Beginning of Construction for Purposes of the Renewable Electricity Production Tax Credit and Energy Investment Tax Credit

Notice 2013-29

SECTION 1. PURPOSE

Under the American Taxpayer Relief Act of 2012, Pub. L. No. 112-240, 126 Stat. 2313 (ATRA), a qualified facility (as described in section 45(d) of the Internal Revenue Code) will be eligible to receive the renewable electricity production tax credit (PTC) under section 45, or the energy investment tax credit (ITC) under section 48 in lieu of the PTC, if construction of such facility begins before January 1, 2014. This notice provides guidelines and a safe harbor to determine when construction has begun on such a facility.

SECTION 2. BACKGROUND

A taxpayer can claim a PTC with respect to electricity produced at a “qualified facility” within the meaning of section 45(d). If the taxpayer makes an election under section 48(a)(5), the taxpayer may instead claim an ITC with respect to that facility. Prior to ATRA, to be a qualified facility, a facility was required to be placed in service before January 1, 2014, except for qualified wind facilities, which had to be placed in service before January 1, 2013. Section 407 of ATRA modified section 45 by extending the PTC for wind facilities through 2013. ATRA also modified the definition of qualified facility by replacing the requirement to place a facility in service before January 1, 2014, with the requirement to begin construction of a facility before January 1, 2014. For
purposes of sections 45(d) and 48(a)(5), qualified facilities include wind facilities, closed-loop biomass facilities, open-loop biomass facilities, geothermal facilities, landfill gas facilities, trash facilities, hydropower facilities, and marine and hydrokinetic facilities.

**SECTION 3. METHODS FOR ESTABLISHING BEGINNING OF CONSTRUCTION**

This notice provides two methods that a taxpayer may use to establish that construction of a qualified facility has begun. A taxpayer may establish the beginning of construction by starting physical work of a significant nature as described in section 4. Alternatively, a taxpayer may establish the beginning of construction by meeting the safe harbor provided in section 5 (Safe Harbor). Although a taxpayer may satisfy both methods, a taxpayer need only satisfy one method to establish that construction of a facility has begun for the purpose of qualifying for the PTC or ITC.

**SECTION 4. PHYSICAL WORK**

.01 In general. Construction of a qualified facility begins when physical work of a significant nature begins. Work performed by the taxpayer and work performed for the taxpayer by other persons under a binding written contract that is entered into prior to the manufacture, construction, or production of the property for use by the taxpayer in the taxpayer’s trade or business (or for the taxpayer’s production of income) is taken into account in determining whether construction has begun. Whether a taxpayer has begun construction of a facility before January 1, 2014, will depend on the relevant facts and circumstances. The Internal Revenue Service will closely scrutinize a facility, and may determine that construction has not begun on a facility before January 1, 2014, if a taxpayer does not maintain a continuous program of construction as determined under
.02 Physical work of a significant nature. Both on-site and off-site work (performed either by the taxpayer or by another person under a binding written contract) may be taken into account for purposes of demonstrating that physical work of a significant nature has begun. For example, in the case of a facility for the production of electricity from a wind turbine, on-site physical work of a significant nature begins with the beginning of the excavation for the foundation, the setting of anchor bolts into the ground, or the pouring of the concrete pads of the foundation. If the facility’s wind turbines and tower units are to be assembled on-site from components manufactured off-site by a person other than the taxpayer and delivered to the site, physical work of a significant nature begins when the manufacture of the components begins at the off-site location, but only if (i) the manufacturer’s work is done pursuant to a binding written contract (as described in section 4.03(1)) and (ii) these components are not held in the manufacturer’s inventory (as described in section 4.02(2)). If a manufacturer produces components for multiple facilities, a reasonable method must be used to associate individual components with particular facilities.

(1) Preliminary activities. Physical work of a significant nature does not include preliminary activities, even if the cost of those preliminary activities is properly included in the depreciable basis of the facility. Preliminary activities include planning or designing, securing financing, exploring, researching, obtaining permits, licensing, conducting surveys, environmental and engineering studies, clearing a site, test drilling of a geothermal deposit, test drilling to determine soil condition, or excavation to change
the contour of the land (as distinguished from excavation for footings and foundations).

Removal of existing turbines and towers is preliminary work and, therefore, does not constitute physical work of a significant nature with respect to the facility.

(2) **Inventory.** Physical work of a significant nature does not include work (performed either by the taxpayer or by another person under a binding written contract) to produce property that is either in existing inventory or is normally held in inventory by a vendor.

.03 **Construction by contract.** For property that is manufactured, constructed, or produced for the taxpayer by another person under a binding written contract (as described in section 4.03(1)), the work performed under the contract is taken into account in determining when physical work of a significant nature begins, provided the contract is entered into prior to the work taking place.

(1) **Binding written contract.** A contract is binding only if it is enforceable under local law against the taxpayer or a predecessor and does not limit damages to a specified amount (for example, by use of a liquidated damages provision). For this purpose, a contractual provision that limits damages to an amount equal to at least five percent of the total contract price will not be treated as limiting damages to a specified amount. For additional guidance regarding the definition of a binding contract, see § 1.168(k)-1(b)(4)(ii)(A)-(D).

(2) **Master contract.** If a taxpayer enters into a binding written contract for a specific number of components to be manufactured, constructed, or produced for the taxpayer by another person under a binding written contract (a “master contract”), and
then through a new binding written contract (a “project contract”) the taxpayer assigns
its rights to certain components to an affiliated special purpose vehicle that will own the
facility for which such property is to be used, work performed with respect to the master
contract may be taken into account in determining when physical work of a significant
nature begins with respect to the facility.

.04 Facility – (1) In general. A facility (within the meaning of section 45(d))
generally includes all components of property that are functionally interdependent.
Components of property are functionally interdependent if the placing in service of each
of the components is dependent upon the placing in service of each of the other
components in order to generate electricity. For example, on a wind farm for the
production of electricity from wind energy, an electricity-generating wind turbine, its
tower, and its supporting pad comprise a single facility. Each such facility can be
separately operated and metered and can begin producing electricity separately. See

(2) Single project. Solely for purposes of determining whether construction of a
facility has begun for purposes of sections 45 and 48, multiple facilities that are
operated as part of a single project (along with any property, such as a computer control
system, that serves some or all such facilities) will be treated as a single facility.
Whether multiple facilities are operated as part of a single project will depend on the
relevant facts and circumstances. Factors indicating that multiple facilities are operated
as part of a single project include, but are not limited to:

(a) The facilities are owned by a single legal entity;
(b) The facilities are constructed on contiguous pieces of land;

c) The facilities are described in a common power purchase agreement or agreements;

d) The facilities have a common intertie;

e) The facilities share a common substation;

f) The facilities are described in one or more common environmental or other regulatory permits;

(g) The facilities were constructed pursuant to a single master construction contract; and

(h) The construction of the facilities was financed pursuant to the same loan agreement.

(3) Example. X is developing a wind farm that will consist of 50 turbines, their associated towers, their supporting pads, a computer system that monitors and controls the turbines, and associated power conditioning equipment. The entire wind farm will be connected to the power grid through a single intertie, and power generated by the wind farm will be sold to a local utility through a single power purchase agreement. In 2013, for 10 of the 50 turbines, X excavates the site for the foundations of the wind turbines and pours concrete for the supporting pads. Thereafter, X completes the construction of all 50 turbines and related facilities pursuant to a continuous program of construction (as determined under section 4.06). For purposes of sections 45 and 48, the entire wind farm is a single project that will be treated as a single facility, and X has performed physical work of a significant nature that constitutes the beginning of
construction of that facility in 2013.

.05 Property integral to the facility – (1) In general. Only physical work of a significant nature on tangible personal property and other tangible property used as an integral part of the activity performed by the facility will be considered for purposes of determining whether a taxpayer has begun construction of a facility. This includes property integral to the production of electricity, but does not include property used for electrical transmission. Thus, physical work on a transmission tower located at the site is not physical work of a significant nature because the transmission is not an integral part of the activity performed by the facility. However, physical work on a custom-designed transformer that steps up the voltage of electricity produced at the facility to the voltage needed for transmission is physical work of a significant nature with respect to the facility because power conditioning equipment is an integral part of the activity performed by the facility.

(2) Roads. Roads that are integral to the facility are integral to the activity performed by the facility; these include onsite roads that are used for moving materials to be processed (for example, biomass) and roads for equipment to operate and maintain the qualified facility. Starting construction on these roads constitutes physical work of a significant nature with respect to the facility. Roads primarily for access to the site, or roads used primarily for employee or visitor vehicles are not integral to the activity performed by the facility; physical work of a significant nature on these roads is not considered for purposes of determining whether a taxpayer has begun construction of a facility.
(3) **Fencing.** Generally, fencing is not an integral part of the facility because it is not integral to the activity performed by the facility.

(4) **Buildings.** Generally, buildings are not integral parts of the facility because they are not integral to the activity of the facility. However, the following structures are not treated as buildings for this purpose: (1) a structure that is essentially an item of machinery or equipment, or (2) a structure that houses property that is integral to the activity of the facility if the use of the structure is so closely related to the use of the housed property that the structure clearly can be expected to be replaced when the property it initially houses is replaced. See Treas. Regs. § 1.48-1(e)(1).

.06 **Continuous construction** – (1) **In general.** A continuous program of construction involves continuing physical work of a significant nature (as described in section 4.02). Whether a taxpayer maintains a continuous program of construction will be determined by the relevant facts and circumstances.

(2) **Construction disruptions.** Certain disruptions in the taxpayer’s construction of a facility that are beyond the taxpayer’s control will not be considered as indicating that a taxpayer has failed to maintain a continuous program of construction. Examples of such disruptions include, but are not limited to:

(a) severe weather conditions;

(b) natural disasters;

(c) licensing and permitting delays;

(d) delays at the written request of a state or federal agency regarding matters of safety, security, or similar concerns;
(e) labor stoppages;
(f) inability to obtain specialized equipment of limited availability;
(g) the presence of endangered species;
(h) financing delays of less than six months; and
(i) supply shortages.

SECTION 5. SAFE HARBOR

.01 In general. Construction of a facility will be considered as having begun before January 1, 2014, if (1) a taxpayer pays or incurs (within the meaning of Treas. Reg. § 1.461-1(a)(1) and (2)) five percent or more of the total cost of the facility, except as provided in section 5.01(2), before January 1, 2014, and (2) thereafter, the taxpayer makes continuous efforts to advance towards completion of the facility (as determined under section 5.02).

(1) Total cost of the facility. All costs properly included in the depreciable basis of the facility are taken into account to determine whether the Safe Harbor has been met. The total cost of the facility does not include the cost of land or any property not integral to the facility, as described in section 4.05(1).

(2) Look-through for economic performance. Solely for purposes of this notice, for property that is manufactured, constructed, or produced for the taxpayer by another person under a binding written contract with the taxpayer, costs incurred with respect to the property by the other person before the property is provided to the taxpayer are deemed incurred by the taxpayer when the costs are incurred by the other person under the principles of section 461.
(3) **Example.** In 2013, accrual-method taxpayer W enters into a binding written contract with A pursuant to which W will provide a wind turbine to A in June 2015. In 2013, W pays Y pursuant to a contract for Y to provide parts in May 2014 for use in the wind turbine. W’s employees provide W with services necessary to design and plan for the production of the wind turbine in 2013 and with services to manufacture (assemble) the wind turbine in 2015. W incurs the cost to design and plan for the production of the turbine assembly in 2013, incurs the costs for the parts in May 2014 when Y delivers the parts to W (even though the parts were paid for in 2013), and incurs the costs for W’s employees to manufacture the wind turbine in 2015. See § 1.461-4(d) and § 1.446-1(c)(1)(ii). The costs W incurred in 2013 for its employees’ performance of turbine design and planning activities are costs deemed incurred by A before January 1, 2014, for purposes of the Safe Harbor. The other costs in this example were incurred by W in 2014 and 2015 and are costs that A includes in the total cost of the facility, but these other costs were not deemed incurred by A before January 1, 2014.

.02 **Continuous efforts – (1) In general.** Whether a taxpayer makes continuous efforts to advance towards completion of the facility will be determined by the relevant facts and circumstances. Facts and circumstances indicating continuous efforts to advance towards completion of the facility may include, but are not limited to:

(a) paying or incurring additional amounts included in the total cost of the facility;

(b) entering into binding written contracts for components or future work on construction of the facility;

(c) obtaining necessary permits; and
(d) performing physical work of a significant nature (as described in section 4.02).

(2) **Disruptions to continuous efforts.** Certain disruptions in the taxpayer’s continuous efforts to advance towards completion of the facility that are beyond the taxpayer’s control will not be considered as indicating that a taxpayer has failed to make continuous efforts to advance towards completion of the facility. Examples of such disruptions include, but are not limited to:

(a) severe weather conditions;

(b) natural disasters;

(c) licensing and permitting delays;

(d) delays at the written request of a state or federal agency regarding matters of safety, security, or similar concerns;

(e) labor stoppages;

(f) inability to obtain specialized equipment of limited availability;

(g) the presence of endangered species;

(h) financing delays of less than six months; and

(i) supply shortages.

.03 **Cost overruns** – (1) **Single project.** If the total cost of a facility that is a single project comprised of multiple facilities (as described in section 4.04(2)) exceeds its anticipated total cost, so that the amount a taxpayer actually paid or incurred with respect to the facility before January 1, 2014, is less than five percent of the total cost of the facility at the time the facility is placed in service, the Safe Harbor is not fully satisfied. However, the Safe Harbor will be satisfied and the PTC or ITC may be
claimed with respect to some, but not all, of the individual facilities (as described in section 4.04(1)) comprising the single project, as long as the total aggregate cost of those individual facilities is not more than twenty times greater than the amount the taxpayer paid or incurred before January 1, 2014 (see Example 1 in section 5.03(3)(a)).

(2) Single facility. If the total cost of a single facility that is not a single project comprised of multiple facilities (as described in section 4.04(2)), and cannot be separated into smaller facilities, exceeds its anticipated total cost so that the amount a taxpayer actually paid or incurred with respect to the facility before January 1, 2014, is less than five percent of the total cost of the facility at the time the facility is placed in service, then the taxpayer will not satisfy the Safe Harbor with respect to any portion of the facility.

(3) Examples – (a) Example 1. A taxpayer incurs $25,000 in costs in 2013 constructing a five-turbine wind farm that will be operated as a single project (as described in section 4.04(2)), anticipating that each turbine (including its own tower and pad) will cost $100,000 for a total cost for the facility of $500,000. Thereafter, the taxpayer makes continuous efforts to advance towards completion of the facility. At the time the taxpayer places the wind farm in service, the actual total cost of the facility amounts to $600,000, with each turbine costing $120,000. Although the taxpayer did not pay or incur five percent of the actual total cost of the facility before January 1, 2014, the taxpayer will be treated as satisfying the Safe Harbor with respect to four of the turbines, as their actual total cost of $480,000 is not more than twenty times greater than the $25,000 in costs incurred by the taxpayer in 2013. Thus, the taxpayer may
claim the PTC on electricity produced from four of the turbines, or the ITC based on $480,000, the cost of four of the turbines. Alternatively, if construction of the facility began (within the meaning of section 4.01) before January 1, 2014, the taxpayer may be able to claim the PTC or the ITC with respect to the entire facility (all five turbines).

(b) Example 2. A taxpayer incurs $25,000 in costs in 2013 in constructing an open-loop biomass facility, anticipating that the total cost of the facility, including one boiler and one turbine generator, will be $500,000. The boiler and turbine generator are functionally interdependent. Thereafter, the taxpayer makes continuous efforts to advance towards completion of the facility. At the time the taxpayer places the facility in service, its actual total cost amounts to $600,000. Because the boiler and turbine generator are a single facility that is not a single project comprised of multiple facilities (as described in section 4.04(2)), the taxpayer will not satisfy the Safe Harbor. However, if construction of the facility began (within the meaning of section 4.01) before January 1, 2014, the taxpayer may be able to claim the PTC or the ITC with respect to the entire facility.

SECTION 6. DRAFTING INFORMATION

The principal author of this notice is Brian J. Americus of the Office of Associate Chief Counsel (Passthroughs & Special Industries). For further information regarding this notice contact Brian J. Americus on (202) 622-3110 (not a toll-free call).