

108TH CONGRESS
1ST SESSION

H. R. 1213

To facilitate the production and generation of coal-based power.

IN THE HOUSE OF REPRESENTATIVES

MARCH 11, 2003

Mr. WHITFIELD (for himself, Mr. BOUCHER, Mr. SHIMKUS, Mr. COSTELLO, Mr. LEWIS of Kentucky, Mr. MOLLOHAN, Mrs. CAPITO, Mr. STRICKLAND, and Mr. LAHOOD) introduced the following bill; which was referred to the Committee on Science, and in addition to the Committees on Ways and Means, and Energy and Commerce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To facilitate the production and generation of coal-based power.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Clean Coal Power Act
5 of 2003”.

6 **SEC. 2. DEFINITIONS.**

7 For purposes of this Act:

1 (1) COST AND PERFORMANCE GOALS.—The
2 term “cost and performance goals” means the cost
3 and performance goals established under section
4 101(a).

5 (2) SECRETARY.—The term “Secretary” means
6 the Secretary of Energy.

7 **TITLE I—CLEAN COAL GENERA-**
8 **TION, FEEDSTOCKS, AND**
9 **TRANSPORTATION**

10 **SEC. 101. COAL AND RELATED PROGRAMS.**

11 (a) ESTABLISHMENT OF COST AND PERFORMANCE
12 GOALS.—

13 (1) IN GENERAL.—The Secretary shall perform
14 an assessment that identifies cost and performance
15 goals, for achievement in 2007, 2015, and the years
16 after 2020, for technologies that would permit the
17 continued cost-competitive use of coal for electricity
18 generation, as chemical feedstocks, and as transpor-
19 tation fuel.

20 (2) CONSULTATION.—In establishing the cost
21 and performance goals under this subsection, the
22 Secretary shall—

23 (A) consider activities and studies under-
24 taken by industry in cooperation with the De-

partment of Energy in support of the assessment performed under paragraph (1); and

(B) consult with interested entities, including coal producers, industries using coal, organizations to promote coal and advanced coal technologies, environmental organizations, and organizations representing workers.

(3) TIMING.—The Secretary shall—

(A) not later than 120 days after the date of enactment of this Act, issue a set of draft cost and performance goals for public comment; and

(B) not later than 180 days after the date of enactment of this Act, after taking into consideration any public comments received, transmit to Congress the final cost and performance goals.

(b) STUDY.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and once every 2 years thereafter through 2016, the Secretary, in cooperation with other appropriate Federal agencies, shall conduct and transmit to the Congress a study to—

1 (A) identify technologies that, by them-
2 selves or in combination with other tech-
3 nologies, may be capable of achieving the cost
4 and performance goals;

5 (B) assess the costs that would be incurred
6 by, and the period of time that would be re-
7 quired for, the deployment of technologies that,
8 by themselves or in combination with other
9 technologies, contribute to the achievement of
10 the cost and performance goals;

11 (C) develop recommendations for tech-
12 nology programs, which the Department of En-
13 ergy could carry out in cooperation with indus-
14 try, by themselves or in combination with other
15 technologies, to achieve the cost and perform-
16 ance goals; and

17 (D) develop recommendations for addi-
18 tional authorities required to achieve the cost
19 and performance goals and review and rec-
20 ommend changes, if any, to those cost and per-
21 formance goals if the Secretary determines that
22 such changes are necessary.

23 (2) EXPERT ADVICE.—In carrying out this sub-
24 section, the Secretary shall give due weight to the

1 expert advice of representatives of the entities de-
2 scribed in subsection (a)(2)(B).

3 **SEC. 102. PRODUCTION AND GENERATION OF COAL-BASED**
4 **POWER.**

5 (a) IN GENERAL.—The Secretary shall carry out a
6 program to facilitate production and generation of coal-
7 based power through methods and equipment under—

8 (1) this title;

9 (2) the Federal Nonnuclear Energy Research
10 and Development Act of 1974 (42 U.S.C. 5901 et
11 seq.);

12 (3) the Energy Reorganization Act of 1974 (42
13 U.S.C. 5801 et seq.); and

14 (4) title XVI of the Energy Policy Act of 1992
15 (42 U.S.C. 13381 et seq.).

16 (b) CONDITIONS.—The program described in sub-
17 section (a) shall be designed to achieve the cost and per-
18 formance goals.

19 **SEC. 103. AUTHORIZATION OF APPROPRIATIONS.**

20 (a) IN GENERAL.—There are authorized to be appro-
21 priated to the Secretary \$200,000,000 for fiscal year
22 2005, \$210,000,000 for fiscal year 2006, and
23 \$220,500,000 for fiscal year 2007, to remain available
24 until expended, for carrying out the program under section
25 102, which may include—

- 1 (1) innovations for existing plants;
- 2 (2) integrated gasification combined cycle;
- 3 (3) advanced combustion systems;
- 4 (4) turbines for synthesis gas derived from coal;
- 5 (5) carbon capture and sequestration;
- 6 (6) coal-derived transportation fuels and chemi-
- 7 cals;
- 8 (7) solid fuels and feedstocks;
- 9 (8) advanced coal-related projects; and
- 10 (9) advanced separation technologies.

11 (b) LIMIT ON USE OF FUNDS.—The Secretary shall
12 not use funds appropriated under this section until 30
13 days after the Secretary has transmitted to the Congress
14 a report describing the proposed use of such funds and
15 containing a plan that includes—

16 (1) a detailed description of how proposals, if
17 any, will be solicited and evaluated, including a list
18 of all activities expected to be undertaken;

19 (2) a detailed list of technical milestones for
20 each coal and related technology that will be pur-
21 sued; and

22 (3) a description of how the programs for which
23 such funds are authorized will be carried out so as
24 to complement and not duplicate activities author-

1 ized under the Clean Coal Power Initiative author-
2 ized under title II.

3 **TITLE II—CLEAN COAL POWER**
4 **INITIATIVE**

5 **SEC. 201. PROJECT CRITERIA.**

6 (a) IN GENERAL.—The Secretary shall provide fund-
7 ing under this title for coal energy generation projects that
8 advance efficiency, environmental performance, and cost
9 competitiveness well beyond the level of technologies that
10 on a full scale are in operation or have been demonstrated
11 as of the date of enactment of this Act.

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

14 (1) GASIFICATION.—

15 (A) TECHNOLOGIES.—In allocating the
16 funds made available under section 204(a), the
17 Secretary shall ensure that up to 80 percent of
18 the funds are used for coal-based gasification
19 technologies, including gasification combined
20 cycle, gasification fuel cells, gasification co-
21 production, and hybrid gasification/combustion
22 projects.

23 (B) TECHNICAL MILESTONES.—The Sec-
24 retary shall set technical milestones specifying
25 emissions levels for projects funded under this

1 paragraph. The milestones shall be designed to
2 increasingly restrict emissions levels through
3 the life of the program. The milestones shall be
4 designed to achieve by 2020 coal gasification
5 projects able—

6 (i) to remove 99 percent of sulfur di-
7 oxide;

8 (ii) to emit no more than .05 lb of
9 NO_x per million Btu;

10 (iii) to achieve substantial reductions
11 in mercury emissions; and

12 (iv) to achieve a thermal efficiency
13 of—

14 (I) 60 percent for coal of more
15 than 9,000 Btu;

16 (II) 59 percent for coal of 7,000
17 to 9,000 Btu; and

18 (III) 50 percent for coal of less
19 than 7,000 Btu.

20 (2) OTHER PROJECTS.—For projects not de-
21 scribed in paragraph (1), the Secretary shall set
22 technical milestones specifying emissions levels. The
23 milestones shall be designed to increasingly restrict
24 emissions levels through the life of the program. The

1 milestones shall be designed to achieve by 2010
2 projects able—

3 (A) to remove 97 percent of sulfur dioxide;

4 (B) to emit no more than .08 lb of NO_x
5 per million Btu;

6 (C) to achieve substantial reductions in
7 mercury emissions; and

8 (D) except as provided in paragraph (4),
9 to achieve a thermal efficiency of—

10 (i) 45 percent for coal of more than
11 9,000 Btu;

12 (ii) 44 percent for coal of 7,000 to
13 9,000 Btu; and

14 (iii) 40 percent for coal of less than
15 7,000 Btu.

16 (3) CONSULTATION.—Before setting the tech-
17 nical milestones under paragraphs (1)(B) and (2),
18 the Secretary shall consult with the Administrator of
19 the Environmental Protection Agency and interested
20 entities, including coal producers, industries using
21 coal, organizations to promote coal or advanced coal
22 technologies, environmental organizations, and orga-
23 nizations representing workers.

24 (4) EXISTING UNITS.—In the case of projects
25 at coal-powered electricity generating facilities exist-

1 ing as of the date of enactment of this Act, in lieu
2 of the thermal efficiency requirements set forth in
3 paragraph (1)(B)(iv) and (2)(D), the projects shall
4 be designed to achieve an overall thermal efficiency
5 improvement, compared to the efficiency of the unit
6 as of the date of enactment of this Act, of not less
7 than—

8 (A) 7 percent for coal of more than 9,000
9 Btu;

10 (B) 6 percent for coal of 7,000 to 9,000
11 Btu; and

12 (C) 4 percent for coal of less than 7,000
13 Btu.

14 (5) PERMITTED USES.—In allocating amounts
15 made available under this title, the Secretary may
16 fund projects that include as part of the project the
17 separation and capture of carbon dioxide.

18 (c) FINANCIAL CRITERIA.—The Secretary shall not
19 provide a funding award under this title unless the recipi-
20 ent has documented to the satisfaction of the Secretary
21 that—

22 (1) the award recipient is financially viable
23 without the receipt of additional Federal funding;

24 (2) the recipient will provide sufficient informa-
25 tion to the Secretary for the Secretary to ensure

1 that the award funds are spent efficiently and effec-
2 tively; and

3 (3) a market exists for the technology, as evi-
4 denced by statements of interest in writing from po-
5 tential purchasers of the technology.

6 (d) FINANCIAL ASSISTANCE.—The Secretary shall
7 provide financial assistance to projects that meet the re-
8 quirements of subsections (a), (b), and (c) and are likely
9 to—

10 (1) achieve overall cost reductions in the utiliza-
11 tion of coal to generate useful forms of energy;

12 (2) improve the competitiveness of coal among
13 various forms of energy in order to maintain a diver-
14 sity of fuel choices in the United States to meet elec-
15 tricity generation requirements; and

16 (3) demonstrate methods and equipment that
17 are applicable to 25 percent of the electricity gener-
18 ating facilities that use coal as the primary feedstock
19 as of the date of the enactment of this Act.

20 (e) FEDERAL SHARE.—The Federal share of the cost
21 of a project funded under this title shall not exceed 50
22 percent.

23 (f) APPLICABILITY.—No technology, or level of emis-
24 sion reduction, shall be treated as adequately dem-
25 onstrated for purposes of section 111 of the Clean Air Act,

1 achievable for purposes of section 169 of that Act, or
2 achievable in practice for purposes of section 171 of that
3 Act solely by reason of the use of such technology, or the
4 achievement of such emission reduction, by one or more
5 facilities receiving assistance under this title.

6 **SEC. 202. REPORT.**

7 Not later than 1 year after the date of the enactment
8 of this Act, and once every 2 years thereafter through
9 2012, the Secretary, in consultation with other appro-
10 priate Federal agencies, shall transmit to the Congress a
11 report describing—

12 (1) the technical milestones set forth in section
13 201 and how those milestones ensure progress to-
14 ward meeting the requirements of subsections
15 (b)(1)(B) and (b)(2) of section 201; and

16 (2) the status of projects funded under this
17 title.

18 **SEC. 203. CLEAN COAL CENTERS OF EXCELLENCE.**

19 As part of the program authorized under this title,
20 the Secretary shall award competitive, merit-based grants
21 to universities for the establishment of Centers of Excel-
22 lence for Energy Systems of the Future. The Secretary
23 shall provide grants to universities that can show the
24 greatest potential for advancing new clean coal tech-
25 nologies.

1 **SEC. 204. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) CLEAN COAL POWER INITIATIVE.—Except as
3 provided in subsection (b), there are authorized to be ap-
4 propriated to the Secretary to carry out the activities au-
5 thorized by this title \$200,000,000 for each of the fiscal
6 years 2005 through 2013, to remain available until ex-
7 pended.

8 (b) LIMIT ON USE OF FUNDS.—

9 (1) OBLIGATION OF FUNDS.—The Secretary is
10 authorized to obligate the use of funds under this
11 section prior to the fiscal year such funds are au-
12 thorized for under subsection (a), subject to appro-
13 priations.

14 (2) REPORT.—The Secretary shall transmit to
15 the Congress a report describing the proposed use of
16 funds which includes—

17 (A) a detailed assessment of whether the
18 aggregate funding levels provided under sub-
19 section (a) are the appropriate funding levels
20 for this title;

21 (B) a detailed description of how proposals
22 will be solicited and evaluated, including a list
23 of all activities expected to be undertaken;

24 (C) a detailed list of technical milestones
25 for each technology that will be pursued; and

1 (D) a detailed description of how the ini-
 2 tiative under this title will avoid problems enu-
 3 merated in General Accounting Office reports
 4 on the Clean Coal Technology Program, includ-
 5 ing problems that have resulted in unspent
 6 funds and projects that failed either financially
 7 or scientifically.

8 (3) USE OF FUNDS.—The Secretary may not
 9 use funds appropriated under this section until 30
 10 days have elapsed after receipt of the report under
 11 paragraph (2).

12 (c) APPLICABILITY.—Subsection (b) shall not apply
 13 to any project selected before September 30, 2004.

14 **TITLE III—CONSERVATION**

15 **SEC. 301. CREDIT FOR PRODUCTION FROM A QUALIFYING** 16 **CLEAN COAL TECHNOLOGY UNIT.**

17 (a) CREDIT FOR PRODUCTION FROM A QUALIFYING
 18 CLEAN COAL TECHNOLOGY UNIT.—Subpart D of part IV
 19 of subchapter A of chapter 1 of the Internal Revenue Code
 20 of 1986 (relating to business related credits) is amended
 21 by adding at the end the following new section:

22 **“SEC. 45G. CREDIT FOR PRODUCTION FROM A QUALIFYING** 23 **CLEAN COAL TECHNOLOGY UNIT.**

24 “(a) GENERAL RULE.—For purposes of section 38,
 25 the qualifying clean coal technology production credit of

1 any taxpayer for any taxable year is equal to the product
2 of—

3 “(1) the applicable amount of clean coal tech-
4 nology production credit, multiplied by

5 “(2) the applicable percentage of the kilowatt
6 hours of electricity produced and the equivalent heat
7 value of other fuels or chemicals produced by the
8 taxpayer during such taxable year at a qualifying
9 clean coal technology unit, but only if such produc-
10 tion occurs during the 10-year period beginning on
11 the date the unit was returned to service after be-
12 coming a qualifying clean coal technology unit.

13 “(b) APPLICABLE AMOUNT.—

14 “(1) IN GENERAL.—For purposes of this sec-
15 tion, the applicable amount of clean coal technology
16 production credit is equal to \$0.0034 per kilowatt-
17 hour of electricity produced and the equivalent heat
18 value of other fuels or chemicals produced from not
19 more than 300,000 kilowatts of nameplate capacity
20 at the same qualifying clean coal technology unit.

21 “(2) INFLATION ADJUSTMENT.—For calendar
22 years after 2004, the applicable amount of clean coal
23 technology production credit shall be adjusted by
24 multiplying such amount by the inflation adjustment
25 factor for the calendar year in which the amount is

1 applied. If any amount as increased under the pre-
2 ceding sentence is not a multiple of 0.01 cent, such
3 amount shall be rounded to the nearest multiple of
4 0.01 cent.

5 “(c) APPLICABLE PERCENTAGE.—For purposes of
6 this section, with respect to any qualifying clean coal tech-
7 nology unit, the applicable percentage is the percentage
8 equal to the ratio which the portion of the national mega-
9 watt capacity limitation allocated to the taxpayer with re-
10 spect to such unit under subsection (e) bears to the total
11 megawatt capacity of such unit.

12 “(d) DEFINITIONS AND SPECIAL RULES.—For pur-
13 poses of this section—

14 “(1) QUALIFYING CLEAN COAL TECHNOLOGY
15 UNIT.—The term ‘qualifying clean coal technology
16 unit’ means a clean coal technology unit of the tax-
17 payer which—

18 “(A) on the date of the enactment of this
19 section was a coal-based electricity generating
20 steam generator-turbine unit which was not a
21 clean coal technology unit,

22 “(B) has a nameplate capacity rating of
23 300,000 kilowatts as of the date of enactment
24 of this section,

1 “(C) becomes a clean coal technology unit
2 as the result of the retrofitting, repowering, or
3 replacement of the unit with clean coal tech-
4 nology, the nameplate capacity of which may
5 then be greater than 300,000 kilowatts, during
6 the 10-year period beginning on the date of the
7 enactment of this section,

8 “(D) is not receiving nor is scheduled to
9 receive funding under the Clean Coal Tech-
10 nology Program, the Power Plant Improvement
11 Initiative, or the Clean Coal Power Initiative
12 administered by the Secretary of Energy, and
13 (E) receives an allocation of a portion of the
14 national megawatt capacity limitation under
15 subsection (e), which shall not exceed 300,000
16 kilowatts.

17 “(2) CLEAN COAL TECHNOLOGY UNIT.—The
18 term ‘clean coal technology unit’ means a unit
19 which—

20 “(A) uses clean coal technology, including
21 advanced pulverized coal or atmospheric fluid-
22 ized bed combustion, pressurized fluidized bed
23 combustion, integrated gasification combined
24 cycle, or any other technology for the produc-
25 tion of electricity,

1 “(B) uses at least 75 percent coal to
2 produce 50 percent or more of its thermal out-
3 put as electricity,

4 “(C) has a design net heat rate of at least
5 500 less than that of such unit as described in
6 paragraph (1)(A),

7 “(D) has a maximum design net heat rate
8 of not more than 9,500, and

9 “(E) meets the pollution control require-
10 ments of paragraph (3).

11 “(3) POLLUTION CONTROL REQUIREMENTS.—

12 “(A) IN GENERAL.—A unit meets the re-
13 quirements of this paragraph if—

14 “(i) its emissions of sulfur dioxide, ni-
15 trogen oxide, or particulates meet the
16 lower of the emission levels for each such
17 emission specified in—

18 “(I) subparagraph (B), or

19 “(II) the new source performance
20 standards of the Clean Air Act (42
21 U.S.C. 7411) which are in effect for
22 the category of source at the time of
23 the retrofitting, repowering, or re-
24 placement of the unit, and

1 “(ii) its emissions do not exceed any
2 relevant emission level specified by regula-
3 tion pursuant to the hazardous air pollut-
4 ant requirements of the Clean Air Act (42
5 U.S.C. 7412) in effect at the time of the
6 retrofitting, repowering, or replacement.

7 “(B) SPECIFIC LEVELS.—The levels speci-
8 fied in this subparagraph are—

9 “(i) in the case of sulfur dioxide emis-
10 sions, 50 percent of the sulfur dioxide
11 emission levels specified in the new source
12 performance standards of the Clean Air
13 Act (42 U.S.C. 7411) in effect on the date
14 of the enactment of this section for the
15 category of source,

16 “(ii) in the case of nitrogen oxide
17 emissions—

18 “(I) 0.1 pound per million Btu of
19 heat input if the unit is not a cyclone-
20 fired boiler, and

21 “(II) if the unit is a cyclone-fired
22 boiler, 15 percent of the uncontrolled
23 nitrogen oxide emissions from such
24 boilers, and

1 “(iii) in the case of particulate emis-
 2 sions, 0.02 pound per million Btu of heat
 3 input.

4 “(4) DESIGN NET HEAT RATE.—The design net
 5 heat rate with respect to any unit, measured in Btu
 6 per kilowatt hour (HHV)—

7 “(A) shall be based on the design annual
 8 heat input to and the design annual net elec-
 9 trical power, fuels and chemicals output from
 10 such unit (determined without regard to such
 11 unit’s co-generation of steam),

12 “(B) shall be adjusted for the heat content
 13 of the design coal to be used by the unit if it
 14 is less than 12,000 Btu per pound according to
 15 the following formula:

$$\text{Design net heat rate} = \text{unit net heat rate} \times [1 - \{(12,000 - \text{design coal heat contents, Btu per pound}) \times .001\} \times .013]$$

16 “(C) shall be corrected for the site ref-
 17 erence conditions of—

18 “(i) elevation above sea level of 500
 19 feet,

20 “(ii) air pressure of 14.4 pounds per
 21 square inch absolute (psia),

22 “(iii) temperature, dry bulb of 63°F,

23 “(iv) temperature, wet bulb of 54°F,

24 and

1 “(v) relative humidity of 55 percent;
2 and

3 “(D) shall be adjusted (or credit given) for
4 any qualifying unit that installs carbon capture
5 controls that remove not less than 50 percent of
6 the unit’s carbon dioxide emissions up to the
7 design heat rate level that would have resulted
8 without installation of carbon capture controls.

9 “(5) HHV.—The term ‘HHV’ means higher
10 heating value.

11 “(6) APPLICATION OF CERTAIN RULES.—The
12 rules of paragraphs (3), (4), and (5) of section 45(d)
13 shall apply.

14 “(7) INFLATION ADJUSTMENT FACTOR.—

15 “(A) IN GENERAL.—The term ‘inflation
16 adjustment factor’ means, with respect to a cal-
17 endar year, a fraction the numerator of which
18 is the GDP implicit price deflator for the pre-
19 ceding calendar year and the denominator of
20 which is the GDP implicit price deflator for the
21 calendar year 2003.

22 “(B) GDP IMPLICIT PRICE DEFLATOR.—
23 The term ‘GDP implicit price deflator’ means
24 the most recent revision of the implicit price
25 deflator for the gross domestic product as com-

1 puted by the Department of Commerce before
2 March 15 of the calendar year.

3 “(8) NONCOMPLIANCE WITH POLLUTION
4 LAWS.—For purposes of this section, a unit which is
5 not in compliance with the applicable State and Fed-
6 eral pollution prevention, control, and permit re-
7 quirements for any period of time shall not be con-
8 sidered to be a qualifying clean coal technology unit
9 during such period.

10 “(e) NATIONAL LIMITATION ON THE AGGREGATE CA-
11 PACITY OF QUALIFYING CLEAN COAL TECHNOLOGY
12 UNITS.—

13 “(1) IN GENERAL.—For purposes of subsection
14 (d)(1)(E), the national megawatt capacity limitation
15 for qualifying clean coal technology units is 5,000
16 megawatts.

17 “(2) ALLOCATION OF LIMITATION.—The Sec-
18 retary shall allocate the national megawatt capacity
19 limitation for qualifying clean coal technology units
20 in such manner as the Secretary may prescribe
21 under the regulations under paragraph (3) provided
22 however that such allocation shall not exceed
23 300,000 kilowatts per qualifying clean coal tech-
24 nology unit.

1 “(3) REGULATIONS.—Not later than 6 months
2 after the date of the enactment of this section, the
3 Secretary shall prescribe such regulations as may be
4 necessary or appropriate—

5 “(A) to carry out the purposes of this sub-
6 section,

7 “(B) to limit the capacity of any qualifying
8 clean coal technology unit to which this section
9 applies so that the combined megawatt capacity
10 allocated to all such units under this subsection
11 when all such units are placed in service during
12 the 10-year period described in subsection
13 (d)(1)(C), does not exceed 5,000 megawatts,

14 “(C) to provide a certification process
15 under which the Secretary, in consultation with
16 the Secretary of Energy, shall approve and allo-
17 cate the national megawatt capacity limita-
18 tion—

19 “(i) to encourage that units with the
20 highest thermal efficiencies, when adjusted
21 for the heat content of the design coal and
22 site reference conditions described in sub-
23 section (d)(4)(C), and environmental per-
24 formance be placed in service as soon as
25 possible,

1 “(ii) to allocate capacity to taxpayers
2 that have a definite and credible plan for
3 placing into commercial operation a quali-
4 fying clean coal technology unit, includ-
5 ing—

6 “(I) a site,

7 “(II) contractual commitments
8 for procurement and construction or,
9 in the case of regulated utilities, the
10 agreement of the State utility commis-
11 sion,

12 “(III) filings for all necessary
13 preconstruction approvals,

14 “(IV) a demonstrated record of
15 having successfully completed com-
16 parable projects on a timely basis, and

17 “(V) such other factors that the
18 Secretary determines are appropriate,

19 “(D) to allocate the national megawatt ca-
20 pacity limitation to a portion of the capacity of
21 a qualifying clean coal technology unit if the
22 Secretary determines that such an allocation
23 would maximize the amount of efficient produc-
24 tion encouraged with the available tax credits,

1 “(E) to set progress requirements and con-
 2 ditional approvals so that capacity allocations
 3 for clean coal technology units that become un-
 4 likely to meet the necessary conditions for
 5 qualifying can be reallocated by the Secretary
 6 to other clean coal technology units, and

7 “(F) to provide taxpayers with opportuni-
 8 ties to correct administrative errors and omis-
 9 sions with respect to allocations and record
 10 keeping within a reasonable period after dis-
 11 covery, taking into account the availability of
 12 regulations and other administrative guidance
 13 from the Secretary.”.

14 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-
 15 tion 38(b) of such Code is amended by striking “plus”
 16 at the end of paragraph (14), by striking the period at
 17 the end of paragraph (15) and inserting “, plus”, and by
 18 adding at the end the following new paragraph:

19 “(16) the qualifying clean coal technology pro-
 20 duction credit determined under section 45G(a).”.

21 (c) TRANSITIONAL RULE.—Section 39(d) of such
 22 Code (relating to transitional rules) is amended by adding
 23 at the end the following new paragraph:

24 “(11) NO CARRYBACK OF SECTION 45G CREDIT
 25 BEFORE EFFECTIVE DATE.—No portion of the un-

1 used business credit for any taxable year which is
 2 attributable to the qualifying clean coal technology
 3 production credit determined under section 45G may
 4 be carried back to a taxable year ending on or before
 5 the date of the enactment of section 45G.”.

6 (d) CLERICAL AMENDMENT.—The table of sections
 7 for subpart D of part IV of subchapter A of chapter 1
 8 of such Code, is amended by adding at the end the fol-
 9 lowing new item:

“Sec. 45G. Credit for production from a qualifying clean coal
 technology unit.”.

10 (e) EFFECTIVE DATE.—The amendments made by
 11 this section shall apply to production after December 31,
 12 2003.

13 **SEC. 302. CREDIT FOR INVESTMENT IN QUALIFYING AD-**
 14 **VANCED CLEAN COAL TECHNOLOGY.**

15 (a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN
 16 COAL TECHNOLOGY FACILITY CREDIT.—Section 46 of
 17 the Internal Revenue Code of 1986 (relating to amount
 18 of credit) is amended by striking “and” at the end of para-
 19 graph (2), by striking the period at the end of paragraph
 20 (3) and inserting “, and”, and by adding at the end the
 21 following:

22 “(4) the qualifying advanced clean coal tech-
 23 nology facility credit.”.

1 (b) AMOUNT OF QUALIFYING ADVANCED CLEAN
 2 COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of
 3 part IV of subchapter A of chapter 1 of such Code (relat-
 4 ing to rules for computing investment credit) is amended
 5 by inserting after section 48 the following:

6 **“SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECH-**
 7 **NOLOGY FACILITY CREDIT.**

8 “(a) IN GENERAL.—For purposes of section 46, the
 9 qualifying advanced clean coal technology facility credit
 10 for any taxable year is an amount equal to 10 percent
 11 of the qualified investment in a qualifying advanced clean
 12 coal technology facility for such taxable year.

13 “(b) QUALIFYING ADVANCED CLEAN COAL TECH-
 14 NOLOGY FACILITY.—

15 “(1) IN GENERAL.—For purposes of subsection
 16 (a), the term ‘qualifying advanced clean coal tech-
 17 nology facility’ means a facility of the taxpayer—

18 “(A)(i)(I) the original use of which com-
 19 mences with the taxpayer, or

20 “(II) which is a retrofitted or repowered
 21 conventional technology facility, the retrofitting
 22 or repowering of which is completed by the tax-
 23 payer (but only with respect to that portion of
 24 the basis which is properly attributable to such
 25 retrofitting or repowering), or

1 “(ii) which is acquired through purchase
2 (as defined by section 179(d)(2)),

3 “(B) which is depreciable under section
4 167,

5 “(C) which has a useful life of not less
6 than 4 years,

7 “(D) which is located in the United States,
8 and

9 “(E) which uses qualifying advanced clean
10 coal technology.

11 “(2) SPECIAL RULE FOR SALE-LEASEBACKS.—
12 For purposes of subparagraph (A) of paragraph (1),
13 in the case of a facility which—

14 “(A) is originally placed in service by a
15 person, and

16 “(B) is sold and leased back by such per-
17 son, or is leased to such person, within 3
18 months after the date such facility was origi-
19 nally placed in service, for a period of not less
20 than 12 years,

21 such facility shall be treated as originally placed in
22 service not earlier than the date on which such prop-
23 erty is used under the leaseback (or lease) referred
24 to in subparagraph (B). The preceding sentence
25 shall not apply to any property if the lessee and les-

1 sor of such property make an election under this
2 sentence. Such an election, once made, may be re-
3 voked only with the consent of the Secretary.

4 “(c) QUALIFYING ADVANCED CLEAN COAL TECH-
5 NOLOGY.—For purposes of this section—

6 “(1) IN GENERAL.—The term ‘qualifying ad-
7 vanced clean coal technology’ means, with respect to
8 clean coal, technology—

9 “(A) which has—

10 “(i) multiple applications, with a com-
11 bined capacity of not more than 1,500
12 megawatts (750 megawatts before 2011),
13 of advanced pulverized coal or atmospheric
14 fluidized bed combustion technology—

15 “(I) installed as a new, retrofit,
16 or repowering application,

17 “(II) operated between 2002 and
18 2014, and

19 “(III) having a design net heat
20 rate of not more than 8,900 Btu per
21 kilowatt hour,

22 “(ii) multiple applications, with a
23 combined capacity of not more than 500
24 megawatts (250 megawatts before 2011),

1 of pressurized fluidized bed combustion
2 technology—

3 “(I) installed as a new, retrofit,
4 or repowering application,

5 “(II) operated between 2002 and
6 2018, and

7 “(III) having a design net heat
8 rate of not more than 8,900 Btu per
9 kilowatt hour, and

10 “(iii) multiple applications, with a
11 combined capacity of not more than 2,500
12 megawatts (750 megawatts, or no more
13 than one project with a heat rate greater
14 than 8,900 Btu, whichever is less, in the
15 case of units placed in service before 2011
16 and 1,500 megawatts before 2015), of in-
17 tegrated gasification combined cycle tech-
18 nology, with or without fuel or chemical co-
19 production—

20 “(I) installed as a new, retrofit,
21 or repowering application,

22 “(II) operated between 2002 and
23 2018,

1 “(III) having a design net heat
2 rate of not more than 8,900 Btu per
3 kilowatt hour, and

4 “(IV) having a net thermal effi-
5 ciency on any fuel or chemical co-pro-
6 duction of not less than 39 percent
7 (higher heating value), or

8 “(iv) multiple applications, with a
9 combined capacity of not more than 500
10 megawatts (250 megawatts before 2011)
11 of technology for the production of elec-
12 tricity—

13 “(I) installed as a new, retrofit,
14 or repowering application,

15 “(II) operated between 2002 and
16 2018, and

17 “(III) having a carbon emission
18 rate which is not more than 85 per-
19 cent of conventional technology, and

20 “(B) which reduces the discharge into the
21 atmosphere of 1 or more of the following pollut-
22 ants to not more than—

23 “(i) 5 percent of the potential com-
24 bustion concentration sulfur dioxide emis-
25 sions for a coal with a potential combus-

tion concentration sulfur emission of 1.2 lb/million Btu of heat input or greater,

“(ii) 15 percent of the potential combustion concentration sulfur dioxide emissions for a coal with a potential combustion concentration sulfur emission of less than 1.2 lb/million Btu of heat input,

“(iii) nitrogen oxide emissions of 0.1 lb per million Btu of heat input from other than cyclone-fired boilers,

“(iv) 15 percent of the uncontrolled nitrogen oxide emissions from cyclone-fired boilers,

“(v) particulate emissions of 0.02 lb per million Btu of heat input, and

“(vi) the emission levels specified in the new source performance standards of the Clean Air Act (42 U.S.C. 7411) in effect at the time of retrofitting, repowering, or replacement of the qualifying clean coal technology unit for the category of source if such level is lower than the levels specified in clause (i), (ii), (iii), (iv), or (v).

“(2) EXCEPTIONS.—Such term shall not include any projects receiving or scheduled to receive

1 funding under the Clean Coal Technology Program,
2 or the Power Plant Improvement administered by
3 the Secretary of the Department of Energy.

4 “(d) CLEAN COAL TECHNOLOGY.—For purposes of
5 this section, the term ‘clean coal technology’ means ad-
6 vanced technology which uses coal to produce 75 percent
7 or more of its thermal output as electricity including ad-
8 vanced pulverized coal or atmospheric fluidized bed com-
9 bustion, pressurized fluidized bed combustion, integrated
10 gasification combined cycle with or without fuel or chem-
11 ical co-production, and any other technology for the pro-
12 duction of electricity which exceeds the performance of
13 conventional technology.

14 “(e) CONVENTIONAL TECHNOLOGY.—The term ‘con-
15 ventional technology’ means—

16 “(1) coal-fired combustion technology with a de-
17 sign net heat rate of not less than 9,500 Btu per kil-
18 owatt hour (HHV) and a carbon equivalents emis-
19 sion rate of not more than 0.54 pounds of carbon
20 per kilowatt hour when the design coal has a heat
21 content of more than 9,000 Btu per pound,

22 “(2) coal-fired combustion technology with a de-
23 sign net heat rate of not less than 10,500 Btu per
24 kilowatt hour (HHV) and a carbon equivalents emis-
25 sion rate of not more than 0.60 pounds of carbon

1 per kilowatt hour when the design coal has a heat
 2 content of 9,000 Btu per pound or less, or

3 “(3) natural gas-fired combustion technology
 4 with a design net heat rate of not less than 7,500
 5 Btu per kilowatt hour (HHV) and a carbon equiva-
 6 lents emission rate of not more than 0.24 pounds of
 7 carbon per kilowatt hour.

8 “(f) DESIGN NET HEAT RATE.—The design net heat
 9 rate with respect to any unit, measured in Btu per kilo-
 10 watt hour (HHV)—

11 “(1) shall be based on the design annual heat
 12 input to and the design annual net electrical power,
 13 fuels and chemicals output from such unit (deter-
 14 mined without regard to such unit’s co-generation of
 15 steam),

16 “(2) shall be adjusted for the heat content of
 17 the design coal to be used by the unit if it is less
 18 than 12,000 Btu per pound according to the fol-
 19 lowing formula:

$$\text{Design net heat rate} = \text{unit net heat rate} \times [1 - \{((12,000 - \text{design coal heat contents, Btu per pound}) \times .001) \times .013\}]$$

20 “(3) shall be corrected for the site reference
 21 conditions of—

22 “(A) elevation above sea level of 500 feet,

23 “(B) air pressure of 14.4 pounds per
 24 square inch absolute (psia),

1 “(C) temperature, dry bulb of 63°F,

2 “(D) temperature, wet bulb of 54°F, and

3 “(E) relative humidity of 55 percent; and

4 “(4) shall be adjusted (or credit given) for any
5 qualifying unit that installs carbon capture controls
6 that remove not less than 50 percent of the unit’s
7 carbon dioxide emissions up to the design heat rate
8 level that would have resulted without installation of
9 carbon capture controls .

10 “(g) SELECTION CRITERIA.—Selection criteria for
11 qualifying advanced clean coal technology facilities—

12 “(1) shall be established by the Secretary of
13 Energy as part of a competitive solicitation,

14 “(2) shall include primary criteria of minimum
15 design net heat rate, maximum design thermal effi-
16 ciency, environmental performance, and lowest cost
17 to the government,

18 “(3) shall include criteria for the selection of a
19 unit(s) that achieves a thermal efficiency of greater
20 than 8,900 Btu in that instance where two or more
21 projects are otherwise eligible for the credit provided
22 by this section, and have applied to the Secretary for
23 selection at or near the same period in time, and

24 “(4) shall include supplemental criteria as de-
25 termined appropriate by the Secretary of Energy.

1 “(h) QUALIFIED INVESTMENT.—For purposes of
2 subsection (a), the term ‘qualified investment’ means, with
3 respect to any taxable year, the basis of a qualifying ad-
4 vanced clean coal technology facility placed in service by
5 the taxpayer during such taxable year.

6 “(i) QUALIFIED PROGRESS EXPENDITURES.—

7 “(1) INCREASE IN QUALIFIED INVESTMENT.—

8 In the case of a taxpayer who has made an election
9 under paragraph (5), the amount of the qualified in-
10 vestment of such taxpayer for the taxable year (de-
11 termined under subsection (c) without regard to this
12 section) shall be increased by an amount equal to
13 the aggregate of each qualified progress expenditure
14 for the taxable year with respect to progress expend-
15 iture property.

16 “(2) PROGRESS EXPENDITURE PROPERTY DE-

17 FINED.—For purposes of this subsection, the term
18 ‘progress expenditure property’ means any property
19 being constructed by or for the taxpayer and which
20 it is reasonable to believe will qualify as a qualifying
21 advanced clean coal technology facility which is
22 being constructed by or for the taxpayer when it is
23 placed in service.

24 “(3) QUALIFIED PROGRESS EXPENDITURES DE-

25 FINED.—For purposes of this subsection—

1 “(A) SELF-CONSTRUCTED PROPERTY.—In
 2 the case of any self-constructed property, the
 3 term ‘qualified progress expenditures’ means
 4 the amount which, for purposes of this subpart,
 5 is properly chargeable (during such taxable
 6 year) to capital account with respect to such
 7 property.

8 “(B) NONSELF-CONSTRUCTED PROP-
 9 ERTY.—In the case of nonself-constructed prop-
 10 erty, the term ‘qualified progress expenditures’
 11 means the amount paid during the taxable year
 12 to another person for the construction of such
 13 property.

14 “(4) OTHER DEFINITIONS.—For purposes of
 15 this subsection—

16 “(A) SELF-CONSTRUCTED PROPERTY.—
 17 The term ‘self-constructed property’ means
 18 property for which it is reasonable to believe
 19 that more than half of the construction expendi-
 20 tures will be made directly by the taxpayer.

21 “(B) NONSELF-CONSTRUCTED PROP-
 22 ERTY.—The term ‘nonself-constructed property’
 23 means property which is not self-constructed
 24 property.

1 “(C) CONSTRUCTION, ETC.—The term
2 ‘construction’ includes reconstruction and erec-
3 tion, and the term ‘constructed’ includes recon-
4 structed and erected.

5 “(D) ONLY CONSTRUCTION OF QUALI-
6 FYING ADVANCED CLEAN COAL TECHNOLOGY
7 FACILITY TO BE TAKEN INTO ACCOUNT.—Con-
8 struction shall be taken into account only if, for
9 purposes of this subpart, expenditures therefor
10 are properly chargeable to capital account with
11 respect to the property.

12 “(5) ELECTION.—An election under this sub-
13 section may be made at such time and in such man-
14 ner as the Secretary may by regulations prescribe.
15 Such an election shall apply to the taxable year for
16 which made and to all subsequent taxable years.
17 Such an election, once made, may not be revoked ex-
18 cept with the consent of the Secretary.

19 “(j) COORDINATION WITH OTHER CREDITS.—This
20 section shall not apply to any property with respect to
21 which the rehabilitation credit under section 47 or the en-
22 ergy credit under section 48 is allowed unless the taxpayer
23 elects to waive the application of such credit to such prop-
24 erty.

1 “(k) TERMINATION.—This section shall not apply
2 with respect to any qualified investment made after De-
3 cember 31, 2011.

4 “(l) NATIONAL LIMITATION.—

5 “(1) IN GENERAL.—Notwithstanding any other
6 provision of this section, the term ‘qualifying ad-
7 vanced clean coal technology facility’ shall include
8 such a facility only to the extent that such facility
9 is allocated a portion of the national megawatt limi-
10 tation under this subsection.

11 “(2) NATIONAL MEGAWATT LIMITATION.—The
12 national megawatt limitation under this subsection
13 is 5,000 megawatts.

14 “(3) ALLOCATION OF LIMITATION.—The na-
15 tional megawatt limitation shall be allocated by the
16 Secretary under rules prescribed by the Secretary.
17 Not later than 6 months after the date of the enact-
18 ment of this subsection, the Secretary shall prescribe
19 such regulations as may be necessary or appropriate
20 to carry out the purposes of this section, including
21 regulations—

22 “(A) to limit which facility qualifies as
23 ‘qualified advanced clean coal technology’ in
24 subsection (c) to particular facilities, a portion
25 of particular facilities, or a portion of the pro-

1 duction from particular facilities, so that when
2 all such facilities (or portions thereof) are
3 placed in service over the ten year period in
4 subsection (k), the combination of facilities ap-
5 proved for tax credits (and/or portions of facili-
6 ties approved for tax credits) will not exceed a
7 combined capacity of 5,000 megawatts;

8 “(B) to provide a certification process in
9 consultation with the Secretary of Energy
10 under subsection (g) that will approve and allo-
11 cate the 5,000 megawatts of available tax cred-
12 its authority—

13 “(i) to encourage that facilities with
14 the highest thermal efficiencies and envi-
15 ronmental performance be placed in service
16 as soon as possible;

17 “(ii) to allocate credits to taxpayers
18 that have a definite and credible plan for
19 placing into commercial operation a quali-
20 fying advanced clean coal technology facil-
21 ity, including—

22 “(I) a site,

23 “(II) contractual commitments
24 for procurement and construction,

1 “(III) filings for all necessary
2 preconstruction approvals,

3 “(IV) a demonstrated record of
4 having successfully completed com-
5 parable projects on a timely basis, and

6 “(V) such other factors that the
7 Secretary shall determine are appro-
8 priate;

9 “(iii) to allocate credits to a portion of
10 a facility (or a portion of the production
11 from a facility) if the Secretary determines
12 that such an allocation should maximize
13 the amount of efficient production encour-
14 aged with the available tax credits;

15 “(C) to set progress requirements and con-
16 ditional approvals so that credits for approved
17 projects that become unlikely to meet the nec-
18 essary conditions that can be reallocated by the
19 Secretary to other projects;

20 “(D) to reallocate credits that are not allo-
21 cated to 1 technology described in clauses (i)
22 through (iv) of subsection (c)(1)(A) because an
23 insufficient number of qualifying facilities re-
24 quested credits for one technology, to another
25 technology described in another subparagraph

1 of subsection (c) in order to maximize the
 2 amount of energy efficient production encour-
 3 aged with the available tax credits; and

4 “(E) to provide taxpayers with opportuni-
 5 ties to correct administrative errors and omis-
 6 sions with respect to allocations and record-
 7 keeping within a reasonable period after their
 8 discovery, taking into account the availability of
 9 regulations and other administrative guidance
 10 from the Secretary.”.

11 (c) RECAPTURE.—Section 50(a) of such Code (relat-
 12 ing to other special rules) is amended by adding at the
 13 end the following:

14 “(6) SPECIAL RULES RELATING TO QUALIFYING
 15 ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—
 16 For purposes of applying this subsection in the case
 17 of any credit allowable by reason of section 48A, the
 18 following shall apply:

19 “(A) GENERAL RULE.—In lieu of the
 20 amount of the increase in tax under paragraph
 21 (1), the increase in tax shall be an amount
 22 equal to the investment tax credit allowed under
 23 section 38 for all prior taxable years with re-
 24 spect to a qualifying advanced clean coal tech-
 25 nology facility (as defined by section 48A(b)(1))

1 multiplied by a fraction whose numerator is the
2 number of years remaining to fully depreciate
3 under this title the qualifying advanced clean
4 coal technology facility disposed of, and whose
5 denominator is the total number of years over
6 which such facility would otherwise have been
7 subject to depreciation. For purposes of the
8 preceding sentence, the year of disposition of
9 the qualifying advanced clean coal technology
10 facility property shall be treated as a year of re-
11 maining depreciation.

12 “(B) PROPERTY CEASES TO QUALIFY FOR
13 PROGRESS EXPENDITURES.—Rules similar to
14 the rules of paragraph (2) shall apply in the
15 case of qualified progress expenditures for a
16 qualifying advanced clean coal technology facil-
17 ity under section 48A, except that the amount
18 of the increase in tax under subparagraph (A)
19 of this paragraph shall be substituted in lieu of
20 the amount described in such paragraph (2).

21 “(C) APPLICATION OF PARAGRAPH.—This
22 paragraph shall be applied separately with re-
23 spect to the credit allowed under section 38 re-
24 garding a qualifying advanced clean coal tech-
25 nology facility.”.

1 (d) TRANSITIONAL RULE.—Section 39(d) of such
2 Code (relating to transitional rules) is amended by adding
3 at the end the following:

4 “(12) NO CARRYBACK OF SECTION 48A CREDIT
5 BEFORE EFFECTIVE DATE.—No portion of the un-
6 used business credit for any taxable year which is
7 attributable to the qualifying advanced clean coal
8 technology facility credit determined under section
9 48A may be carried back to a taxable year ending
10 before January 1, 2004.”.

11 (e) TECHNICAL AMENDMENTS.—

12 (1) Section 49(a)(1)(C) of such Code is amend-
13 ed by striking “and” at the end of clause (ii), by
14 striking the period at the end of clause (iii) and in-
15 serting “, and”, and by adding at the end the fol-
16 lowing:

17 “(iv) the portion of the basis of any
18 qualifying advanced clean coal technology
19 facility attributable to any qualified invest-
20 ment (as defined by section 48A(h)).”.

21 (2) Section 50(a)(4) of such Code is amended by
22 striking “and (2)” and inserting “, (2), and (6)”.

23 (3) Section 50(c) of such Code is amended by
24 adding at the end the following new paragraph:

1 “(6) SPECIAL RULE FOR QUALIFYING AD-
 2 VANCED CLEAN COAL TECHNOLOGY FACILITIES.—
 3 Paragraphs (1) and (2) shall not apply to any prop-
 4 erty with respect to the credit determined under sec-
 5 tion 48A.”.

6 (4) The table of sections for subpart E of part
 7 IV of subchapter A of chapter 1 of such Code is
 8 amended by inserting after the item relating to sec-
 9 tion 48 the following:

“Sec. 48A. Qualifying advanced clean coal technology facility
 credit.”.

10 (f) EFFECTIVE DATE.—The amendments made by
 11 this section shall apply to periods after December 31,
 12 2003, under rules similar to the rules of section 48(m)
 13 of the Internal Revenue Code of 1986 (as in effect on the
 14 day before the date of the enactment of the Revenue Rec-
 15 onciliation Act of 1990).

16 **SEC. 303. CREDIT FOR PRODUCTION FROM QUALIFYING**
 17 **ADVANCED CLEAN COAL TECHNOLOGY.**

18 (a) CREDIT FOR PRODUCTION FROM QUALIFYING
 19 ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of
 20 part IV of subchapter A of chapter 1 of the Internal Rev-
 21 enue Code of 1986 (relating to business related credits)
 22 is amended by adding after section 45G the following:

1 **“SEC. 45H. CREDIT FOR PRODUCTION FROM QUALIFYING**
2 **ADVANCED CLEAN COAL TECHNOLOGY.**

3 “(a) GENERAL RULE.—For purposes of section 38,
4 the qualifying advanced clean coal technology production
5 credit of any taxpayer for any taxable year is equal to—

6 “(1) the applicable amount of advanced clean
7 coal technology production credit, multiplied by

8 “(2) the sum of—

9 “(A) the kilowatt hours of electricity, plus

10 “(B) each 3,413 Btu of fuels or chemicals,
11 produced by the taxpayer during such taxable year
12 at a qualifying advanced clean coal technology facil-
13 ity during the 10-year period beginning on the date
14 the facility was originally placed in service.

15 “(b) APPLICABLE AMOUNT.—For purposes of this
16 section, the applicable amount of advanced clean coal tech-
17 nology production credit with respect to production from
18 a qualifying advanced clean coal technology facility shall
19 be determined as follows:

20 “(1) Where the design coal has a heat content
21 of more than 9,000 Btu per pound:

22 “(A) In the case of a facility originally
23 placed in service before 2011, if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500	\$.0060	\$.0038
More than 8,500 but not more than 8,750	\$.0025	\$.0010
More than 8,750 but not more than 8,900	\$.0010	\$.0010.

1 “(B) In the case of a facility originally
2 placed in service after 2010 and before 2015,
3 if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,770	\$.0105	\$.0090
More than 7,770 but not more than 8,125	\$.0085	\$.0068
More than 8,125 but not more than 8,350	\$.0075	\$.0055.

4 “(C) In the case of a facility originally
5 placed in service after 2014 and before 2019,
6 if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,380	\$.0140	\$.01
More than 7,380 but not more than 7,720	\$.0120	\$.0090.

7 “(2) Where the design coal has a heat content
8 of not more than 9,000 Btu per pound:

9 “(A) In the case of a facility originally
10 placed in service before 2011, if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500	\$.0060	\$.0038
More than 8,500 but not more than 8,750	\$.0025	\$.0010
More than 8,750 but not more than 9,000	\$.0010	\$.0010.

1 “(B) In the case of a facility originally
2 placed in service after 2010 and before 2015,
3 if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,000	\$.0105	\$.009
More than 8,000 but not more than 8,250	\$.0085	\$.0068
More than 8,250 but not more than 8,400	\$.0075	\$.0055.

4 “(C) In the case of a facility originally
5 placed in service after 2014 and before 2019,
6 if—

“The facility design net heat rate, Btu/kWh (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800	\$.0140	\$.0115
More than 7,800 but not more than 7,950	\$.0120	\$.0090.

7 “(3) Where the clean coal technology facility is
8 producing fuel or chemicals:

9 “(A) In the case of a facility originally
10 placed in service before 2011, if—

“The facility design net thermal efficiency (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 40.6 percent	\$.0060	\$.0038
Less than 40.6 but not less than 40 percent	\$.0025	\$.0010
Less than 40 but not less than 39 percent	\$.0010	\$.0010.

1 “(B) In the case of a facility originally
2 placed in service after 2010 and before 2015,
3 if—

“The facility design net thermal efficiency (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent	\$.0105	\$.009
Less than 43.9 but not less than 42 percent	\$.0085	\$.0068
Less than 42 but not less than 40.9 percent	\$.0075	\$.0055.

4 “(C) In the case of a facility originally
5 placed in service after 2014 and before 2019,
6 if—

“The facility design net thermal efficiency (HHV) is:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent	\$.0140	\$.0115
Less than 44.2 but not less than 43.6 percent	\$.0120	\$.0090.

7 “(c) A qualifying clean coal technology facility origi-
8 nally placed in service before 2009 that has a design heat
9 rate that meets a lower heat rate test in paragraphs
10 (1)(A), (B) and (C), (2)(A), (B) and (C), or (3)(A), (B)
11 and (C) of subsection (b), or a qualifying clean coal tech-

1 nology facility originally placed in service before 2013 that
 2 has a design heat rate that meets a lower heat rate test
 3 in paragraphs (1)(C), (2)(C), or (3)(C) of subsection (b),
 4 shall receive the highest applicable amount with respect
 5 to a production tax credit for which it qualifies.

6 “(d) INFLATION ADJUSTMENT FACTOR.—For cal-
 7 endar years after 2004, each amount in paragraphs (1),
 8 (2), and (3) shall be adjusted by multiplying such amount
 9 by the inflation adjustment factor for the calendar year
 10 in which the amount is applied. If any amount as in-
 11 creased under the preceding sentence is not a multiple of
 12 0.01 cent, such amount shall be rounded to the nearest
 13 multiple of 0.01 cent.

14 “(e) DEFINITIONS AND SPECIAL RULES.—For pur-
 15 poses of this section—

16 “(1) IN GENERAL.—Any term used in this sec-
 17 tion which is also used in section 48A shall have the
 18 meaning given such term in section 48A.

19 “(2) APPLICABLE RULES.—The rules of para-
 20 graphs (3), (4), and (5) of section 45 shall apply.

21 “(3) INFLATION ADJUSTMENT FACTOR.—The
 22 term ‘inflation adjustment factor’ means, with re-
 23 spect to a calendar year, a fraction the numerator
 24 of which is the GDP implicit price deflator for the
 25 preceding calendar year and the denominator of

1 which is the GDP implicit price deflator for the cal-
2 endar year 2003.

3 “(4) GDP IMPLICIT PRICE DEFLATOR.—The
4 term ‘GDP implicit price deflator’ means the most
5 recent revision of the implicit price deflator for the
6 gross domestic product as computed by the Depart-
7 ment of Commerce before March 15 of the calendar
8 year.”.

9 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-
10 tion 38(b) of such Code is amended by striking “plus”
11 at the end of paragraph (15), by striking the period at
12 the end of paragraph (16) and inserting “, plus”, and by
13 adding at the end the following:

14 “(17) the qualifying advanced clean coal tech-
15 nology production credit determined under section
16 45K(a).”.

17 (c) TRANSITIONAL RULE.—Section 39(d) of such
18 Code (relating to transitional rules) is amended by adding
19 after paragraph (12) the following:

20 “(13) NO CARRYBACK OF SECTION 45K CREDIT
21 BEFORE EFFECTIVE DATE.—No portion of the un-
22 used business credit for any taxable year which is
23 attributable to the qualifying advanced clean coal
24 technology production credit determined under sec-
25 tion 45H may be carried back to a taxable year end-

1 ing before the date of the enactment of section
2 45H.”.

3 (d) CLERICAL AMENDMENT.—The table of sections
4 for subpart D of part IV of subchapter A of chapter 1
5 of such Code is amended by adding at the end the fol-
6 lowing:

“Sec. 45H. Credit for production from qualifying advanced clean
coal technology.”.

7 (e) EFFECTIVE DATE.—The amendments made by
8 this section shall apply to production in taxable years be-
9 ginning after December 31, 2003.

10 **SEC. 304. TREATMENT OF PERSONS NOT ABLE TO USE EN-**
11 **TIRE CREDIT RELATING TO CLEAN COAL**
12 **TECHNOLOGY.**

13 (a) IN GENERAL.—Section 45G of the Internal Rev-
14 enue Code of 1986, as added by this Act, is amended by
15 adding at the end the following new subsection:

16 “(f) TREATMENT OF PERSON NOT ABLE TO USE
17 ENTIRE CREDIT.—

18 “(1) ALLOWANCE OF CREDITS.—

19 “(A) IN GENERAL.—Any credit allowable
20 under this section, section 45H, or section 48A
21 with respect to a facility owned by a person de-
22 scribed in subparagraph (B) may be transferred
23 or used as provided in this subsection, and the
24 determination as to whether the credit is allow-

1 able shall be made without regard to the tax-
2 exempt status of the person.

3 “(B) PERSONS DESCRIBED.—A person is
4 described in this subparagraph if the person
5 is—

6 “(i) an organization described in sec-
7 tion 501(c)(12)(C) and exempt from tax
8 under section 501(a),

9 “(ii) an organization described in sec-
10 tion 1381(a)(2)(C),

11 “(iii) a public utility (as defined in
12 section 136(c)(2)(B)),

13 “(iv) any State or political subdivision
14 thereof, the District of Columbia, or any
15 agency or instrumentality of any of the
16 foregoing,

17 “(v) any Indian tribal government
18 (within the meaning of section 7871) or
19 any agency or instrumentality thereof, or

20 “(vi) the Tennessee Valley Authority.

21 “(2) TRANSFER OF CREDIT.—

22 “(A) IN GENERAL.—A person described in
23 clause (i), (ii), (iii), (iv), or (v) of paragraph
24 (1)(B) may transfer any credit to which para-
25 graph (1)(A) applies through an assignment to

1 any other person not described in paragraph
2 (1)(B).

3 Such transfer may be revoked only with the consent
4 of the Secretary.

5 “(B) REGULATIONS.—The Secretary shall
6 prescribe such regulations as necessary to in-
7 sure that any credit described in subparagraph
8 (A) is claimed once and not reassigned by such
9 other person.

10 “(C) TRANSFER PROCEEDS TREATED AS
11 ARISING FROM ESSENTIAL GOVERNMENT FUNC-
12 TION.—Any proceeds derived by a person de-
13 scribed in clause (iii), (iv), or (v) of paragraph
14 (1)(B) from the transfer of any credit under
15 subparagraph (A) shall be treated as arising
16 from the exercise of an essential government
17 function.

18 “(3) USE BY TVA.—

19 “(A) IN GENERAL.—Notwithstanding any
20 other provision of law, in the case of a person
21 described in paragraph (1)(B)(vi), any credit to
22 which paragraph (1)(A) applies may be applied
23 as a credit against the payments required to be
24 made in any fiscal year under section 15d(e) of
25 the Tennessee Valley Authority Act of 1933 (16

1 U.S.C. 831n-4(e)) as an annual return on the
2 appropriations investment and an annual repay-
3 ment sum.

4 “(B) TREATMENT OF CREDITS.—The ag-
5 gregate amount of credits described in para-
6 graph (1)(A) with respect to such person shall
7 be treated in the same manner and to the same
8 extent as if such credits were a payment in cash
9 and shall be applied first against the annual re-
10 turn on the appropriations investment.

11 “(C) CREDIT CARRYOVER.—With respect
12 to any fiscal year, if the aggregate amount of
13 credits described paragraph (1)(A) with respect
14 to such person exceeds the aggregate amount of
15 payment obligations described in subparagraph
16 (A), the excess amount shall remain available
17 for application as credits against the amounts
18 of such payment obligations in succeeding fiscal
19 years in the same manner as described in this
20 paragraph.

21 “(4) CREDIT NOT INCOME.—Any transfer
22 under paragraph (2) of any credit to which para-
23 graph (1)(A) applies shall not be treated as income
24 for purposes of section 501(c)(12).

1 “(5) TREATMENT OF UNRELATED PERSONS.—

2 For purposes of this subsection, sales among and be-
3 tween persons described in clauses (i), (ii), (iii), (iv),
4 and (v) of paragraph (1)(A) shall be treated as sales
5 between unrelated parties.”.

6 (b) EFFECTIVE DATE.—The amendment made by
7 this section shall apply to production after December 31,
8 2003.

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