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LATHAM & WATKINS LLP

October 28, 2014

Craig Melodia
Associate Regional Counsel
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: Ashland Lakefront Superfund Site: Initial Response to September 23, 2014 Weston Dry Dredge Report

Dear Mr. Melodia:

On behalf of Northern States Power Company of Wisconsin ("NSPW" or the "Company"), we are writing to acknowledge receipt of Weston Solutions, Inc.'s ("Weston") Technical Submittal, dated September 23, 2014 ("2014 Weston Report"), and a CD containing backup data pertinent to the 2014 Weston Report. NSPW and its consultants are in the process of reviewing these voluminous new materials; however, based on an initial review, NSPW continues to have serious concerns about the safety and implementability of the proposed dry dredge approach—concerns that are shared by a number of experienced technical experts, including Dr. Richard J. Finno.

In particular, the company remains concerned that the dry dredge is susceptible to a number of different types of failure, and, as acknowledged by Weston, "the development of any one of the . . . potential instability scenarios would represent a serious health and safety risk to construction personnel working within the dry excavation footprint." *See* 2014 Weston Report, at ES-2. Despite recognizing these potentially catastrophic consequences, Weston concludes that it would only reject the dry dredge as a technically feasible cleanup option if there were "a high probability" of failure. *Id.* The company, however, adheres to a higher standard of safety, and believes that a more universal and standard approach is warranted when it comes to protecting the health and safety of its employees and contractors. NSPW's highest priority is the safety of its workers, and the company is not willing to endanger the welfare of construction personnel by gambling on an unproven remedy that poses a significant risk of catastrophic failure, especially when much safer remedies (such as a wet dredge or an engineered shoreline) can provide equivalent environmental benefits.

NSPW is also surprised by the extent of the new analysis in the 2014 Weston Report, particularly given that NSPW and the U.S. Environmental Protection Agency ("EPA") had agreed to an open, transparent process of sharing technical information contemporaneously.

While NSPW has abided by that agreement and shared its analyses with EPA and Weston up front, it is now clear that Weston developed two revised analyses *a year ago* that were only recently shared with NSPW and the public. In addition, the Army Corps of Engineers submitted to EPA a critique of Weston's prior analyses *more than eight months ago* that identified numerous problems with Weston's analyses, yet those documents were also only recently shared with NSPW and the public. NSPW is concerned that this type of approach does not allow the type of scientifically-focused dialogue that was originally intended.

NSPW's concerns with the proposed dry dredge remedy and the 2014 Weston Report are set forth in greater detail below and in the materials attached to this letter. Because the new 2014 Weston Report contains new methods and analyses, and substantially changes the remedy set forth in the Record of Decision ("ROD") for the Ashland Lakefront Superfund Site ("Site"), issued in September 2010, NSPW reserves the right to submit a supplemental report responding to those analyses upon our further review.

I. THE DRY DREDGE CONTINUES TO PRESENT SIGNIFICANT SAFETY AND IMPLEMENTABILITY CONCERNS

A. Multiple Previously-Submitted Expert Reports Concluded that the Proposed Dry Dredge Presents Serious Safety, Environmental, and Feasibility Concerns

After learning of the existence of the 2009 Weston Report in 2010, NSPW asked three separate nationally-regarded engineering and consulting experts with particular expertise in sediments (Anchor, Gradient and Burns & McDonnell) to independently review the 2009 Weston Report. Following their independent review of the proposed remedy and Weston analysis, all three consultants concluded that the 2009 Weston Report did not support implementation of a dry dredge at this Site, and all three expressed serious concerns about the safety, environmental risks, and feasibility of a dry dredge.[1] In fact, each consultant concluded that a dry dredge is an inappropriate remedy for the Site and could result in catastrophic and irreparable harm to human health and the environment, which is what originally prompted the agencies to take a second look at the proposed remedy.

Among other things, the experts concluded that a dry dredge creates a significant risk of "bottom uplift," a catastrophic failure of the bay floor that would threaten the safety of the workers performing the remedy and cause wide distribution of the contaminants in the bay sediments. The dry dredge is also based on unrealistic expectations regarding the ability of a sheet pile wall to hold back Lake Superior, among other potential failure mechanisms. A dry dredge would also cause significant community disruption and potentially expose the community to greater impacts from noise, air emissions, odors, and the long-term closure of Kreher Park. Notably, however, there are less expensive, less dangerous, and more effective alternatives to the

[1] Three additional consultants, AECOM, URS Corporation and Foth Infrastructure & Environment LLC, also expressed serious concerns with the dry dredge, prior to the release of the Weston Report.

selected dry dredge. As such, the dry dredge is inconsistent with the National Contingency Plan ("NCP") and would be an unsafe and inappropriate remedy for this Site.

B. Dr. Finno's Recent Independent Evaluation Also Finds Serious Flaws with the Proposed Dry Dredge Remedy

The concerns expressed by Anchor, Gradient, and Burns & McDonnell are echoed in a recent report prepared by Dr. Richard J. Finno. As described in NSPW's letter dated October 28, 2014, Dr. Finno is a distinguished Professor of Civil Engineering at Northwestern University, specializing in geotechnical engineering. Dr. Finno independently evaluated the proposed dry dredge from a geotechnical perspective. Based on his review, Dr. Finno concludes that the proposed dry dredge remedy is not safe or implementable at the Site due to the potential for bottom heave, global instability, and numerous and insurmountable design and constructability concerns. Dr. Finno further concludes that a wet dredge remedy would eliminate the risks associated with the dry dredge, and would be a far better solution to the geotechnical challenges at the Site.[2]

C. Weston's New Analyses Do Not Resolve The Experts' Concerns Regarding The Safety And Feasibility Of A Dry Dredge At This Site

While NSPW remains in the process of digesting Weston's new analyses, NSPW continues to be concerned that the approach toward the dry dredge in the 2014 Weston Report is overly aggressive and still not safe. Anchor also continues to have concerns about the dry dredge following their review of the 2014 Weston Report and backup analyses. Anchor has identified a number of significant concerns related to Weston's analytic methods, Weston's approach toward implementability and construction safety, and the incomplete nature of Weston's key data and information. Anchor's concerns are set forth in the technical memorandum attached hereto as Attachment A.

Based on its initial review of the 2014 Weston Report and the concerns noted herein, Anchor has concluded that *the dry dredge proposed in the 2014 Weston Report would be unsafe and unimplementable and better alternatives exist* to clean up the Site. Anchor concludes—and NSPW agrees—that this is not a time or place to experiment in the field with novel and untested theories when the consequences of failure could be so severe. Anchor intends to perform a thorough and detailed review of Weston's backup data and analyses and accompanying exhibits, and NSPW reserves the right to submit additional reports evaluating these new materials, but even a preliminary review has revealed serious concerns with Weston's approach.

[2] At this time, Dr. Finno has only conducted a preliminary review of the September 23, 2014 Weston analyses and the United States Army Corps of Engineers' ("Army Corps") February 21, 2014 "Peer Review Concerning Dry Dredge Excavation" and has concluded that these additional materials and new methodologies do not change his ultimate conclusions.

II. THE 2014 WESTON REPORT SIGNIFICANTLY ALTERS THE DRY DREDGE REMEDY DESCRIBED IN THE RECORD OF DECISION

As you know, the ROD selects a wet-dry hybrid remedy for the sediments, while allowing for the potential of a remedy change to a wet dredge only approach, following the successful completion of a pilot study. The dry dredge proposed in the ROD, which was based on the 2009 Weston Report, consisted of a single sheet pile wall and excavation. Since that time, Weston's approach to the dry dredge has changed. In the 2014 Weston Report, Weston now proposes a single sheet pile wall with add-ons, a possible dewatering of the aquifer to attempt to balance pressures, construction of temporary roads in the bay, a "segmental" approach to dry dredging, and so on. None of the modifications, including the segmental approach, are described or analyzed in the ROD. Nor were they evaluated under the NCP factors for remedy selection, including feasibility, effectiveness, cost, cost-effectiveness, etc. These modifications are substantial, and materially alter the dry dredge remedy set forth in the ROD.

In its recent analyses, Weston also targets an unduly low factor of safety of 1.25 for bottom uplift. Numerous other consultants contacted by NSPW have indicated that a factor of safety of 1.25 is too low for assessing possible uplift at this site for this type of project, and that a factor of at least 1.5 for uplift is appropriate. Alarmingly, as set forth in Anchor QEA LLC's ("Anchor") analysis dated October 28, 2014, Weston's own calculations show that the proposed dry dredge would not be able to meet a factor of safety of 1.5 in certain locations.

For these reasons, and the reasons set forth in Section I above, NSPW continues to believe that the dry dredge is unsafe and unimplementable. Moreover, due to the significant modifications in the 2014 Weston Report, an amendment to the ROD would be required before EPA could proceed with implementing a dry dredge option at this site.

III. EXPERIENCED TECHNICAL EXPERTS HAVE CONCLUDED THAT A WET DREDGE REMEDY IS THE SUPERIOR APPROACH

The serious safety concerns that have been identified with regard to the dry dredge can easily be avoided through implementation of an alternative remedy, such as a wet dredge or an engineered shoreline. In fact, four expert consultants (Anchor, Burns & McDonnell, Gradient, and Dr. Finno) have all separately concluded that an alternative remedy, such as a wet dredge or an engineered shoreline would avoid the risks of catastrophic failure that are posed by the dry dredge, and therefore would be better options for remediating the Site.

In addition, the ROD specifically allows for a wet dredge remedy, if the results of a pilot study demonstrate that wet dredging can successfully clean up the bay. NSPW strongly believes that safety comes first; accordingly, it is unacceptable to the company to subject construction personnel to the serious risks posed by the dry dredge when there are much safer alternatives that could provide equivalent environmental benefits.

IV. THE REMEDY SELECTION PROCESS SHOULD BE TRANSPARENT

NSPW, EPA and WDNR initially agreed that the parties would exchange technical information regarding the parties' respective positions on the dry dredge remedy (including

formulas, assumptions, minimum safety factors, etc.) *before* commencing the offshore sampling program in 2013, and then proceed to have an open, scientifically-focused dialogue among the parties' technical teams regarding the safety and implementability of the dry dredge once the offshore sampling was completed. NSPW compiled, and provided its analytical approach to EPA and WDNR on October 15, 2012 prior to performing the offshore sampling (as well as an updated analysis on December 17, 2013, after the offshore sampling was completed). EPA first shared its analyses only earlier this month, even though the reports on which the 2014 Weston Report relies were produced in 2013, critiqued by the Army Corps earlier this year, and then further revised. This was not the open and collaborative approach that the parties initially contemplated.

V. NSPW REMAINS WILLING TO PERFORM A REASONABLE ALTERNATIVE REMEDY

NSPW is unwilling to undertake a remedy that presents an unacceptable safety risk to workers, and unacceptable risks to human health and the natural environment. NSPW continues to remain open to considering reasonable, safe, and environmentally sound approaches to addressing contamination in the bay. One potential alternative continues to be a wet dredge remedy for the Site. Another potential option would be an enhanced confined disposal facility or permanent engineered shoreline which would promote recreational and navigational opportunities for the local community, consistent with the City of Ashland's Waterfront Redevelopment Plan. To the extent the agencies want to implement the dry dredge, NSPW urges EPA to consider accepting NSPW's cash-out offer, which would allow the agencies to perform the risky dry dredge remedy themselves .

Thank you for your attention to these important matters. We look forward to discussing these issues with you further at your earliest convenience.

Sincerely,

Kelly E. Richardson
of LATHAM & WATKINS LLP

cc: Kristen Carney
Tom Benson, U.S. DOJ
Sumona Majumdar, U.S. DOJ
Lacey Cochart, WDNR
Scott Hansen, EPA
Jamie Dunn, WDNR
John Robinson, WDNR

Enclosures

ATTACHMENT A

ANCHOR QEA

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TECHNICAL MEMORANDUM

To:	Jerry Winslow, Northern States Power - Wisconsin	**Date:**	October 28, 2014
From:	Michael Whelan, P.E. and John Verduin, P.E., Anchor QEA, LLC	**Project:**	110851-01.03
Re:	Initial Commentary on 2014 Weston Report Ashland/Northern States Power—Wisconsin Lakefront Superfund Site		

At the request of Northern States Power—Wisconsin (NSPW), Anchor QEA, LLC, has performed a preliminary review of the recently published *Ashland Lakefront Superfund Site Technical Submittal* (referred to herein as the 2014 Weston Report; Weston 2014) prepared by Weston Solutions on behalf of the U.S. Environmental Protection Agency (EPA). The purpose of this technical memorandum is to present Anchor QEA's initial comments on the 2014 Weston Report.

Although Anchor QEA has not yet performed a detailed review of all the various analyses, white papers, and data tables included in the 2014 Weston Report, we have reviewed the main body of the document and have done an initial overview of the various attachments and exhibits. As part of our review, we have also read two documents representing peer reviews by the U.S. Army Corps of Engineers (USACE), dated February 21 and September 23, 2014 (USACE 2014a, 2014b). Our initial overview has been sufficient for us to have identified a number of significant issues with the presentation, logic, and conclusions contained in the document.

As was documented in Anchor QEA's document, titled *Shoreline and Offshore Geotechnical Evaluation Report* (Anchor QEA 2013), we harbor serious concerns about the safety and implementability of the "dry dredge" approach to sediment remediation at the Ashland Lakefront Superfund Site. In short, the discussions and conclusions contained in the 2014 Weston Report are insufficient to change our fundamental conclusion that dry dredging at this site would be unsafe and unimplementable, and that more appropriate alternatives exist for cleaning up site sediments.

We offer the following concerns regarding the 2014 Weston analysis.

Weston has applied inappropriately low safety factors that would result in unnecessary risks being taken at this site. The minimum factors of safety for the analyses presented in the 2014 Weston Report are insufficient given the fundamentally serious nature of potential instabilities at this site. The selection of factors of safety is obviously a crucial element of these evaluations, and therefore was the subject of significant focus in Anchor QEA's 2013 geotechnical evaluation. We believe that Weston has defined an inadequate factor of safety for bottom uplift, given conditions at the Site, as they propose the use of a minimum 1.25 rather than the industry standard minimum value of 1.50 recommended by Anchor QEA. This is particularly important given the fact that Weston, for example, determined a factor of safety value of 1.4 for location AQ-SB-02.

Inadequate rationale is provided for Weston's factor of safety selection, and the limited rationale that is provided does not support their approach. For such an important parameter as the minimum factor of safety, there is very little rationale provided in the 2014 Weston Report for the value they have selected. Their defense of the 1.25 value rests on apparent consistency with the USACE's peer review letter dated February 21, 2014 (USACE 2014a), which itself briefly cites a passage from Bowles' *Foundation Analysis and Design* (Bowles 1996) related to analysis of temporary excavations, but no further context is provided for their use of Bowles' text. This is important because the context of the project, the risks, the extent of subsurface knowledge, and the ability to respond to unknowns in the field all need to be taken into account when determining an appropriate factor of safety. It is not merely a matter of pulling a number out of single reference without consideration of the overall context and project-specific conditions. Anchor QEA has recommended that a factor of safety of 1.5 be utilized for bottom uplift, based on recommended practice by the United States Navy (Naval Facilities Air Command, or NAVFAC 1986), work by Fang (1991), and consideration of the inherent risks of performing dry dredge excavation at the Ashland site. Therefore, the minimum factor of safety value of 1.5 is well supported and justified given the importance and risks associated with dry dredging, and it remains the prudent minimum value in our view. This would mean that Weston's recalculation of the factor of safety for bottom uplift at AQ-SB-02, is, in fact, below (less safe than) the appropriate threshold level.

Weston proposes an erroneously low factor of safety for piping failure, which is, in fact, inconsistent with their own work in 2009. Piping is another possible effect of dry dredging for which Weston has applied an inappropriately low factor of safety. In the 2014 Weston report, the minimum factor of safety is stated as being 2.0. In fact, this is inconsistent with and much more aggressive than their own work in Weston (2009), which proposed a minimum factor of safety of 4 to 5. Anchor QEA disagrees with a minimum factor of safety of 2.0 for piping, as it is less than half of the industry accepted range of values of 4 to 5. Piping is an erosive failure mode that happens progressively and cannot be effectively controlled once initiated, so the minimum factor of safety is often much higher than for analyses of other failure modes.

Weston has not adequately accounted for site-specific wave and water level conditions that will be experienced on Lake Superior and in Chequamegon Bay. Wave forces and lake levels experienced at the site will have a profound effect on the stability of the sheetpile barrier walls. Experiences during the wet dredge pilot study set-up in September of this year provided a vivid example of how challenging conditions can be in Chequamegon Bay and at this site. Exhibit 4 to the 2014 Weston Report presents a detailed discussion of potential wave heights, in which it appears that the potential for severe variations in weather conditions, wave state, or lake levels have not been thoroughly accounted for in the analysis. Lake level variations could occur both from seiche effects and from other longer-term climactic and regional factors. As important examples, a 1- to 2-foot temporary seiche effect accompanied the storm event of September 9 and 10, 2014, and lake levels over the past year (2014) have been observed as approximately 1 foot higher than Weston's presumed lake level elevation of 602 feet. In addition to the wave-imposed forces, it is also important to consider the potential variation in lake surface level, because deeper water allows larger waves to transmit without losing as much energy as they would in shallower water.

It also appears that Weston only evaluated waves generated for a 50-year return period, drawn from the Coast and Harbor Engineering (2012) wave study for the site, rather than for a 100-year return period.

Weston appears to have developed unique ways of analyzing site stability, which result, in some cases, in new and untested formulas, rather than using standard, published analytical

techniques. The 2014 Weston Report presents a pair of white papers newly developed by William Deutsch that purport to derive, "detailed and technically advanced quantitative analysis procedures" for basal heave and bottom uplift. The white papers present newly constructed, multi-step analytical formulas for both failure modes, based upon an assemblage of references and theoretical interpretations. One specific instance where a new formula has been derived by Weston is in their proposed treatment of underlying artesian groundwater pressures in the computation of basal heave. While we have not yet fully reviewed all of the theoretical discussions and derivations of the proposed formulas and approaches, the development of new formulas and calculation methods appears to be untested by industry peers and field experience, and may imply an attempt to rationalize the safety and feasibility of dry dredging at this site. This is neither the time nor the place to experiment with the application of novel and untested theories, where the consequences of failure could be so severe. Self-derived factor of safety equations have not been vetted or tested in the geotechnical industry, and lack a history and track record of being applied and implemented successfully.

Weston has developed design concepts that would be neither implementable nor workable under real-world conditions, and has failed to recognize the constructability challenges that dry dredging would pose in the field. Installation of sheetpiling is going to be a much more difficult process than envisioned and described by Weston, with debris, rock, and natural variability of soil strengths in the Miller Creek Formation (MCF) presenting areas where hard driving or refusal are likely to be encountered. These variable subsurface conditions and driving difficulties are going to make it very difficult, if not impossible, to achieve a consistently "impermeable" wall, in which each connection between sheets remains perfectly sealed. A reliably impervious and structurally intact wall is an unrealistic expectation.

Weston has ignored the community impacts that would result from the dry dredging approach, including significantly increased noise, duration, odor, and cost. The 2014 Weston Report presents no discussion of the environmental and community impacts that would result from sheetpile installation and from dry dredging itself. Sheetpile driving would cause significant and prolonged noise, as demonstrated during the Phase 1 bulkhead installation. In addition, dry dredging would impact air quality to a significantly greater degree than wet

dredging, because the lake bed itself would be exposed directly to the air during sediment removal. These impacts would be compounded further and extended over a longer time span if the dry dredging were to be done segmentally.

Some construction elements described in the 2014 Weston Report are inconsistent or completely absent from the Record of Decision's (ROD's) remedy description. The segmental approach to dry dredging remains a concept at odds with the ROD discussion, and Weston's brief mention of "temporary roads" within the dry dredging area implies that significant construction measures would be needed to undertake the dry dredge concept, which represent significant additions to, and deviations from, the project concept described in the ROD. Performing the work in a segmental fashion, and utilizing temporary roads within the excavation area, cannot be deferred as mere "design" issues. On the contrary, these are fundamental construction elements that affect the very definition of the work itself, modifying the feasibility, cost, and environmental effectiveness of the work, and all of these factors are an essential part of the ROD formulation process.

Weston acknowledges that potentially dangerous conditions could be encountered, but their proposed mitigation measures are unrealistic and not implementable. Weston acknowledges the potential for soil instability within the dry dredge area, but they simultaneously overestimate the ability to detect such dangers in the field (basing it entirely on the appearance of a thicker impacted sediment layer), and underestimate the difficulty of achieving a reliable approach to mitigating the condition, if it were recognized at all. What if the bottom of the MCF were at a higher elevation than expected, so that the reduced aquitard thickness degrades the factor of safety? There would be no way of knowing this in the field prior to installation of the sheetpile, so it would not be possible, in practice, to recognize that the design needs modification.

Another example is the idea of using wells to reduce water pressures in the underlying aquifer, a misleadingly simple concept that would be very difficult, if not impossible, to implement successfully. These wells would be installed offshore, so their installation would be much more complicated and prone to imprecision than on-land well installation methods. Furthermore, the amount of time needed to 1) identify the existence and bounds of problematically variable soil layers; 2) devise and design a solution, including well locations,

screened intervals, and the like; 3) install and develop the wells; and 4) achieve and verify the desired degree of depressurization—all in an area with significant spatial gaps between known subsurface conditions, requiring guesswork and approximations each step of the way—renders such an idea thoroughly unworkable within the timeframes of the dry dredging concept, and certainly not in enough time to stave off developing instabilities. Attempting to depressurize the aquifer could also lead to other problems such as settlement of adjoining land areas and disruption to groundwater flow (potentially leading to further spread of the groundwater contamination plume below the Phase 1 area).

The proposed mitigation approach is another instance of a concept that was not described nor evaluated in the ROD, and greatly impacts feasibility, cost, and effectiveness of the remedy.

Weston acknowledges the potential for bottom instability, but simply dismisses the risks and downplays the potential consequences of failure. Weston's reluctance to recognize very real construction challenges is exemplified by their dismissive and over-simplified statement that occasions of incipient basal heave and bottom uplift, "are typically and easily remedied by staged excavation and bottom grading activities, and/or active dewatering of the excavation bottom using readily available suction pumps." This understates the implementation challenges that such measures would represent. Similarly, Weston severely understates the effort associated with performing dry dredging in a segmental fashion, simply saying that it is "more practical and efficient" to do so, without any justification for this highly debatable opinion. In reality, breaking the project into individual dry dredging segments would greatly add to project duration and cost, as each segment would need to undergo sheetpile driving, dewatering, and excavation, separately from the others. The total amount of sheetpile driven would be far greater in a segmental approach, and time, cost, and community impacts would increase proportionately. Additional rows of driven sheet piling would also increase the disturbance of soils within the MCF, further worsening the stability concerns.

Weston fails to address important issues and concerns raised in reports prepared by Anchor QEA and other consultants. The 2014 Weston Report, while lengthy and detailed, is still missing some important points of discussion. Soil strength is a key component of dry dredging stability analysis, and variations play a critical role as possible "weak links" for

stability, but Weston is quick to dismiss the potential for, and importance of, localized areas of disturbance or fracturing in the soil mass, which could degrade predicted strength properties. Their discussion merely states, "[o]ur review of the collected field and laboratory test data… has led WESTON to conclude that these concerns have no merit based on the subsurface conditions encountered at the site." In comparison to the detailed narrative and derivations devoted to other topics, the brevity of this rationale is striking. Furthermore, they have not addressed the possible further degradation of soil strength and disturbance that would result from sheetpile installation, incipient basal heave/bottom uplift, or piping. These effects could lead to further destabilization of the dry dredging scenario as the work proceeds. Altogether, the 2014 Weston Report appears to be highly lacking in discussion regarding these potentially critical soil and strength effects.

Finally, Weston's review of Anchor QEA's 2013 report is confined only to their statement that, "numerous and serious technical deficiencies, inaccuracies, inconsistencies, and overly conservative assumptions were evident," but, as they admit, no further rationale, explanation, or discussion is given. Again, this seems to be a crucial missing element from their review.

The USACE, meanwhile, appears not to have reviewed Anchor QEA's 2013 report at all, nor any of the independent evaluations performed by other engineering consultants, including Burns and McDonnell (2012) and Gradient (2012) . Thus, the USACE's statements regarding the project may be based on an incomplete understanding of the project and the full nature of concerns with its potential stability issues.

NEXT STEPS

This memorandum has presented only a high-level review of the 2014 Weston Report. As previously mentioned, we have not yet completed a thorough and detailed review of the details of their assumptions, their theoretical derivations, mathematical analyses, data set reviews, nor accompanying exhibits. It will be important that the team perform this level of analysis. However, our initial overview has revealed critical problems, oversights, and lack of rationale for the fundamentally important items discussed above.

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