113TH CONGRESS
1st Session
HOUSE OF REPRESENTATIVES
REPORT
113–252

EPA HYDRAULIC FRACTURING STUDY IMPROVEMENT ACT

OCTOBER 23, 2013.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SMITH of Texas, from the Committee on Science, Space, and Technology, submitted the following

R E P O R T

[To accompany H.R. 2850]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 2850) to require certain procedures in the conduct by the Environmental Protection Agency of its study of the potential impacts of hydraulic fracturing on drinking water resources, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

CONTENTS

39–006

I. AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "EPA Hydraulic Fracturing Study Improvement Act".

SEC. 2. EPA HYDRAULIC FRACTURING RESEARCH.

In conducting its study of the potential impacts of hydraulic fracturing on drinking water resources, with respect to which a request for information was issued under Federal Register Vol. 77, No. 218, the Administrator of the Environmental Protection Agency shall adhere to the following requirements:

(1) PEER REVIEW AND INFORMATION QUALITY.—Prior to issuance and dissemination of any final report or any interim report summarizing the Environmental Protection Agency's research on the relationship between hydraulic fracturing and drinking water, the Administrator shall—

(A) consider such reports to be Highly Influential Scientific Assessments and require peer review of such reports in accordance with guidelines governing such assessments, as described in—

(i) the Environmental Protection Agency's Peer Review Handbook 3rd Edition;

(ii) the Environmental Protection Agency's Scientific Integrity Policy, as in effect on the date of enactment of this Act; and

(iii) the Office of Management and Budget's Peer Review Bulletin, as in effect on the date of enactment of this Act; and

(B) require such reports to meet the standards and procedures for the dissemination of influential scientific, financial, or statistical information set forth in the Environmental Protection Agency's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency, developed in response to guidelines issued by the Office of Management and Budget under section 515(a) of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106–554).

(2) PROBABILITY, UNCERTAINTY, AND CONSEQUENCE.—In order to maximize the quality and utility of information developed through the study, the Administrator shall ensure that identification of the possible impacts of hydraulic fracturing on drinking water resources included in such reports be accompanied by objective estimates of the probability, uncertainty, and consequence of each identified impact, taking into account the risk management practices of States and industry. Estimates or descriptions of probability, uncertainty, and consequence shall be as quantitative as possible given the validity, accuracy, precision, and other quality attributes of the underlying data and analyses, but no more quantitative than the data and analyses can support.

(3) RELEASE OF FINAL REPORT.—The final report shall be publicly released by September 30, 2016.

II. PURPOSE AND SUMMARY

H.R. 2850 directs the EPA Administrator to adhere to additional requirements in conducting its study into potential impacts of hydraulic fracturing on drinking water resources. The act requires the Administrator to peer review information prior to the issuance of any final or interim report from the EPA. The bill also directs the Administrator to ensure that possible impacts of hydraulic fracturing on drinking water included in the report be accompanied by objective estimates of the probability, uncertainty, and consequence of each identified impact.

III. BACKGROUND AND NEED FOR THE LEGISLATION

Pursuant to Congressional direction, the EPA is undertaking a multi-year *Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources.* The study results are widely anticipated to have significant public policy implications. Committee correspondence and testimony at hearings since the inception of the

report have emphasized the importance of assuring the study be conducted in the most scientifically sound manner possible, adhere to all appropriate EPA peer review requirements, and present its conclusions in relevant context.

The ongoing study is being conducted by EPA's Office of Research and Development (ORD). The Fiscal Year 2010 Department of the Interior, Environment, and Related Agencies Appropriations Act (P.L. 111–88) directed EPA to carry out the study in accordance with the following report language:

"Hydraulic Fracturing Study.—The conferees urge the Agency to carry out a study on the relationship between hydraulic fracturing and drinking water, using a credible approach that relies on the best available science, as well as independent sources of information. The conferees expect the study to be conducted through a transparent, peer-reviewed process that will ensure the validity and accuracy of the data. The Agency shall consult with other Federal agencies as well as appropriate State and interstate regulatory agencies in carrying out the study, which should be prepared in accordance with the Agency's quality assurance principles."

In February of 2011, EPA released a draft study plan for public comment and review by its Science Advisory Board (SAB), and a final study plan was released in November 2011.[1] The purpose of the study, as outlined in the final study plan, is to "elucidate the relationship, if any, between hydraulic fracturing and drinking water resources" and "assess the potential impacts of hydraulic fracturing on drinking water resources and to identify the driving factors that affect the severity and frequency of any impacts."[2]

The study plan identified the following fundamental research areas and questions:

- *Water Acquisition: What are the potential impacts of large volume water withdrawals from ground and surface waters on drinking water resources?*
- *Chemical Mixing: What are the possible impacts of surface spills on or near well pads of hydraulic fracturing fluids on drinking water resources?*
- *Well Injection: What are the possible impacts of the injection and fracturing process on drinking water resources?*
- *Flowback and Produced Water: What are the possible impacts of surface spills on or near well pads of flowback and produced water on drinking water resources?*
- *Wastewater Treatment and Waste Disposal: What are the possible impacts of inadequate treatment of hydraulic fracturing wastewaters on drinking water resources?*

On December 21, 2012, EPA released a "Progress Report" to this ongoing study which provided information on current work being done by the Agency, including the status of research projects that are anticipated to inform the final study.[3] The progress report did not include conclusions regarding the relationship between hydrau-

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[1] Environmental Protection Agency, *Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources*, November 2011. Accessible at: http://www2.epa.gov/sites/production/files/documents/hf_study_plan_110211_final_508.pdf

[2] Ibid.

[3] News Release, Environmental Protection Agency, *EPA Releases Update on Ongoing Hydraulic Fracturing Study*, December 21, 2012. Accessible at: http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/4af0024955d936ef85257adb0058aa29!OpenDocument

lic fracturing and drinking water resources. The final report, which has been classified by the Agency as a Highly Influential Scientific Assessment, is anticipated to be released in draft form in late 2014 for peer review and public comment.[4] However, recent testimony before the Committee indicated the peer review process will continue into 2015, suggesting that a final report will not be released until that year or later.[5]

Prior to the release of the Progress Report, the EPA Office of Research and Development requested the Scientific Advisory Board to conduct a "consultation" review of the research that would be found in that report. To this end, the ad hoc SAB panel, known as the Hydraulic Fracturing Research Advisory Board Panel [6] participated in a consultation with the full SAB in May of this year. In this meeting, the ad hoc SAB panel responded to charge questions from the Agency and provided input and comments on the Progress Report. The written comments submitted by the panelists were compiled into a report, which was released on June 25.[7]

Throughout this process stakeholders have expressed concerns that the study had the potential to produce results that lacked context and were based on what were possible outcomes rather than likely or probable outcomes, as well as concerns with the peer review process. Several issues with the report were identified in an independent review of the EPA's study plan conducted by Battelle, which included recommendations for strengthening the study. Other issues and questions have been raised by the SAB or addressed in recommendations it has provided to the Administrator.

In its 2011 review of the draft study plan, the Science Advisory Board recommended to the Administrator that "EPA consider the four steps of the risk assessment paradigm (i.e. hazard identification, exposure assessment, dose-response assessment, and risk characterization) to assess and prioritize research activities".[8] In the more recent consultation conducted by the SAB Hydraulic Fracturing Research Advisory Panel on the Progress Report, several reviewers also commented on the absence of a risk assessment. One reviewer noted "There is no quantitative risk assessment included in EPA's research effort. Thus, the reader has no sense of how risky any operations may be in ultimately impacting drinking water. This is also a significant limitation of the work."[9] Another reviewer noted that "To simply discount the regulatory network in

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[4] Environmental Protection Agency, Stakeholder Engagement Roadmap and Peer Review Overview for EPA's Study on the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources. Accessible at: http://www2.epa.gov/hfstudy/stakeholder-engagement-roadmap-and-peer-review-overview-epas-study-potential-impacts

[5] Testimony of David A. Dzombak before the Subcommittee on Environment and the Subcommittee on Energy, *Lessons Learned: EPA's Investigations of Hydraulic Fracturing*, July 24, 2012. Accessible at: http://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-113-SY18-WState-DDzombak-20130724_0.pdf

[6] Members of Hydraulic Fracturing Research Advisory Panel. Accessible at: http://yosemite.epa.gov/sab/sabpeople.nsf/WebExternalSubCommitteeRosters?OpenView&committee=BOARD&subcommittee=Hydraulic %20Fracturing%20Research %20Advisory%20Panel

[7] EPA Science Advisory Board Consultation on EPA Office of Research and Development Report, *Progress Report: Potential Impacts of Hydraulic Fracturing on Drinking Water Resources—December 2012.* June 25, 2013. Accessible at: http://yosemite.epa.gov/sab/sabproduct.nsf/5F72227CF643BF8785257B9500764E6B/$File/Individual+Comments+from+Members+of+Science+Advisory+Board+Hydraulic+Fracturing+ Research+Advisory+Panel+on+EPA.pdf

[8] EPA Science Advisory Board to EPA Administrator, *SAB Review of EPA's Draft Hydraulic Fracturing Study Plan,* August 4, 2011.P. ii. Accessible at: http://yosemite.epa.gov/sab/sabproduct .nsf/0/2BC3CD632FCC0E99852578E2006DF890/$File/EPA-SAB-11-012-unsigned.pdf

[9] Consultation, p. 60.

place and model "what if" and "worse case" scenarios will not produce realistic results." [10]

Another concern expressed by stakeholders was EPA's past failure to designate the study as a Highly Influential Scientific Assessment, or HISA. According to a review of the study plan conducted by Battelle, "Such designation triggers more rigorous standards for peer review, and thus study design, data quality, and transparency." [11] Battelle also noted that "Even in the absence of such a formal designation, there is no direct evidence documented in the study plan or in associated documents that EPA followed its quality policy in framing the study objectives and developing the study design . . ." [12] While EPA has since designated the final study as a HISA, there is still a need to ensure that the requisite policies and procedures governing such scientific undertakings are followed.

Committee concerns with EPA's overall study design and implementation, as well as specific aforementioned issues such as risk assessment and peer review, were detailed in numerous letters to the agency in 2011 and 2012.[13]

IV. HEARING SUMMARY

Although there was no legislative hearing that specifically focused on H.R. 2850 as introduced, on July 24, 2013, the Subcommittee on Environment and the Subcommittee on Energy held a joint oversight hearing, entitled, *Lessons Learned: EPA's Investigations of Hydraulic Fracturing,* which demonstrated the need for the bill. The Subcommittees received testimony from witnesses affiliated with the EPA, the Chair of the SAB's Hydraulic Fracturing Research Advisory Panel, the Utah Department of Natural Resources, and Cornell University. The Subcommittees examined concerns raised by Members of the Hydraulic Fracturing Research Advisory Panel, including that "[t]here is no quantitative risk assessment included in EPA's research effort." Dr. Brian Rahm of the New York Water Resources Institute testified that "industry and state agencies have a great amount of data and expertise that we should be using . . . when it comes to looking at risks and impacts and assessing those." Dr. David Dzombak, Chair of the SAB panel, said that EPA "committed to in the final report putting the various components of the study in a risk framework" when pushed by the panelists.

Additionally, the Subcommittee on Energy and the Subcommittee on Environment held a hearing on April 26, 2013, entitled, *A Review of Federal Hydraulic Fracturing Research Activities,* which examined the research being undertaken by the EPA, the Department of Energy (DOE), and the United States Geological Survey (USGS) pursuant to an interagency Memorandum of Under-

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[10] Consultation, p. 99.

[11] Battelle, *Review of EPA Hydraulic Fracturing Study Plan,* November 2011. P. 5. Accessible at: http://anga.us/media/press/CA5CEA92-0C88-CC29-EAADA8AD4F447B5E/files/final_epa_study_plan_review_061112.pdf

[12] *Ibid.*

[13] October 26, 2011 letter from Reps. Ralph Hall, Andy Harris, and Paul Broun. Accessible at http://science.house.gov/sites/republicans.science.house.gov/files/documents/Letters/10-26-2011%20Letter%20to%20Jackson.pdf; June 7, 2012 letter from Rep. Andy Harris. Accessible at http://science.house.gov/sites/republicans.science.house.gov/files/documents/Letters/060712_%20Harris%20to%20Lisa%20Jackson.pdf; and October 16, 2012 letter from Reps. Hall, Harris, and Dana Rohrabacher. Accessible at: http://science.house.gov/sites/republicans .science.house.gov/files/documents/10_16_2012%20Science%20Committee%20to%20Lisa%20Jackson_0.pdf

standing signed by the three agencies. At that hearing the EPA's Senior Science Adviser at the Office of Research and Development provided testimony on the ongoing drinking water study.

The Committee also held several hearings in the 112th Congress examining EPA's hydraulic fracturing research. On February 1, 2012, the Subcommittee on Energy & Environment held a hearing entitled, *EPA Fractured Science—Examining EPA's Approach to Ground Water Research: The Pavillion Analysis.* The hearing examined EPA's approach to ground water research in Pavillion, Wyoming. The Subcommittee received testimony from the Regional Administrator for EPA Region 8. On May 11, 2011, the Full Committee on Science, Space, and Technology held a hearing to review the technology and practices of hydraulic fracturing for energy production entitled, *Review of Hydraulic Fracturing Technology and Practices.*

In addition to these hearings focused specifically on hydraulic fracturing, the Committee held three additional hearings in the 112th Congress with EPA witnesses, at which the ongoing study received significant attention and discussion, including: a March 10, 2011, full committee hearing on *An Overview of the Fiscal Year 2012 Research and Development Budget Proposals at the National Oceanic and Atmospheric Administration and the Environmental Protection Agency;* a November 17, 2011, Energy and Environment Subcommittee hearing on *Fostering Quality Science at EPA: The Need for Common Sense Reform;* and a March 6, 2012, hearing on *An Overview of NOAA & EPA FY13 Budget.*

V. COMMITTEE CONSIDERATION

On July 30, 2013, H.R. 2850 was introduced by Rep. Lamar Smith and referred to the Committee on Science, Space, and Technology.

On August 1st 2013, the Committee on Science, Space, and Technology met in open markup session and adopted H.R. 2850, as amended, by voice vote. Further, the Committee ordered H.R. 2850 favorably reported to the House, as amended, by voice vote.

VI. COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list the record votes on the motion to report legislation and amendments thereto. A motion to order H.R. X favorably reported to the House, as amended, was agreed to by voice vote.

During Full Committee consideration of H.R. 2850, the following amendments were considered:

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

Full Committee Business Meeting

August 1, 2013

AMENDMENT ROSTER

Markup of H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act"

No.	Amendment	Summary	
1	**Amendment to H.R. 2850 Offered by Mr. Bera (CA) #020**	Requires that the final report shall be publicly released by September 30, 2016.	**Agreed to by Voice Vote**

VII. SUMMARY OF MAJOR PROVISIONS OF THE BILL

H.R. 2850 codifies EPA's designation of the final report as a Highly Influential Scientific Assessment (HISA) by directing the Administrator of the Office of Research and Development, prior to the issuance and dissemination of any final or interim report, to consider such reports HISAs.

The bill further requires the Administrator to ensure peer review of the report is conducted in compliance with the guidelines that govern HISAs. This includes the guidelines from the EPA's Peer Review Handbook, which lays out the Agency's policies and procedures governing peer review; the EPA's Scientific Integrity Policy, which establishes the Agency's framework to promote scientific integrity and promote standards, including those governing information quality, communication with the public and the use of peer review and advisory committees; and the OMB's Final Information Quality Bulletin for Peer Review, which establishes government-wide guidance aimed at enhancing the practice of peer review of government-wide science documents.

The Administrator is also required to follow the guidelines for dissemination of influential scientific information as outlined in the Agency's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency. These guidelines outline EPA's policy and procedural guidance for ensuring information quality

Finally, the bill requires the Administrator to include a risk assessment with any identification of possible impacts of hydraulic fracturing on drinking water. This will ensure that any identification of possible risks is accompanied by an assessment of such risks, which will provide context regarding the likelihood that such impacts might occur.

VIII. COMMITTEE VIEWS

H.R. 2850 improves the hydraulic fracturing study conducted by the EPA by requiring an objective evaluation of the possible impacts of hydraulic fracturing on drinking water resources. To this end, the bill requires that any final or interim reports be subject to peer review prior to issuance. The bill also requires the agency to place the potential impacts in context by providing objective estimates of uncertainties and consequences.

In the absence of these changes, EPA's scientific review of hydraulic fracturing would be insufficient to appropriately inform decision makers about the adequacy of existing groundwater protections. H.R. 2850 resolves this by requiring the evaluation the Committee believes necessary for the Administrator to make factual determinations.

IX. COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee held an oversight hearing and made findings that are reflected in the descriptive portions of this report.

X. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

In accordance with clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the performance goals and objectives of the Committee are reflected in the descriptive portions of this report, including the goal to improve the Environmental Protection Agency's (EPA's) ongoing study of the potential impacts of hydraulic fracturing on drinking water.

XI. NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

In compliance with clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XII. ADVISORY ON EARMARKS

In compliance with clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act", contains no earmarks.

XIII. COMMITTEE COST ESTIMATE

The Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XIV. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

Pursuant to clause 3(c)(3) of rule XIII of the Rules of the House of Representatives, the following is the cost estimate provided by the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, August 30, 2013.

Hon. LAMAR SMITH,
Chairman, Committee on Science, Space, and Technology, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2850, the EPA Hydraulic Fracturing Study Improvement Act of 2013.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susanne S. Mehlman.

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

H.R. 2850—EPA Hydraulic Fracturing Study Improvement Act of 2013

H.R. 2850 would require the Environmental Protection Agency (EPA) to follow certain procedures related to its ongoing Study *Potential Impacts of Hydraulic Fracturing on Drinking Water Re-*

sources. (At the request of the Congress, EPA began this mulityear study in 2010; a progress report was issued in December 2012, and the draft report is expected to be released for public comment and peer review in 2014.) This legislation would require that any interim or final report pertaining to EPA's study be considered as a Highly Influential Scientific Assessment (HISA). With a HISA designation for the reports, EPA must adhere to more stringent standards for peer review, meet certain criteria related to data quality, and meet certain procedures for the dissemination of scientific, financial, or statistical information. This legislation also would require EPA to include estimates of the probability, uncertainty, and consequences of each identified impact on drinking water. Finally, H.R. 2850 would require that the final report be released by September 30, 2016; currently, there is no deadline for the report.

According to EPA, enacting this legislation would require additional resources primarily to address the requirement to include probability assessments in the study. The ongoing study is expected to discuss and describe appropriate levels of uncertainty associated with hydraulic fracturing but will not include any probability assessments. To include a scientifically sound assessment of probability with the appropriate level of detail, EPA would need to obtain additional site-specific data related to well construction, hydraulic fracturing, and wastewater management practices. Based on information from EPA, CBO estimates that implementing the changes proposed by this legislation would cost about $1 million annually, totaling $5 million over the 2014–2018 period assuming availability of appropriated funds. That funding would provide for additional personnel and related administrative expenses.

Enacting H.R. 2850 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

H.R. 2850 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

The CBO staff contact for this estimate is Susanne S. Mehlman. The estimate was approved by Theresa Gullo, Deputy Assistant Director for Budget Analysis.

XV. FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

XVI. COMPLIANCE WITH H. RES. 5

A. Directed Rule Making. This bill does not direct any executive branch official to conduct any specific rule-making proceedings.

B. Duplication of Existing Programs. This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95–220, as amended by Public Law 98–169) as relating to other programs.

XVII. FEDERAL ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act were created by this legislation.

XVIII. APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

XIX. SECTION-BY-SECTION ANALYSIS

Sec. 1. Short Title

This section establishes the short title as the "EPA Hydraulic Fracturing Study Improvement Act."

Sec. 2. EPA Hydraulic Fracturing Research

This section places requirements on the Administrator of the Office of Research and Development at the Environmental Protection Agency in carrying out the *Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources.*

This section further requires that any interim or final report pertaining to the EPA's study on the relationship between hydraulic fracturing and drinking water be considered as a Highly Influential Scientific Assessment (HISA). This codifies EPA's designation of the final report as a HISA, and also requires the Administrator to abide by the more stringent standards for peer review and information quality that must accompany such a designation. The guidelines the bill specifically requires the Agency to follow are those outlined in the 3rd Edition of the Agency's Peer Review Handbook and its current Scientific Integrity Policy, and the Office of Management and Budget's Final Information Quality Bulletin for Peer Review.

The Administrator is also required in this section to provide objective estimates of the probability, uncertainty, and consequence of any possible impacts of hydraulic fracturing on drinking water identified throughout the study and ensure that such estimates be as quantitative as possible taking into account the current risk management practices of states and industry.

This section requires that the final report be publicly released by September 30, 2016.

XX. PROCEEDINGS OF THE FULL COMMITTEE MARKUP

PROCEEDINGS OF THE FULL COMMITTEE MARKUP OF H.R. 2850, THE EPA HYDRAULIC FRACTURING STUDY IMPROVEMENT ACT

THURSDAY, AUGUST 1, 2013

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Committee met, pursuant to call, at 10:03 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Lamar Smith [Chairman of the Committee] presiding.

Chairman SMITH. The Committee on Science, Space, and Technology will come to order. Without objection, the Chair is authorized to declare recesses of the Committee at any time. Pursuant to Committee Rule II(f) and House Rule XI(2)(H)(4), the Chair announces that he may postpone roll call votes on matters in which the yeas and nays are ordered until the end of the markup.

Welcome to today's Full Committee business meeting. We meet today for two purposes: to authorize the issuance of subpoenas and to mark up H.R. 2850, "The EPA Hydraulic Fracturing Study Improvement Act."

Chairman SMITH. Pursuant to notice, I now call up H.R. 2850, introduced by me along with Subcommittee Chairman Stewart and Subcommittee Chairman Lummis. And the clerk will report the bill.

The CLERK. H.R. 2850, to require certain procedures in the conduct by the Environmental Protection Agency of its study of the potential impacts of hydraulic fracturing on drinking water resources.

[H.R. 2850 appears in Appendix I]

Chairman SMITH. Without objection, the bill will be considered as read, and I will recognize myself for five minutes for an opening statement.

This item that we consider, the "EPA Hydraulic Fracturing Study Improvement Act," is a simple, four page bill that addresses the Environmental Protection Agency's ongoing study of the potential impacts of hydraulic fracturing on drinking water.

The bill does two things. First, it requires the EPA to follow basic scientific principles in carrying out the study, which has been designated a Highly Influential Scientific Assessment.

Second, the bill requires that the EPA's study go beyond simply identifying "possible impacts" of hydraulic fracturing on drinking water. The study must provide objective estimates of the probability, uncertainty, and consequence of any such impacts.

This addresses a concern identified on multiple occasions by stakeholders and independent experts since the EPA first proposed its study design in 2011. Requiring the EPA to provide context to any identified risk will maximize the study's utility to both scientists and decision-makers. And it will limit the possibility that findings will be misinterpreted or misused.

This basic principle has been emphasized repeatedly in Committee hearings and correspondence over the last two years. And its inclusion will enhance not only the credibility of the EPA's work on hydraulic fracturing but also our ability to ensure continued safe and responsible production of America's vast oil and gas resources.

And that concludes my opening statement.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF CHAIRMAN LAMAR SMITH

The next item we consider today is H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act."

This simple, four-page bill addresses the Environmental Protection Agency's (EPA's) ongoing study of the potential impacts of hydraulic fracturing on drinking water.

The bill does two things. First, it requires the EPA to follow basic scientific principles in carrying out the study, which has been designated a Highly Influential Scientific Assessment.

Second, the bill requires that the EPA's study go beyond simply identifying "possible impacts" of hydraulic fracturing on drinking water. The study must provide objective estimates of the probability, uncertainty and consequence of any such impacts.

This addresses a concern identified on multiple occasions by stakeholders and independent experts since the EPA first proposed its study design in 2011.

Requiring the EPA to provide context to any identified risks will maximize the study's utility to both scientists and decision-makers. And it will limit the possibility that findings will be misinterpreted or misused.

This basic principle has been emphasized repeatedly in Committee hearings and correspondence over the last two years. And its inclusion will enhance not only the credibility of the EPA's work on hydraulic fracturing but also our ability to ensure continued safe and responsible production of America's vast oil and gas resources.

Chairman SMITH. The gentlewoman from Texas, Ms. Johnson, is recognized for hers.

Ms. JOHNSON. Thank you, Mr. Chairman. I will be relatively brief in my remarks on H.R. 2850 because there is really not much to say about it.

Unfortunately, it is another example of this Committee's majority doing political messaging instead of legislating. If the majority were really interested in legislating on the issue ostensibly being addressed by this bill, they would have had meaningful Subcommittee hearings to examine the potential impact of the congressionally mandated study that this bill could have. They would have given EPA time to assess that impact and provide input to the Subcommittee jurisdiction. They would not have skipped Subcommittee and instead rushed this bill to the Full Committee markup one day before the August recess.

I have to conclude that this bill is not a serious bill. It, coupled with the ill-advised move at today's business meeting to push for subpoenas against EPA, as well as potentially any nongovernmental custodians of the data that the Chairman is seeking, is consistent with the majority's ongoing attempt across the House of

Representatives to discredit EPA's scientific work and to undermine the ability of the new EPA Administrator to do her job.

I understand that Representative Bera may offer an amendment today to this bill, and I will support that amendment, but I wanted to be clear. I do not intend to support this bill and will not vote for it. We all need to remember that the study that this bill will impact has been well underway and the study's planned review by EPA's Scientific Advisory Board. Members of Congress want the study to proceed unimpeded so that we can get its results in a timely fashion.

This bill is at best a piece of political messaging, at worst, something that can seriously delay and undercut the congressionally mandated study. This bill will go nowhere in the Senate but it should not even be coming out of this Committee.

I yield back the balance of my time.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF RANKING MEMBER EDDIE BERNICE JOHNSON

Mr. Chairman, I will be relatively brief in my remarks about H.R. 2850, because there really is not much to say about it. It unfortunately is another example of this Committee Majority doing political messaging instead of legislating. If the Majority were really interested in legislating on the issue ostensibly being addressed by this bill, they would have had meaningful Subcommittee hearings to examine the potential impact on the congressionally mandated study that this bill could have. They would have given EPA time to assess that impact and provide input to the Subcommittee of jurisdiction. They would not have skipped Subcommittee and instead rushed this bill to a Full Committee markup one day before the August recess.

I have to conclude that this bill is not a serious bill. It, coupled with the ill-advised move at today's business meeting to push for subpoenas against EPA as well as potentially any non-governmental custodians of the data that the Chairman is seeking, is consistent with the Majority's ongoing attempts across the House of Representatives to discredit EPA's scientific work and to undermine the ability of the new EPA Administrator to do her job.

I understand that Congressman Ami Bera (D-CA) may offer an amendment today to this bill, and I will support that amendment. But I want to be clear—I do not support this bill and will not vote for it. We all need to remember that the study that this bill will impact has been well underway and the study's plan reviewed by EPA's Science Advisory Board. Members of Congress want the study to proceed unimpeded so that we can get its results in a timely fashion.

This bill is at best a piece of political messaging, and at worst, something that could seriously delay or undercut the congressionally mandated study. This bill will go nowhere in the Senate, but it should not even be coming out of this Committee.

I yield back the balance of my time.

Chairman SMITH. Thank you, Ms. Johnson. I will recognize myself for a unanimous consent request, which is to enter into the record a letter from the Chamber of Commerce supporting H.R. 2850. That letter was sent to both myself and the Ranking Member.

[The information follows:]

LETTER FROM THE CHAMBER OF COMMERCE SUPPORTING H.R. 2850

CHAMBER OF COMMERCE
OF THE
UNITED STATES OF AMERICA

R. BRUCE JOSTEN
EXECUTIVE VICE PRESIDENT
GOVERNMENT AFFAIRS

1615 H STREET, N.W.
WASHINGTON, D.C. 20062-2000
202/463-5310

August 1, 2013

The Honorable Lamar Smith
Chairman
Committee on Science, Space,
and Technology
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Eddie Bernice Johnson
Ranking Member
Committee on Science, Space,
and Technology
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Johnson:

The U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations, and dedicated to promoting, protecting, and defending America's free enterprise system, strongly supports H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act of 2013." The legislation would ensure that any findings from a key EPA investigation of hydraulic fracturing are based upon, among other things, sound science, properly peer-reviewed work, and well-defined risk assessments.

The EPA is currently conducting an unprecedented, multi-year study into hydraulic fracturing and its impact on drinking water resources, titled "Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources." A study of this magnitude, which will have a significant impact on the economy and domestic energy production, must be conducted applying the highest possible scientific standards. The science and data that inform the results of the study must be of the highest caliber and instill confidence in the final work product. In order to achieve these standards, the "EPA Hydraulic Fracturing Study Improvement Act of 2013" would do the following:

- Codify EPA's designation of the final report as a Highly Influential Scientific Assessment (HISA);
- Require the EPA Administrator to ensure peer review of the report is conducted in compliance with the guidelines that govern HISAs, including EPA's Peer Review Handbook, EPA's Scientific Integrity Policy, and OMB's Final Information Quality Bulletin for Peer Review;
- Mandate that the EPA Administrator adhere to the guidelines for disseminating influential scientific information; and

- Require that the identification of any possible impacts of hydraulic fracturing on drinking water resources be accompanied by objective estimates of the probability, uncertainty, and consequence of each identified impact, factoring in the risk management practices of states and industry.

Under OMB guidelines, a scientific assessment is considered "highly influential" if its "dissemination could have a potential impact of more than $500 million in any one year on either the public or private sector or that the dissemination would be novel, controversial, or precedent-setting, or has significant interagency interest." The EPA hydraulic fracturing study clearly would meet these qualitative criteria because no federal study like it exists, the wider implications of the report likely will generate controversy, it will help inform policy in this country and possibly around the world, and it is of significant interest to other Federal agencies.

The EPA hydraulic fracturing study also unquestionably would meet OMB's quantitative criteria for a HISA designation. Oil and natural gas production from hydraulic fracturing have had an extraordinarily positive impact on the U.S. economy. For instance, according to an October 2012 IHS study sponsored by the Chamber's Institute for 21st Century Energy, unconventional oil and natural gas exploration and production in 2012 alone supported 1.75 million jobs, generated $62 billion in government revenues, and added nearly $240 billion to the U.S. economy. Oil and natural gas production from hydraulic fracturing also has helped move the U.S. closer to a manufacturing revival. With the availability of increased energy and feedstock resources at internationally competitive prices, many companies are looking to open new operations in the U.S., or in some cases, return their operations to this country. For example, the petro-chemical sector has announced a combined plan to invest in excess of $100 billion in new manufacturing facilities.

The "EPA Hydraulic Fracturing Study Improvement Act of 2013" would assure the public that the study is sufficiently peer-reviewed, based upon quality scientific and technical data, properly disseminated, and that any potential impacts identified in the study results would be put in the appropriate context in terms of risk assessment.

The Chamber strongly supports H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act of 2013."

Sincerely,

R. Bruce Josten

cc: Members of the House Committee on Science, Space, and Technology

Chairman SMITH. The gentleman from California, Dr. Bera, is recognized for the purpose of offering an amendment.

Mr. BERA. Mr. Chairman, I have got an amendment at the desk.

Chairman SMITH. And the clerk will report the amendment.

The CLERK. Amendment to H.R. 2850 offered by Mr. Bera of California.

[The amendment of Mr. Bera appears in Appendix I]

Mr. BERA. I ask unanimous consent that the amendment be considered as read.

Chairman SMITH. Without objection, the amendment will be considered as read and the gentleman is recognized to explain his amendment.

Mr. BERA. Thank you, Chairman Smith.

I understand the desire of the majority to provide context to the ultimate findings of the study. And, you know, as a doctor, I certainly would not want to tell a patient that they have a risk of a particular illness without qualifying that risk as much as I can, and that is the intent of this study.

However, I also have concerns that the current language of the bill perhaps inadvertently could lead to a significant delay in the release of an in-depth, critically important study that the EPA is currently carrying out to determine whether there is a relationship between hydraulic fracturing and groundwater contamination. This study is an important component to informing science-based national and state policies in this area going forward. I am told that such a delay is not the majority's intent and any delay in the study and a delay in the EPA reporting their findings will continue to hinder both the scientific community and industry. So let's hold to the original intent of the study and, you know, put those findings forward.

Therefore, I am offering this amendment to ensure that this is the case. The amendment simply states that the final report will be released no later than September 30, 2016, which is consistent with the study's current timeline. I urge my colleagues on both sides of the aisle to support the amendment as it in no way would undermine the majority's intent while also ensuring that the report's schedule will not intentionally or otherwise be further delayed by the language of the underlying bill.

And I yield back.

Chairman SMITH. Thank you, Mr. Bera, and I will recognize myself in support of the amendment.

This amendment—and, by the way, let me say at the outset this amendment very much improves the bill and I appreciate the gentleman's offering it.

The amendment requires the EPA to release its final report of its ongoing study of the potential impact of hydraulic fracturing on drinking water resources by September 30, 2016. The EPA has continuously insisted that the final draft report of results should be expected late next year, 2014, with peer review to continue into 2015. So it appears that, according to the Agency's own projections, they should be able to meet this deadline of 2016.

Additionally, this study has been ongoing for three years and the 2016 deadline is another three years away. While we support the EPA taking a deliberate approach to get the science right, we also should ensure that this study is completed in a timely fashion and

not unduly prolonged or otherwise delayed. Given that the Agency testified last week that the study is being conducted within a risk framework, inclusion of estimates of probability, uncertainty, and consequences should not lengthen the study beyond the deadline that this amendment proposes.

This amendment gives the EPA ample time frame in which to complete the study while also ensuring that the study is completed without further delay or expansion of its scope. For these reasons, I support the amendment and urge my colleagues to support the amendment as well.

Are there any other Members who wish to be heard on the amendment? If not, the vote is on the Bera amendment.

All in favor, say aye.

Opposed, nay.

The amendment is agreed to.

Are there any other amendments? If there are no further—the gentleman from New York, Mr. Maffei.

Mr. MAFFEI. Mr. Chairman, I move to strike the last word.

Chairman SMITH. The gentleman is recognized for five minutes.

Mr. MAFFEI. Thank you very much, Mr. Chairman.

This is an important issue to me and my district. My district is in upstate central New York and relies on a clean water economy. Lake Ontario, the Finger Lakes, Onondaga Lake, all of these natural resources support tourism, agriculture, and wineries, clean water-dependent industries, and thousands of jobs.

We fight a constant battle to preserve our clean waters. We fight against pollution and invasive species. Our communities rely on water resources and, as such, New York has a State moratorium on hydrofracking. But we face a new threat, the uncertainty created by even the possibility that hydrofracking may have a disaster that would threaten our clean water economy. That reputation even is a threat. So our watershed and clean water know no state boundaries, and the Federal Government shouldn't turn a blind eye to this issue. So that is why I am pleased that the EPA is looking at it. It is also why I am a cosponsor of the bipartisan FRAC Act, which would put fracking under the Safe Drinking Water Act, making the practice subject to Federal regulation.

Now, the EPA is studying the effects of hydrofracking on drinking water and the bill we are considering today may postpone the publication of some of those findings. If, as supporters say, fracking is safe, we should be happily anticipating the EPA's findings and not working to postpone them or even a piece of them. If, as supporters say, fracking is safe, then they also should have no issue creating a level playing field and applying the safe drinking water standards.

Therefore, I will respectfully oppose this bill today and I encourage my colleagues on the Committee to also oppose the bill. I thank the Chairman and I yield back.

Chairman SMITH. Okay. Thank you, Mr. Maffei. Are there others?

The gentlewoman from Oregon, Ms. Bonamici, is recognized.

Ms. BONAMICI. Thank you very much, Mr. Chairman.

I want to thank the Chairman for his interest in this issue. I know that we are all interested in getting the best results from the EPA on this important study.

Just a week ago yesterday, the Chair mentioned to me this concept that we are marking up today and asked me to keep an open mind. I did. I reviewed the Chair's memo and the language of the bill multiple times. I just received that language on July 29, 3 days ago. I also reviewed the Committee memo and the EPA's progress report.

I concluded that Section 1 of the bill isn't necessary. The EPA's own progress report from December of 2012 on page 4 states "the EPA has designated the report of results as highly influential scientific assessment, which will undergo peer-review by the EPA's Science Advisory Board, an independent and external Federal advisory Committee that conducts peer-reviews of significant EPA research products and activities." So the designation is in place already and that has already triggered the strictest peer-reviewed requirements.

With regard to Section 2, this section appears to impose new and ostensibly different research requirements on the EPA. Unfortunately, because there was no hearing on this bill, we do not have information from the EPA regarding whether these requirements will take additional time, and if so, how much time. And importantly, we don't have information about what additional resources, if any, the EPA might require to comply with this language.

And I do want to note what has happened in the meantime. The majority has proposed cutting the EPA's budget by 34 percent. So without more information about what would be required to comply with the provisions in this bill, I will be opposing it at this time.

Thank you, Mr. Chairman, and I yield back.

Chairman SMITH. Okay. Thank you, Ms. Bonamici.

Are there other Members who wish to be heard? If not, the question is on the bill, H.R. 2850, as amended. The question is not on the bill. The question is on the—it is on the bill.

On the 2850 as amended, those in favor, say aye.

Opposed, nay.

In the opinion of the Chair, the ayes have it and the bill is ordered reported favorably.

Pursuant——

Mr. MAFFEI. Mr. Chairman, on that I request a roll call vote. For the bill to be reported favorably, I request a roll call vote.

Chairman SMITH. Would the gentleman approach the Chair for a minute? Okay.

A roll call vote has been requested. Pursuant to Committee Rule II(f) and House Rule XI(2)(H)(4), proceedings on this vote will be postponed.

Mr. MAFFEI. I thank the Chair.

Chairman SMITH. Okay. Let me announce to the Members that there are a couple of classified briefings still ongoing and Members may be attending those classified briefings. So we are going to postpone proceedings on the three pending votes and we will give Members 30 minutes advanced notice of the specific time to which we will roll those votes.

So, once again, everyone will have 30 minutes notice. It will be this afternoon and we will stand in recess until that time.

[Recess.]

Chairman SMITH. The Science, Space, and Technology Committee will reconvene.

And before we get to the scheduled and postponed votes, I want to take a minute to recognize Ellen Scholl. Ellen, stand up just for a second so everybody can say hello and goodbye. I want to recognize Ellen for her hard work and dedication to the Full Committee and the Energy and Environment Subcommittees over the past 2–1/2 years. After this markup, Ellen will be packing up for a long drive back to the great State of Texas where she will return to UT Austin to pursue a graduate degree at the LBJ School of Public Affairs. Ellen, we thank you for your outstanding service to this Committee and we certainly wish you well in your next adventure.

Chairman SMITH. The gentleman from New York, Mr. Maffei, is recognized.

Mr. MAFFEI. Yes, Mr. Chairman, thank you. I ask unanimous consent that I be allowed to withdraw my request for a roll call vote on the pending matter.

Chairman SMITH. Okay. Without objection, I thank the gentleman. The question is on the bill H.R. 2850, as amended.

Those in favor, say aye.

Opposed, nay.

The ayes have it and the bill, as amended, is agreed to. Now, without objection, the Motion to Reconsider is laid upon the table, and I move that the bill H.R. 2850, as amended, be favorably reported to the House and that staff be authorized to make any necessary technical and conforming changes. And without objection, so ordered.

If there is no further discussion, that completes our business and this concludes the Full Committee markup. Without objection, the Committee stands adjourned.

[Whereupon, at 4:32 p.m., the Committee was adjourned.]

Appendix I:

H.R. 2850, THE EPA HYDRAULIC FRACTURING STUDY IMPROVEMENT ACT, SECTION–BY–SECTION ANALYSIS, AMENDMENTS, AMENDMENT ROSTER

.....

(Original Signature of Member)

113TH CONGRESS
1ST SESSION

H. R. 2850

To require certain procedures in the conduct by the Environmental Protection Agency of its study of the potential impacts of hydraulic fracturing on drinking water resources.

IN THE HOUSE OF REPRESENTATIVES

Mr. SMITH of Texas introduced the following bill; which was referred to the Committee on _____

A BILL

To require certain procedures in the conduct by the Environmental Protection Agency of its study of the potential impacts of hydraulic fracturing on drinking water resources.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "EPA Hydraulic Fracturing Study Improvement Act".

SEC. 2. EPA HYDRAULIC FRACTURING RESEARCH.

In conducting its study of the potential impacts of hydraulic fracturing on drinking water resources, with respect to which a request for information was issued under Federal Register Vol. 77, No. 218, the Administrator of the Environmental Protection Agency shall adhere to the following requirements:

(1) PEER REVIEW AND INFORMATION QUALITY.—Prior to issuance and dissemination of any final report or any interim report summarizing the Environmental Protection Agency's research on the relationship between hydraulic fracturing and drinking water, the Administrator shall—

(A) consider such reports to be Highly Influential Scientific Assessments and require peer review of such reports in accordance with guidelines governing such assessments, as described in—

(i) the Environmental Protection Agency's Peer Review Handbook 3rd Edition;

(ii) the Environmental Protection Agency's Scientific Integrity Policy, as in effect on the date of enactment of this Act; and

(iii) the Office of Management and Budget's Peer Review Bulletin, as in effect on the date of enactment of this Act; and

(B) require such reports to meet the standards and procedures for the dissemination of influential scientific, financial, or statistical information set forth in the Environmental Protection Agency's Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency, developed in response to guidelines issued by the Office of Management and Budget under section 515(a) of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554).

(2) PROBABILITY, UNCERTAINTY, AND CONSEQUENCE.—In order to maximize the quality and utility of information developed through the study, the Administrator shall ensure that identification of the possible impacts of hydraulic fracturing on drinking water resources included in such reports be accompanied by objective estimates of the probability, uncertainty, and consequence of each identified impact, taking into account the risk manage-

ment practices of States and industry. Estimates or descriptions of probability, uncertainty, and consequence shall be as quantitative as possible given the validity, accuracy, precision, and other quality attributes of the underlying data and analyses, but no more quantitative than the data and analyses can support.

SECTION–BY–SECTION ANALYSIS OF

H.R. 2850, THE EPA HYDRAULIC FRACTURING STUDY IMPROVEMENT ACT

Section 1. Short Title

This section establishes the short title as the "EPA Hydraulic Fracturing Study Improvement Act."

Section 2. EPA Hydraulic Fracturing Research

This section places requirements on the Administrator of the Office of Research and Development at the Environmental Protection Agency in carrying out the *Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources.*

The bill requires that any interim or final report pertaining to the EPA's study on the relationship between hydraulic fracturing and drinking water be considered as a Highly Influential Scientific Assessment (HISA). This codifies EPA's designation of the final report as a HISA, and also requires the Administrator to abide by the more stringent standards for peer review and information quality that accompany such a designation. The guidelines the bill specifically requires the Agency to follow are those outlined in the 3rd Edition of the Agency's Peer Review Handbook and its current Scientific Integrity Policy, and the Office of Management and Budget's Final Information Quality Bulletin for Peer Review.

The Administrator is also required to provide objective estimates of the probability, uncertainty, and consequence of any possible impacts of hydraulic fracturing on drinking water identified throughout the study and shall ensure that such estimates be as quantitative as possible and take into account the current risk management practices of states and industry.

AMENDMENTS

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AMENDMENT TO H.R. 2850

OFFERED BY MR. BERA OF CALIFORNIA

Page 4, after line 7, add the following new paragraph:

(3) RELEASE OF FINAL REPORT.—The final report shall be publicly released by September 30, 2016.

☒

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
Full Committee Business Meeting
August 1, 2013

AMENDMENT ROSTER

Markup of H.R. 2850, the "EPA Hydraulic Fracturing Study Improvement Act"

No.	Amendment	Summary	
1	**Amendment to H.R. 2850 Offered by Mr. Bera (CA) #020**	Requires that the final report shall be publicly released by September 30, 2016.	**Agreed to by Voice Vote**

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