

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
STRATA ENERGY, INC., ) Docket No. 40-9091-MLA  
 )  
(Ross In Situ Recovery Uranium Project) )

**DECLARATION OF CHRISTOPHER E. PAINE ON BEHALF  
OF THE NATURAL RESOURCES DEFENSE COUNCIL &  
POWDER RIVER BASIN RESOURCE COUNCIL IN SUPPORT OF  
CONTENTIONS 4/5A AND 6**

**I. INTRODUCTION**

I, Christopher Paine, declare that the following statements are true and correct to the best of my knowledge.

1. My qualifications and experience relevant to this proceeding are as follows: from August 2007 to March 2013, I held the position of Nuclear Program Director for Petitioner Natural Resources Defense Council (NRDC) and now hold the title of Senior Policy Adviser; from June 1991 to July 2007 I held the position of Senior Policy Analyst in the NRDC Nuclear Program; from February 1987 to May 1991 I was Legislative Assistant for Nuclear Energy and Arms Control to Senator Edward M. Kennedy of Massachusetts. In these positions I have gained a detailed knowledge of the statutory requirements and practical implementation of the Atomic Energy Act (AEA) and National Environmental Policy Act (NEPA). I have participated as a professional staff member in oversight investigations by Committees of the Congress concerning: the proliferative impacts of nuclear technology export licensing; the qualifications of a controversial former NRC Executive Director of Operations (EDO) to serve in a post subject to Senate confirmation; and the use of

fraudulent weld radiographs during construction to document regulatory compliance at a nuclear power plant. I have given declarations in prior and ongoing NRDC litigation challenging the adequacy of NEPA documents prepared by federal agencies, including the NRC, and I have been invited to appear before the Commission three times within the last two years to present NRDC's views on the Commission's regulatory response to the lessons of the Fukushima nuclear accident, and on the way NRC rules frequently function to suppress meaningful public participation in the nuclear licensing process. I am a 1974 graduate of Harvard College.

2. The observations and comments that follow in this declaration are based on my professional experience, on a review of relevant portions of the DSEIS for the Ross ISR Project in Crook County, Wyoming, and Strata's Environmental Report (ER), and on numerous other documents, for which URLs are provided in the text, that contain new and significant information concerning the scope and environmental consequences of the proposed NRC licensing action that was not properly considered in the Applicant's ER and the NRC Staff's DSEIS.
3. This declaration sets forth the historical and factual basis for Petitioners Contention Six that the DSEIS fails to consider the environmental impacts of, and appropriate alternatives to, the applicant's actual proposed project, and instead improperly segments environmental analysis of the project by framing the Proposed Action under review as a small part of the Applicant's planned and scheduled In Situ Recovery (ISR) activities in the Lance District. The declaration also supports the need for the expanded NEPA analysis called for in Petitioners' Contention 4/5A.

4. When the NRC Staff issued a Notice of Intent to prepare the SEIS for the “Ross Uranium Recovery Project” on Nov. 16, 2011, it did not describe a proposed scope for the environmental analysis, and in fact noted the “NRC’s Part 51 regulations do not require scoping for SEISs.” As a consequence of the Staff’s decision not to voluntarily undertake a formal public scoping process for the DSEIS, the task of correctly divining the proper scope for the Proposed Action that would be subjected to detailed environmental analysis in the SEIS became the sole responsibility of the NRC Staff.
5. By the time of the Prehearing Conference on standing and admissible Contentions on December 20, 2011, or at any point in the ensuing months while it was preparing the SEIS, the NRC Staff could have and should have understood, from its own detailed regulatory knowledge of Strata’s mining plans, that the scope of the Proposed Action delineated for detailed NEPA analysis in the SEIS no longer fairly reflected the widening scope of Strata’s proposed mining scheme, advancing well-field deployment schedules, and stepped-up drilling activities in adjacent areas well beyond the proposed boundaries of the “Ross Project.”
6. At any point between issuing the Notice of Intent in November, 2011 and filing the Draft SEIS in March 2012, the Staff could have exercised its inherent discretion and authority, stepped-back, and recognized that the scope of the Proposed Action subjected to detailed environmental analysis in the DSEIS had become too narrow and, with each advancing month, was becoming increasingly susceptible to the charge of being arbitrary and capricious, given the steady stream of ongoing disclosures to financial markets by the (wholly-owned) Applicant’s Australian parent company, Peninsula Energy, Ltd., of its plans, schedules, advance preparations and financing to promptly begin ISL mining of

multiple “Lance Projects” – large areas outside the comparatively small “Ross Project” area that is the subject of environmental analysis in the DSEIS.

7. But NRC Staff chose not to notify the Applicant or the public, via a revised Notice of Intent to prepare a SEIS, that the Applicant’s swiftly advancing plans for multiple “Lance Projects,”—adjacent to the small “Ross Project” area analyzed in the SEIS and spread over a much larger area with consequently wider environmental impacts—now necessitated a significantly revised scope for the Proposed Action and reasonable alternatives that NEPA requires be subjected to detailed environmental analysis. Instead, the Staff issued a Draft SEIS that fails to encompass the actual scope of ISL mining activities and environmental impacts that would be triggered by issuance of the pending draft license for the “Ross Project.”
8. While Petitioners had previously expressed their strong concerns, via Admitted Contentions 4/5A, regarding future mining activities beyond the scope of the Ross Project that could properly be viewed as “reasonably foreseeable” for the purpose of assessing cumulative impacts, as Director of the NRDC Nuclear Program, I, and the other petitioners were not aware, as of the deadline for filing contentions based on the ER in October, 2011, of the immediacy and definitive extent of the Applicant’s plans to mine expanded areas contiguous to the “Ross Project” area, attributes that remove them from the domain of “reasonably foreseeable” future actions that must be assessed for their “cumulative impacts,” and place them squarely in the domain of the Applicant’s “Proposed Action.”
9. Based on its statements at hearing, the NRC Staff, as discussed further below, likewise appears to have been unaware at the time of the immediacy and full extent of the Applicant’s plans that would be set in motion by the granting of a license for the “Ross

Project The ER as originally filed made oblique and even contradictory references to these future plans. At the Prehearing Conference on December 20, 2011, Attorney for the Petitioners, Geoffrey Fettus, noted their concern with the Applicant's position that "cumulative impacts associated with any potential future Strata satellites will be addressed in the environmental reports associated with each such satellite," and then continued as follows: "Strata's application carves up the potential impacts into pieces, preventing the public and regulators from realistically looking at the long term cumulative impacts." (Prehearing Transcript at 138).

10. However, statements made by NRC Staff during the Prehearing Conference on December 20, 2011 encouraged Petitioners to continue viewing these future plans, in legal terms, as appropriately belonging to the domain of contingent, uncertain, but nonetheless "reasonably foreseeable" future cumulative impacts in the vicinity of the Proposed Action, and not yet sufficiently defined to be part of the Proposed Action itself. In particular, at one point in the proceeding Judge G. Paul Bollwerk (for the Board) was inquiring of the Staff whether any follow-on cumulative impacts of the Ross Project could alone be sufficient to grant standing to Petitioner Pam Viviano, a rancher with two properties in the general vicinity of the Ross Project, but not immediately adjacent to its boundaries as then proposed in the License application:

JUDGE BOLLWERK: "...but just hypothetically, if the next project was going to be right next to her ranch, could she raise it then?....

MS. MARSH (for the NRC Staff): I would say she would need to wait until the opportunity for hearing for the new site came about. *If it were proposed as part of this action ...*she could certainly get standing by arguing a harm for that (emphasis added).

JUDGE BOLLWERK: Well, when you say proposed, I mean, here – as the staff has pointed out, I believe, *the applicant has made it clear that they're looking to extend these additional sites on this corridor that they marked out.* All I'm saying is if that corridor went across from her property rather than down to the south, wouldn't she have, at least facially, a pretty good argument?

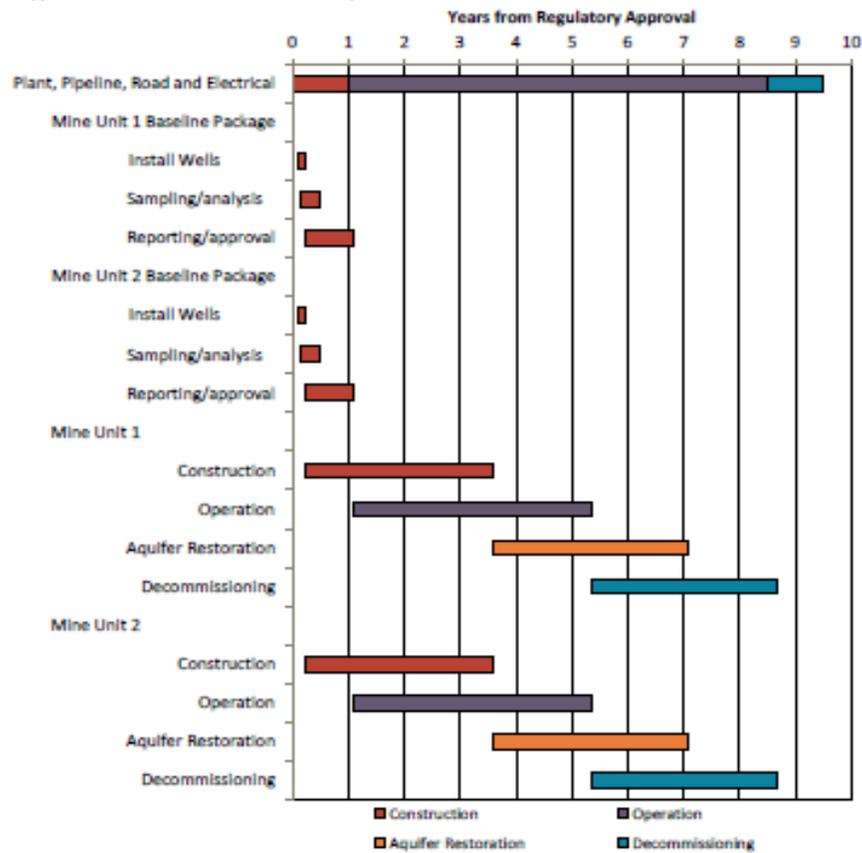
MS. MARSH: ...But we don't – I mean, at this point, *we don't have the details of where any of these –if any of these proposed actions will in fact take place or what the details of those proposed sites might be. We'd be – I mean, we'd really be working at hypotheticals about where these sites might be or when or if they would actually be done.* The staff has said that we believe that the new – an expansion is reasonably foreseeable, but we haven't said that they are definitely going to happen, so we would just be hypothetically arguing about things that might not even happen. *And I don't have anything more.* (12/20/12 Prehearing Transcript, at 43-44) (emphasis added).

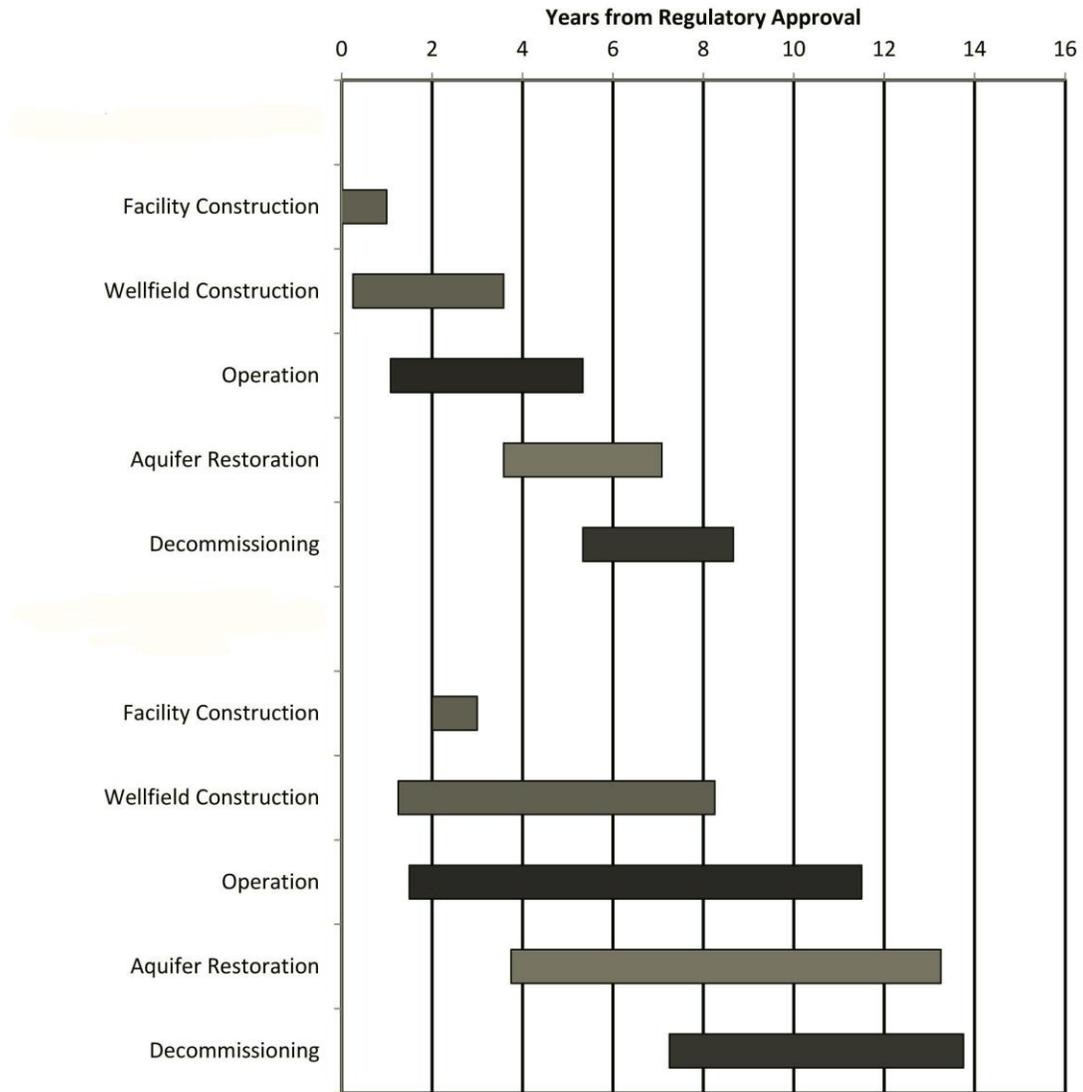
11. I and the other Petitioners likewise relied on the statement by Staff at hearing that “the cumulative impacts coming from future expansion of the ISR in the Lance District” was admissible because “the information doesn't exist in the [license] application...when it comes to the ISR expansion, that information is entirely lacking.” Speaking for the Staff, Ms. Marsh stated, “The Staff will get the information from Strata, any other source it needs to, and then we'll do the analysis [in the] SEIS. At that point, if the Staff addresses the contention, that contention will be moot and the petitioners would have to raise another contention.” (Prehearing transcript, at 147-48).
12. Petitioners have taken Ms. March's counsel to heart and have now “raised another contention,” Contention 6, based on new information that was not available to them in the

ER, but has since come to light in the SEIS, and to a much greater extent, in other documents generated by the Applicant's Australian parent company, Peninsula Energy, Ltd. that are not referenced in the DSEIS.

13. Below are two Figures, from the ER and DSEIS, respectively, that suggest a significant evolution has occurred in the Applicant's and the NRC's strategy and timing for uranium recovery operations in the Lance District beyond the Ross Project. The first figure below is cited in ER Section 1.3.2 on the "*Ross ISR Project Schedule*," and shows a 9.5 year project. This exact figure is not repeated in the SEIS, but one resembling it appears on SEIS page 2-8, but now carries the title, "Figure 2.6: Schedule for *Potential Lance District Development*," and conveys a timeline of 14 years, 4.5 years longer than the schedule described in the ER (see next page for figure).

Figure 1.3-1. Ross ISR Project Schedule



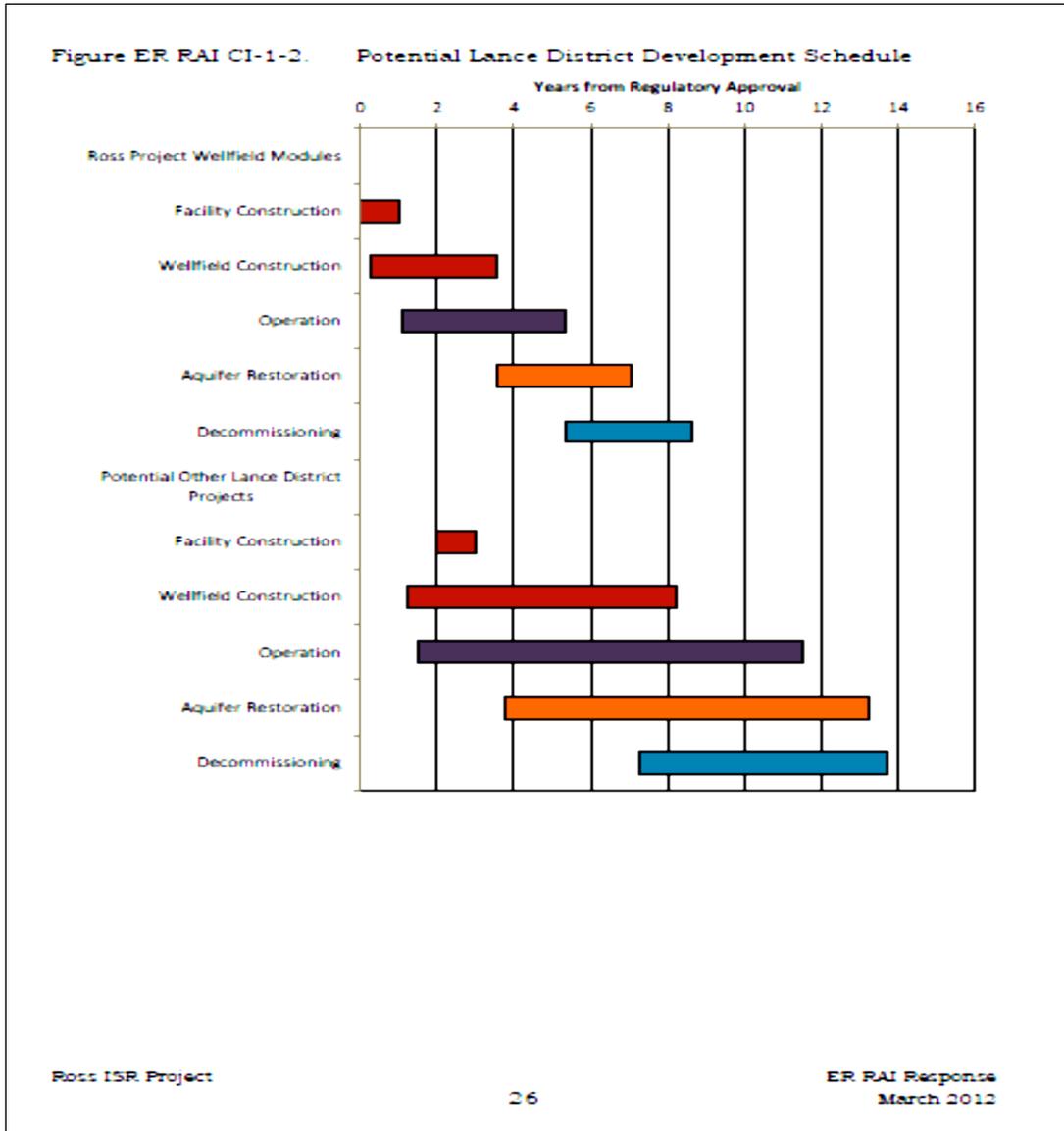


Source: Strata, 2012a.

**Figure 2.6 [from page 2-4 of SEIS]  
Schedule for Potential Lance District Development**

14. If one traces the above figure back to its source (“Strata, 2012a” RAI Response), one finds that the NRC Staff has deleted the subheadings “Ross Project Wellfield Modules” and “Potential Other Lance District Projects” that were present on the above chart in the RAI, subheadings that indicate that the Proposed Action *is really to license a single large ISR project via the Ross Project license and subsequent license conditions or amendments*

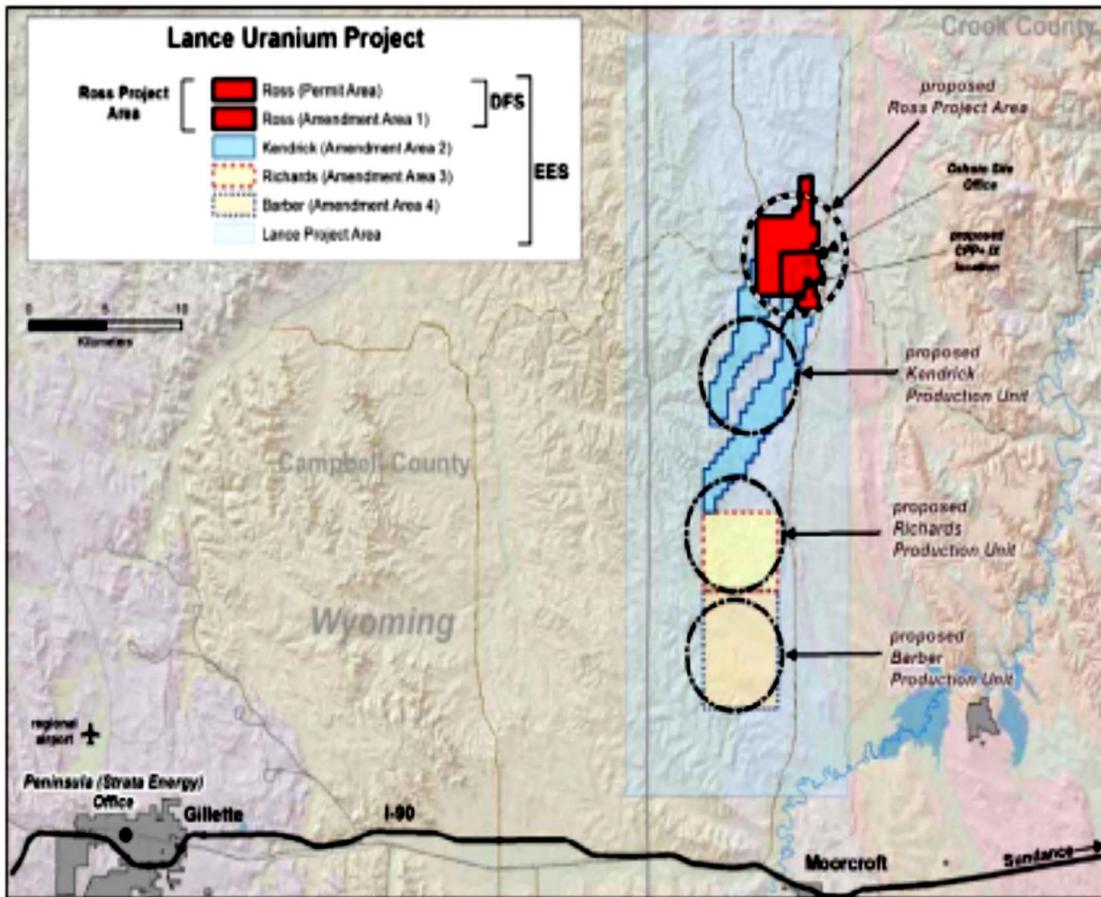
thereto, in which the various subsequent development “phases” clearly significantly overlap each other in time, and “satellite facility” construction begins just a year after the first Ross Project well-field goes into operation, and satellite well-field construction begins less than a year after construction of the Ross Project well-fields. Here is the March 2012 RAI Figure:



15.

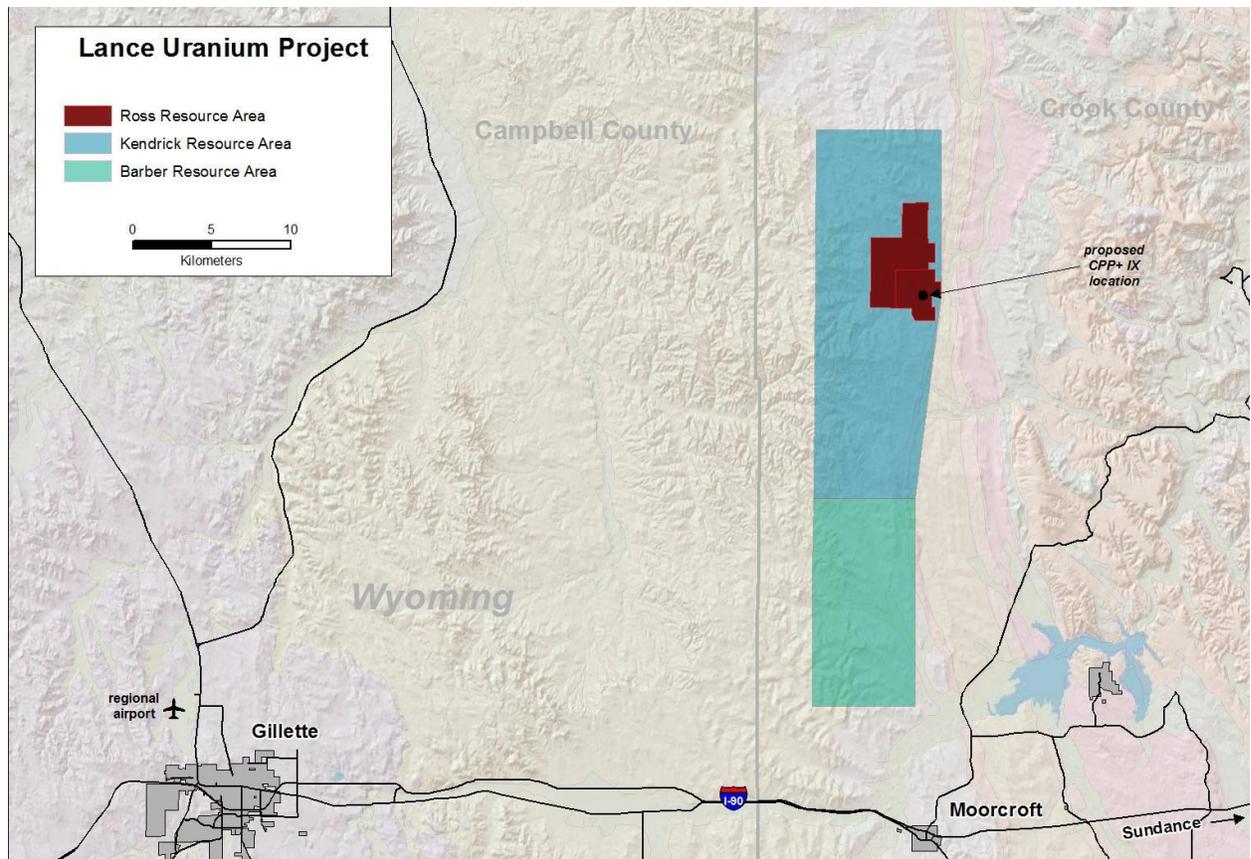
16. Note the NRC Staff's deletions (from the previous chart) of the headings "Ross Project Wellfield Modules" and "Potential Other Lance District Projects" from the above chart provided by Strata. Otherwise it is the same chart.
17. Below is Strata's plan, provided to NRC in the RAI of March 2012, and now reproduced on page 2-4 of the DSEIS, to march through the entire Lance District uranium roll-front deposit over the 14 years following regulatory approval. It reveals that the proposed "Ross Permit Area" subjected to analysis in the ER and DSEIS is but a small fraction of the total area to be mined. It was the NRC Staff's NEPA obligation, not Petitioners', upon receipt of this information to modify the scope of the Proposed Action in the DSEIS to fairly reflect the reality that this expanded sequence of planned "production units" would have much wider environmental impacts, over a more defined timeframe, than previously described in the ER.

Figure ER RAI CI-1-1. Potential Future Lance District Projects



Source: Peninsula 2011

- 18.
19. Below is another map (dated 01/23/13) from the Australian corporate parent, Peninsula Energy, which differs from the previous maps in the ER, showing an expanded “Ross Resource Area” within an even larger “Kendrick Resource Area, which is in turn contiguous at its southern boundary with a “Barber Resource Area.” This map is *prima facie* evidence that even the basic boundaries within which the environmental impacts of this proposed licensing action will be felt have not yet been defined, much less all the potential environmental impacts adequately considered as required under NEPA.



20. **Figure 1: Resource Area Location Map** (Source: Peninsula Energy, January 23, 2013)

21. Note that the NRC/Strata delineated “Ross Project” is merely a subset of a larger “Ross Resource Area” that is in turn included within an even larger “Kendrick Resource Area” that the company intends to mine more or less simultaneously with what it now calls the “Ross Production Unit,” and a further “Berber Resource Area” now abuts the southern boundary of the Kendrick Resource Area and extends far to the south. In other words, *there is no discrete “Ross Project,”* and it represents a tiny fraction of the total resource area that the Applicant is planning and preparing to mine. The proposed “Ross Project” license is merely a legal artifice to facilitate the deployment of a much larger ISL mining operation, now called “The Lance Projects,” that extends over a much larger area.

22. This view is substantiated by a careful examination, which I conducted in April and early May of 2013, of a collection of company releases and presentations for the period October 2010 through March 2013 that I found via a web search on the website of Strata's Australian parent company, Peninsula Energy, Ltd. (Strata Energy is a 100%-owned U.S. subsidiary of Peninsula). In the paragraphs that follow, I will summarize the relevant highlights of that review:

23. In a release dated 4 January 2011, "Peninsula Completes Major Regulatory Milestone," [<http://www.pel.net.au/images/peninsul-19--ayidiesieg.pdf>] the company announced that it had submitted an application for an NRC Combined Source and 11e.(2) Byproduct Material License on December 31, 2010, requesting authorization to "construct and operate an in-situ uranium recovery (ISR) facility at Peninsula's Ross ISR Project, located near Oshoto, in north-eastern Wyoming (Ross Project). The proposed facility would consist of wellfields, pipelines, and a central plant to process extracted uranium into yellowcake for commercial use in nuclear power plants." The release noted that, "as previously announced, in October of 2010 the NRC conducted *an unprecedented on-site visit and pre-license application submission review* of Strata's proposed license application to identify any major acceptance or technical/environmental review issues. Feedback from that critical review was then incorporated into the final license application." This release noted that the "proposed Ross ISR site... forms *part of the total project area and the first to be permitted for production.*" (emphasis added) This statement is significant as it suggests that NRC staff may have been made aware of the expansive nature of the overall project design even before the inception of the formal licensing process.

24. In a release dated 2 February 2011, “Peninsula Announces 33Mlbs U<sub>3</sub>O<sub>8</sub> Resource at Lance,” [<http://www.pel.net.au/images/peninsul-19--zaayeikeis.pdf>] the company stated, “The Directors...are pleased to announce a further upgrade of the JORC-complaint Resource Estimate for the Lance uranium projects in Wyoming, USA (**Lance Projects**)” [boldface in original]. (From this point forward, this is the nomenclature that the company uses to refer to its proposed ISR mining in Wyoming. The proposed “Ross ISR Project” mentioned in prior press release becomes the “Ross Permit Area.”) The company also disclosed that “98% of [the] *Ross Permit Area* resource” had been defined to “Indicated or Measured Category,” and that “resource conversion and exploration drilling will continue with two rotary mud rigs employed full time in the northern Ross area [i.e. outside the “Ross Permit Area”] and a third rig engaged at Barber to identify additional uranium mineralization in the area and increase the resource inventory at Barber.” It also noted, “The Lance project covers an area of over 120km<sup>2</sup> within which there is a combined total of at least 305 line kilometers (190 mile) of known stacked roll fronts,” and goes on to discuss the “upgrade” in the “mineralized potential of the *Lance Projects*” (emphasis added).
25. In a release dated 15 February 2011, “Peninsula Signs Uranium Sales Agreement,” [<http://www.pel.net.au/images/peninsul-19--cheojaozoo.pdf>] the company announced, “Long term sale agreement secured for U<sub>3</sub>O<sub>8</sub> from *Lance Projects*” (emphasis added).
26. In a release dated 24 Feb. 2011, “High Grade Drill Results Continue at Lance,” [<http://www.pel.net.au/images/peninsul---fooxeiquoo.pdf>] the company disclosed that “one drilling rig is currently engaged within the Ross Permit area while a second drilling

rig is dedicated to areas immediately adjacent to the north-west. Within the next quarter, a third drilling rig will also commence drilling at Barber.”

27. In a release dated 14 March 2011, “WDEQ Confirms Permit to Mine Application Complete and Adequate,” [<http://www.pel.net.au/images/peninsul---teewaimith.pdf> ] the company noted that this was “one of two primary permits necessary to conduct ISR operations at the *initial production center of the Lance Projects* in Wyoming, USA.” (emphasis added)
28. In a release dated 4 May 2011, “Nuclear Regulatory Commission has Commenced Formal Safety and Environmental Acceptance Review,” [<http://www.pel.net.au/images/peninsul---eiyaoxaeko.pdf>] Peninsula’s Executive Chairman, Mr. Gus Simpson, stated, “The confirmation that the NRC expects to complete its acceptance review ahead of schedule is an example of the efficiencies being achieved *through the pro-active involvement of Strata and the regulatory bodies* during the new streamlined licensing process” (emphasis added). Such “pro-active involvement” of the company with NRC staff early in the licensing process suggests the possibility that the full-scope of the company’s plan, pursuant to the proposed license, to swiftly mine expanded areas within the Lance District, may have been communicated to relevant officials within the agency early in the application process, in plenty of time to have informed an appropriate scope for NEPA analysis of the Proposed Action in the DSEIS.
29. In a release dated 16 May 2011, “Ross ISR Permitting Ahead of Schedule,” [<http://www.pel.net.au/images/peninsul---vaemoocohl.pdf> ] Peninsula Energy limited said it was “pleased to announce that recent feedback from key US regulatory agencies has confirmed that the Ross In-Situ recovery (ISR) license application continues to advance ahead of schedule.” Again, such “feedback from key US regulatory agencies” presented an

opportunity to advise the Company regarding the necessary scope of the NEPA analysis that would be required to adequately consider the environmental impacts of its integrated plan to solution-mine large areas of the Lance District.

30. In release dated 17 June 2011, “Peninsula Announces Major Resource Upgrade and Definitive Feasibility Study Time Frame,” [<http://www.pel.net.au/images/peninsul---ugeoceotei.pdf>] the company disclosed that “resource conversion” drilling – i.e. to convert “inferred resources” to “indicated and measured resources” suitably delineated for expanded ISR mining -- as well as “exploration drilling” would continue “outside the permit area” in the “northern Ross area” and “at Barber.” The company included a table in the release showing “Lance Project U<sub>3</sub>O<sub>8</sub> Resource Estimate by Area and Category,” which named three ISR areas targeted for development: “Ross Permit Area,” “Ross,” and “Barber,” with the total resource estimates for “Ross” and “Barber” dwarfing the total for the “Ross Permit Area.” The release further states, “one drilling rig is currently dedicated *to the Barber area in order to delineate sufficient mineralization to support the planned remote ion exchange (IX) plant that will provide additional feed to the central processing plant (CCP) [sic] to be located at Ross.*” Note that there is nothing conditional or vaguely prospective about this scenario. It is described nearly two years ago as part of the Applicant’s definite integrated plan, but this is not how it was presented in the ER.
31. In a release dated 29 June 2011, “Nuclear Regulatory Commission Accepts Application for Detailed Technical and Environmental Review,” [<http://www.pel.net.au/images/peninsul---iathuchuej.pdf>] Peninsula Energy stated, “The Ross Project forms the core of *the greater Lance Project*, with primary mineral processing activities centered in *this initial production area*” (emphasis added). The release again took note of Strata’s “strong lines of

communication with the various regulatory bodies,” and announced, “The acceptance review was completed in 55 days, well short of the NRC internal guideline of 90 days for such reviews. With this prompt acceptance, the Ross Project continues to move forward on schedule.”

32. In a release dated 12 Sept. 2011, “DFS Update and Lance Drilling Program Continues to Identify (sic) High Grade Mineralization,” [<http://www.pel.net.au/images/peninsul---jeemaefith.pdf>] Peninsula Energy noted that its initial Definitive Feasibility Study (DFS) “was focused exclusively on the *Ross Project Area (Ross Permit Area and Ross Amendment Area)*,” and that the “preliminary results of the Initial DFS are positive, which is particularly encouraging as *the Ross Project Area covers only a small area and resource base of the larger Lance project*” (emphasis added). In other words, the NRC staff knew, or certainly should have understood by September, 2011, that the “Ross Permit Area” described in the docketed License Application comprised only a part of a larger planned “Ross Project Area” *that already included* an additional “Ross Amendment Area,” and that this expanded Ross Project Area in turn covered “only a small area and resource base of the larger Lance project.”
33. In a release dated 20<sup>th</sup> December, 2011, “Resource Upgrade Drilling Intercepts High Grade Mineralization at Lance,” [<http://www.pel.net.au/images/peninsul---uivahtupie.pdf>] Peninsula Energy announced that recent drilling in the wider “Ross Project Area” west of the “Ross Permit Boundary” had “produced thick higher grade intercepts, and the area is now recognized as *a key area for resource expansion given its close proximity to the proposed Central Processing Plant site*” (emphasis added).

34. In a release [<http://www.pel.net.au/images/peninsul---singaefehu.pdf>] dated 21 December 2011, “Definitive Feasibility and Expanded Economic Studies Confirm the Viability of the Lance ISR Projects,” [note closeness in time with Dec. 20<sup>th</sup> Prehearing] Peninsula Energy disclosed “highlights” of these two studies, including a “planned steady state annual production rate of 2.19 mlbs U<sub>3</sub>O<sub>8</sub> per annum *from three production units within three years of start-up*” (emphasis added). This amount was clearly vastly in excess of the forecast annual production from the “Ross production unit” (aka the “Ross Project”) in Strata’s license application. This release stated that the Ross Project requires only “the first production unit” with “a capacity of 750,000 lbs per annum,” with “production *ramping up over three years* to 2.19 mlbs per annum steady-state production *with the inclusion of the Kendrick and Barber production units*” (emphasis added). The initial 750 klbs U<sub>3</sub>O<sub>8</sub> Ross production unit would produce “for a ten year minimum life from...measured and indicated resources contained within the *original Ross project permit application and* an area containing furthered measured and indicated [i.e. minable] resources that is *an extension of the Ross permit area*” (emphasis added). Just to make clear, even implementation of the small subset of the Proposed Action that is outlined in the ER and SEIS would require an “extension of the Ross permit area” to achieve the “10 year minimum life” outlined in the company’s “Definitive Feasibility Study.”
35. Further reinforcing the integrated nature of the actual full-scale ISR proposal under review in the Licensing process, Peninsula stated that its Definitive Feasibility Study was premised on spreading the capital, fixed-operating, and decommissioning costs of the CPP “across multiple production units within Lance...over an extended period of time,” and cited the companion “Lance Expanded Economic Study” (EES) as “illustrating” this overall project

financial strategy. In the EES, further production units were “assumed to be *permitted for development at Kendrick and Barber and to follow Ross into production at 12 month intervals feeding the CPP*” (emphasis added). The company noted it was “continuing the drill program at Kendrick and Barber...*to provide the feedstock for the expanded project...*The CPP will house the initial ion exchange (IX) circuit and will see an additional IX circuit installed with the commissioning of *the second production unit planned for Kendrick* located in close proximity to the CPP. Additional IX circuits for remote satellite production units will not be housed at the CPP, but *at locations near the remote production units*. Loaded resins from these facilities will be transported to the CPP for further processing into yellow cake...Prior to the commissioning of the Barber production unit an additional US \$8 million capital investment will be required to expand CPP capacity to 2.25 mlbs per annum.

36. Peninsula Energy’s December 21, 2011 release [<http://www.pel.net.au/images/peninsul---singaefehu.pdf>] noted that the purpose of the Lance Expanded Economic Study (Lance EES) “was to demonstrate the Lance projects’ continued economic vitality and robustness *over an extended life beyond the Ross production unit*, which is limited to measured and indicated resources of 6.2 mlbs [of] recovered U<sub>3</sub>O<sub>8</sub> (emphasis added).” Strata’s Australian parent further noted, under the heading “Permitting and Project Development Timeline,” that swift WDEQ and NRC acceptance of the completeness of its applications attested to their “quality,” and “provided the Company with the basis to submit amendments to bring on further production units in a timely and efficient manner.” The following statement contained in the Dec. 21<sup>st</sup> release is of particular interest: “Following a recent review of the permitting strategy the Company is confident in finalizing permitting. In addition *all new*

*project areas are being designed so they are contiguous with the Ross permit area and as such will be deemed to be amendments to the Ross permit (once issued) rather than standalone applications. This strategy will significantly reduce the permitting process and timing going forward”* (emphasis added).

37. In a release dated 16<sup>th</sup> January 2012, “NRC Approves Earlier Deep Well Disposal Testing,” [<http://www.pel.net.au/images/peninsul---aelaouquhu.pdf>] Peninsula Energy announced that the “United States Nuclear Regulatory Commission (NRC) have advised Peninsula’s wholly owned subsidiary Strata Energy, Inc. that the development of a deep disposal well [DDW] to test subsurface conditions would be considered exploration and Strata can begin drilling without any further approval. This decision allows the Company to proceed with DDW testing significantly ahead of original schedule and could see flow rates at the upper limits of expectation that would lead to significant capital expenditure reductions at the *Lance Projects* (emphasis added). . . . The NRC has confirmed that Strata can, upon the issue of the SML [Source Material License] apply to have the test deep disposal well converted for operations.” Executive Chairman Gus Simpson added, “Proactive decision-making like this demonstrates the NRC’s objective approach to the assessment of proposed ISR developments and its understanding of the value to the Companies of obtaining project development information early.”
38. In a release dated 10 February 2012, “Peninsula Acquires Lance Projects Central Processing Site,” [<http://www.pel.net.au/images/peninsul---fochahoung.pdf>] Peninsula Energy Limited announced that it “has acquired 240 acres covering the site of *the proposed Lance Projects Central Processing Plant (CPP)*,” still referred to a year later in the DSEIS as the “Ross Project facility” (emphasis added). (DSEIS at 2-1). Again, the statements of

Peninsula Energy betray no uncertainty or ambivalence regarding the scope of its proposed actions.

39. In a release dated 13 February 2012, “NRC License Process,”

[<http://www.pel.net.au/images/peninsul---eisaesheez.pdf>] Executive Chairman Gus

Simpson stated, “Based on previous license reviews, the grant of standing is a procedural matter and the Company does not anticipate delay to the review process or grant of the SML [Source Materials License].”

40. In a release dated 24 February, 2011 [year is a typo – release makes clear year is 2012],

“High Grade Drill Results to Enhance Lance Resource,”

[<http://www.pel.net.au/images/peninsul---fooxeiquoo.pdf>] Peninsula Energy disclosed

that its drilling along the Kendrick roll front system is consistently producing thick high grade intercepts which *has resulted in its prioritization due to its resource expansion*

*potential and its proximity to the proposed site of the Lance Central Processing Plant.*” In

a statement with environmental implications, in terms of establishing “baseline” water

quality in the “post-licensing” sequential manner described in the ER and the DSEIS, the

company disclosed that the these Kendrick roll fronts (K4 and K5) “are located to the east

of and adjacent to the K3 roll front trend which is down-gradient from the main roll front

within the permit area.”

41. In a release dated 27 February 2012, “Property Acquired for Lance Projects Operation,”

[<http://www.pel.net.au/images/peninsul---aihohttheyy.pdf>] Peninsula Energy announced

that it had purchased, through its wholly owned U.S. subsidiary Strata Energy, Inc., an

additional 34.5 acres that would “facilitate the expanded exploration and the proposed

development of the Lance projects.”

42. In a release dated 5 April 2012, “Peninsula Advances Land and Mineral Rights at Lance,” [\[http://www.pel.net.au/images/peninsul---wiwahgaepa.pdf\]](http://www.pel.net.au/images/peninsul---wiwahgaepa.pdf) Peninsula Energy announced that it had “secured significant additional land and mineral rights for exploration and mining at its Lance Uranium Projects in north-eastern Wyoming. Executive Chairman Gus Simpson commented, “The increase in surface and mineral acreage highlights the success of *Strata’s strategic land acquisition program*. What is currently held more than supports targeted exploration and production requirements at the Lance Projects.” In a lengthy release date 3 May 2012, “Feasibility Study Upgrades Economics at Lance,” [\[http://www.pel.net.au/images/peninsul---ietheichai.pdf\]](http://www.pel.net.au/images/peninsul---ietheichai.pdf) Peninsula Energy Ltd. reiterated many of the conclusions of its 21 December 2011 release (discussed previously above) and stated, “The *Lance ISR uranium projects* are ready to be transitioned to development stage following relevant permitting and project funding factors, which are all well advanced....The Company continues assembling a highly experienced team to successfully transition from explorer to producer and have the financial capacity to *fast track the project implementation* where possible” (emphasis added).
43. In a release dated 15 June 2012, “Spectacular Drill Results Continue at Lance Projects,” [\[http://www.pel.net.au/images/peninsul---daiquoocei.pdf\]](http://www.pel.net.au/images/peninsul---daiquoocei.pdf) Peninsula Energy Ltd. stated, “This drilling has been focused on converting inferred resources to the indicated category in the *planned Kendrick Production Unit* located to the west of the *Ross Production Unit*.”
44. Dated 25 July 2012, “New Roll Front System Discovered at Lance Projects,” [\[http://www.pel.net.au/images/peninsul---aineevooch.pdf\]](http://www.pel.net.au/images/peninsul---aineevooch.pdf) Peninsula Energy Ltd. graphically displayed the extent of its discoveries in the planned Kendrick Production Unit (see Figure 1 on page 3 of this release). The map shows a large area to the west and

southwest of the “Ross Production Unit” that was targeted because “success in this area could support a second ion exchange (IX) circuit within the central processing plant.”

45. In a release dated 15<sup>th</sup> October 2012, “High Grade Drill Results Continue at Lance Projects,” [<http://www.pel.net.au/images/peninsul---epongiiphe.pdf>] Peninsula announced, ‘Strata has suspended resource drilling for several weeks as it complete multiple clusters of aquifer monitoring wells *as part of the Mine Permit extension process*. This process is being undertaken *to include the Kendrick Production unit in the mine planning schedule going forward.*’ (emphasis added)
46. In a release dated 7 November 2012, “\$70 Million Industrial Revenue Bond for Lance Projects Wins Unanimous Crook County Commission Support,” [<http://www.pel.net.au/images/peninsul---aizuatheok.pdf>] Peninsula Energy Ltd. announced that the “\$70 million in requested Bonds represents 47% of the \$148.1 million required to construct the *Lance Projects Central Processing Plant, CPP expansion, Satellite Ion Exchange Plant, and initial well-field development*” (emphasis added).
47. In a release dated 8 November 2012, “Peninsula Receives Draft Source Material License,” [<http://www.pel.net.au/images/peninsul---aimohgaeto.pdf>] Peninsula announced that “issuance of the draft SML in less than two years after application submission reflects *a significantly accelerated schedule over the applications of others in the industry*, which have averaged 3 years or more in receiving draft licenses,” and noted, “The draft SML also *confirms regulatory bounding conditions upon which the project economics have been based*” (emphasis added). Since the “project economics” appear to be based on the successful implementation of the wider “Lance Projects” rather than the singular “Ross Project” described in the ER and the DSEIS, this statement supports the view that the

Proposed Action includes a planned regulatory pathway for expansion of the Ross Project to the scale needed to realize the “project economics” of the Applicant’s multiple planned “Lance Projects.” For the purposes of defining the scope of the Proposed Action to be subjected to NEPA analysis and detailed consideration of reasonable alternatives, such economically-driven expansion along a defined regulatory pathway must be deemed highly likely to occur and therefore clearly within the scope of the Proposed Action.

48. In a release dated 22 November 2012, “Peninsula Receives Permit to Mine,” [\[http://www.pel.net.au/images/peninsul---seraiquaef.pdf\]](http://www.pel.net.au/images/peninsul---seraiquaef.pdf) Peninsula stated that “within the coming weeks, Strata will commence allowable construction (pre the SML license) at the Lance Projects, including the development of deep disposal wells, monitoring wells, and CPP site and civil works.” Regarding this favorable development, Executive Chairman Gus Simpson stated, “With the issuance of the WDEQ Permit to Mine, the Lance Projects continue to gain momentum toward production. Yet again, the project team and regulatory authorities have achieved a significant project milestone on time and without issue.”
49. Regarding the activities and sentiments expressed in the preceding paragraph, while the focus of this declaration is on the factual basis for Contention 6, I cannot help but note in passing that the onset of what appears to be in NEPA terms a premature and potentially irretrievable commitment of resources to not only the “Ross Project” but even multiple “Lance Projects,” months before the appearance of even the draft SEIS for public comment, much less a Final EIS and Licensing decision, suggests that there is something seriously amiss with the timing of the NRC Staff’s implementation of the NEPA process, resulting in at least the appearance and possibly the reality that the Staff is engaging in prohibited *ex-post facto* NEPA analysis to rationalize decisions already made.

50. In a release dated 23 January 2013, “Lance Projects Resource Estimate Adds 2.5 Million Measured and Indicated Pounds,” [<http://www.pel.net.au/images/peninsul---ehenoghaox.pdf>] Peninsula noted, “The resource delineation and exploration drilling program was suspended at the Lance Projects in October 2012 and the rigs deployed to complete *multiple clusters of aquifer monitoring wells as part of the accelerated Mine Permit amendment process that incorporates the Kendrick Production Unit in the mine planning schedule.*” (*emphasis added*) ...The drilling along the Kendrick roll front system has produced consistent thick high-grade intercepts and has been prioritized due to its resource expansion capacity and its proximity to the proposed site of the *Lance Central Processing Plant* [aka “The Ross Project CPP” in the SWEIS].
51. According to the DSEIS, “Strata’s Proposed Action, the Ross Project, would occupy 697 ha [1,721 acres] in the north half of the approximately 90-km<sup>2</sup> Lance District, where the applicant is actively exploring for additional reserves.” [DSEIS at xviii]. By contrast, Peninsula Energy, in its January 23<sup>rd</sup> release cited above, states, “The Lance Project, operated by Peninsula’s US subsidiary, Strata Energy Inc., covers an area of over 120 km<sup>2</sup> within which there is a total of at least 305 line kilometers (190 miles) of known stacked [uranium] roll fronts. Of this total, only a small percentage has been explored, with over 90% of the drilling concentrated within the more advanced Ross, Kendrick, and Barber areas.” It is regrettable that this far into the NRC’s licensing and NEPA process, there remains such basic uncertainty in the public’s and apparently even the NRC’s knowledge regarding the scheduled, planned, and potential scope of uranium extraction activities that could occur in this region. This situation cries out for a comprehensive definition of the scope and scale of the activities and environmental impacts that could reasonably be

expected to ensue following an affirmative NRC decision to grant a license to Strata to pursue “The Lance Projects,” as described in detail in the preceding paragraphs of this declaration.

52. Peninsula Energy Limited’s most recent (2013) Company Presentation,

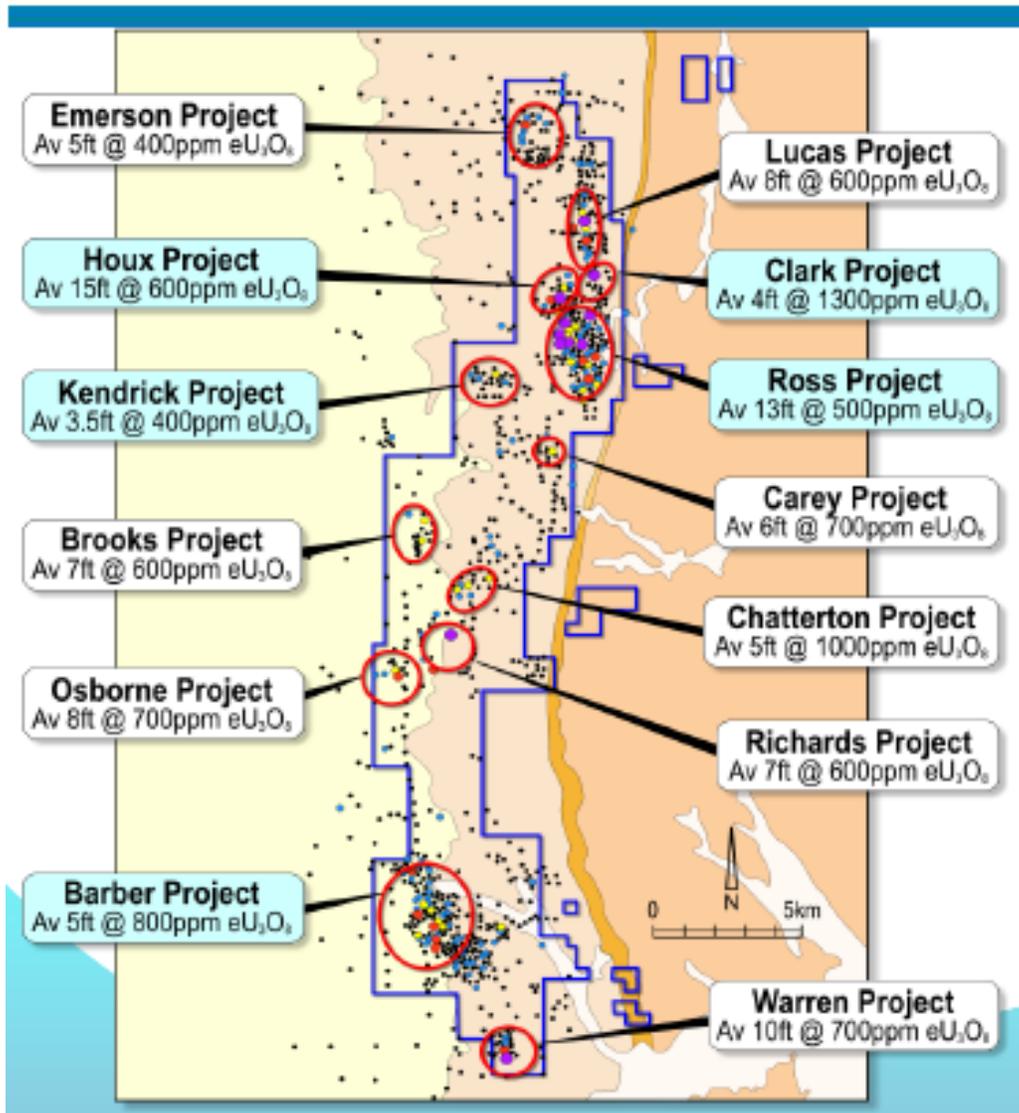
[\[http://www.pel.net.au/images/peninsul---eineebeixe.pdf\]](http://www.pel.net.au/images/peninsul---eineebeixe.pdf) ] states in a slide on its “Business Plan” that it intends to “Commence ISR production at Lance Projects, Wyoming in 2014 building to 2.2 mobs U308 per annum over 3.5 - 4 years (plant capacity 3 mlbs per annum.” [It is simultaneously pursuing or seeking to acquire other uranium projects in South Africa and Australia, but intends to “Underpin Balance Sheet with Profit from Lance Projects.” The Company sees a large resource potential at the Lance, and foresees “70 + years of mine life.” By contrast, the DSEIS is vague on this issue, but the ER shows an operational mine life for the Ross Project of a little more than four years, and the DSEIS envisions a timeframe for cumulative impacts, including decommissioning of only 14 years for “Potential Lance District Development.” I do not know where the correct answer lies, but I am quite certain that it is not in the current “Ross Project” DSEIS, which bears little resemblance to the business plans and schedules for expanded mining that Peninsula Energy Ltd., has been disclosing to investors and financial markets for the past 2.5 years.

53. The graphic below from the Peninsula Energy Ltd. March 21 “2013 Company Presentation:

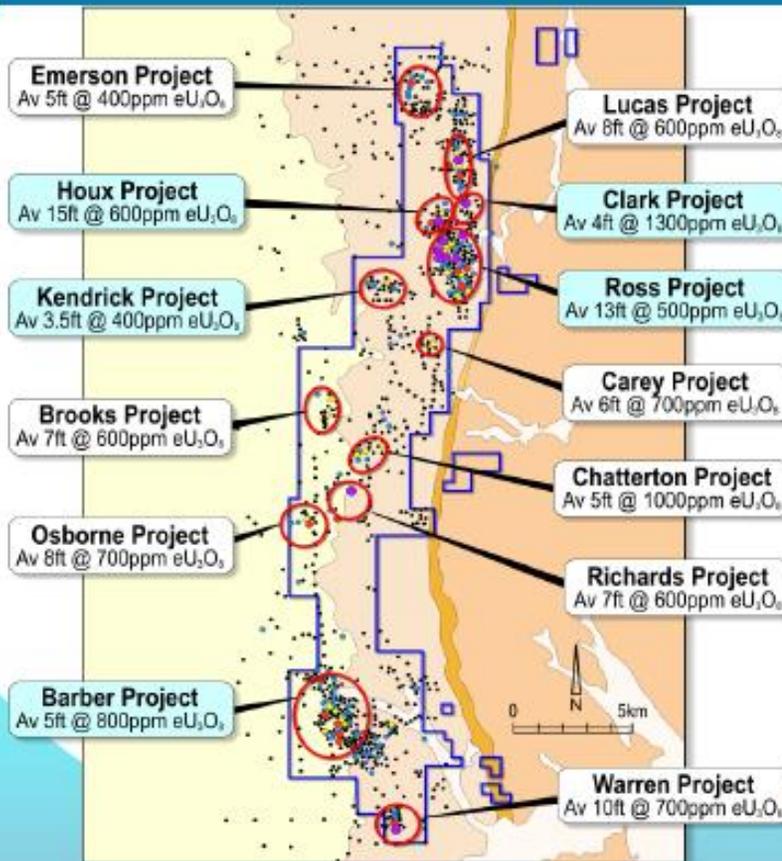
Emerging Producer” [\[http://www.pel.net.au/images/peninsul---eineebeixe.pdf\]](http://www.pel.net.au/images/peninsul---eineebeixe.pdf) ] demonstrates that the “Ross Project” and its environmental impacts represent only a tiny fraction of the impacts that could be experienced as a result of the NRC decision to license a large and expandable “modular” ISR operation that can grow easily through the proliferation of nearby “amendment areas” and “satellite IX facilities.” The “Ross Project” is only one of 13 prospective uranium ISR projects that

Peninsula Energy Ltd. is planning to develop in the Lance District in the years and decades ahead. This situation demands thoughtful and careful NEPA analysis, beginning with a full statement of the scope of the actions and environmental consequences that could ensue from the granting of the proposed license.

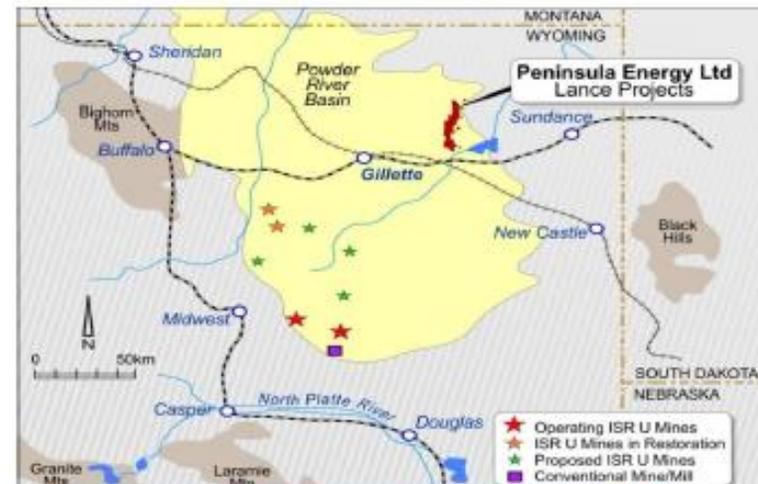
**Detail from the March 21 Peninsula Presentation to the “2013 Mines and Money Conference”**



# Lance – Exploration Potential



- 13 historic resources
- 22 roll fronts extend for a combined linear strike length of 194 miles (312km)
- Exploration potential 158-217mlbs U<sub>3</sub>O<sub>8</sub>



**LARGE RESOURCE POTENTIAL - 70+ YEARS MINE LIFE**

54. As established by the preceding analysis in this declaration, almost from the beginning, the scope of the Applicant's planned activities has exceeded the public disclosure of them in the ER and now the DSEIS, although there has been greater candor, as I only recently discovered, with the investment community in Australia. At a minimum, the required rescoping of the Proposed Action must include all the additional mining projects in the additional resource areas – the “Ross Amendment Area,” “Kendrick Resource Area,” and the “Barber Resource Area” – that Peninsula has stated it is planning to exploit in the near term to amortize its investment in the CPP, utilize its full capacity, and make a profit for reinvestment in its uranium business elsewhere, and that could be put into production via an amendment to the initial license for the “Lance Projects Central Processing Plant” and “initial wellfields.”
55. Another valid approach might be to assume that entire measured, indicated, and inferred uranium resources, under the control of the Applicant in the Lance District and susceptible to development via this proposed license and “amendments” thereto, *actually get mined*, and then assess the environmental impacts and reasonable alternatives to that level of uranium mining in the region over the predicted 70 year “mine life” projected in Peninsula's March 21<sup>st</sup> presentation to the “2013 Mines and Money Conference” in Hong Kong.
56. One could imagine an analysis that combined both these approaches, demanding a rigorous analytical approach for estimating the impacts of the planned and scheduled projects described by Peninsula in its numerous releases (and summarized in this declaration), and then flowing from that analysis, using representative parameterized values to calculate the

environmental consequences of more distant future projects, until the resource under Peninsula's control is essentially mined-out.

/s/ (electronic signature)

Christopher E. Paine

Dated: May 6, 2013.