Summary of Written Public Comments

Part 1: Letters Concerning NETL

Email received from Kenny Purdue and Joshua Sword, AFL-CIO

Commission to Review the Effectiveness of the National Energy Laboratories

Re: Comments on the CRENEL Draft Final Report

On behalf of the 70,000 active members and the 70,000 retired members of the West Virginia AFL-CIO, please accept our comments below related to the CRENEL draft report.

The CRENEL report makes numerous sensible and logical recommendations that we agree with. However, the report is off-base in its recommendations for NETL (Recommendation #5), which appears to be the result of a lack of full understanding and recognition of NETL's Mission Space and Core Competencies.

NETL's Government-Owned Government-Operated (GO-GO) status allows it to conduct research that can serve as an independent, unbiased, comparative assessment of private-sector technology. As a federally staffed laboratory, NETL's workforce consists of government employees who serve first in the national interest, with no competing or conflicting bias from the private sector. Further, NETL is not viewed as a competitor by the private sector, which is then willing to work with the Laboratory by sharing information and collaborating and partnering to solve critical energy challenges.

As a GO-GO, NETL provides unbiased, science-based analyses and assessments of energy and environmental policy, legislation, and regulations. NETL is able to participate in the interagency review of proposed energy and environmental regulations that impact the U.S. energy sector. NETL can respond quickly to National crises, as evidenced by the well-recognized role NETL played in assisting on the Deepwater Horizon spill.

NETL has been extremely successful in developing and transferring important technologies to industry, consistently earning the prestigious R&D 100 Awards. NETL has received 41 R&D 100 awards since 2000. Nearly half of these awards have been given to NETL's Office of Research and Development as a result of research performed by NETL Federal researchers. This is an extremely successful record for these prestigious awards, particularly for a national laboratory of NETL's size. In fact, NETL has exceeded the DOE average for R&D 100 awards since the time of that awards' inception.

NETL is a GO-GO that excels in technology transfer. NETL has been very successful in the pursuit of Federal Laboratory Consortium (FLC) awards for Excellence in Technology Transfer. NETL has received 22 FLC awards since 2007 (eight National FLC and 14 Regional FLC awards).

These awards demonstrate the emphasis that NETL places on the movement of technology to industry. Since 2000, NETL has entered into over 300 technology transfer agreements with the private sector.

Additional NETL success stories are numerous, particularly in areas identified for improvement in the report. For instance, NETL multiplies the value of federal R&D dollars by attracting industry investment. Between 1978 and 2000, industry investment on NETL managed projects is estimated to have been between $5 billion and $9 billion. This represents 38 percent to 46 percent cost share on federal research. These numbers have significantly increased in the last 15 years.

NETL established a successful Regional University Partnership program. Program and project management is a core competency of the NETL, which directly leads to Technology commercialization and transitioning. This has been NETL's forte since its existence with examples including the development of technologies to address acid rain, mercury emissions, enhanced tight gas development, and many others.

Several mission critical functions of the National Laboratories, including those which are provided by NETL, are not evaluated by the report, such as: administration of Public/Private partnerships by experts at Laboratory sites; shepherding and managing large-scale demonstration projects and scale-ups (high-risk and large-scale projects require government involvement and management); and, developing a well-established federal procurement capability for National Laboratories.

Statements in the report such as "NETL is unique" and while there is "nothing inherently wrong with that […] it does seem unusual" seem prejudicial. This, along with an assertion that NETL has not enjoyed "the flexibility and other benefits that come along with" being a GO-CO, appear to beg the assumption that the GO-CO model is superior in some way and are counterintuitive when compared to NETL's track record. The report never makes an attempt to justify such a bold assumption, however, and does not explore the value of the NETL model; further, this GO-GO model is NOT unique in other federal agencies.

So the report acknowledges that there is a unique need for certain functions, and acknowledges that NETL is unique, but instead of taking the simple path of suggesting the best performer of these roles continue in that fashion, instead suggests that DOE break apart NETL simply for being different from the other DOE National Laboratories.

It is for these reasons that we write to urge the Commission to reconsider Recommendation #5, especially the parts calling for "DOE to separate the NETL R&D function from its program responsibilities (and call the R&D portion – not the program activities - NETL)", and "Furthermore, consideration should be given to converting the new, research NETL into a government-owned, contractor-operated FFRDC."

Again, thank you for the opportunity to comment on this report. we urge you to reevaluate and reconsider recommendation #5, especially in light of NETL's outstanding history of performance in its' current operating model, and in recognition of NETL's many strengths and capabilities.

Sincerely yours,

Kenny Perdue — President, WV AFL-CIO

Joshua Sword — Secretary-Treasurer, WV AFL-CIO

Email received from Keith Collins, AFL-CIO

Commission to Review the Effectiveness of the National Energy Laboratories

Re: Comments on the CRENEL Draft Final Report

I write on behalf of the American Federation of Government Employees, AFL-CIO, Local 1104 representing the Federal employees at the US Department of Energy's National Energy Technology Laboratory, Albany, Oregon. I want to thank the Commission and the Department for the opportunity to comment on the draft report.

While making several sensible recommendations, the draft report's recommendation #5 shows a misunderstanding of NETL's Mission Space and Core Competencies. NETL's Government-Owned Government-Operated (GO-GO) status allows it to generate an independent, unbiased, comparative assessments of private-sector technology. As a federally-staffed laboratory, NETL's workforce consists of government employees who serve the national interest, without private sector conflicts and biases. Further, because the private sector does not see NETL as a competitor, the Laboratory can work with firms—sharing, collaborating, and partnering in order to solve critical energy challenges.

As a GO-GO, NETL can also provide unbiased, science-based analyses and assessments of energy and environmental policy, legislation, and regulations. The Laboratory also participates in the interagency review of proposed energy and environmental regulations that impact the U.S. energy sector. NETL can act quickly in a crisis, as evidenced by the well-recognized role the Laboratory played in responding to the Deepwater Horizon spill.

NETL has been extremely successful in developing and transferring important technologies to industry, earning more than 40 prestigious R&D 100 Awards just since 2000, which is an impressive haul considering the Laboratory's size. Nearly half of these awards have been given to NETL's Office of Research and Development in recognition of research performed by NETL's federal employee researchers. In fact, NETL has exceeded the DoE average for R&D 100 awards since the time of that awards' inception. Moreover, NETL is a GO-GO that excels in technology transfer. NETL has received 22 Federal Laboratory Consortium Awards for Excellence in Technology Transfer since 2007. And since 2000, NETL has entered into over 300 technology transfer agreements with the private sector.

Contrary to the impression conveyed by your report, NETL multiplies the value of federal R&D dollars by attracting industry investment. Between 1978 and 2000, industry investment on projects managed by NETL is estimated to have been between $5 billion and $9 billion, increasing significantly in the last 15 years, and which represents 38 percent to 46 percent cost share on federal research.

NETL has established a successful Regional University Partnership program. Program and project management is a core competency of the NETL, which directly leads to Technology commercialization and transitioning. Among the technologies developed pursuant to this program are those which mitigate against acid rain and mercury emissions and promote tight gas development.

The commission's draft report fails to recognize several mission critical functions performed by NETL, including the administration of public-private partnerships; management of large-scale demonstration projects and scale-ups (i.e., high-risk and large-scale projects require government involvement and management); and development of a well-established federal procurement capability for DoE laboratories.

Statements in the draft report such as "NETL is unique" and while there is "nothing inherently wrong with that […] it does seem unusual" are at best meaningless and more likely indicative of a prejudice against federal civil servants. And then there's the assertion that NETL has not enjoyed "the flexibility and other benefits that come along with" being a GO-CO, which begs the assumption that the GO-CO model is somehow superior despite NETL's demonstrated strengths. The draft report never makes an attempt to justify such a questionable assumption, however, and, as discussed earlier doesn't understand the value of the NETL model or appreciate all of its accomplishments. Finally, it should be noted that NETL is not the only thriving and successful GO-GO in the federal government.

Given the strengths and accomplishments of NETL, it makes no sense to bust it up merely because it employs a different model from the GO-CO facilities. Therefore, I strongly urge the commission to reconsider Recommendation #5, especially the parts calling for "DOE to separate the NETL R&D function from its program responsibilities (and call the R&D portion – not the program activities - NETL)", and "Furthermore, consideration should be given to converting the new, research NETL into a government-owned, contractor-operated FFRDC."

Respectfully,

Keith Collins

President

STATE OF WEST VIRGINIA
OFFICE OF THE GOVERNOR
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV 25305
(304) 558-2000

EARL RAY TOMBLIN
GOVERNOR

September 25, 2015

Karen Gibson, Designated Federal Officer
U.S. Department of Energy
1000 Independence Avenue SW
Washington D.C. 20585

RE: Comments of Commission to Review the Effectiveness of National Energy Laboratories (CRENEL)

Dear Ms. Gibson:

I write you to express my concern over one of the recommendations contained in the CRENEL report regarding the effectiveness of the US Department of Energy's National Energy Technology Laboratory ("NETL") in Morgantown, West Virginia. Recommendation 5 states that "DOE should separate NETL's [research and development] function from its program responsibilities" and should consider "converting the new, research NETL into a government-owned contractor-operated FFRDC [federally funded research and development center]." I believe this change may adversely affect dedicated and valuable West Virginians and NETL's effectiveness here in the mountain state.

As stated above, please accept this letter as my formal request to reconsider Recommendation 5 which would enable NETL to continue its long successful history of researching, developing and transferring important technologies to industry and our nation.

Sincerely,

Earl Ray Tomblin
Governor

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, AFL-CIO

J. David Cox, Sr.
National President

Eugene Hudson, Jr.
National Secretary-Treasurer

Augusta Y. Thomas
National Vice President for
Women and Fair Practices

00350557

September 25, 2015

Commission to Review the Effectiveness of the National Energy Laboratories (CRENEL)
CRENEL@hq.doe.gov
Re: Comments on the CRENEL Draft Report

Dear Commissioners,

On behalf of the American Federation of Government Employees, AFL-CIO, which represents more than 650,000 federal employees who serve the American people across the nation and around the world, including in the Department of Energy's (DoE) National Energy Technology Laboratory (NETL), I submit our views on behalf of AFGE Locals 1104 (in Albany, OR), 1916 (Pittsburgh, PA), and 1995 (Morgantown, WV), with regard to the draft report of the Commission to Review the Effectiveness of the National Energy Laboratories (CRENEL).

While making several sensible recommendations, the draft report's Recommendation #5 shows a misunderstanding of NETL's mission space and core competencies. NETL's Government-Owned Government-Operated (GO-GO) status allows it to generate independent, unbiased, comparative assessments of private-sector technology. As a federally-staffed laboratory, NETL's workforce consists of government employees who serve the national interest—without private sector conflicts and biases. Further, because the private sector does not see NETL as a competitor, the Laboratory can work with firms—sharing, collaborating, and partnering in order to solve critical energy challenges.

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been given to NETL's Office of Research and Development in recognition of research performed by the Laboratory's federal employee researchers. In fact, NETL has exceeded the DoE average for R&D 100 awards since the award's inception. Moreover, NETL is a GO-GO that excels in technology transfer. NETL has received 22 Federal Laboratory Consortium Awards for Excellence in Technology Transfer since 2007. And since 2000, NETL has entered into over 300 technology transfer agreements with the private sector.

Contrary to the misimpression conveyed by the draft report, NETL multiplies the value of federal R&D dollars by attracting industry investment. Between 1978 and 2000, industry investment on projects managed by NETL is estimated to have been between $5 billion and $9 billion, increasing significantly in the last 15 years.

NETL has also established a successful Regional University Partnership program. Program and project management is a core competency of the NETL, which directly leads to Technology commercialization and transitioning. Among the technologies developed pursuant to this program are those which mitigate against acid rain and mercury emissions and promote tight gas development.

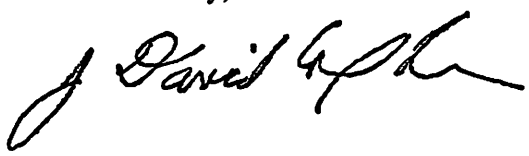
The draft report fails to recognize several mission critical functions performed by NETL, including the administration of public-private partnerships; management of large-scale demonstration projects and scale-ups (i.e., high-risk and large-scale projects require government involvement and management); and development of a well-established federal procurement capability for DoE laboratories.

Statements in the draft report such as "NETL is unique" and while there is "nothing inherently wrong with that [...] it does seem unusual" are at best meaningless and more likely indicative of a prejudice against federal civil servants. And then there's the assertion that NETL has not enjoyed "the flexibility and other benefits that come along with" being a GO-CO, which begs the assumption that the GO-CO model is somehow superior despite NETL's demonstrated strengths. The draft report never makes an attempt to justify such a questionable assumption, however, and, as discussed earlier the draft report doesn't understand the value of the NETL model or appreciate all of its accomplishments. Finally, it should be noted that NETL is not the only thriving and successful GO-GO in the federal government.

Given the strengths and accomplishments of NETL, it makes no sense to bust it up merely because it employs a different model from the GO-CO facilities. Therefore, I strongly urge the commission to reconsider Recommendation #5, especially the parts calling for "DoE to separate the NETL R&D function from its program responsibilities (and call the R&D portion – not the program activities - NETL)", and "Furthermore, consideration should be given to converting the new, research NETL into a government-owned, contractor-operated FFRDC."

A recommendation to convert NETL from GO-GO to GO-CO is nothing more than privatization, an option which has been repeatedly discredited. Privatization in this case is particularly egregious because the benefits discussed herein from NETL's promotion of the public interest and its coordination of various conflicting private interests would be lost if the Laboratory were to be stripped of its GO-GO status. AFGE will strongly oppose any effort to alter NETL's GO-GO status.

Sincerely,



J. David Cox, Sr.
AFGE National President

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Congress of the United States
House of Representatives

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ENVIRONMENT AND THE ECONOMY

SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS
VICE CHAIR

September 23, 2015

Commission to Review the Effectiveness of the National Energy Laboratories
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Re: Comments on the CRENEL Draft Final Report

Dear Commission:

First, thank you to the U.S. Department of Energy (DOE) and the Commission to Review the Effectiveness of the National Energy Laboratories (CRENL) for its report on this important issue. The Commission's work is greatly appreciated.

The draft CRENEL report makes several sensible recommendations. However, I am concerned with Recommendation #5, specifically as it relates to National Energy Technology Laboratory's (NETL) R&D program and operations. Recommendation #5 recommends that DOE separate NETL's R&D function from its program responsibilities and convert NETL into a government-owned, contractor-operated (GOCO) facility. I fear that this recommendation is the result of misguided assumptions and a lack of full understanding of NETL's core competencies and accomplishments.

The report seems to assert that GOCO model is more efficient than the government-owned, government-operated (GOGO) model found at NETL. But, the Commission never makes an attempt to justify this assertion and does not explore the value of the GOGO model. One major benefit of model is the directing and managing capabilities of large-scale demonstration projects. Often, it is difficult to partner with industry given the high-risk that may accompany a large-scale project. In this case, government involvement and management is necessary.

The Commission should review the numerous success stories and operations that can be found at NETL. This laboratory has received more R&D 100 Awards than the National Laboratory average. NETL was instrumental in assisting on Deepwater Horizon spill, established a successful Regional University program, and has established a federal procurement agency for National Laboratories, just to name a few.

Again, thank you for the opportunity to comment on this report. I hope that you will reevaluate Recommendation #5 accordingly and take into consideration the positives of NETL.

Sincerely,

David B. McKinley, P.E.
Member of Congress

Office of the Secretary of State
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Natalie E. Tennant
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September 25, 2015

Commission to Review the Effectiveness of the National Energy Laboratories
1000 Independence Ave. SW
Washington DC 20585

Dear Commission:

The National Energy Technology Laboratory (NETL) should remain a government-owned, government-operated facility. NETL's work continues to provide our country with better energy options, improved safety in the energy sector and a stronger economy. Through NETL's research and collaboration it has been and will continue to be a leader in energy R&D. Particularly, as West Virginia continues as a key player in the energy sector, the work done at NETL is extremely important to our economy.

When visiting NETL's Morgantown facility I observed tremendous opportunity. The facility and personnel are ready to tackle the nation's most complex energy issues – those affecting us today and those that we'll see in the future. They just need the commitment of the Department of Energy to get it done.

NETL supports communities by providing thousands jobs for hundreds of employees, contractors and small businesses in West Virginia. Additionally, the award-winning facility works diligently with universities, which was a core recommendation. I agree that increasing the interactions and collaborations with universities will be beneficial to all. Accordingly, NETL has partnered with Northeast Energy, West Virginia University, and The Ohio State University to form the first field laboratory designed for the long-term study of unconventional resource development. This project is just the most current commitment NETL has made to the region and energy R&D.

I understand that NETL may need to make internal changes, but just because it is not like the other laboratories, there is not a need to change it from government-owned, government-operated

facility. If NETL's situation is changed it would be detrimental to many people and businesses in West Virginia.

Sincerely,

Natalie E. Tennant
West Virginia Secretary of State

Congress of the United States
Washington, DC 20510

September 25, 2015

Commission to Review the Effectiveness of the National Energy Laboratories

Re: Comments on the CRENEL Draft Final Report

Dear Commission:

We write regarding the Commission's report on the effectiveness of the US Department of Energy's National Energy Technology Laboratory in Morgantown, West Virginia. We want to thank the Commission and the Department for the opportunity to comment on the draft report.

While the CRENEL report makes many reasonable recommendations, it errs in its recommendations for NETL (Recommendation 5), which reflects a lack of appreciation of NETL's mission space and core competencies.

> *Recommendation 5: DOE should separate NETL's R&D function from its program responsibilities (and call the R&D portion—not the program activities—NETL). Furthermore, consideration should be given to converting the new, research NETL into a government-owned, contractor-operated FFRDC [federally funded research and development center]. Whether or not the above steps are taken, NETL should increase its interactions and collaboration with universities.*

Considering NETL's many successes, including its successful Regional University Partnership Program, as well as the Secretary of Energy's assurances on this subject, it would be appropriate to withdraw this recommendation.

NETL's Government-Owned Government-Operated (GO-GO) status allows it to conduct research that can serve as an independent, unbiased, comparative assessment of private-sector technology. As a federally staffed laboratory, NETL's workforce consists of government employees who serve first in the national interest, with no competing or conflicting bias from the private sector. Further, NETL is not viewed as a competitor by the private sector, which is then willing to work with NETL by sharing information and collaborating and partnering to solve critical energy challenges.

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Additional NETL success stories are numerous, particularly in areas identified for improvement in the report. For instance, NETL multiplies the value of federal R&D dollars by attracting industry investment. Between 1978 and 2000, industry investment on NETL managed projects is estimated to have been between $5 billion and $9 billion. This represents 38 percent to 46 percent cost share on federal research. These numbers will have significantly increased in last 15 years.

NETL established a successful Regional University Partnership Program. Program and Project management is a core competency of the NETL, which directly leads to Technology commercialization and transitioning. This has been NETL's forte since its existence, with examples including the development of technologies to address acid rain and mercury emissions, for tight gas development, and many others.

In his February 2015 Congressional testimony, involving the DOE budget, to both Senate and House committees, DOE Secretary Moniz responded emphatically to questions concerning the Commission's report, by indicating there was no intention of changing the organizational structure of NETL:

House Energy and Commerce Committee, February 11, 2015

"Look, NETL is our fossil fuel laboratory -- just no ifs, ands, or buts about it -- and has done very, very good work in the carbon capture sequestration arena, in methane hydrates, and in some of the hydraulic fracturing environmental impact work, et cetera, et cetera. So its future is -- we have a new director, of course, relatively new director. And I think she is doing -- she will do a great job, I think. First of all, you mentioned privatize. And I don't know what this commission -- this congressional commission will recommend. But certainly we have -- I have made it very, very clear -- we have no plans to change the organizational structure of NETL as the one of our 17 laboratories that is a -- that is a Federal organization."

Senate Energy and Natural Resources Committee, February 12, 2015

"In particular, as you implied, our laboratories are generally management and operating contracts. NETL is unique in being a Federal facility. And that reflects two points. One is that it does do, let's call it, laboratory-based research. But it also plays a major role in managing all the contracting for our fossil energy office and others. We have no intention of changing that arrangement."

Given the Secretary's comprehensive understanding of and responsibility for the national laboratory system and in recognition of the Secretary's confidence in the current organization, we urge the Commission to reconsider Recommendation 5. This would represent a highly-deserved modification, in light of NETL's outstanding history of performance, as portrayed above.

Sincerely,

Joe Manchin III
United States Senator

Shelley Moore Capito
United States Senator

David B. McKinley
United States Congressman

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES
LOCAL 1916
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16

September 24, 2015

Commission to Review the Effectiveness of the National Energy Laboratories

Re: Comments on the CRENEL Draft Final Report

I write on behalf of the American Federation of Government Employees, AFL-CIO, Local 1916 representing the Federal employees at the US Department of Energy's National Energy Technology Laboratory, Pittsburgh, Pennsylvania. I want to thank the Commission and the Department for the opportunity to comment on the draft report.

While making several sensible recommendations, the draft report's recommendation #5 shows a misunderstanding of NETL's Mission Space and Core Competencies. NETL's Government-Owned Government-Operated (GO-GO) status allows it to generate an independent, unbiased, comparative assessments of private-sector technology. As a federally-staffed laboratory, NETL's workforce consists of government employees who serve the national interest, without private sector conflicts and biases. Further, because the private sector does not see NETL as a competitor, the Laboratory can work with firms—sharing, collaborating, and partnering in order to solve critical energy challenges.

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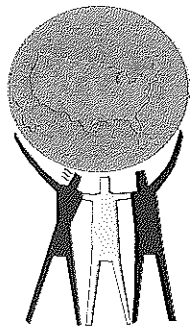
Respectfully,

Frances M. Wright
President



American Federation of Government Employees
Affiliated with the AFL-CIO

AFGE Local 1995
National Energy Technology Laboratory
P.O. Box 880
Morgantown, WV 26505

September 24, 2015

Commission to Review the Effectiveness of the National Energy Laboratories

Re: Comments on the CRENEL Draft Final Report

Dear Commission:

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NETL is a GO-GO that excels in technology transfer. NETL has been very successful in the pursuit of Federal Laboratory Consortium (FLC) awards for Excellence in Technology Transfer. NETL has received 22 FLC awards since 2007 (eight National FLC and 14 Regional FLC awards).

These awards demonstrate the emphasis that NETL places on the movement of technology to industry. Since 2000, NETL has entered into over 300 technology transfer agreements with the private sector.

Additional NETL success stories are numerous, particularly in areas identified for improvement in the report. For instance, NETL multiplies the value of federal R&D dollars by attracting industry investment. Between 1978 and 2000, industry investment on NETL managed projects is estimated to have been between $5 billion and $9 billion. This represents 38 percent to 46 percent cost share on federal research. These numbers have significantly increased in the last 15 years.

NETL established a successful Regional University Partnership program. Program and project management is a core competency of the NETL, which directly leads to Technology commercialization and transitioning. This has been NETL's forte since its existence with examples including the development of technologies to address acid rain, mercury emissions, enhanced tight gas development, and many others.

Several mission critical functions of the National Laboratories, including those which are provided by NETL, are not evaluated by the report, such as: administration of Public/Private partnerships by experts at Laboratory sites; shepherding and managing large-scale demonstration projects and scale-ups (high-risk and large-scale projects require government involvement and management); and, developing a well-established federal procurement capability for National Laboratories.

Statements in the report such as "NETL is unique" and while there is "nothing inherently wrong with that [...] it does seem unusual" seem prejudicial. This, along with an assertion that NETL has not enjoyed "the flexibility and other benefits that come along with" being a GO-CO, appear to beg the assumption that the GO-CO model is superior in some way and are counterintuitive when compared to NETL's track record. The report never makes an attempt to justify such a bold and unfounded assumption, however, and does not explore the value of the NETL model; further, this GO-GO model is NOT unique in other federal agencies.

So the report acknowledges that there is a unique need for certain functions, and acknowledges that NETL is unique, but instead of taking the simple path of suggesting the best performer of these roles continue in that fashion, instead suggests that DOE break apart NETL simply for being different from the other DOE National Laboratories.

It is for these reasons that I write to urge the Commission to reconsider Recommendation #5, especially the parts calling for "DOE to separate the NETL R&D function from its program responsibilities (and

call the R&D portion – not the program activities - NETL)", and "Furthermore, consideration should be given to converting the new, research NETL into a government-owned, contractor-operated FFRDC."

Again, thank you for the opportunity to comment on this report. I urge you to reevaluate and reconsider recommendation #5, especially in light of NETL's outstanding history of performance in its' current operating model, and in recognition of NETL's many strengths and capabilities.

Sincerely yours,

Dan Doyle
President, AFGE Local 1995

Part 2: Suggested Corrections from DOE Laboratories

Email received from Brenda Dingus, LANL

In Volume 1 on page 45, the figure caption states that the overhead rate is “calculated by dividing total direct costs by total indirect costs”. Don’t you mean the inverse, i.e. “calculated by dividing total indirect costs by total direct costs”? In other words, smaller numbers are better value not bigger.

Also, you give one standard deviation error bars. I think it would be useful to actually show the numbers for each institution. There aren’t that many points to plot. There are only 3 NNSA labs and the standard deviation of those 3 is very large. Knowing the individual numbers would be very helpful in understanding that large deviation.

Brenda

Brenda Dingus / LANL Fellow

Email received from Reiner Friedel, LANL

Dear Sir,

I have read with alarm the section of the report dealing with the issue of laboratory costs compared to other institutions. (Section 6. Managing Effectiveness and Efficiency; A. Overhead)

The report’s conclusion that

"Therefore, it can be said that National Laboratories are more expensive than universities, but not significantly, given organizational differences”

This is highly misleading (and wrong, see below) and is sending exactly the wrong message to the management of the national laboratories: "our costs structure is fine, we do not need to do anything”.

There seems to be a factual error in the reasoning presented on p.44. The report states that

"universities include depreciation and interest expenses associated with facilities in their overhead, while DOE’s laboratories do not.”

The report estimates this at 14.5% of the university’s overhead rates.

In addition, the report estimates that the “actual” admin costs at Universities are 5% higher than the OMB limit of 26% which are internally hidden.

Then the report argues that adding these costs to the Univeristy rates (57% + 14.5% + 5%) yields an “actual” rate of 76.5% with is indeed within 10% of the DOE lab rates.

HOWEVER: if the universities include depreciation and interest expenses and the DOE labs do not, then the estimated cost of this needs to be SUBTRACTED from the Univeristy rate to obtain a rate WITHOUT depreciation and interest that is then comparable to the DOE rate. Or put differently, if the DOE labs were to add depreciation and interest to their rates, then their overhead costs would be even bigger than the reported 85%.

THUS the university rate would become 57% - 14.5% + 5% = 47.5 which actually makes the comparison to the DOE rates worse. Instead of the direct overhead comparison, which makes DOE labs 1.49 times more expensive on overhead, the factor increases to 1.78.

I would also like to take exception in bringing into the comparison “intangibles” such as if organizations do or do not include "depreciation and interest” or if they “hide” some admin costs. This is immaterial to a sponsor who funds the research. The sponsor is interested in how much work does my dollar buy, nothing more.

In addition, comparing costs through overhead alone is misleading as it ignores the effect of fringe an benefit costs that are different at DOE labs compared to universities. A more realistic comparison would be to compare the salary of a full time employee doing research at a DOE lab v. a university, asking how much such an employees would “cost” a given sponsor. As program manager for the Lab’s NASA and NSF programs I sit on many NASA and NSF review panels where I have the opportunity to compare the costs of research proposals across institutions.

At LANL, for a mid-level researcher, the multiplier from salary to cost to sponsor is ~3.2

For a range of top universities the multiplier is 1.8, 2.3, 2.1, 1.9, 1.9, an average of ~2.0

By the above measure the cost of doing research based on salary alone is 1.6 times higher at A DOE lab (LANL) compared to universities.

Respectfully

Reiner Friedel

Reiner Friedel

LANL Program Manager for NASA/NSF

Email received from Charles McMillan, LANL

Good Afternoon:

LANL offers the following comments on the DRAFT CRENEL Report:

Red Team (Volume 1, Page 36)

- The paragraph that begins on the bottom of page 36 of the draft report confuses red teams (which are LANL-internal teams) with independent assessment teams (which are LLNL teams). The current wording is incorrect. Suggested replacement for the paragraph that begins on the bottom of page 36 of the draft document *Final Report of the Commission to Review the Effectiveness of the National Energy Laboratories* dated 4 September 2015:

- In addition, the current annual assessment process, which is a central element of stockpile stewardship, has included the Independent Nuclear Weapons Assessment Process (INWAP) since 2010. INWAP employs assessment teams from one physics laboratory to independently develop and refine nuclear performance baselines for weapon types that are the responsibility of the other physics laboratory. The technical experts on these teams are uniquely qualified to conduct these assessments because they draw from the only organizations that have the computational and experimental capabilities necessary to conduct such technical evaluations and the personnel who possess the required security clearances. The results of these independent annual assessments are reported to the responsible laboratory Director, who uses them as one element of the overall annual assessment process to evaluate the certification basis of the weapon types for which the laboratory is responsible.

Editorial Change

- Volume 1, Page 29 – NE is Nuclear Energy, not Nuclear Engineering

Best,

Charlie

Charles F. McMillan

Laboratory Director

Los Alamos National Laboratory

Email received from Ryan Kilbury, PNNL

General Comments:

The draft report recommends that DOE and the National Laboratories develop annual operating plans. In light of the success demonstrated by the Office of Science's planning and performance management (PEMP) processes we do not see the value in adding another level of planning detail. Instead, we support the Commission's recommendation that the Office of Science's planning and performance management processes be adopted by the entire DOE.

In Volume 2 of the draft report, the Commission notes that PNNL receives only 20% of our funding from our steward, the Office of Science. The unstated implication is that, as a result, the Office of Science has proportionately less ability to influence the Laboratories strategic priorities. On the contrary, the comprehensive and interactive nature of the Office of Science's planning and performance management processes ensures that our institutional priorities are strategically aligned with those of the Office of

Science, and of DOE. In addition, PNNL has the ability to leverage a diverse set of funding sponsors which enables PNNL to have an increased impact on DOE and National priorities.

Page 11, A. Restoring the Partnership between DOE and its Laboratories

While the report discusses in great detail the "broken" relationship between DOE and their labs, our experience at PNNL differs. PNSO and PNNL continually are working towards our goal of "partnership". Partnership in our view supports a PNSO-Contractor relationship promoting the achievement of mutually beneficial goals. It involves an agreement to work together supportively to achieve the Laboratory missions. That is the FFRDC model, the model in itself is not broken and does not need to be restored or modified. It needs to be embraced by both sides. DOE in an owner's role and Contractor's in the role of management and operations working for common objectives.

Page 12, 1st Paragraph:

The statement is made that, "DOE's role is to provide direction, oversight and funding to the National Laboratories to carry out those programs. The Laboratories, as trusted partners, play active roles in supporting DOE in that process." The **Laboratory is the institution** that is **owned or controlled by DOE**, and should not be *confused with the contractor, who is managing and operating* the Laboratory for DOE. This sentence should more appropriately read "DOE's role, **as owner of the Laboratory**, is to provide direction, oversight and funding to the National Laboratory *contractors* to carry out those programs. The Laboratory *contractors*, as trusted partners, play active roles in supporting DOE in that process." This same terminology should be used throughout the document.

Page 16, Recommendation 6 – Abandoning Incentive Award Fees:

Incentive Award Fees are an effective tool for contracts and do provide the necessary focus on important areas of mission outcomes and performance. Incentives need to be aligned to the desired outcomes and need to be appropriately implemented not eliminated.

Pgs. 16-17, Contract Requirements:

As the report points out there are layers of requirements in Government contracting, usually because there is a lot of room for interpretation of expectations and outcomes related to Laws and Federal Regulations. Reduction of requirements is not the answer, refinement of expectations is.

Pg. 17, Recommendation 7:

The statement is made that DOE should give the Laboratories and M&O contractors the authority to operate with more discretion whenever possible. Contractors clearly have the ability and authority to operate in accordance within the terms and conditions of the contract. Assuming contractors don't have the authority to operate with discretion, is false.

Pg. 20, Recommendation 10:

The report mentions that "the role of the site office should be emphasized as one of "mission support". This is incomplete and makes it sound like mission "trumps" everything and at all cost. As mentioned above in the comment for page 12, 1st paragraph, DOE and the individual site office role is to provide contract management, direction, oversight, and stewardship of the national asset that DOE owns.

Pg. 48, Recommendation 33:

The report specifies that OMB has not approved a third-party financed or alternatively financed lease since 2007. It is more accurate to say that DOE has not requested a review by OMB of any new third-party financed facilities or alternatively financed facilities as DOE has not proposed one since 2011 and it never made it to OMB for their review.

Ryan M. Kilbury

Pacific Northwest Site Office

Email received from Karin Brown, INL

CRENEL Team,

Stated below are comments provided by the Office of Nuclear Energy, Idaho Operations Office on factual inaccuracies after reviewing the "Final Report of the Commission to Review the Effectiveness of the National Energy Laboratories" document. Please contact Karin Brown, DOE Idaho Operations Office for any clarifications on the information provided or if you have additional questions.

Page	Volume	Paragraph	Comment
29	1	3, 2nd sentence	Change "nuclear engineering" to nuclear energy
5	1 & 2	Table – referring to Idaho National Laboratory	In reference to the "Budget from DOE & Total Budget" columns environment management clean up at the Idaho National Laboratory (INL) is managed by a separate primary contract, INL Nuclear Energy mission is not responsible for clean up at the laboratory that would equate to $387m less as stated in Congressional Budget tables
Throughout both volumes (per 48 CFR Part 970)	1 & 2		Change work for others (WFO) to Strategic Partnership Projects (SPP)
4	2	1	Change "nuclear engineering" to nuclear energy

Email received from Joe Arango, JLab

I would like to offer the following input to correct a factual inaccuracy in the CRENEL draft Final Report. In the section of the report discussing the requirements included in M&O contracts (Volume 2, Section 3.B.2, page 31), Table 5 shows 79 Directives in the M&O contract at the Thomas Jefferson National Accelerator Facility as of July 2015. That is not accurate in that there are only 52 Directives in the contract (Section J, Appendix E, List B, List of Applicable Directives) as of July 2015. As was discussed with the Commission members who visited the Laboratory during the review, the Site Office and Laboratory staff have put focused efforts into reducing the number of Directives requirements over the recent years and have made progress in reducing the number to the current 52. I appreciate your help in correcting this inaccuracy in the Final Report such that the data better reflects the results of these focused efforts.

Joe Arango

TJSO Manager

Email received from Hugh Montgomery, JLab

Sassanah et al,

I have read Volume 1: Executive Report

There appears to be an error on Page 6. In discussion of the LCLS project. Brookhaven is cited as a participant, and Argonne is not. As far as I know, Argonne is a participant, Brookhaven is not.

With Best Regards,

Hugh Montgomery

THE DRAFT FINAL REPORT--COMMISSION TO REVIEW THE EFFECTIVENESS OF THE NATIONAL ENERGY LABORATORIES: UNIVERSITY OF CALIFORNIA COMMENTARY

The University of California (UC or University) commends the Commission on both the extensive evaluation process that was undertaken as well as the excellent recommendations put forth in the draft report. As the Management & Operating (M&O) Contractor of longest tenure within the Department of Energy/National Nuclear Security Administration (DOE/NNSA) complex, we continue to be committed to this important public service role and believe the engagement of major academic research institutions is vital to the long-term health and vitality of the national laboratories.

By way of background, the University of California is unique among not-for-profit government contractors. It is not only one of the largest of such contractors but also the contractor with the longest tenure, having pioneered the Management and Operating contract form -- more specifically, the concept of an academic institution as a not-for-profit contractor. The University has been involved with three major federal laboratories since their inception: the Lawrence Berkeley National Laboratory, the Lawrence Livermore National Laboratory, and the Los Alamos National Laboratory. This relationship with the federal government spans more than 70 years. The M&O contract form and the labs' operations as Federally Funded Research and Development Centers (FFRDCs) have been the critical means of interaction between the government and these laboratories. Its fundamental characteristics of partnership, scientific freedom, optimization of private-sector creativity and flexibility while also ensuring appropriate federal direction and oversight, and long-term relationships have been central to the extraordinary success achieved by the laboratories.

While we find much to commend in the Commission's report we offer the following observations on a limited subset of the Commission's recommendations.

> **Recommendation 2:** Return to the spirit of the FFRDC model (stewardship, accountability, competition, and partnership). DOE and the National Laboratories must work together as partners to restore the ideal nature of the FFRDC relationship as a culture of trust and accountability. DOE should delegate more authority and flexibility to the laboratories on *how* to perform their R&D, and hold them fully accountable for their actions and results. For their part, to be trusted partners and advisors, the laboratories must be transparent with DOE about their planned activities ahead of time, as well as about their actions and results as they are carried out.

The University of California strongly endorses this recommendation and would propose that this is an essential necessary first step to accomplishing many of the other objectives discussed within the report. Indeed this could be taken as the overarching message of the report; degradation in this trust-based relationship is at the root of many of the issues and challenges facing the laboratories today. The Secretary has made good progress by engaging the national laboratory directors but there is much more to be done to develop a more effective, consistent institutional approach to laboratory stewardship across the DOE.

It is also important that this recommendation highlight the differences across the DOE. The Office of Science feels a strong sense of ownership for and shared fate with their laboratories. This has driven the development of a consistent approach to laboratory stewardship and engagement with their M&O contractors that is very effective. In the NNSA, there is the added complication of a mix of FFRDCs and production sites across the nuclear weapons enterprise (NWE) and the NNSA's efforts to establish a consistent approach to performance assessment across all of the sites. The laboratories as FFRDCs should be clearly differentiated from the production sites and subjected to a planning and evaluation process consistent with that used for the Office of Science laboratories. This process must be distinct from any NWE planning processes used to formulate the stockpile stewardship program and must include the long-term, strategic focus on the health and vitality of the Science, Technology & Engineering (ST&E) capabilities at the laboratories.

> **Recommendation 3:** DOE and each laboratory should cooperatively develop a robust annual operating plan, with specific agreements on the nature and scope of activities at the laboratory, and milestones and goals that are jointly established. Within that framework, DOE should give greater flexibility and authority to the M&O contractor to implement that plan. This greater flexibility must go hand-in-hand with greater transparency and accountability from the laboratory to DOE.

We strongly concur with the need for a cooperative annual planning process and suggest that clear guidance on the proposed level of specificity would be beneficial. Such a plan should be created at a *strategic* level, with broad definition of scope, and contain a small number of high impact milestones and goals that are meaningful measures of performance. Ideally these would be part of a multi-year planning framework so that meaningful progress within a given year could be measured and rewarded rather than waiting for activities to come to completion.

> **Recommendation 6:** DOE should abandon *incentive* award fees in favor of a fixed fee set at competitive rates with risk and necessary investment in mind. In addition, DOE should adopt a broader and richer set of incentives and consequences to motivate sound laboratory management and enforce accountability.

In general fees are available to M&O contractors in acknowledgement of the financial risks they were assuming, which have increased substantially over time. The introduction of a mix of fixed and performance-based incentive fee was viewed as a way to drive improved performance in areas of concern at the Labs. In practice, the fees serve strictly to motivate the M&O contractors, not the employees of the Lab for whom the fee represents a reduction in the amount of programmatic funding available to advance the mission.

The central element of the M&O partnership is the recognition that we, along with the Laboratory leadership team have a strong and shared interest in the success of the Laboratory. Ideally this relationship is based on a shared commitment to the long-term health of the Laboratory and works to ensure that all necessary actions are being undertaken to achieve this end. In part, the fees associated with M&O contracts acknowledge and compensate the contractor for the risks we are assuming, which have increased substantially over time. UC feels strongly that any income derived from our M&O contracts should be reinvested to enhance and strengthen the relationship between the University and the Laboratories and to best position the Laboratories to address emerging national security threats through excellent ST&E capabilities and workforce pipelines. As such, the University invests our residual fee income in campus-lab research projects designed to foster relationships between faculty and Lab researchers, introduce

students to the many capabilities of the Labs thereby promoting a talent pipeline, and enhance the ST&E capabilities at the Labs through collaboration with world-class researchers across the UC enterprise.

Today's fee structure detracts from this partnership model. A substantial portion of the fee is incentive fee, driven by short term, tactical objectives and disproportionately influenced by expectations for operational performance (vice ST&E and mission achievements). Even one adverse incident in operations can result in substantial impacts to both the evaluation and fee determination associated with ST&E and mission execution. This is extremely demoralizing to Laboratory staff and represents a substantial challenge to the University's effective participation as an M&O contractor.

In general terms a preferred arrangement would include: a fixed fee, longer award terms to ensure stability for the Labs and a sustained commitment by the University as the M&O, the DOE (including the Field Office and the Federal Program Leadership) and the Laboratory leadership team to the future of the Labs. This relationship based on trust and a shared commitment to success, rather than any fee or award term structure, is the critical element of a successful M&O contract.

In considering fee arrangements for national laboratory M&O contracts, it is important to distinguish between fees paid to commercial/industrial contractors for specific procurements and fees for the operation of FFRDCs. FFRDCs are required to operate in the public interest and must be isolated from shareholder interests. The criteria for earning fee should be structured with this in mind, thus avoiding the creation of conflicts with the public interest.

> **Recommendation 7:** DOE should give the laboratories and M&O contractors the authority to operate with more discretion whenever possible. For non-nuclear, non-high-hazard, unclassified activities, DOE should allow laboratories to use Federal, State, and national standards in place of DOE requirements. DOE should review and minimize approval processes.

The University of California is unique among M&O contractors in managing classified, high-hazard activities at two of the nation's nuclear weapons and broader national security labs, while also managing unclassified, non-high-hazard R&D at one of the world's pre-eminent science labs. We understand in all of its many dimensions how different the operating envelopes of these two kinds of enterprises are. For that reason, we strongly support the Commission's Recommendation 7 to allow non-nuclear, non-high-hazard, unclassified activities to use existing Federal, State, and national standards in place of DOE requirements, wherever appropriate, and regardless of whether such activities are conducted at a science lab or a nuclear weapons/national security lab.

> **Recommendation 9:** DOE should focus on making the use of CAS more uniform across the laboratories. DOE local overseers should rely on information from the CAS systems, with appropriate validation, as much as possible for their local oversight. The quality of CAS can be increased through peer reviews for implementation and effectiveness.

The University supports this recommendation. Currently, there is no coherent and uniformly accepted set of expectations for an appropriate CAS. When a CAS is accepted and implemented, there is often reluctance on the part of DOE to rely on such system, resulting in inefficient redundancies associated with the “checker checking the checker.”

> **Recommendation 10:** The role of the site office should be emphasized as one of "mission support" to the program offices at DOE and to the laboratories. The site office manager should be clearly responsible for the performance of the site office in support of the mission, and all staff in the site office, including the Contracting Officers, should report to the site office manager. Since site office effectiveness is so dependent on site office leadership, DOE should devote more effort to leadership training and professional development of field staff.

The University fully concurs. Contracting Officers frequently are not answerable to their respective site offices, and the reporting relationships of the Contracting Officers are variable throughout the Department. Aligning site office functions, including Contracting Officers, under the site office manager would benefit mission execution and promote uniformity within the Department.

> **Recommendation 16:** Other DOE program offices should adapt to their contexts the procedures and processes that DOE's Office of Science has in place for guiding and assessing the alignment of the laboratories under its stewardship with DOE's missions and priorities.

We strongly agree that the Office of Science approach to laboratory stewardship has much to commend it, in particular their strong sense of ownership and shared fate with their laboratories. However, it is important to note that it is not the *processes* that make the system effective but rather their embrace of the role of the FFRDCs in the execution of their missions that makes the Office of Science model an exemplar. Absent that commitment to the trusted partnership between the government and its FFRDCs it is unlikely that any process will result in a more favorable outcome than present.

> **Recommendation 19:** The Commission strongly endorses LDRD programs, both now and into the future, and supports restoring the cap on LDRD to 6 percent unburdened, or its equivalent. The Commission recognizes that in practice restoring the higher cap will likely only impact the LDRD programs of the NNSA laboratories.

We strongly concur with this recommendation and the endorsement of the strategic importance of LDRD to the laboratories. It is mentioned in the report text that LDRD plays a different role in the NNSA laboratories, where their funding is strongly dominated by mission-focused research and development, than in the Office of Science laboratories, where basic research is the focus. This important distinction would have more impact if it were highlighted within the recommendation itself rather than as part of the supporting commentary.

> **Recommendation 20:** DOE should manage the National Laboratories as a system having an overarching strategic plan that gives the laboratories the flexibility to pursue new lines of inquiry, so long as the research aligns with mission priorities. Once the research has matured to the point that a preferred or most promising approach can be identified, the Department should provide strategic oversight and guidance, including expert peer review, for the laboratory system to coordinate and potentially consolidate their programs to achieve the most effective and efficient use of resources.

We strongly concur with the recommendation for the DOE to create an overarching strategy

for the national laboratories as a system. The system as it is currently constructed already has incentives in place to foster collaboration across the sites and to stimulate competition in areas where the technical and/or programmatic risks are high and a preferred approach has not emerged. While this can be strengthened, too much focus on eliminating perceived duplicative effort could be extremely detrimental to the health and vitality of the laboratories. Intellectual competition is the cornerstone of scientific excellence. Furthermore, it is often the case that research that appears duplicative at a high level is quite different when viewed up close. The DOE and all of its laboratories should strive for effective and efficient use of resources but a small sacrifice in efficiency may provide a marked increase in flexibility and creativity within the system. Tightly constrained budgets and the accompanying program scrutiny and review processes are already decreasing the laboratories' ability to invest in highly speculative research, which does not come with a guarantee of success or clear program milestones. Enhancing the incentives within the system to drive consolidation could unintentionally amplify this trend.

> **Recommendation 21:** Congress should recognize that the technical capabilities currently housed within the NNSA laboratories are essential to the Nation. Maintaining the nuclear explosive package capabilities in separate and independent facilities has proven effective and should continue, thereby providing senior decision makers the highest possible level of confidence in the country's nuclear weapons stockpile.

We strongly concur with this recommendation. The University of California has helped to steward LLNL and LANL as they, in partnership with Sandia National Laboratories, have successfully sustained the U.S. nuclear deterrent over more than 7 decades. The system of independent design laboratories and intense peer review has served the nation extremely well and served to identify and resolve a host of highly complex technical challenges that could have impacted U.S. national security. It is also essential to acknowledge that sustaining those technical capabilities requires the same kind of stewardship and investment in the ST&E foundations of the laboratories that the other DOE laboratories require and that they should be treated as full partners in the community of national laboratories within the DOE.

> **Recommendation 22:** DOE should establish policies and procedures to make the Work for Others (WFO) process more efficient, especially for work that is consistent with the annual operating plans, such as institutionalizing ongoing efforts to streamline the contracting process through more consistent use of umbrella WFO agreements and oversight mechanisms dedicated to shortening the timeline of the approval process; encouraging greater use of personnel exchanges and "customer relationship managers"; and creating a central point of contact in DOE headquarters to field questions from WFO customers about where specific capabilities lie within the laboratory system.
> **Recommendation 23:** DOE should support efforts to strengthen the Mission Executive Council.

We agree that efforts should be undertaken to streamline the WFO process within the DOE, particularly enhanced and consistent use of umbrella agreements. We also believe it is important that WFO partners continue to foster relationships with the individual laboratories where they sponsor work and DOE not seek to take ownership of this process. Consistent with earlier recommendations to provide the laboratories with more flexibility it is important that they are given the latitude to develop appropriate WFO activities to enhance their technical capabilities, develop staff and to support important needs of agencies across the government in their role as FFRDCs. Creating a central DOE point of contact without clear expectations about the relationship to the individual laboratories could create unintended confusion for other agencies and diminish the laboratories ability to manage these relationships effectively.

On the other hand, a strengthened Mission Executive Council could provide much of this function by educating other agencies about the capabilities of the laboratories and developing strategic focus areas that could be pursued in a multi-agency, multi-laboratory approach. It also can provide effective interagency coordination, a shared view of the value of the FFRDCs across the government and identify opportunities for co-investment and/or advocacy by other agencies to help ensure the vitality and effectiveness of the laboratories. This approach avoids creation of (or perception of) a DOE 'broker' for WFO but enables the process to be better understood and potentially more strategic.

> **Recommendation 24:** DOE and its laboratories should continue to facilitate and encourage engagement with universities through collaborative research and vehicles such as joint faculty appointments and peer review.

The University agrees. Science and technology (S&T) excellence is the defining quality for the three UC-affiliated DOE Laboratories. The University uses fee earned from its participation in governance of the labs to support collaborative research activities.

Rigorous and on-going applications of independent peer reviews ensure that S&T remain the core strength at the Laboratories. UC has applied the principles of peer review across both the S&T and operations areas to maximize the Labs' ability to impact the complex missions across the national security space. UC faculty scientists contribute to the quality of peer reviews by participating as members of the Labs' capabilities review committees and the S&T oversight committees for the M&O parent organizations. Joint faculty appointments are also an important element at the UC-affiliated labs. The total number of joint UC faculty appointments for the three Labs is around 260.

> **Recommendation 33:** DOE, the laboratories, Congress and OMB should actively work together to identify appropriate situations and methods for utilizing innovative financing approaches, such as third-party financing, enhanced use leases, and other methods, including State funding, gifts, and leveraging partnerships with other Federal agencies.

The University agrees with this recommendation and recommends its strengthening. The University owns much of the real property at the Berkeley Lab, and it has been free of many of the restrictions (e.g., DOE Orders) that impede or constrain contractor capital investments at other labs. Accordingly, the University has been able to invest in capital improvements in ways that other labs cannot, and this investment has greatly benefited both DOE the Berkeley Lab. Current rules dis-incentivize contractor and third-party capital investment. The rules/restrictions frequently are premised on the desire for "near-zero risk" and fail to consider the long-term viability and mission of the laboratory complex. In light of the current budget environment and long-term capital investment needs of the laboratories, the University advocates the strengthening of this recommendation by calling on the parties to reconsider and reevaluate the rules and restrictions (and their underlying assumptions) associated with alterative financing for capital improvements at the laboratories.

> **Recommendation 36:** A standing body should be established to track implementation of the recommendations and actions in this report, and to report regularly to DOE, the laboratories, the Administration, and the Congress on progress, results, and needed corrective actions. The standing body could assist Congressional committees in developing a rational plan for future evaluations of the DOE laboratories.

The University concurs. The make-up of this standing body is crucial, and should include representatives of relevant stakeholder communities, including the M&O contractors, to ensure that a broad variety of perspectives on actions and their results are solicited.

Booz | Allen | Hamilton

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September 25, 2015
Via Electronic Mail

Commission to Review the Effectiveness of the National Energy Laboratories
1000 Independence Avenue, SW
Washington, DC 20585

Attn: CRENEL@hq.doe.gov

Subject: Booz Allen Hamilton Response to DOE's request for comment on the Draft Final Report - Commission to Review the Effectiveness of the National Energy Laboratories (CRENEL)

Reference: Draft Final Report – CRENEL

Dear Commission Members and Staff,

Booz Allen Hamilton is pleased to submit comments to the Draft Final Report - CRENEL; we applaud the Commission's effort and believe the report is both comprehensive and thought-provoking. Booz Allen welcomes the opportunity to further discuss any of our suggestions in greater detail.

Questions may be addressed to Mr. Gary Rahl at Redacted or to me at Redacted.

Sincerely,

Richard J. Goffi
Vice President

BOOZ ALLEN HAMILTON INC.

Enclosure

Comments on Commission to Review the Effectiveness of the National Energy Laboratories Draft Report

Booz Allen thanks the Commission for requesting comments on this draft review of the effectiveness of the national energy laboratories. The Commission should be commended for such a thorough output. While we agree with many of the recommendations, we have some additional considerations for the Commission on their analysis of the role and nature of the M&O contractor and how to incentivize performance and stewardship of these national assets.

Mixed messages on the role of the M&O contractor: The Commission should consider acknowledging the subtle differences between the M&O contractor and the laboratory, as an entity in of itself. It is clearly stated that the laboratory should be viewed as a partner, trusted advisor and disinterested party; however, there are mixed messages in this report as to the role of the M&O contractor. As the Commission suggests, these two entities are intertwined; however, they are not inextricably linked. This message should be made stronger. For example, in Volume 2, page 17, the Commission suggests in an ideal state: "The laboratory is answerable only to the government customer" and while that may be true for the laboratory alone, it is definitely not the case for the M&O contractor, as suggested with the Commission's use of the term "FFRDC/M&O" in that same paragraph. The M&O contractor, as a separately organized entity, is ideally answerable to its customers, partners, shareholders and the public at large (through the local, state and federal government). The Commission should consider plainly describing these differences and the relationship between the laboratory and its M&O contractor, along with ensuring the terms laboratory, M&O contractor and FFRDC are not used interchangeably throughout the report.

The Nature of the M&O contractor: In our experience as an M&O contractor and analysis of existing and previous M&O contracts, the DOE has created an apparent dichotomy between the laboratory management and their M&O corporate parent(s). The contracts have been structured to ensure great laboratory management but do little in the way to involve the parent organization(s). Laboratory management, while extremely important to the day-to-day operation and strategic direction of the laboratory, should not be solely accountable as the M&O contractor. It is unclear in this report if the Commission sees value in the parent organization outside of taking on the risks and liabilities of the laboratory. In reality, the parent organization can drive improvement in the asset and ensure high performance across the enterprise; but only if this involvement is valued. The Commission should ensure that their report reflects this important role by calling on both the laboratory management and their respective parent organizations to aid in the improvement of the laboratory system.

Comments on Incentive Fees: The incentives structure is a key mechanism for contractually aligning the government and its partner. It seems that the Commission agrees that a misaligned fee structure can cause the M&O contractors to be viewed as "absentee landlords" – receiving what is seen as high fees, for what amounts to little involvement. While a fixed fee only model has merits, particularly for single-program laboratories that require little to no parent organization, Booz Allen would like to offer an alternative model that aligns with the public interest and equates the return on the government's investment with the involvement, as well as the risk, taken by the corporate parent. DOE officials have stated that facilities should be managed in alignment with their mission needs, along with the understanding that the contractor manages risks appropriately. As shown by previous incidents, however, tying risk to fee does not necessarily preclude risky scenarios from occurring. To help avoid future safety/security failures, safe and secure operations could be considered a baseline for the existence of a contract, and the risk level of the operations could be held in check by award term

extensions rather than fee. If the government would like to still reward high performance within the laboratory, the NNSA could build a performance fee used solely within the laboratory operations (e.g., employee incentives, additional internal research and development). This set of incentives aligns the interests of the public with laboratory performance as a singular entity. The government can then use incentives for the corporate parent to align across the enterprise and in the national arena – with fees tied to strategic initiatives and high priority deliverables. Tying fee to the corporate parent's involvement and performance would attract competition, compensate for risk taken by the corporate parent, and offset unallowable costs.

The Commission should consider modifying Recommendation 6 to read:

"DOE should abandon incentive award fees that detract from the alignment between the DOE and M&O contractor. A fixed fee set at competitive rates with risk and necessary investment in mind should be considered for single-program laboratories that require little to no parent organization. In addition, DOE should adopt a broader and richer set of incentives and consequences to motivate sound laboratory management and accountability, along with corporate parent involvement in the enterprise-wide laboratory system."

Commission to Review the Effectiveness of the National Energy Laboratories
Draft Final Report Public Comments by
Pacific Northwest National Laboratory
September 24, 2015

Section I – General Comments

1. Throughout the draft report statements are made implying that trust is uniformly broken between DOE and the National Laboratories. Our observation, and experience at PNNL, is that the trust between DOE and the National Laboratories stewarded by the Office of Science is strong.

2. The draft report recommends that DOE and the National Laboratories develop annual operating plans. In light of the success demonstrated by the Office of Science's planning and performance management (PEMP) processes we do not see the value in adding another level of planning detail. Instead, we support the Commission's recommendation that the Office of Science's planning and performance management processes be adopted by the entire DOE.

3. In Volume 2 of the draft report, the Commission notes that PNNL receives only 20% of our funding from our steward, the Office of Science. The unstated implication is that, as a result, the Office of Science has proportionately less ability to influence our strategic priorities. On the contrary, the comprehensive and interactive nature of the Office of Science's planning and performance management processes ensures that our institutional priorities are strategically aligned with those of the Office of Science, and of DOE. In addition, our ability to leverage a diverse set of funding sponsors enables us to have an increased impact on DOE and National priorities.

4. In Chapter 5 – Findings and Recommendations, the Commission recommends that the National Laboratories track the laboratory level of effort for all assessments. In light of our recent experience doing this at the request of the SEAB, we do not believe that the effort it takes to do this returns commensurate value to the institution. Instead, we believe that it is better to utilize the risk-based approach to assessments as articulated in our Contractor Assurance System.

5. We agree with the Commission's recommendation (#19) that LDRD be unburdened, but disagree that the impact will be limited to the NNSA laboratories. Unburdening LDRD will allow either increased investment or a lowering of rates at all of the National Laboratories.

Section II – Factual Corrections

1. On page 98 (Volume 2); third paragraph down, the report references PNNL's "Timekeeping and Travel and Property M&O Program." This is really two M&O Programs: Timekeeping and Travel; and Property. Because of the content of this paragraph applies only to the Property M&O program, reference to the Timekeeping and Travel Program should be removed.

2. The same reference is made in the second paragraph of page 99 (Volume 2), and in the first paragraph of page 101 (Volume 2), and again, reference to the Timekeeping and Travel Program should be removed.

3. The same reference is made in the figure caption for Figure 18 (Volume 2). Because the details of Figure 18 refer to both programs the caption should be changed to reflect the fact that these are two separate programs.

4. On page 157 (Volume 2), Footnote 210 should be modified to include PNNL among those labs participating in the multi-lab Grid Consortium. In fact, as noted in the text, PNNL is co-leading that Consortium with NREL.

RESULTS OF SAVANNAH RIVER NATIONAL LABORATORY (SRNL) TECHNICAL ACCURACY REVIEW OF DRAFT FINAL REPORT OF THE COMMITTEE TO REVIEW THE EFFECTIVENESS OF NATIONAL ENERGY LABORATORIES (CRENEL)
September 2015

VOLUME/PAGE	TABLE/FIGURE	CHANGE
Volume 1, page 5	Table 1	SRNL *Budget from DOE (FY 2014)* is $204M (rather than $15M) SRNL *Total Budget (FY 2014)* should be $231M (rather than $215M)
Volume 2, page 4	Table 1	SRNL *Budget from DOE (FY 2014)* is $204M (rather than $15M) SRNL *Total Budget (FY 2014)* should be $231M (rather than $215M)
Volume 2, page 31	Table 5	Number of Contract Clauses for SRNL should be • H-Clauses: 66 (rather than 62) • I-Clauses: 63 (rather than 25) • DEAR: 38 (rather than 33) • Directives: 90+ (rather than 40)
Volume 2, page 46, 51, 55, and other pages throughout report		The term Work for Others (WFO) has been replaced by Strategic Partnerships Program (SPP).
Volume 2, page 181	Figure 31	SRNL *WFO as a Percentage of Average Total Budgets FY 2009–FY 2013* should be 15.76% (rather than ~<3%)
Volume 2, page 195	Table 31	Mechanisms for Technology Transfer should include for EM technology deployment by a contractor as direct pathway
Volume 2, page E-12	Figure 59	SRNL budgets from DOE in this figure should be FY04: $122M (rather than $373.4M) FY05: $120M (rather than $67.4M) FY06: $123M (rather than $73.0M) FY07: $133M (rather than $105.4M) FY08: $140M (rather than $83.7M) FY09: $154M (rather than $607.3M) FY10: $164M (rather than $76.4M) FY11: $140M (rather than $73.9M) FY12: $138M (rather than $5.1M) FY13: $184M (rather than $19.1M) FY14: $204M (rather than $14.2M)
Volume 2, page F-1		SRNL *Budget from DOE (FY 2014)* should be $204M (rather than $14M) and the *Available Fee as % of DOE Budget* is 2.33%

Email received from NREL

Volume 1

Accuracy Comments:

Page	Paragraph	Comment
11	1	"stewarding industrial or university partner" - statement does not recognize that some labs are stewarded by non-profit research organizations.
22	Last	The sentence referencing Fig. 4 – should substitute the word "a" for the word "the" as this represents the perspective of one lab
23	Table	The table is not well explained to clarify what the column headers mean
24	Last	…EERE policy decreased the number of milestones per project to one per quarter… This is not accurate. Prior to FY14, we had fewer than one milestone per quarter. The implementation of one per quarter greatly increased the number per program. EERE is working to remedy this by moving to larger projects and by parsing the types of milestones to be "progress milestones" versus "outcome milestones". This is still a work in progress, but the overall number of milestones that needs to be tracked continues to be the same.

Accuracy Comments

Volume 2		
180	Footnote 239	The DoD investment was not just energy efficiency work, it was also renewables and microgrids
226	Table 35	Shows no leased space for NREL. This is not correct
E-8		List of core capabilities needs to be corrected. ESI is listed twice. We should be consistent with the eight in our 5 Year Plan.

Part 3: Suggested Corrections from DOE Headquarters

Email received from Rick Hass, IG

Thanks for your work on this effort. The report provides a number of meaningful observations/recommendations that could help improve the effectiveness of the National Energy Laboratories.

My comments relate primarily to the numerous references in the report to "audits" performed by various entities. While a variety of entities (Headquarters staff/program offices, field/site offices, etc.) perform program/compliance reviews, the Office of Inspector General is the organization primarily responsible for performing audits within the Department. Readers may be confused when efforts that are actually program reviews are referred to as "audits."

I also noted a passage on page iv where some clarification is necessary. The statement, "DOE should also utilize a risk-based model with meaningful stakeholder engagement when developing new requirements and conducting audits," could lead one to conclude that the Office of Inspector General does not use such an approach when planning and conducting audits. As we described to the Commission members that visited us, we employ an extensive risk-modeling/ranking process for planning and conducting audits. We also continually seek to avoid duplication of work performed by both external and internal oversight organizations.

Thanks for your consideration of these comments.

Rick Hass
Deputy IG for Audits and Inspections

Warren, Jermaine M (CONTR)

From:	Van Dyke, Henry
Sent:	Wednesday, September 23, 2015 1:06 PM
To:	Dinardo, Katherine (CONTR); Felton, Niquie (CONTR); Gerbsman, Jason; Megary, Sue; NA-50 Correspondence; Perry, Rhanika (CONTR); Rhoads, Patrick; Mclaurin, Jasmine (CONTR); Lee, Yolanda
Cc:	Cole, Frances; Tullis, Cathy; Mccuen, Anna; Barnes, Doreen
Subject:	RE: NAES Collaboration: IDRMS 2015-02289 - Request for Concurrence: Technical Comments Requested on the Draft Final Lab Commission Report

NNSA GC has no legal comments but offers the following edit:

P.5, footnote.
"Budget from DOE from Budget from DOE figures are from the DOE FY 2016 Budget Justification"

Sent with Good (www.good.com)

-----Original Message-----
From: Dinardo, Katherine (CONTR)
Sent: Friday, September 11, 2015 08:45 AM Eastern Standard Time
To: Felton, Niquie (CONTR); Gerbsman, Jason; Megary, Sue; NA-50 Correspondence; Perry, Rhanika (CONTR); Rhoads, Patrick; Mclaurin, Jasmine (CONTR); Lee, Yolanda; Van Dyke, Henry
Cc: Cole, Frances; Tullis, Cathy; Mccuen, Anna; Barnes, Doreen
Subject: NAES Collaboration: IDRMS 2015-02289 - Request for Concurrence: Technical Comments Requested on the Draft Final Lab Commission Report

<<HQ-#539502-v1-DOE_Lab_Commission_Volume_2_DRAFT.PDF>>
<<HQ-#539501-v1-DOE_Lab_Commission_Volume_1_DRAFT.PDF>>
<<HQ-#539504-v1-Incoming_9_10.MSG>>

The attached item is being sent to NA-10, NA-50, NA-EA & NA-GC for review, concurrence and to recommend collaboration by NA-1.

It is the responsibility of all program offices to let NAES know exactly who concurred either through a forwarded email, attached concurrence, copying the concurring officer on the email or letting NAES know that the concurrence is in IDRMS.

It is due to NAES COB 9/17/2015. Please reply all to this email on your acceptance of this collaboration and with your concurrence response.

- Pages 250 to 279 should be read in their entirety to ensure we all have the same baseline for moving forward.

- Page 268-269:

UPF will be located at NNSA's Y-12 National Security Complex to ~~store and~~ process enriched uranium ~~in a single centralized area~~ currently performed in a 70 year old facility. This will support the nuclear weapons program, nuclear nonproliferation and provide uranium as feedstock for fuel for naval reactors. The UPF cost estimates have escalated: at CD-0, the cost range was $600 million to $1.1 billion; at CD-1, the range estimate was ~~$4.1~~ 4.2 billion to ~~$6.4~~ 6.5 billion.[360]

While UPF is not located at a laboratory, NNSA ~~tasked a group of laboratory staff members to~~ chartered a review the project's cost, schedule, and scope challenges led by the ~~ONRL~~ ORNL manager, and made up of subject matter experts from across the DOE complex. In its final report, the ~~laboratory~~ "Red Team" agreed with the project team's proposal that ~~concluded that~~ the facility did not have to be a single big box facility but rather could be a series of smaller, segregated facilities designed and constructed to meet individual safety and security criteria.[361] The "Red Team" affirmed the project team's plan to ~~recommended~~ minimizing the nuclear footprint, building non-nuclear buildings where appropriate, and using existing infrastructure at Y-12. The report concludes that the cost of the new approach will be at the high end of the CD-1 cost range—~~$6.4~~ 6.5 billion. NNSA plans to continue to refine the final project cost and schedule baseline following 90-percent completion of the design.

-----Original Message-----
From: Dinardo, Katherine (CONTR)
Sent: Friday, September 11, 2015 11:16 AM
To: Dickenson, Howard; Dunne, Claire; Fresco, Laura (CONTR); Gil, Jose (CONTR)
Cc: Cole, Frances; Tullis, Cathy; Burris, Maryhelen (CONTR); Viars, Joy (NNSA)
Subject: FW: NAES Collaboration: IDRMS 2015-02289 - Request for Concurrence: Technical Comments Requested on the Draft Final Lab Commission Report
Importance: High

NA-APM & NA-MB/Dickenson are being added for concurrence.

-----Original Message-----
From: Dinardo, Katherine (CONTR)
Sent: Friday, September 11, 2015 8:45 AM
To: Felton, Niquie (CONTR); Gerbsman, Jason; Megary, Sue; NA-50 Correspondence; Perry, Rhanika (CONTR); Rhoads, Patrick; Mclaurin, Jasmine (CONTR); Lee, Yolanda; Van Dyke, Henry
Cc: Cole, Frances; Tullis, Cathy; Mccuen, Anna; Barnes, Doreen
Subject: NAES Collaboration: IDRMS 2015-02289 - Request for Concurrence: Technical Comments Requested on the Draft Final Lab Commission Report
Importance: High

The attached item is being sent to NA-10, NA-50, NA-EA & NA-GC for review, concurrence and to recommend collaboration by NA-1.

It is the responsibility of all program offices to let NAES know exactly who concurred either through a forwarded email, attached concurrence, copying the concurring officer on the email or letting NAES know that the concurrence is in IDRMS.

OFFICE OF MANAGEMENT – TECHNICAL COMMENTS ON DRAFT CRENEL REPORT

CHAPTER 3 – CONTRACT REQUIREMENTS

1. Page 66 -- The Director of the Office of Management (MA-1), as Chair of the DRB, has the authority to recommend cancellation of directives and/or their requirements. However, MA-1 cannot unilaterally cancel requirements.

2. Page 66 -- Technical Standards are not requirements unless they are invoked in an Order. At that time, invoked technical standards are reviewed for applicability.

3. Page 66 -- Requirements and guidance are already clearly separated within the Directives System. Separation between mandatory requirements and non-mandatory guidance may be needed outside of the Directives system. If a technical standard is invoked, it becomes a mandatory requirement and is reviewed as such. Contractor Requirements Documents include all relevant contractor requirements.

CHAPTER 9 – DIVERSE SUPPORT OF OTHER AGENCIES

1. DOE issued regulations changing the name of "Work for Others" to "Strategic Partnership Projects." All references to "Work for Others" (WFO) should be changed to "Strategic Partnership Projects" (SPP).

CHAPTER 14 – FACILITIES AND INFRASTRUCTURE

1. Volume 1, Section 6.B, 4th paragraph, page 47 & Volume 2, section 14.B.1.a, paragraph 2, page 234 – While all laboratories have deferred maintenance, three laboratories (out of the 17) hold approximately 64% ($1.4B) of the deferred maintenance ($2.2B). Of the three, one laboratory accounts for 29% ($608K) of the deferred maintenance balance.

2. Volume 1, page 51, Table 10 - Please include under "Source: Data provided by DOE from the Facilities Information Management System (FIMS) database, FY 2014 Snapshot." This will provide consistency with Table 35 in Volume 2 and data repeatability in the future, if necessary.

3. Volume 2, Section 14.A.1, page 225 - The quantities will need to be updated. Page 46 of Volume 1 will also need to be updated. See Comment 4 below for additional information.

4. Volume 2, Section 14.A.1, page 225 - As presented, Table 35 does not include information on condition. It indicates the amount of maintenance and repairs that have been deferred.

5. Volume 2, Table 35, page 226 - It appears the table in the report was based on preliminary data and not the finalized data. For convenience and to ensure the correct information is

used, we have included the finalized table and updated it to include the following footnotes for ORNL and SRNL, respectively:

- Land assets for the Oak Ridge National Laboratory (ORNL) are managed by the Oak Ridge Office and are not specifically assigned to ORNL.
- The Savannah River National Laboratory (SRNL) is located at the Savannah River Site (SRS). The SRS is comprised of almost 198,000 acres (approximately 310 square miles) of DOE Owned land and supports facilities assigned not only to the SRNL but also other DOE Program Offices. While the Site maintains a single land record in FIMS, approximately 35 acres is managed by the SRNL contractor.

6. Volume 2, Section 14.A.3, page 228, 1st paragraph, 3rd sentence – "Institutional Plant Projects" should be "Institutional General Plant Projects".

7. Volume 2, Section 14.A.3, page 228, 1st paragraph, 4th sentence – "…maintenance or light renovation of existing facilities." Should be "maintenance, renovation of existing facilities, or construction of new facilities." To ignore new construction would be inaccurate.

8. Volume 2, Section 14.A.3, page 228, 2nd paragraph – The paragraph leaves the reader with the impression that RTBF, SLI, FIRP and RAMP are or were line item type funding programs. Suggest restructuring the paragraph.

9. Volume 2, Section 14.A.3, page 228, 3rd paragraph – The sentence "...the Federal government does not use a capital budget…" appears to be contradicted by the later statement "… capital projects are segregated in a capital budget and depreciation on Federal capital assets is reported in the regular budget"

10. Volume 2, Section 14.A.4, page 232, 2nd paragraph – NNSA did not modify DOE O 430.1B. They simply expanded their reporting time period by an additional 15 years to cover a planning period of Twenty-Five Years. NNSA's requirements were in addition to but not in lieu of the requirements if DOE O 430.1B.

11. Volume 2, Section 14.B.1.b, page 234, 1st paragraph, 2nd sentence – The natural conclusion of the facilities life cycle is Disposition. The D&D referenced in the paragraph is done in order to dispose of the asset via demolition, sale, transfer, etc. Often, if the asset is contaminated (particularly process contaminated), the end state of the D&D process will be demolition.

12. Volume 2, Section 14.B.1.b, Figure 39 – The Facilities Information Management System (FIMS), the Department's official real property database, does not support the information provided in Figure 39. The presentation referenced by the table provides forecast values not current, actual values. Since all assets will become excess at some point in the future, use of this chart as currently presented without timelines, reference to projections, etc. is misleading. For DOE official real property data, data sourced from FIMS should be used.

According to FIMS, FY 2014 snapshot:

- ANL has 0 Square Feet (SF)
- ORNL has 226,028 SF
- BNL has 47,011 SF
- LBNL has 55,756 SF

13. Since this is meant to be a public document, recommend consistency in how laboratories are referenced throughout the document. An example is Jefferson Lab. The following are some examples of terms are used to refer to Jefferson Lab in the two volumes JLab, Thomas Jefferson, Thomas Jefferson National Accelerator Facility, and TJNL. Other sites have similar issues but not as drastic - example ANL and Argonne.

Volume 2

Page 5. "DOE is unique among Federal agencies in how it funds research. Rather than focusing solely on proposals driven by a single principal investigator, the Department also funds both large-scale multidisciplinary research and large expensive facilities that universities and industry are unable or unwilling to invest in."

Multidisciplinary research projects and large expensive facilities are not the exclusive domain of DOE. NSF established the SynBERC consortium in 2006, a > $16M multidisciplinary project involving genetics, protein folding, computational biology and regulatory scientists from several universities that focused on discovery-based advancements for synthetic and systems biology. NIST labs, among other federal laboratories, also boast of relatively large and expensive facilities and instrumentation that are world-class for material sciences, among other disciplines. The statement as written is not inaccurate, but may overstate the uniqueness of R&D models that DOE employs. Rather, the resources and emphasis that DOE commits for implementing these models as an overall percentage of total R&D expenditures to these collaborative research models and facilities have few peers among U.S. federal R&D agency outside of Defense.

Page 52. "Figure 12. Work for Others Approval Process".

DOE adopted the Strategic Partnerships Program (or SPP) that renamed Work for Others (WFO) agreements through a DOE Order issued last November. The report should consistently use that nomenclature. Also, in the figure, the orange box labeled "Agreement is signed and approved by lab Technology Transfer Office" approval step positioned near the bottom right hand corner of the process flow diagram appears to be duplicated erroneously.

Page 129. "For example, several laboratories noted that the Office of Science does a fairly good job of embedding some flexibility within their WBS; conversely, DOE's Office of Energy Efficiency and Renewable Energy (EERE) was mentioned as having the tightest controls on its funding and a more restrictive WBS, thereby requiring more compliance-related transactions within each B&R code."

The EERE budget atomization phenomenon mentioned by the Commissioner is in part due to Congressional control differences at the approved budget level. Specific guidance on spending levels is occasionally prescribed within budget Conference Reports at the B&R codes for EERE Programs. In at least one instance in the past decade an EERE Program Office was asked by auditors to provide evidence of adherence to Conference Report spending, down to the dollar. The WBS system implemented by EERE may or may not align with B&R codes and act primarily as a portfolio tracking tool and technology classification system. By itself WBS does not cause inflexibility on lab funding and B&R code alignment.