

## § 48A Qualifying advanced coal project credit.

### **(a) In general.**

For purposes of section 46, the qualifying advanced coal project credit for any taxable year is an amount equal to—

- (1) 20 percent of the qualified investment for such taxable year in the case of projects described in subsection (d)(3)(B)(i),
- (2) 15 percent of the qualified investment for such taxable year in the case of projects described in subsection (d)(3)(B)(ii), and
- (3) 30 percent of the qualified investment for such taxable year in the case of projects described in clause (iii) of subsection (d)(3)(B).

### **(b) Qualified investment.**

#### **(1) In general.**

For purposes of subsection (a), the qualified investment for any taxable year is the basis of eligible property placed in service by the taxpayer during such taxable year which is part of a qualifying advanced coal project—

(A)

(i) the construction, reconstruction, or erection of which is completed by the taxpayer, or

(ii) which is acquired by the taxpayer if the original use of such property commences with the taxpayer, and

(B) with respect to which depreciation (or amortization in lieu of depreciation) is allowable.

#### **(2) Special rule for certain subsidized property.**

Rules similar to section 48(a)(4) (without regard to subparagraph (D) thereof) shall apply for purposes of this section.

#### **(3) Certain qualified progress expenditures rules made applicable.**

Rules similar to the rules of subsections (c)(4) and (d) of section 46 (as in effect on the day before the enactment of the Revenue Reconciliation Act of 1990) shall apply for purposes of this section.

### **(c) Definitions.**

For purposes of this section —

#### **(1) Qualifying advanced coal project.**

The term “qualifying advanced coal project” means a project which meets the requirements of subsection (e).

**(2) Advanced coal-based generation technology.**

The term “advanced coal-based generation technology” means a technology which meets the requirements of subsection (f).

**(3) Eligible property.**

The term “eligible property” means—

(A) in the case of any qualifying advanced coal project using an integrated gasification combined cycle, any property which is a part of such project and is necessary for the gasification of coal, including any coal handling and gas separation equipment, and

(B) in the case of any other qualifying advanced coal project, any property which is a part of such project.

**(4) Coal.**

The term “coal” means anthracite, bituminous coal, subbituminous coal, lignite, and peat.

**(5) Greenhouse gas capture capability.**

The term “greenhouse gas capture capability” means an integrated gasification combined cycle technology facility capable of adding components which can capture, separate on a long-term basis, isolate, remove, and sequester greenhouse gases which result from the generation of electricity.

**(6) Electric generation unit.**

The term “electric generation unit” means any facility at least 50 percent of the total annual net output of which is electrical power, including an otherwise eligible facility which is used in an industrial application.

**(7) Integrated gasification combined cycle.**

The term “integrated gasification combined cycle” means an electric generation unit which produces electricity by converting coal to synthesis gas which is used to fuel a combined-cycle plant which produces electricity from both a combustion turbine (including a combustion turbine/fuel cell hybrid) and a steam turbine.

**(d) Qualifying advanced coal project program.**

**(1) Establishment.**

Not later than 180 days after the date of enactment of this section, the Secretary, in consultation with the Secretary of Energy, shall establish a qualifying advanced coal project program for the deployment of advanced coal-based generation technologies.

**(2) Certification.**

(A) Application period. Each applicant for certification under this paragraph shall submit an application meeting the requirements of subparagraph (B). An applicant may only submit an application—

(i) for an allocation from the dollar amount specified in clause (i) or (ii) of paragraph (3)(B) during the 3-year period beginning on the date the Secretary establishes the program under paragraph (1), and

(ii) for an allocation from the dollar amount specified in paragraph (3)(B)(iii) during the 3-year period beginning at the earlier of the termination of the period described in clause (i) or the date prescribed by the Secretary.

(B) Requirements for applications for certification. An application under subparagraph (A) shall contain such information as the Secretary may require in order to make a determination to accept or reject an application for certification as meeting the requirements under subsection (e)(1). Any information contained in the application shall be protected as provided in section 552(b)(4) of title 5, United States Code.

(C) Time to act upon applications for certification. The Secretary shall issue a determination as to whether an applicant has met the requirements under subsection (e)(1) within 60 days following the date of submittal of the application for certification.

(D) Time to meet criteria for certification. Each applicant for certification shall have 2 years from the date of acceptance by the Secretary of the application during which to provide to the Secretary evidence that the criteria set forth in subsection (e)(2) have been met.

(E) Period of issuance. An applicant which receives a certification shall have 5 years from the date of issuance of the certification in order to place the project in service and if such project is not placed in service by that time period then the certification shall no longer be valid.

### **(3) Aggregate credits.**

(A) In general. The aggregate credits allowed under subsection (a) for projects certified by the Secretary under paragraph (2) may not exceed \$2,550,000,000.

(B) Particular projects. Of the dollar amount in subparagraph (A), the Secretary is authorized to certify—

(i) \$800,000,000 for integrated gasification combined cycle projects the application for which is submitted during the period described in paragraph (2)(A)(i),

(ii) \$500,000,000 for projects which use other advanced coal-based generation technologies the application for which is submitted during the period described in paragraph (2)(A)(i), and

(iii) \$1,250,000,000 for advanced coal-based generation technology projects the application for which is submitted during the period described in paragraph (2)(A)(ii).

**(4) Review and redistribution.**

(A) Review. Not later than 6 years after the date of enactment of this section, the Secretary shall review the credits allocated under this section as of the date which is 6 years after the date of enactment of this section.

(B) Redistribution. The Secretary may reallocate credits available under clauses (i) and (ii) of paragraph (3)(B) if the Secretary determines that—

(i) there is an insufficient quantity of qualifying applications for certification pending at the time of the review, or

(ii) any certification made pursuant to paragraph (2) has been revoked pursuant to paragraph (2)(D) because the project subject to the certification has been delayed as a result of third party opposition or litigation to the proposed project.

(C) Reallocation. If the Secretary determines that credits under clause (i) or (ii) of paragraph (3)(B) are available for reallocation pursuant to the requirements set forth in paragraph (2), the Secretary is authorized to conduct an additional program for applications for certification.

**(5) Disclosure of allocations.**

The Secretary shall, upon making a certification under this subsection or section 48B(d), publicly disclose the identity of the applicant and the amount of the credit certified with respect to such applicant.

**(e) Qualifying advanced coal projects.**

**(1) Requirements.**

For purposes of subsection (c)(1), a project shall be considered a qualifying advanced coal project that the Secretary may certify under subsection (d)(2) if the Secretary determines that, at a minimum—

(A) the project uses an advanced coal-based generation technology—

(i) to power a new electric generation unit; or

(ii) to retrofit or repower an existing electric generation unit (including an existing natural gas-fired combined cycle unit);

(B) the fuel input for the project, when completed, is at least 75 percent coal;

(C) the project, consisting of one or more electric generation units at one site, will have a total nameplate generating capacity of at least 400 megawatts;

(D) the applicant provides evidence that a majority of the output of the project is reasonably expected to be acquired or utilized;

(E) the applicant provides evidence of ownership or control of a site of sufficient size to allow the proposed project to be constructed and to operate on a long-term basis;

(F) the project will be located in the United States; and

(G) in the case of any project the application for which is submitted during the period described in subsection (d)(2)(A)(ii), the project includes equipment which separates and sequesters at least 65 percent (70 percent in the case of an application for reallocated credits under subsection (d)(4)) of such project's total carbon dioxide emissions.

**(2) Requirements for certification.**

For the purpose of subsection (d)(2)(D), a project shall be eligible for certification only if the Secretary determines that—

(A) the applicant for certification has received all Federal and State environmental authorizations or reviews necessary to commence construction of the project; and

(B) the applicant for certification, except in the case of a retrofit or repower of an existing electric generation unit, has purchased or entered into a binding contract for the purchase of the main steam turbine or turbines for the project, except that such contract may be contingent upon receipt of a certification under subsection (d)(2) .

**(3) Priority for certain projects.**

In determining which qualifying advanced coal projects to certify under subsection (d)(2), the Secretary shall—

(A) certify capacity, in accordance with the procedures set forth in subsection (d), in relatively equal amounts to—

(i) projects using bituminous coal as a primary feedstock,

(ii) projects using subbituminous coal as a primary feedstock, and

(iii) projects using lignite as a primary feedstock,

(B) give high priority to projects which include, as determined by the Secretary—

(i) greenhouse gas capture capability,

(ii) increased by-product utilization,

(iii) applicant participants who have a research partnership with an eligible educational institution (as defined in section 529(e)(5)), and

(iv) other benefits , and

(C) give highest priority to projects with the greatest separation and sequestration percentage of total carbon dioxide emissions.

**(f) Advanced coal-based generation technology.**

**(1) In general.**

For the purpose of this section, an electric generation unit uses advanced coal-based generation technology if—

(A) the unit—

(i) uses integrated gasification combined cycle technology, or

(ii) except as provided in paragraph (3), has a design net heat rate of 8530 Btu/kWh (40 percent efficiency), and

(B) the unit is designed to meet the performance requirements in the following table:

Performance characteristic:	
Design level	
for project:	
SO <sub>2</sub> (percent removal)	99 percent
NO(x) (emissions)	0.07
lbs/MMBTU	
PM* (emissions)	0.015
lbs/MMBTU	
Hg (percent removal)	90 percent

For purposes of the performance requirement specified for the removal of SO<sub>2</sub> in the table contained in subparagraph (B), the SO<sub>2</sub> removal design level in the case of a unit designed for the use of feedstock substantially all of which is subbituminous coal shall be 99 percent SO<sub>2</sub> removal or the achievement of an emission level of 0.04 pounds or less of SO<sub>2</sub> per million Btu, determined on a 30-day average.

**(2) Design net heat rate.**

For purposes of this subsection , design net heat rate with respect to an electric generation unit shall—

(A) be measured in Btu per kilowatt hour (higher heating value),

(B) be based on the design annual heat input to the unit and the rated net electrical power, fuels, and chemicals output of the unit (determined without regard to the cogeneration of steam by the unit),

(C) be adjusted for the heat content of the design coal to be used by the unit—

(i) if the heat content is less than 13,500 Btu per pound, but greater than 7,000 Btu per pound, according to the following formula: design net heat rate=unit net heat rate x  $[1-[(13,500-\text{design coal heat content, Btu per pound})/1,000]* 0.013]]$ , and

(ii) if the heat content is less than or equal to 7,000 Btu per pound, according to the following formula: design net heat rate=unit net heat rate x  $[1-[(13,500-\text{design coal heat content, Btu per pound})/1,000]* 0.018]]$ , and

(D) be corrected for the site reference conditions of—

(i) elevation above sea level of 500 feet,

(ii) air pressure of 14.4 pounds per square inch absolute,

(iii) temperature, dry bulb of 63°F,

(iv) temperature, wet bulb of 54°F, and

(v) relative humidity of 55 percent.

**(3) Existing units.**

In the case of any electric generation unit in existence on the date of the enactment of this section, such unit uses advanced coal-based generation technology if, in lieu of the requirements under paragraph (1)(A)(ii), such unit achieves a minimum efficiency of 35 percent and an overall thermal design efficiency improvement, compared to the efficiency of the unit as operated, of not less than—

(A) 7 percentage points for coal of more than 9,000 Btu,

(B) 6 percentage points for coal of 7,000 to 9,000 Btu, or

(C) 4 percentage points for coal of less than 7,000 Btu.

**(g) Applicability.**

No use of technology (or level of emission reduction solely by reason of the use of the technology), and no achievement of any emission reduction by the demonstration of any technology or performance level, by or at one or more

facilities with respect to which a credit is allowed under this section, shall be considered to indicate that the technology or performance level is—

- (1) adequately demonstrated for purposes of section 111 of the Clean Air Act (42 U.S.C. 7411);
- (2) achievable for purposes of section 169 of that Act (42 U.S. C. 7479);  
or
- (3) achievable in practice for purposes of section 171 of such Act (42 U.S.C. 7501).

**(h) Competitive certification awards modification authority.**

In implementing this section or section 48B, the Secretary is directed to modify the terms of any competitive certification award and any associated closing agreement where such modification—

- (1) is consistent with the objectives of such section,
- (2) is requested by the recipient of the competitive certification award,  
and
- (3) involves moving the project site to improve the potential to capture and sequester carbon dioxide emissions, reduce costs of transporting feedstock, and serve a broader customer base,

unless the Secretary determines that the dollar amount of tax credits available to the taxpayer under such section would increase as a result of the modification or such modification would result in such project not being originally certified. In considering any such modification, the Secretary shall consult with other relevant Federal agencies, including the Department of Energy.

**(i) Recapture of credit for failure to sequester.**

The Secretary shall provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any project which fails to attain or maintain the separation and sequestration requirements of subsection (e)(1)(G).