do so by its license, its decommission plan, and/or the Nuclear Regulatory Commission ("NRC"). In short, relocation would allow Westinghouse to eliminate entirely the risks posed in digging under and around an active pipeline or leaving in place a pyramid of contaminated soil. The relocation option should have been fully evaluated in the December 2014 Assessment. The glaring absence of such an evaluation is itself sufficient to compel disapproval of the Proposal.

B. The Westinghouse Proposal Fails to Fully or Adequately Account for Future Risks to Laclede's Workers.

In considering the Proposal, it is essential for the NRC to understand that, if the Proposal is approved, it is not a question of if Laclede's workers will be exposed to the contaminated soil Westinghouse proposes to leave in place; it is a question of when they will be exposed. While there are no current plans to replace the NGP, it was constructed in the mid-1950s and is, therefore, well over half a century old. It is inevitable that at some point in the foreseeable future, the NGP will have to be repaired and/or replaced. Therefore, exposure to the contaminated soil is not a conceptual concern, it is a certainty.

Further, the NGP carries the sole supply of natural gas to several significant communities around the Hematite plant. Therefore, any leaks or failures must be addressed immediately in order to restore essential, life sustaining services such as residential heating. In the event of a major pipeline failure or leak, immediate restoration of service will be essential and Laclede will not have

the "luxury" of first trying to locate the appropriate Westinghouse personnel or to conduct significant radiological or chemical surveys to fully explore the existing exposure conditions. To avoid service interruption, Laclede must act swiftly.

In the December 2014 Assessment, Westinghouse contends that any exposure to radiation is unlikely to occur at a dose high enough to cause injury. Yet, this contention is flawed for several reasons. First, Westinghouse candidly admits that, "[p]ortions of the Root Stratum that are left to provide structural support to the NGP may have *elevated levels of radioactivity*." December 2014 Assessment p. 13 (emphasis added). Westinghouse further states that, "it is possible that during excavation of the evaporation ponds that *previously unidentified areas of significant contamination* could be found in the soil structurally supporting the NGP that would require removal or re-evaluation of the NGP Soil Volume contributing dose estimates." December 2014 Assessment p. 12 (emphasis added). Thus, Westinghouse plainly concedes that the samples on which its Proposal relies are insufficient to preclude the possibility that "previously unidentified areas of significant contamination" will be found in the soil it plans to leave in place, the very same soil to which Laclede's workers will be exposed at the time of NGP repair or replacement.

Moreover, Westinghouse admits that discovery of such previously unidentified significant contamination could require removal of the soil and/or re-evaluation of the dose estimate Westinghouse used to justify its Proposal to leave the soil in place. In essence, Westinghouse seems to be saying that under the exposure assumptions utilized, its limited sampling results indicate that radiation in the soil is not high enough to harm anyone. Yet, in the same breath, Westinghouse admits that it is quite possible that in sampling the area Westinghouse missed radiological contamination so significant that it would require removal of the soil or a complete re-evaluation of the dose estimate that supposedly justified the Proposal.

To address the possibility that significant radiological contamination could be discovered, Westinghouse states that, "[i]n the event that this situation occurs, work will be immediately stopped and not restarted until an acceptable path forward is developed with concurrence from Laclede...and the NRC." *Id* at 12-13. This "we'll deal with it then" approach is hardly an acceptable contingency plan – indeed, it is no plan at all. Moreover, the approach entirely fails to address the likely scenario that significant previously unidentified contamination is found not during Westinghouse's excavation, but rather during future repair or replacement of the NGP by Laclede at a time when Westinghouse and its project team have long since left the site.

Further, if "significant contamination," in the form of "elevated levels of radioactivity" and/or chemical contamination, is encountered by Laclede during repair or replacement of the NGP, the discovery may well be made under circumstances when emergency repairs are required and significant public health and safety concerns are at issue. Laclede should not be forced to choose between the need to perform immediate emergency repairs to restore natural gas flow essential for heating homes in the communities served by the NGP and conducting radiological surveys and contamination assessments necessary to protect its workers. Yet that is exactly the position Laclede will find itself if the NRC allows Westinghouse to leave contaminated soil in place around

the NGP. If Laclede must perform radiological surveys and chemical contaminant assessments prior to or in connection with the excavation work necessary to perform repairs on the line, the communities it serves could be without heat and other essential services for an extended period of time – a scenario with real and potentially severe public health and safety ramifications. Conversely, if Laclede immediately proceeds with excavations necessary to restore service, as it normally would where its right-of-way was not adversely impacted by dangerous contamination, it would be putting its workers at risk of exposure to "previously unidentified areas of significant contamination." That "choice" is simply unacceptable; nor is it necessary, as it can and should be avoided by relocating the NGP.

C. Any Failure to Relocate the NGP Would Inappropriately Shift the Risk of Residual Contamination and Costs of Investigation and Remediation or Any Future Relocation From Westinghouse to the Public

Laclede is a regulated public utility that serves the rate-paying public. In the simplest of terms, the costs of providing natural gas service are primarily borne by the public through rates reviewed and approved by the Missouri Public Service Commission. If Westinghouse, as proposed, leaves the vast quantities of contaminated soil in place for Laclede to confront when it performs excavations necessary to maintain its natural gas delivery system, the costs of investigating, assessing, excavating, transporting and disposing of that soil, and the costs of hiring and deploying specially trained crews to address the radiological and chemical concerns, are all costs that will be foisted on Laclede, and therefore the public.

Laclede, having been advised by the Westinghouse December 2014 Assessment of the possible discovery of previously unidentified areas of significant contamination, cannot and should not ignore the associated risks. Laclede will have to take appropriate precautions and other measures to ensure worker safety and to comply with the many regulatory requirements that govern the handling and disposal of contaminated soil. Alternatively, Laclede could attempt to acquire additional right-of-way/easements and re-route the NGP itself. However, under that scenario, the costs would be incurred by Laclede and, thus, the rate-paying public. Either way, it is palpably unfair that the general public should absorb the costs of such measures rather than the licensee who has expressly agreed to conduct all necessary decontamination and decommissioning as a condition of its license!

D. The December 2014 Assessment is Inadequate to Support the Proposal to Leave in Place Soil Under and Around the NGP

While the Westinghouse decontamination and decommissioning project has been proceeding for many years, Laclede only recently became aware of the Proposal to leave contaminated soil in place within its easement and under its NGP. Laclede is in the process of retaining a qualified specialist to review and scrutinize the December 2014 Assessment, the January 2015 Supplement and the baseline risk assessment conducted by Westinghouse in 2007. Yet, even without the benefit of a complete technical review by a qualified consultant, the adequacy of the December

2014 Assessment and the January 2015 Supplement as support for the Proposal is, at best, dubious. As stated above, Westinghouse admits there may be previously unidentified areas of significant contamination in the soils that are to be left in place. Such an admission simply states the obvious given the limited sampling upon which the Proposal is based. Westinghouse itself highlighted the concern about the adequacy of the sampling when it "discovered" some additional sample results which it reported in the January 2015 Supplement. When the additional results were included in the data set, the survey unit dose more than doubled! While Westinghouse was quick to point out that the revised calculation does not alter its previous conclusion with regard to dose, the January 2015 Supplement clearly illustrates what a significant impact a few more data points can have on the dose estimates, and calls into doubt the adequacy of Westinghouse's sampling.

Further, Westinghouse introduces some inaccurate and/or highly questionable statements in the December 2014 Assessment, which have the effect of "downplaying" the risk. Westinghouse states that "[c]onsideration was given to the *possibility* that at some future date the gas company would need to dig up and work on the NGP." December 2014 Assessment p. 13 (emphasis added). Again, that workers will dig in the soils Westinghouse proposes to leave in place is not a "possibility", it is a certainty! The question is when, not if, the exposure will occur.

To support its erroneous notion that "any work on the NGP would be localized in nature to conduct repairs", Westinghouse points to statements by Laclede personnel that the pipeline would be left in place when it is no longer needed. Westinghouse then incorrectly speculates that since exposures would be limited to "repairs," any exposures would be "expected to be short in duration." *Id* at 14. To the extent that Westinghouse is suggesting that repairs to the NGP are the only source of exposure, Westinghouse is simply wrong. At some point, the section of NGP running through the area at issue will need to be replaced. The NGP is now approximately 60 years old, it will not last forever and it may not last for many years longer. Moreover, Laclede's easement rights through the Hematite site are less than 17 feet in width. Therefore, at the time of NGP replacement, absent relocation by Westinghouse as suggested in these comments, new pipe will have to be installed immediately adjacent to and alongside the old pipeline. Thus, it is not at all relevant that the existing pipe may eventually be abandoned in place, as installation of the new pipe will necessarily entail excavation in the contaminated soils. The notion that exposures will be "short in duration" is of course further speculation based on the erroneous assumption that only limited repairs to the NGP will be made. In fact, exposure reasonably could be expected to last weeks or even months, and workers are likely to come into close contact with the excavated soils.

In the December 2014 Assessment, Westinghouse further downplays the inevitable risk by suggesting that "[b]ecause the NGP was installed prior to the construction of the evaporation ponds, there should be minimal contamination directly below the NGP." *Id.* That the NGP was installed prior to the construction of the evaporation ponds does not mean that contamination in the NGP soils will be minimal, especially since Westinghouse's own figures and drawings show that the evaporation ponds extend up to and were immediately adjacent to, if not directly above, the NGP. See *id*, Figure 1, 2 and 4. Westinghouse's statement as to the extent of the potential contamination is pure speculation.

In sum, the December 2014 Assessment is based on limited sampling and erroneous exposure assumptions which are insufficient to support Westinghouse's request.

E. If the NGP is Not Relocated, an Assessment that Takes Into Account Actual Foreseeable Exposure Scenarios Should be Conducted Along with Additional Sampling

Contrary to the descriptions in Westinghouse's December 2014 Assessment, the prospect of future worker exposure is a certainty. If the NGP is not relocated, as it should be, Westinghouse should conduct additional assessment to account for the actual exposure conditions that will actually occur in the future. Requiring such additional work is consistent with the NRC's pending rulemaking on low-level radioactive waste disposal. *See* proposed revisions to 10 CFR Part 61. Notably, the proposed revisions express a concern and need for greater protection of both future users and the general public through the introduction of performance and intruder assessments. In contrast, Westinghouse's proposal fails to appropriately account for and assess the dangers posed to Laclede's workers who are likely to come into direct contact with contaminated soils for potentially significant durations during future repair or replacement of the NGP. Westinghouse's calculations seem to be based on certain limited residential construction and/or exposure assumptions, and do not appear to adequately protect against the more significant exposure which a pipeline worker may experience. While Westinghouse seems to suggest that any contact with unremediated soils will be minimal, repair or replacement of sections of damaged pipeline will necessarily involve excavating the surrounding soils and may subject workers to intensive and prolonged exposure to and contact with contaminated soils. An assessment of the potential radiological and chemical exposures and risks posed to Laclede's workers must be conducted before a decision on Westinghouse's Proposal is made.

F. Prior to Acceptance of the Westinghouse Proposal, Laclede Should be Afforded the Opportunity to Obtain its Own Technical Assessment and the Public Should Have the Opportunity to Review and Provide Comment on the Proposal

If the NRC is seriously considering approval of the Proposal – which, for the reasons set forth herein, Laclede submits it should not do – then the NRC should delay any action until (i) Laclede has had the opportunity to fully assess the Proposal through consultants who specialize in radiological and chemical contaminants, and (ii) the general public (who will be absorbing the costs associated with approval of the Proposal) is provided notice of and the opportunity to review and comment on the Proposal.

Because the December 2014 Assessment and January 2015 Supplement were disclosed to Laclede only recently, and Laclede wanted to communicate its concerns directly to Westinghouse and the NRC prior to taking other actions, Laclede has not yet had the opportunity to conduct a full technical review and analysis of the Proposal. As indicated above, Laclede is now in the process of obtaining a technical review by a qualified specialist.

Under 10 CFR 20.1405, the NRC has the authority to notify and solicit comments from local and state governments, the EPA and the affected public by publishing a notice in the Federal Register, local newspapers and other appropriate forums, "whenever the Commission deems such notice to be in the public interest." Here, the public, as rate payers, will ultimately bear the costly consequences of leaving in place areas of soil that may contain significant contamination, if Westinghouse is allowed to do so. As such, this situation presents the precise scenario where public comment is most appropriate. Accordingly, the public should be given notice and the opportunity to be heard. A fair opportunity for public notice and comment is, at the very least, essential to the integrity of the process. It will ensure that adequate time is taken for consideration by interested parties before a costly mistake is made that could have significant potential health and safety consequences.

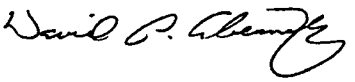
It is not in any way Laclede's intention or wish to impede progress toward completion of the Hematite project. However, given that the decontamination and decommissioning of the Hematite site is a multi-year project, and the fact that Laclede's technical review and the public comment period could proceed simultaneously, any delay to the project would not be the least bit material.

G. <u>Relocation of the NGP is the Safest Approach and is Consistent with the Public Interest</u>

Relocation of the pipeline would eliminate entirely the worker exposure and safety risks addressed in Westinghouse's December 2014 Assessment and those discussed by Laclede above. It will also help ensure the uninterrupted flow of essential natural gas to the public, and prevent the public from taking the risks of and footing the bill for "previously unidentified areas of significant contamination." Further, implementation of the relocation approach could be accomplished without any delay to the completion of the project. While it is understandable that Westinghouse would prefer to avoid the cost of relocation, if they are not required to relocate the NGP, the public will ultimately bear that cost and the associated risks, without even having had the opportunity for notice and comment. The relocation option should be adopted at the Hematite site. When the public interest is considered, it is clearly the best and only acceptable alternative.

Sincerely,

Laclede Gas Company

By 

cc: Mr. John Hayes, NRC
Ms. Gay M. Fussell, Westinghouse