| 112TH CONGRESS 1ST SESSION | S. |
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To amend the Internal Revenue Code of 1986 to improve and extend certain energy-related tax provisions, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. BINGAMAN (for himself, Ms. SNOWE, and Mrs. FEINSTEIN) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To amend the Internal Revenue Code of 1986 to improve and extend certain energy-related tax provisions, and for other purposes.

- 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; AMENDMENT OF 1986 CODE;
- 4 TABLE OF CONTENTS.
- 5 (a) Short Title.—This Act may be cited as the
- 6 "Expanding Industrial Energy and Water Efficiency In-
- 7 centives Act of 2012".
- 8 (b) Amendment of 1986 Code.—Except as other-
- 9 wise expressly provided, whenever in this Act an amend-

| 1 | ment or repeal is expressed in terms of an amendment |
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| 2 | to, or repeal of, a section or other provision, the reference |
| 3 | shall be considered to be made to a section or other provi- |
| 4 | sion of the Internal Revenue Code of 1986. |
| 5 | (c) Table of Contents.—The table of contents for |
| 6 | this Act is as follows: |
| | Sec. 1. Short title; amendment of 1986 Code; table of contents. Sec. 2. Modifications in credit for combined heat and power system property. Sec. 3. Motor energy efficiency improvement tax credit. Sec. 4. Credit for replacement of CFC refrigerant chiller. Sec. 5. Qualifying efficient industrial process water use project credit. Sec. 6. Investment tax credit for biomass heating property. |
| 7 | SEC. 2. MODIFICATIONS IN CREDIT FOR COMBINED HEAT |
| 8 | AND POWER SYSTEM PROPERTY. |
| 9 | (a) Modification of Certain Capacity Limita- |
| 10 | TIONS.—Section 48(c)(3)(B) is amended— |
| 11 | (1) by striking "15 megawatts" in clause (ii) |
| 12 | and inserting "25 megawatts", |
| 13 | (2) by striking "20,000 horsepower" in clause |
| 14 | (ii) and inserting "34,000 horsepower", and |
| 15 | (3) by striking clause (iii). |
| 16 | (b) Nonapplication of Certain Rules.—Section |
| 17 | 48(c)(3)(C) is amended by adding at the end the following |
| 18 | new clause: |
| 19 | "(iv) Nonapplication of Certain |
| 20 | RULES.—For purposes of determining if |
| 21 | the term 'combined heat and power system |
| 22 | property' includes technologies which gen- |

| 1 | erate electricity or mechanical power using |
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| 2 | back-pressure steam turbines in place of |
| 3 | existing pressure-reducing valves or which |
| 4 | make use of waste heat from industrial |
| 5 | processes such as by using organic |
| 6 | rankine, stirling, or kalina heat engine sys- |
| 7 | tems, subparagraph (A) shall be applied |
| 8 | without regard to clause (ii).". |
| 9 | (c) Effective Date.—The amendments made by |
| 10 | this section shall apply to periods after the date of the |
| 11 | enactment of this Act, under rules similar to the rules of |
| 12 | section 48(m) of the Internal Revenue Code of 1986 (as |
| 13 | in effect on the day before the date of the enactment of |
| 14 | the Revenue Reconciliation Act of 1990). |
| 15 | SEC. 3. MOTOR ENERGY EFFICIENCY IMPROVEMENT TAX |
| 16 | CREDIT. |
| 17 | (a) In General.—Subpart D of part IV of sub- |
| 18 | chapter A of chapter 1 is amended by adding at the end |
| 19 | the following new section: |
| 20 | "SEC. 45R. MOTOR ENERGY EFFICIENCY IMPROVEMENT |
| 21 | TAX CREDIT. |
| 22 | "(a) IN CHAIRAI For numbers of section 20 the |
| 22 | "(a) In General.—For purposes of section 38, the |
| 23 | motor energy efficiency improvement tax credit deter- |
| | |

equal to \$120 multiplied by the motor horsepower of an 1 2 appliance, machine, or equipment— 3 "(1) manufactured in such taxable year by a 4 manufacturer which incorporates an advanced motor 5 and drive system into a newly designed appliance, 6 machine, or equipment or into a redesigned appli-7 ance, machine, or equipment which did not pre-8 viously make use of the advanced motor and drive 9 system, or 10 "(2) placed back into service in such taxable 11 year by an end user which upgrades an existing ap-12 pliance, machine, or equipment with an advanced 13 motor and drive system. For any advanced motor and drive system with a total 14 15 horsepower of less than 10, such motor energy efficiency improvement tax credit is an amount which bears the 16 same ratio to \$120 as such total horsepower bears to 1 17 18 horsepower. 19 "(b) ADVANCED MOTOR AND DRIVE SYSTEM.—For purposes of this section, the term 'advanced motor and 21 drive system' means a motor and any required associated 22 electronic control which— 23 "(1) offers variable or multiple speed operation, 24 and

| 1 | "(2) uses permanent magnet technology, elec- |
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| 2 | tronically commutated motor technology, switched |
| 3 | reluctance motor technology, synchronous reluctance, |
| 4 | or such other motor and drive systems technologies |
| 5 | as determined by the Secretary of Energy. |
| 6 | "(c) Aggregate Per Taxpayer Limitation.— |
| 7 | "(1) In general.—The amount of the credit |
| 8 | determined under this section for any taxpayer for |
| 9 | any taxable year shall not exceed the excess (if any) |
| 10 | of \$2,000,000 over the aggregate credits allowed |
| 11 | under this section with respect to such taxpayer for |
| 12 | all prior taxable years. |
| 13 | "(2) AGGREGATION RULES.—For purposes of |
| 14 | this section, all persons treated as a single employer |
| 15 | under subsections (a) and (b) of section 52 shall be |
| 16 | treated as 1 taxpayer. |
| 17 | "(d) Special Rules.— |
| 18 | "(1) Basis reduction.—For purposes of this |
| 19 | subtitle, the basis of any property for which a credit |
| 20 | is allowable under subsection (a) shall be reduced by |
| 21 | the amount of such credit so allowed. |
| 22 | "(2) No double benefit.—No other credit |
| 23 | shall be allowable under this chapter for property |
| 24 | with respect to which a credit is allowed under this |
| 25 | section. |

| 1 | "(3) Property used outside united states |
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| 2 | NOT QUALIFIED.—No credit shall be allowable under |
| 3 | subsection (a) with respect to any property referred |
| 4 | to in section $50(b)(1)$. |
| 5 | "(e) Application.—This section shall not apply to |
| 6 | property manufactured or placed back into service before |
| 7 | the date which is 6 months after the date of the enactment |
| 8 | of this section or after December 31, 2015.". |
| 9 | (b) Conforming Amendments.— |
| 10 | (1) Section 38(b) is amended by striking "plus" |
| 11 | at the end of paragraph (34), by striking the period |
| 12 | at the end of paragraph (35) and inserting ", plus", |
| 13 | and by adding at the end the following new para- |
| 14 | graph: |
| 15 | "(36) the motor energy efficiency improvement |
| 16 | tax credit determined under section 45R.". |
| 17 | (2) Section 1016(a) is amended by striking |
| 18 | "and" at the end of paragraph (36), by striking the |
| 19 | period at the end of paragraph (37) and inserting ", |
| 20 | and", and by adding at the end the following new |
| 21 | paragraph: |
| 22 | "(38) to the extent provided in section |
| 23 | 45R(d)(1).". |

| 1 | (3) The table of sections for subpart D of part |
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| 2 | IV of subchapter A of chapter 1 is amended by add- |
| 3 | ing at the end the following new item: |
| | "Sec. 45R. Motor energy efficiency improvement tax credit.". |
| 4 | (c) Effective Date.—The amendments made by |
| 5 | this section shall apply to property manufactured or |
| 6 | placed back into service after the date which is 6 months |
| 7 | after the date of the enactment of this Act. |
| 8 | SEC. 4. CREDIT FOR REPLACEMENT OF CFC REFRIGERANT |
| 9 | CHILLER. |
| 10 | (a) In General.—Subpart D of part IV of sub- |
| 11 | chapter A of chapter 1, as amended by this Act, is amend- |
| 12 | ed by adding at the end the following new section: |
| 13 | "SEC. 45S. CFC CHILLER REPLACEMENT CREDIT. |
| 14 | "(a) In General.—For purposes of section 38, the |
| 15 | CFC chiller replacement credit determined under this sec- |
| 16 | tion for the taxable year is an amount equal to— |
| 17 | "(1) \$150 multiplied by the tonnage rating of |
| 18 | a CFC chiller replaced with a new efficient chiller |
| 19 | that is placed in service by the taxpayer during the |
| 20 | taxable year, plus |
| 21 | "(2) if all chilled water distribution pumps con- |
| 22 | nected to the new efficient chiller include variable |
| 23 | frequency drives, \$100 multiplied by any tonnage |
| 24 | downsizing. |

- 1 "(b) CFC CHILLER.—For purposes of this section,2 the term 'CFC chiller' includes property which—
- 3 "(1) was installed after 1980 and before 1993,
- 4 "(2) utilizes chlorofluorocarbon refrigerant, and
- 5 "(3) until replaced by a new efficient chiller,
- 6 has remained in operation and utilized for cooling a
- 7 commercial building.
- 8 "(c) New Efficient Chiller.—For purposes of
- 9 this section, the term 'new efficient chiller' includes a
- 10 water-cooled chiller which is certified to meet efficiency
- 11 standards effective on January 1, 2010, as defined in table
- 12 6.8.1c in Addendum M to Standard 90.1–2007 of the
- 13 American Society of Heating, Refrigerating, and Air Con-
- 14 ditioning Engineers.
- 15 "(d) Tonnage Downsizing.—For purposes of this
- 16 section, the term 'tonnage downsizing' means the amount
- 17 by which the tonnage rating of the CFC chiller exceeds
- 18 the tonnage rating of the new efficient chiller.
- 19 "(e) Energy Audit.—As a condition of receiving a
- 20 tax credit under this section, an energy audit shall be per-
- 21 formed on the building prior to installation of the new effi-
- 22 cient chiller, identifying cost-effective energy-saving meas-
- 23 ures, particularly measures that could contribute to chiller
- 24 downsizing. The audit shall satisfy criteria that shall be
- 25 issued by the Secretary of Energy.

| 1 | "(f) Property Used by Tax-exempt Entity.—In |
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| 2 | the case of a CFC chiller replaced by a new efficient chiller |
| 3 | the use of which is described in paragraph (3) or (4) of |
| 4 | section 50(b), the person who sold such new efficient chill- |
| 5 | er to the entity shall be treated as the taxpayer that placed |
| 6 | in service the new efficient chiller that replaced the CFC |
| 7 | chiller, but only if such person clearly discloses to such |
| 8 | entity in a document the amount of any credit allowable |
| 9 | under subsection (a) and the person certifies to the Sec- |
| 10 | retary that the person reduced the price the entity paid |
| 11 | for such new efficient chiller by the entire amount of such |
| 12 | credit. |
| 13 | "(g) Termination.—This section shall not apply to |
| 14 | replacements made after December 31, 2015.". |
| 15 | (b) Conforming Amendments.— |
| 16 | (1) Section 38(b), as amended by this Act, is |
| 17 | amended by striking "plus" at the end of paragraph |
| 18 | (35), by striking the period at the end of paragraph |
| 19 | (36) and inserting ", plus", and by adding at the |
| 20 | end the following new paragraph: |
| 21 | "(37) the CFC chiller replacement credit deter- |
| 22 | mined under section 45S.". |
| 23 | (2) The table of sections for subpart D of part |
| 24 | IV of subchapter A of chapter 1, as amended by this |

| 1 | Act, is amended by adding at the end the following |
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| 2 | new item: |
| | "Sec. 45S. CFC chiller replacement credit.". |
| 3 | (c) Effective Date.—The amendments made by |
| 4 | this section shall apply to replacements made after the |
| 5 | date of the enactment of this Act. |
| 6 | SEC. 5. QUALIFYING EFFICIENT INDUSTRIAL PROCESS |
| 7 | WATER USE PROJECT CREDIT. |
| 8 | (a) In General.—Section 46 is amended by striking |
| 9 | "and" at the end of paragraph (4), by striking the period |
| 10 | at the end of paragraph (5), and by adding at the end |
| 11 | the following new paragraph: |
| 12 | "(6) the qualifying efficient industrial process |
| 13 | water use project credit.". |
| 14 | (b) Amount of Credit.—Subpart E of part IV of |
| 15 | subchapter A of chapter 1 is amended by inserting after |
| 16 | section 48C the following new section: |
| 17 | "SEC. 48D. QUALIFYING EFFICIENT INDUSTRIAL PROCESS |
| 18 | WATER USE PROJECT CREDIT. |
| 19 | "(a) In General.— |
| 20 | "(1) Allowance of Credit.—For purposes of |
| 21 | section 46, the qualifying efficient industrial process |
| 22 | water use project credit for any taxable year is an |
| 23 | amount equal to the applicable percentage of the |
| 24 | qualified investment for such taxable year with re- |

| 1 | spect to any qualifying efficient industrial process |
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| 2 | water use project of the taxpayer. |
| 3 | "(2) Applicable percentage.—For purposes |
| 4 | of subsection (a)— |
| 5 | "(A) IN GENERAL.—The applicable per- |
| 6 | centage is— |
| 7 | "(i) 10 percent in the case of a quali- |
| 8 | fying efficient industrial process water use |
| 9 | project which achieves a 25 percent or |
| 10 | greater (but less than 50 percent) reduc- |
| 11 | tion in water use for industrial purposes, |
| 12 | "(ii) 20 percent in the case of a quali- |
| 13 | fying efficient industrial process water use |
| 14 | project which achieves a 50 percent or |
| 15 | greater (but less than 75 percent) reduc- |
| 16 | tion in water use for industrial purposes, |
| 17 | and |
| 18 | "(iii) 30 percent in the case of a |
| 19 | qualifying efficient industrial process water |
| 20 | use project which achieves a 75 percent or |
| 21 | greater reduction in water use for indus- |
| 22 | trial purposes. |
| 23 | "(B) Water use.—For purposes of sub- |
| 24 | paragraph (A)— |

| 1 | "(i) Measurement of reduction |
|----|--|
| 2 | IN WATER USE.— |
| 3 | "(I) IN GENERAL.—The taxpayer |
| 4 | shall elect one of the methods speci- |
| 5 | fied in clause (ii) for measuring the |
| 6 | reduction in water use achieved by a |
| 7 | qualifying efficient industrial process |
| 8 | water use project. |
| 9 | "(II) IRREVOCABLE ELECTION.— |
| 10 | An election under subclause (I), once |
| 11 | made with respect to a qualifying effi- |
| 12 | cient industrial process water use |
| 13 | project, shall apply to the taxable year |
| 14 | for which made and all subsequent |
| 15 | taxable years, and may not be re- |
| 16 | voked. |
| 17 | "(III) Projected savings.— |
| 18 | The credit under subsection (a) may |
| 19 | be claimed on the basis of a reduction |
| 20 | in water use which is projected, by a |
| 21 | registered professional engineer who is |
| 22 | not a related person (within the mean- |
| 23 | ing of section $144(a)(3)(A)$) to the |
| 24 | taxpayer or the installer of eligible |
| 25 | property, to be achieved by a quali- |

| 1 | fying efficient industrial process water |
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| 2 | use project. Such projection, if used |
| 3 | as a basis for determining the credit |
| 4 | under subsection (a), shall be included |
| 5 | with the return of tax. |
| 6 | "(ii) Methods specified.—The |
| 7 | methods specified in this clause are— |
| 8 | "(I) a measurement of the per- |
| 9 | centage reduction in water use per |
| 10 | unit of product manufactured by the |
| 11 | taxpayer, and |
| 12 | "(II) a measurement of the per- |
| 13 | centage reduction in water use per |
| 14 | pound of product manufactured by |
| 15 | the taxpayer. |
| 16 | "(b) Qualified Investment.— |
| 17 | "(1) In general.—For purposes of subsection |
| 18 | (a), the qualified investment for any taxable year is |
| 19 | the basis of eligible property placed in service by the |
| 20 | taxpayer during such taxable year which is part of |
| 21 | a qualifying efficient industrial process water use |
| 22 | project. |
| 23 | "(2) Exceptions.—Such term shall not in- |
| 24 | clude any portion of the basis related to— |
| 25 | "(A) permitting, |

| 1 | "(B) land acquisition, or |
|----|---|
| 2 | "(C) infrastructure not directly associated |
| 3 | with the implementation of the technology or |
| 4 | process improvements of the qualifying efficient |
| 5 | industrial process water use project. |
| 6 | "(3) Certain qualified progress expendi- |
| 7 | TURES RULES MADE APPLICABLE.—Rules similar to |
| 8 | the rules of subsections (c)(4) and (d) of section 46 |
| 9 | (as in effect on the day before the enactment of the |
| 10 | Revenue Reconciliation Act of 1990) shall apply for |
| 11 | purposes of this section. |
| 12 | "(4) Special rule for subsidized energy |
| 13 | FINANCING.—Rules similar to the rules of section |
| 14 | 48(a)(4) (without regard to subparagraph (D) there- |
| 15 | of) shall apply for purposes of this section. |
| 16 | "(5) LIMITATION.—The amount which is treat- |
| 17 | ed for all taxable years with respect to any quali- |
| 18 | fying efficient industrial process water use project |
| 19 | with respect to any site shall not exceed |
| 20 | \$10,000,000. |
| 21 | "(c) Definitions.—For purposes of this section— |
| 22 | "(1) Qualifying efficient industrial |
| 23 | PROCESS WATER USE PROJECT.— |
| 24 | "(A) IN GENERAL.—The term 'qualifying |
| 25 | efficient industrial process water use project' |

| 1 | means, with respect to any site, a project which |
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| 2 | retrofits or expands an existing facility to im- |
| 3 | plement technology or process improvements |
| 4 | which are designed to reduce water use for sys- |
| 5 | tems that use any form of water in the produc- |
| 6 | tion of goods in the manufacturing sector (as |
| 7 | defined in North American Industrial Classi- |
| 8 | fication System codes 31, 32, and 33), includ- |
| 9 | ing any system that uses water for heating, |
| 10 | cooling, or energy production for the production |
| 11 | of goods in the trade or business of manufac- |
| 12 | turing. Such term shall not include a project |
| 13 | which alters an existing facility to change the |
| 14 | type of goods produced by such facility. |
| 15 | "(B) Systems.—For purposes of subpara- |
| 16 | graph (A), the term 'system' does not include |
| 17 | any system which does not encompass 1 or |
| 18 | more complete processes. |
| 19 | "(2) Eligible Property.—The term 'eligible |
| 20 | property' means any property— |
| 21 | "(A) which is part of a qualifying efficient |
| 22 | industrial process water use project and which |
| 23 | is necessary for the reduction in water use de- |
| 24 | scribed in paragraph (1), |

| 1 | "(B)(i) the construction, reconstruction, or |
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| 2 | erection of which is completed by the taxpayer, |
| 3 | or |
| 4 | "(ii) which is acquired by the taxpayer if |
| 5 | the original use of such property commences |
| 6 | with the taxpayer, and |
| 7 | "(C) with respect to which depreciation (or |
| 8 | amortization in lieu of depreciation) is allow- |
| 9 | able. |
| 10 | "(3) Water use.— |
| 11 | "(A) IN GENERAL.—The term 'water use' |
| 12 | means all water taken for use at the site di- |
| 13 | rectly from ground and surface water sources |
| 14 | together with any water supplied to the site by |
| 15 | a regulated water system. |
| 16 | "(B) REGULATED WATER SYSTEM.—The |
| 17 | term 'regulated water system' means a system |
| 18 | that supplies water that has been treated to po- |
| 19 | table standards. |
| 20 | "(d) Termination.—This section shall not apply to |
| 21 | periods after December 31, 2016, under rules similar to |
| 22 | the rules of section 48(m) (as in effect on the day before |
| 23 | the date of the enactment of the Revenue Reconciliation |
| 24 | Act of 1990).". |
| 25 | (c) Conforming Amendments.— |

| 1 | (1) Section 49(a)(1)(C) is amended by striking |
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| 2 | "and" at the end of clause (iv), by striking the pe- |
| 3 | riod at the end of clause (v) and inserting ", and", |
| 4 | and by adding after clause (v) the following new |
| 5 | clause: |
| 6 | "(vi) the basis of any property which |
| 7 | is part of a qualifying efficient industrial |
| 8 | use water project under section 48D.". |
| 9 | (2) The table of sections for subpart E of part |
| 10 | IV of subchapter A of chapter 1 is amended by in- |
| 11 | serting after the item relating to section 48B the fol- |
| 12 | lowing new item: |
| | "Sec. 48D. Qualifying efficient industrial process water use project credit.". |
| 13 | (d) Effective Date.—The amendments made by |
| 14 | this section shall apply to periods after January 1, 2013, |
| 15 | under rules similar to the rules of section 48(m) of the |
| 16 | Internal Revenue Code of 1986 (as in effect on the day |
| 17 | before the date of the enactment of the Revenue Reconcili- |
| 18 | ation Act of 1990). |
| 19 | SEC. 6. INVESTMENT TAX CREDIT FOR BIOMASS HEATING |
| 20 | PROPERTY. |
| 21 | (a) In General.—Subparagraph (A) of section |
| 22 | 48(a)(3) is amended by striking "or" at the end of clause |
| 23 | (vi), by inserting "or" at the end of clause (vii), and by |
| 24 | inserting after clause (vii) the following new clause: |

| 1 | "(viii) open-loop biomass (within the |
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| 2 | meaning of section 45(c)(3)) heating prop- |
| 3 | erty, including boilers or furnaces which |
| 4 | operate at output efficiencies of not less |
| 5 | than 65 percent (measured by the higher |
| 6 | heating value of the fuel) and which pro- |
| 7 | vide thermal energy in the form of heat, |
| 8 | hot water, or steam for space heating, air |
| 9 | conditioning, domestic hot water, or indus- |
| 10 | trial process heat, but only with respect to |
| 11 | periods ending before January 1, 2016,". |
| 12 | (b) 30 Percent and 15 Percent Credits.— |
| 13 | (1) In General.—Subparagraph (A) of section |
| 14 | 48(a)(2) is amended— |
| 15 | (A) by redesignating clause (ii) as clause |
| 16 | (iii), |
| 17 | (B) by inserting after clause (i) the fol- |
| 18 | lowing new clause: |
| 19 | "(ii) except as provided in clause |
| 20 | (i)(V), 15 percent in the case of energy |
| 21 | property described in paragraph |
| 22 | (3)(A)(viii), and", and |
| 23 | (C) by inserting "or (ii)" after "clause (i)" |
| 24 | in clause (iii), as so redesignated. |

| 1 | (2) Increased credit for greater effi- |
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| 2 | CIENCY.—Clause (i) of section $48(a)(2)(A)$ is |
| 3 | amended by striking "and" at the end of subclause |
| 4 | (III) and by inserting after subclause (IV) the fol- |
| 5 | lowing new subclause: |
| 6 | "(V) energy property described in |
| 7 | paragraph (3)(A)(viii) which operates |
| 8 | at an output efficiency of not less |
| 9 | than 80 percent (measured by the |
| 10 | higher heating value of the fuel),". |
| 11 | (c) Effective Date.—The amendments made by |
| 12 | this section shall apply to periods after the date of the |
| 13 | enactment of this Act, in taxable years ending after such |
| 14 | date, under rules similar to the rules of section 48(m) of |
| 15 | the Internal Revenue Code of 1986 (as in effect on the |
| 16 | day before the date of the enactment of the Revenue Rec- |
| 17 | onciliation Act of 1990). |
| | |