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SENATE

{ REPORT
110-158

ALTERNATIVE SULFUR DIOXIDE REMOVAL MEASURE- MENT FOR COAL GASIFICATION PROJECT GOALS

SEPTEMBER 17, 2007.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural
Resources, submitted the following

R E P O R T

[To accompany S. 645]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 645) to amend the Energy Policy Act of 2005 to provide an alternate sulfur dioxide removal measurement for certain coal gasification project goals, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

PURPOSE

The purpose of S. 645 is to amend the Energy Policy Act of 2005 to provide an alternative sulfur dioxide removal measurement for certain coal gasification project goals.

BACKGROUND AND NEED

The Clean Coal Power Initiative (“CCPI”) authorized in section 404 of the Energy Policy Act of 2005 (“EPACT”), Public Law 109–58, requires the Secretary of Energy to establish goals and milestones for emissions from such projects so that by year 2020 they will be able to remove, among other criteria pollutant reductions, at least 99% of sulfur dioxide from coal fired electricity generation. Thus, under current law, projects seeking CCPI funding are reviewed based on their ability to achieve 99% removal of sulfur dioxide regardless of the original levels of sulfur in their coal feedstock. Because western coals have significantly lower sulfur content than other coals, it is prohibitively more expensive to remove 99% of that sulfur than it is to do so for other coals that contain more sulfur to begin with. This bill provides an alternative goal based on

emissions of sulfur dioxide per unit of energy to account for this variation in sulfur content. This alternative criterion for low sulfur coals will achieve an emission standard that is no less than and, in some cases, greater than that which is achieved with a 99% standard using other coals. This alternative is also consistent with language found in Internal Revenue Code section 48A(f)(1)(B).

LEGISLATIVE HISTORY

S. 645 was introduced by Senator Thomas on February 15, 2007. During the 109th Congress, the Committee considered similar legislation, S. 4076. The Subcommittee on Energy held a hearing on S. 645 on May 22, 2007. At its business meeting on July 25, 2007, the Committee on Energy and Natural Resources ordered S. 645 to be favorably reported.

COMMITTEE RECOMMENDATION

The Committee on Energy and Natural Resources, in open business session on July 25, 2007, by a voice vote of a quorum present, recommends that the Senate pass S. 645.

SECTION-BY-SECTION ANALYSIS

Section 1 amends the Clean Coal Power Initiative emissions goals in Section 402 to add an alternative goal for emissions of sulfur dioxide of .04 pounds per million Btu, based on a 30-day average.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

AUGUST 14, 2007.

Hon. JEFF BINGAMAN,
Chairman, Committee on Energy and Natural Resources,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 645, a bill to amend the Energy Policy Act of 2005 to provide an alternate sulfur dioxide removal measurement for certain coal gasification project goals.

If you wish further details on this estimate, we will be pleased to provide them.

The CBO staff contact is Megan Carroll.

Sincerely,

PETER R. ORSZAG.

Enclosure.

S. 645—A bill to amend the Energy Policy Act of 2005 to provide an alternate sulfur dioxide removal measurement for certain coal gasification project goals

Through the Clean Coal Power Initiative (CCPI), the Department of Energy (DOE) provides financial support for projects to develop and demonstrate the use of clean coal technologies in facilities that generate electric power. The Energy Policy Act of 2005 specifies eligibility criteria for such projects, including requirements related to

controlling emissions of pollutants such as sulfur dioxide. S. 645 would amend the Energy Policy Act of 2005 to allow an alternative measure of reductions in sulfur dioxide emissions. According to DOE, the proposed alternative would be slightly less stringent than the existing requirement.

CBO estimates that implementing S. 645 would have no significant effect on the federal budget. Although the proposed change could affect the types of technologies used in projects that receive federal assistance through the CCPI, it would not affect total federal spending for such projects, all of which is subject to appropriation. Enacting S. 645 would not affect direct spending or revenues.

S. 645 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 Megan Carroll. The estimate was approved by Peter H. Fontaine, Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 645. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 645, as ordered reported.

EXECUTIVE COMMUNICATIONS

STATEMENT OF DAVID R. HILL, GENERAL COUNSEL, DEPARTMENT OF ENERGY

Chairman Dorgan, Senator Murkowski, and members of the Committee, my name is David Hill, and I am the General Counsel of the U.S. Department of Energy (Department or DOE). I want to thank you for the opportunity to appear today and offer preliminary comments on five energy-related bills that Congress is considering. The bills before the Committee today each make valuable contributions to our national discussion on energy security, but in some cases could benefit from further review, discussion and modification. The Department looks forward to working with the Committee to resolve these issues. I would like to discuss elements of each bill, as well as present some of the DOE activities that are already underway in the areas addressed by the bills.

S. 645

S. 645 modifies the technical criteria in the Energy Policy Act of 2005 for the Clean Coal Power Initiative. The Department supports the proposed change because it would reduce a bias in the current requirement that favors

a particular coal type, while still maintaining a stringent sulfur dioxide emission standard for the R&D program. The practical effect of the change will be to allow slightly less strict SO₂ requirements for power plants burning low sulfur coals. Nevertheless, even with the proposed change, the SO₂ emission requirement for these lower sulfur coal-fueled power plants would remain as stringent, or more stringent, than the allowable emissions rate for higher sulfur coals.

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CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by S. 645, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

ENERGY POLICY ACT OF 2005

(Public Law 109–58; Approved August 8, 2005)

AN ACT To ensure jobs for our future with secure, affordable, and reliable energy
Be it enacted by the Senate and House of Representatives of the United States of America Congress assembled,

* * * * *

SEC. 402. PROJECT CRITERIA.

(a) IN GENERAL.—To be eligible to receive assistance under this subtitle, a project shall advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in commercial service or have been demonstrated on a scale that the Secretary determines is sufficient to demonstrate that commercial service is viable as of the date of enactment of this Act.

(b) TECHNICAL CRITERIA FOR CLEAN COAL POWER INITIATIVE.—

(1) GASIFICATION PROJECTS.—

* * * * *

(B) TECHNICAL MILESTONES.—

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(ii) 2020 GOALS.—The Secretary shall establish the periodic milestones so as to achieve by the year 2020 coal gasification projects able—

[(I) to remove at least 99 percent of sulfur dioxide;]

(I)(aa) to remove at least 99 percent of sulfur dioxide; or (bb) to emit not more than 0.04 pound SO₂ per million Btu, based on a 30-day average;

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