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Primer on Energy Tax Credits

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Overview of Presentation

- Tax Planning
  - Viable Transaction Structures
  - Investor Considerations (e.g., economic substance)
- Review of the IRS Private Letter Ruling (PLR) process
- Detailed Review of the Principal Renewable Energy Tax Credit Provisions and Requirements (e.g., Sections 45 and 48)
- Virginia Tax Incentives for Renewable Energy Projects
- Legislative Developments and Expectations
- Priority Guidance from Treasury and Expected IRS Guidance
- Overview of Other Energy Tax Credits and Benefits (e.g., special depreciation allowance)

Principal Tax Credits

- The Internal Revenue Code contains a number of key tax credit provisions for energy projects
- Two categories of energy income tax credits: (1) Production tax credits and (2) Investment tax credits
- Excise tax credits for the production of certain renewable or alternative fuels
- Details regarding the requirements for the tax credits will be discussed in details in the latter half of this presentation

Tax Planning: Investment Structures

- No one typical arrangement/structure for investing in qualified production facilities or property eligible for investment tax credits. Each arrangement/structure will require consideration of the various technical requirements of the credit and also of the rules relating to the structure itself (e.g., partnership tax rules) and those developed by the courts (e.g., economic substance doctrine)
- Various arrangements/structures reviewed by IRS in the PLR process. Transactions fully disclosed and reviewed in the PLR process. Transactions generally conditioned upon the receipt of a favorable PLR. However, IRS will not issue PLRs on partnership tax issues under Section 45 (with one exception).

Non-Tax Considerations for Arrangements/Structures

- Numerous agreements may be involved in the commercial arrangements for a energy tax credit deal. Terms of agreements and business issues are often heavily negotiated and there are various issues of price, risk and reward and are allocated in various ways (e.g., covenants, representations of seller and operator). Also, extensive non-tax due diligence (e.g., environmental and state law regulatory issues). Finally, additional issues of target returns and exit strategies for investors.

- Site lease and control agreements
- Access agreements
- Feedstock and transportation agreements
- Operating and maintenance agreements
- Feedstock and product handling agreements
- Energy purchase agreements
- Technology licensing agreements
- Union or employee contracts (if required)
- Consulting agreements
- Partnership or limited liability company agreements
- Operating protocols

Potential Sale Structures

- Sale structures are negotiated. Price and structure based on return, risk, and similar business considerations:
  - Upfront payment (all cash at closing)
  - Upfront payment and note or obligation for future fixed payments
  - Upfront payment and note or obligation for future contingent payments
  - Upfront payment and notes or obligations for future fixed and contingent payments
- Investor generally has certain control and consent rights regarding the operation of the facility.

Investment Structures: Straight Partnership Investment

- Investor purchases an interest in a partnership entity (LP, LLP, etc.) or a limited liability company ("LLC") taxed as a partnership from existing investors or project sponsor or developer. Corporations typically invest through partnership structures.
- Non-tax issues regarding risk and rewards
- Existing investors and new Investor make capital contributions for operation of the facility Partnership owns the facility and is the "taxpayer"
- Exit strategies - Put or call option with respect to entire ownership interest or Termination of partnership. Note that an investor must remain a partner or member for at least 5 years from the date the project is placed in service in the case of investment tax credits
- Investor will be allocated tax credits under the partnership tax rules
  - Production tax credits: Based on receipts from sale of production
  - Investment tax credits: Based on allocations of taxable income or special allocations if substantial economic effect rules met
- Inability to make special allocations
- State law liability risks to corporate entity
- No flexibility to use managing member or operating partner

- Inflexible exit strategy

Investment Structures: FLIP Partnership Investment

- Partnership is set up with two classes of membership interests. Investor owns preferred interests. Managing members own common interests. Initially, Investor receives preferred distributions of cash from the partnership entity on a 99% to 1% basis (or other similar percentages) and the distributions "FLIP" 10% to Investor and 90% (or other percentages) to the other partners/members of the partnership entity if:
    - o Investor has been a partner/member of the entity for at least 5 years from the date the project is placed in service, in the case of investment tax credits, or the remaining credit period, in the case of production tax credits, and/or
    - o Investor has received preferred distributions that exceed an agreed-upon return (including the tax credits and other tax benefits) on the purchase price for its membership interest
- Profits, losses, and tax credits are allocated in the same manner as distributions
- Exit strategies - At some point after 5 years from the placed-in-service date, in the case of investment tax credits, or after the remaining credit period, in the case of production tax credits, the other partners/members have the right to purchase the Investors' interests in the partnership entity at fair market value, and the partnership entity terminates and liquidates
- The IRS recently issued a Rev. Proc. providing a partnership flip structure safe harbor.

Investment Tax Credit Considerations

- If investment is made through a straight partnership investment or a flip structure investment, the investment <u>in all events</u> must be made before the placed-in-service date of the investment credit property. Credits are not available to investors in partnerships or otherwise, if the investments are made (i) after the placed-in-service date or (ii) after qualified progress expenditures are made.
- Partners may be subject to recapture rules if:
    - o Investment credit property is sold or otherwise disposed of
    - o There is a change in use of the investment credit property
    - o Partner sells interest before the end of the 5-year recapture period
    - o Partner's interest flips before the end of the 5-year recapture period

Investment Structures: Sale-and-Leaseback

- Investor purchases the project and leases it back to a tax-indifferent third party who operates the facility and receives any profits from the sale of production.
- Note that structure will not work with production tax credits that require the taxpayer to be the energy producer. However, transaction may work with investment tax credits
- Investor, as owner of the facility, claims the tax credits and depreciation deductions associated with the facility

- Lessee pays rent to Investor in amounts sufficient to repay purchase price and a certain percentage return
- Investor may use a leveraged-lease arrangement and purchase property with loan proceeds
  - Rent payments are used to pay down principal and make interest payments
  - Interest deductions are then used to offset rental income
- Limitations:
  - Section 467 rent allocation rules
  - Section 470 limitations on deductions allocable to property used by governments or other tax-exempt entities
  - Section 168(h) tax-exempt use property rules
  - Special rules for noncorporate lessors under former Section 46(e)(3), incorporated by Section 50(d)(1)
- Sale-and-Leaseback transactions should be structured within IRS's minimum ruling requirements (Rev. Procs. 75-21 & 2001-28)
  - Leased property must have expected value at end of the lease term of at least 20% of the cost (calculated without regard to inflation)
  - Leased property must have a remaining economic life at the end of the lease term (including any fixed rate renewal options) of at least 20% of the useful life at the commencement of the lease
  - Lessee cannot provide any portion of the cost of the property
  - Property cannot be "limited use property"
  - Overall pre-tax profit and positive cash flow are required
  - Lessee cannot provide or guarantee lessor's indebtedness incurred to acquire the property
  - Lessor must maintain an equity investment of at least 20% of the cost of the property throughout the term of the lease
  - No fixed price purchase options (only fair market value at the time option is exercisable)
- Exit Strategy - Lessee has the option to repurchase the facility on a fixed date for fair market value. Lease terminates at certain point and residual value of facility reverts to Investor or subject to sale or service contract arrangement. Put options will not work.

Investment Structures: Lessee Pass-Through Election

- Owner of the facility leases the tax credit property to the Investor or a partnership entity in which the Investor is a partner/member
- On placed-in-service date, project sponsors make a pass-through election under Section 50(d), passing-through the tax credits to the LLC
- Investor receives tax credit allocations and cash-an-cash return
- Owner of the facility claims depreciation and other deductions
- Transaction will not work with production tax credits that require the taxpayer to be the energy producer
- Transaction may work with investment tax credit. Useful where the owner does not have the ability to effectively employ investment tax credits
  - Can transfer the credits to a lessee-investor who is able to use investment

    tax credits to offset tax liability
  - Lessor receives the benefit of rental receipts which can be offset, at least in part, with depreciation and/or interest deductions
- Opportunities to leverage project economics
  - Pass-through election could be used in combination with a partnership-lessee structure
- Similar lease limitations and guidelines apply to lessor-lessee election
- Old investment tax credit rules are specifically incorporated under Section 50(d)
- Lessee must be first user of the property in order to make the pass-through election

Investment Structures: Service Contract Arrangement

- Energy purchaser or a third party sells the qualified facility to the Investor or a partnership entity in which the Investor is a partner/member. Energy purchaser enters into an energy purchase agreement with the Investor or the partnership entity and purchases the energy at a discounted price. (Note that an advance payment for electricity is possible)
- Operating and maintenance and certain other costs are passed through to the energy purchaser as part of the consideration for the electricity
- The Investor receives the production or investment tax credits and depreciation deductions as the producer and owner of the facility
- Energy purchaser has an option to purchase the facility at the end of the service contract term
- Service contract arrangement must be structured carefully under the special rules provided in Section 7701(e)(3) and (4)
- First, the facility must be an "alternative energy facility" - a facility for producing electrical or thermal energy if the primary energy source for the facility is not oil, natural gas, coal, or nuclear power. Note that qualified facilities in Section 45 with the exception of refined coal production facilities and Indian coal production facilities would be treated as alternative energy facilities
- The four "foot faults" of Section 7701(e)(4):
  - the service recipient (or a related entity) operates such facility
  - the service recipient (or a related entity) bears any significant financial burden if there is nonperformance under the contract or arrangement (other than for reasons beyond the control of the service provider)
  - the service recipient (or a related entity) receives any significant financial benefit if the operating costs of such facility are less than the standards of performance or operation under the contract or arrangement
  - the service recipient (or a related entity) has an option to purchase, or may be required to purchase, all or a part of such facility at a fixed and determinable price (other than for fair market value)
- Related entity rules of Section 168(h)(4) apply
- Any contract or arrangement between a service provider and a service recipient which is an alternative energy facility (and does not trigger the four "foot faults" in Section 7701 (e)(4)), which purports to be a service contract, "shall be treated as a service contract."

- Deemed to satisfy "producer" requirement of Section 45 and other credits
    - May be deemed to satisfy tax ownership requirement
- No regulations under Section 7701(e)(3) and (4) and no IRS published guidance. The Legislative history is key guidance and PLR 8749045

Key Tax Issues For Various Structures

- Taxpayer must be treated as the tax owner of the qualified facility for production and investment tax credit purposes, but there are certain exceptions:
    - Open-loop biomass facilities
    - Lessee pass-through election
- Production tax credits: (1) Taxpayer must be the producer of the energy product and (2) Taxpayer must have the risk and rewards of, and title to, the production from the qualified facility
- Investment tax credits: Special rules that relate to partnerships
- Economic substance

Special Partnership Investment Tax Credit Rules: Allocations

- Allocations of investment tax credits cannot have economic effect under the Section 704 regulations
- Investment credit property basis is allocated to the partners in accordance with their interests in the partnership, determined in accordance with the ratio in which they divide the general profits of the partnership (that is the taxable income of the partnership)
- Notwithstanding this rule, if all related items of income, gain, loss, and deduction with respect to any item of partnership investment credit property are specially allocated in the same manner, and if such special allocation is recognized under the substantial economic effect rules of the Section 704 regulations, then each partner's share of the basis of the investment credit property is determined by reference to such special allocation
- Special opt-out rule for 5% or less partners

Special Partnership Investment Tax Credit Rules: Recapture

- If a partner sells all or part of its partnership interest, the partner is treated as having sold its share of the investment credit property held by the partnership
- If the partner sells all of its partnership interest, and the sale occurs within the 5-year recapture period (or during the period before the placed-in-service date, if qualified progress expenditures have been made), the general recapture rules apply to the partner's share of investment credit property
- A partner is subject to recapture if (during the 5-year recapture period):
    - Its interest in the partnership's general profits (or the item of property) is reduced to less than 66 2/3% of its interest at the time the property was placed in service,
    - Again, if its interest in general partnership profits is reduced further to less than 33 1/3% of its interest at the time the property was placed in service, and
    - Presumably, again, if its interest in general partnership profits is further

reduced to 0%

Special Partnership Investment Tax Credit Rules: Recapture Triggers

- Sale of portions of partnership interest, including sales among partners
- "Flip" in partnership distributions and allocations during 5-year recapture period or before placed-in-service date where qualified progress expenditures have been made
- Section 708(b)(1)(8) technical termination of partnership during recapture period
- Distributions of all or a portion of the investment credit property to partners
- Contributions of investment credit property to another entity if contribution does not meet the certain special rules

Economic Substance

- Economic substance doctrine developed by courts permits IRS to recharacterize a transaction in certain circumstances or to disregard certain of its components
  - Subjective business purpose
  - Objective economic substance
- U.S. Supreme Court (Frank Lyon case): "In short, we hold that where, as here, there is a genuine multiple-party transaction with economic substance which is compelled or encouraged by business or regulatory realities, is imbued with tax-independent considerations, and is not shaped solely by tax-avoidance features that have meaningless labels attached, the Government should honor the allocation of rights and duties effectuated by the parties. Expressed another way, so long as the lessor retains significant and genuine attributes of the traditional lessor status, the form of the transaction adopted by the parties governs for tax purposes."
- Investors and/or project company may lack a pre-tax profit or cash-an-cash return from the investment
- General rule: "a transaction has economic substance and will be recognized for tax purposes if the transaction offers a reasonable opportunity for economic profit, that is, profit exclusive of tax benefits" (pre-tax profit potential)
- Leasing transactions require minimal profitability:
  - Estate of Thomas case: 1 % pre-tax profit
  - IRS Chief Counsel's Office has informally commented that it will not challenge leveraged-lease transactions with a 2% to 4% profitability

Ninth Circuit Rule: Sacks Case

- "Where a transaction has economic substance, it does not become a sham merely because it is likely to be unprofitable on a pre-tax basis"
- Not clear that this rule applies outside of the Ninth Circuit
- Sacks dealt with investment tax credit (solar) and accelerated depreciation benefits
- Sacks requires legislative intent to incentivize energy investment: "Absence of pre-tax profitability does not show 'whether the transaction had economic substance beyond the creation of tax benefits,' ... where Congress has purposely used tax incentives to change investors' conduct."

- Requires genuine non-tax economic effects (as cited in Sacks):
  - Genuine personal obligation to pay the price for the solar heaters
  - Taxpayer paid fair market value for the heaters
  - The transaction shifted the tax benefits but did not create them from thin air
  - The business of putting solar water heaters on homeowners' roofs was genuine
  - The business consequences of a rise or fall in energy prices and solar energy devices were genuinely shifted to the taxpayer by the transaction
- Recognized by IRS in PLRs and advisories: (1) Priv. Ltr. Rul. 200609001, (2) 1998 FSA LEXIS 125, (3) Implicit rulings on economic substance in other tax credit PLRs

Proposed Legislation

- The Senate has proposed legislation to codify the economic substance doctrine: A transaction has economic substance only if: (1) the transaction changes in a meaningful way (apart from Federal tax effects) the taxpayer's economic position, and (2) the taxpayer has a substantial nontax purpose for entering into such transaction and the transaction is a reasonable means of accomplishing such purpose. Note that any financial accounting benefit is not taken into account in the determination of substantial nontax purpose.
- A transaction is not treated as having economic substance by reason of having a potential for profit unless (1) the present value of the reasonably expected pre-tax profit from the transaction is substantial in relation to the present value of the expected net tax benefits that would be allowed if the transaction were respected, and (2) the reasonably expected pre-tax profit from the transaction exceeds a risk-free rate of return
- Special rule for lessors: In applying the pre-tax profit rule, the expected net tax benefits with respect to the leased property shall not include the benefits of depreciation, any tax credit, or any other deduction as provided in guidance and the risk-free rate of return rule shall not apply.

Investor Considerations: Reportable Transaction Rules

- Taxpayers and promoters are required to comply with certain reporting rules in the case of reportable transactions. Taxpayer must attach a disclosure statement to its tax return for each taxable year for which it participates in a reportable transaction.
  - Copy must be sent to the Office of Tax Shelter Analysis at the same time that any disclosure statement is first filed by the taxpayer
  - In the case of a taxpayer that is a partnership or S corporation, the disclosure statement for a reportable transaction must be attached to the entity's tax return for each taxable year in which the entity participates in the transaction
- Five categories of reportable transactions:
  - Listed transactions Same as or substantially similar to one of the types of transactions that the IRS has determined to be a tax avoidance transaction

and identified by notice, regulation, or other form of published guidance as a listed transaction. Not likely an issue with energy tax credit transactions.
    - Confidential transactions - A transaction that is (1) offered to a taxpayer under conditions of confidentiality conditions imposed by advisor and limitation on disclosure protects advisor's tax strategies, and (2) the taxpayer pays the advisor a minimum fee (broadly defined) ($250,000 for a transaction if the taxpayer is a corporation or a partnership or trust and all of the ultimate owners or beneficiaries are corporations, or $50,000 for all other transactions)
        - Solution: Add confidentiality carve-out language to all agreements allowing disclosure to any and all persons, without limitation of any kind, of the U.S. federal tax structure and U.S. federal tax treatment of the transaction.
    - Transactions with contractual protection - Taxpayer or a related party has the right to a full or partial refund of fees if all or part of the intended tax consequences from the transaction are not sustained (includes certain contingent fee transactions, but excludes right to a transaction in certain circumstances)
    - Loss transactions - Any transaction resulting in the taxpayer claiming a loss under Section 165 at certain levels.
    - [Repealed] Transactions involving a brief asset holding period

Private Letter Ruling Process

- Transactions are approved by the IRS through Private Letter Rulings ("PLRs"). PLRs can be obtained in advance of undertaking a transaction or after the transaction occurs if events have occurred that raise doubts as to whether the prior PLR will be followed prospectively
    - Provides some degree of certainty with respect to a transaction
    - Protects against overzealous Exam teams

Types of Rulings (Section 45)

- Production of electricity from the facility will be attributable solely to Taxpayer and, as a result, Taxpayer and Taxpayer's partners will be entitled to the Section 45 credit for electricity sold to unrelated persons
- The renewable electricity production credit under Section 45 is allowed to Taxpayer and may be passed through to and allocated to the partners of Taxpayer under the principles of Section 702(a)(7) in accordance with the partners' interest in Taxpayer as of the time the tax credit arises
- The facility will be deemed to have been placed in service for purposes of Section 45 on the date the turbines are placed in a condition or state of readiness and availability to produce electricity within the meaning of Treas. Reg. Secs. 1.46-3(d)(1)(ii) and 1.167(a)-11 (e)(1)(i)
- A future termination of Taxpayer under Section 708(b)(1)(8) will not preclude the reconstituted partnership from claiming the Section 45 credit for the sale of electricity to unrelated persons that is generated from the facility

- The amount of the Section 45 credits attributable to Taxpayer and its partners are entitled to claim will not be reduced because of certain financing, payments, credits, etc. (discussed below)

No-Rule Areas

- The IRS will not rule on whether a facility has satisfied the placed-in-service date requirements
- In recent interim guidance (Notice 2006-88) the IRS has stated it will not issue PLRs regarding Section 45 as it relates to open-loop biomass
- The IRS has also stated it will not rule on any issues under Subchapter K for partnerships claiming the credit under Section 45
- Includes "FLIP" partnership structures (but see safe harbor recently issued by IRS)
- The IRS will not rule specifically on economic substance but economic substance is often implicitly dealt with in PLRs

Status of PLRs

- PLRs and other written determinations of the IRS (e.g., technical advice memoranda) may not be used or cited as precedent
- PLRs binding only on the IRS and the parties to whom they have been issued
- Courts have cited PLRs as evidence of the IRS's interpretation of a particular Code section or provision
- Duty of administrative consistency has not been consistently applied by the courts or the IRS in the case of PLRs
- Material change in facts underlying a PLR causes it to lose prospectively its binding effect with respect to the taxpayer to which it was issued
- Adoption of temporary or final regulations will supercede PLR, even with respect to the taxpayer to which it was issued, on a prospective basis to the extent such regulations are inconsistent with the PLR

PLR Application Process

- Partnership (and Investors) applies for a PLR
- PLR request will contain a full description of taxpayer information, facility's facts and history (if applicable), commercial transaction, and investor transaction, and attaches all relevant documents:
    - Purchase and sale transaction documents
    - Commercial transaction documents
    - Documents regarding the partnership
    - Documents regarding the facility its operations
    - Engineering reports
- Contains an analysis of all relevant authority
- Complies with all IRS guidelines for issuance of the PLR

Section 45 Production Tax Credit

- Section 45 provides a renewable electricity credit for any taxable year equal to the product of 1.5 cents, multiplied by the kilowatt hours of electricity
  - produced by the taxpayer
  - from qualifying energy resources, and
  - at a qualifying facility during the 10-year period beginning on the date the facility was originally placed in service, and
  - sold by the taxpayer to an unrelated person during the taxable year.

Produced by the Taxpayer

- To claim the Section 45 tax credit, the electricity must be produced by the taxpayer
  - Producer has the risks and rewards of production and sale of electricity; bears risks and receives benefits of price fluctuations
  - Operation and maintenance agreements with respect to the qualified facility and production should not impact determination of who is the producer
  - Special rules under Section 7701 (e) for service contract arrangements
  - Partnership is the taxpayer in the case of a partnership investment structure
  - Production must occur in the United States or its possessions

Tax Ownership

- Implicit in Section 45 requirements is the general tax ownership requirements. Taxpayer must own the qualified facility to claim Section 45 tax credits
- Identity of interest between producer and owner
  - Exception for open-loop biomass facilities: Section 45(d)(3)(B): "In the case of any [open-loop biomass facility] ... , if the owner of such facility is not the producer of the electricity, the person eligible for the credit allowable under [Section 45(a)] ... shall be the lessee or the operator of such facility."
- Determination of tax ownership: (1) Benefits and Burdens of Ownership Test, and (2) Economic Substance Doctrine

Qualified Energy Resources Include:

- Wind
- Closed-loop biomass
- Open-loop biomass
- Geothermal energy
- Solar energy
- Small irrigation power
- Municipal solid waste
- Qualified hydropower production

Wind Facilities

- A facility using wind to produce electricity is a qualified facility if the facility is owned by the taxpayer which is originally placed in service after December 31, 1993, and before January 1, 2009. (Placed-in-service rules applicable to various tax credits will be discussed later in this presentation.)
- Note that Section 45 does not require the facilities to be originally placed in service by the taxpayer whereas other tax credit provisions of the Code may require the original use of the facility to commence with the taxpayer, see e.g., Section 45K(f)(2) (coke or coke gas facilities)

Closed-Loop Biomass

- "Closed-loop biomass" means "any organic material from a plant which is planted exclusively for purposes of being used at a qualified facility to produce electricity." (Switchgrass mentioned in legislative history. Does not include standing timber.)
- In the case of a facility using closed-loop biomass to produce electricity, the term "qualified facility" means any facility owned by the taxpayer which is originally placed in service after December 31, 1992, and before January 1, 2009.

Special Rule for Co-Firing Facilities

- Section 45(d)(2)(A)(ii) provides special rules for facilities modified to co-fire closed-loop biomass with coal, with other biomass, or with both:
- Applies to coal-burning facilities originally placed in service and modified before January 1, 2009
- Modification must be approved under the Biomass Power for Rural Development Programs or be part of a pilot project of the Commodity Credit Corporation as described in 65 Fed. Reg. 63052
- Section 45 credit equals normal Section 45 tax credit amount multiplied by the ratio of the thermal content of the closed-loop biomass used in such facility to the thermal content of all fuels used in such facility
- Special exception to tax ownership rule for lessees and operators of the co-firing facility
- Bad financing limitation does not apply to modified closed-loop biomass facilities

Open-Loop Biomass (defined)

- Any agricultural livestock waste nutrients - bovine, swine, poultry, and sheep manure and litter, including wood shavings, straw, rice hulls, and other bedding material for the disposition of manure; or
- Any solid, nonhazardous, cellulosic waste material or any lignin material which is segregated from other waste materials and which is derived from-
  - Certain forest-related resources: Mill and harvesting residues, precommercial thinnings, slash, and brush
  - Solid wood waste materials: Includes waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings; excludes municipal solid waste, gas derived from the

biodegradation of solid waste, paper which is commonly recycled
    - Agriculture sources: Orchard tree crops, vineyard, grain, legumes, sugar, and other crop byproducts or residues
    - Includes wood bark and lignin material recovered from spent pulping liquors

Open-Loop Biomass Facilities

- Facilities using agricultural livestock waste nutrients must be originally placed in service after October 22, 2004 and before January 1, 2009 and must have a nameplate capacity rating of which is not less than 150 kilowatts
- All other facilities using open-loop biomass to produce electricity must be originally placed in service before January 1, 2009
- Special exception to tax ownership rule for lessees and operators of open-loop biomass facilities

IRS Interim Guidance on Open-Loop Biomass

- IRS issued interim guidance (Notice 2006-88) regarding electricity produced from open-loop biomass
- IRS indicates it will issue regulations for open-loop biomass, but what are the chances of regulations being issued?
- Notice is published guidance on binding on IRS but is not entitled to the level of deference given to a regulation
- Notice 2006-88 states that the IRS will not issue PLRs regarding Section 45 as it relates to open-loop biomass
- Notice 2006-88 also states that the IRS will not rule on any issues under Subchapter K for partnerships claiming the credit under Section 45
- No guidance on tax credits claimed by lessees or operators of open-loop biomass facilities

IRS Interim Guidance: Components of Facility

- Power plant consisting of all components necessary for the production of electricity from open-loop biomass (and, if applicable, other energy sources) which includes:
    - All burners and boilers (whether or not burning open-loop biomass)
    - Any handling and delivery equipment that supplies fuel directly to and is integrated with such burners and boilers
    - Steam headers, turbines, generators, and all other depreciable property necessary to the production of electricity

  and excludes:
    - Property used for the collection, processing, or storage of open-loop biomass before its use in the production of electricity
    - Transformers or other property used in the transmission of electricity after its production
    - Ancillary site improvements (e.g., roadways and fencing) that are not necessary to the production of electricity
- Each power plant that is operated as a separate integrated unit is treated as a

separate facility

IRS Interim Guidance: Additions and Improvements

- Notice 2006-88 adopts the 80/20 test of Revenue Ruling 94-31 in determining whether an existing facility has acquired a new placed-in-service date
- Under Revenue Ruling 94-31, property is treated as having acquired a new placed-in-service date, even if it contains some existing components of a facility, provided the fair market value of the existing components is not more than 20% of the facility's total value (the cost of the new property plus the value of the used property)
- Notice 2006-88 refers to the test in the negative: the facility will not be treated as originally placed in service after October 22, 2004 or August 8, 2005, as the case may be, if more than 20 percent of the facility's total value (the cost of the new property plus the value of the used property) is attributable to property placed in service on or before such date

IRS Interim Guidance: Cofiring with Fossil Fuels

- The term "open-loop biomass" does not include "closed-loop biomass or biomass burned in conjunction with fossil fuel (cofiring) beyond such fossil fuel required for startup and flame stabilization."
- Notice 2006-88 states that biomass will qualify as open-loop biomass only if the amount of fossil fuel used is "the minimum necessary for startup and flame stabilization."
    - "minimum necessary" is not defined or illustrated
    - only the electricity produced from the open-loop biomass can qualify for the credit and electricity produced from the fossil fuel used for startup and flame stabilization does not qualify for the credit
    - allocation based on thermal content from open-loop biomass
- If biomass is cofired with fossil fuels beyond the minimum amount necessary, "the biomass is not open-loop biomass and the electricity produced from the biomass does not qualify for the § 45 credit"

IRS Interim Guidance: Cofiring with Other Fuels

- Cofiring with other biomass or non-fossil fuel materials: Permissible? Determination of credit amount?
- Notice 2006-88 provides that electricity produced from open-loop biomass that is cofired with fuels other than fossil fuels may qualify for the Section 45 credit
- Electricity produced from the other fuel may also qualify for credits if it is also a qualified energy resource and the facility is placed in service during the period specified for that qualified energy resource
- Cofiring with fuels that do not meet these requirements should not impact open-loop biomass-generated electricity's qualification for credits
    - Allocation based on thermal content of fuels
    - Example: Facility co-firing open-loop biomass with tire-derived fuels

IRS Interim Guidance: Simultaneous Sale and Purchases of Electricity

- Notice 2006-88 provides that to the extent a taxpayer sells electricity to an unrelated person and then also purchases electricity from an unrelated person for use at the same location, the sale of the electricity will be treated as a sale to an unrelated person only to the extent the amount of electricity sold exceeds the amount of electricity purchased
- Example: If the taxpayer sells 100 kWh of electricity to an unrelated person and 60 kWh is then purchased from an unrelated person, the credit is only available with respect to 40 kWh

Geothermal Energy

- The term "geothermal energy" means energy derived from a geothermal deposit (i.e., a geothermal reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure))
- To be a qualified facility, a facility using geothermal energy to produce electricity must be originally placed in service after October 22, 2004 and before January 1, 2009
- Anti-double-dip rule: Facility does not qualify if the taxpayer also claimed investment tax credits under Section 48(a)(3) (relating to geothermal facilities) with respect to the facility

Solar Energy

- The term "solar energy" is not defined in Section 45
- To be a qualified facility, a facility using solar energy to produce electricity must be originally placed in service after October 22, 2004 and before January 1, 2006
- Placed-in-service deadline has passed. However, section 48 tax credits are still available.
- Anti-double-dip rule: Facility does not qualify for section 45 tax credits if the taxpayer claimed investment tax credits under Section 48(a)(3) (relating to solar facilities) with respect to the facility

Small Irrigation Power

- The term "small irrigation power" means power: (1) generated without any dam or impoundment of water through an irrigation system canal or ditch and (2) the nameplate capacity rating of which is not less than 150 kilowatts but is less than 5 megawatts
- To be a qualified facility, a facility using small irrigation power to produce electricity must be originally placed in service after October 22, 2004 and before January 1, 2009

Municipal Solid Waste (defined)

- Defined by reference to the term "solid waste" under section 2(27) of the Solid Waste Disposal Act (42 U.S.C. 6903): any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to perm its under 33 U.S.C. 1342, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act

Landfill Gas Facilities/Trash Combustion Facilities

- Landfill Gas Facilities: In the case of a facility producing electricity from landfill gas, the term "qualified facility" means any facility owned by the taxpayer which is originally placed in service after October 22, 2004 and before January 1, 2009.
  - Excludes any facility the production from which is allowed as a credit under Section 45K for the taxable year or <u>any prior taxable year</u> (or under former Section 29)
- Trash Combustion Facilities: In the case of a facility which burns municipal solid waste to produce electricity, the term "qualified facility" means any facility owned by the taxpayer which is originally placed in serve after October 22, 2004 and before January 1, 2009.
  - Includes a new unit placed in service in connection with a facility placed in service on or before October 22, 2004, but only to the extent of the increased amount of electricity produced at the facility by reason of such new unit

Qualified Hydropower Production (Hydroelectric Dam)

- In the case of any hydroelectric dam which was placed in service on or before October 22, 2004, qualified hydropower production means the "incremental hydropower production" for the taxable year. Incremental hydropower production for the taxable year is equal to the percentage of average annual hydropower production at the facility attributable to efficiency improvements or additions of capacity placed in service after October 22, 2004
- A hydroelectric dam placed in service on or before October 22, 2004 is treated as a qualified facility to the extent of its incremental hydropower production attributable to efficiency improvements or additions of capacity placed in service after October 22, 2004 and before January 1, 2009
- 10-year credit period treated as beginning on the date the efficiency improvements or additions to capacity are placed in service

Qualified Hydropower Production (Nonhydroelectric Dam)

- In the case of any nonhydroelectric dam, qualified hydropower production means the hydropower production from the facility for the taxable year
- Qualifies as a "nonhydroelectric dam" if:
  - the facility is licensed by the Federal Energy Regulatory Commission and meets all other applicable environmental, licensing, and regulatory requirements
  - the facility was placed in service on or before October 22, 2004 and did not produce hydroelectric power on that date
  - turbines or other generating devices are to be added to the facility after

October 22, 2004 to produce hydroelectric power, but only if there is not any enlargement of the diversion structure or construction or enlargement of a bypass channel, or the impoundment or any withholding of any additional water from the natural stream channel

- To be a qualified facility, the facility must be placed in service after October 22, 2004 and before January 1, 2009

Bad Financing Limitation

- Section 45 credit is reduced by any bad financing used to finance the renewable electricity project
- Reduction is the product of the credit otherwise determined under Section 45 and the lesser of % or a fraction (determined as of the close of the taxable year): The numerator of which is the sum, for the taxable year <u>and all prior taxable years</u>, of:
    - o Grants provided by the United States, a state, or a political subdivision of a state for use in connection with the project
    - o Proceeds of an issue of state or local government obligations used to provide financing for the project the interest on which is exempt from tax under Section 103
    - o The aggregate amount of subsidized energy financing provided (directly or indirectly) under a federal, state, or local program provided in connection with the project
    - o The amount of any other [Federal tax] credit allowable with respect to any property which is part of the project
- The denominator of which is the aggregate amount of additions to the capital account for the project for the taxable year and all prior taxable years
- The IRS has ruled that the following do not represent bad financing under Section 45:
    - o Renewable Energy Credits
    - o Wind energy incentive payments funded by a private investor-owned utility
    - o State income tax credit directly attributable to the amount of electricity produced and sold by the taxpayer (not to the capital cost of construction or acquisition of the facility)
    - o Advance supplemental production payment for operating expenses made by "Agency," loan guarantee by "Agency," and a state sales and use tax exemption for the acquisition of building materials in an enterprise zone
    - o State income tax credit based upon, among other things, the amount of real property taxes and the increase in employment and not the capital cost of construction or acquisition of the project
    - o Advance payment for transfer of environmental attributes associated with the production of electricity to a tax-exempt utility
- Rev. Rul. 2006-9 provides that only federal tax credits constitute bad financing - not state or local tax credits

Special Computational Rules

- The general credit rate of 1.5 cents per kWh is adjusted by multiplying such amount by an inflation adjustment factor and rounding to the nearest multiple of 0.1 cent
  - The credit amount for 2007 is 2.0 cents per kWh
- The general credit rate of 1.5 cents per kWh (adjusted for inflation but without rounding to the nearest multiple of 0.1 cent) is reduced by one-half in the case of open-loop biomass facilities, small irrigation power facilities, landfill gas facilities, trash combustion facilities, and qualified hydropower facilities
  - The credit amount for 2007 is 1.0 cents per kWh

Phase-Out of Section 45 Tax Credit

- Credit is reduced or eliminated if the "reference prices" for electricity produced from the various energy sources exceeds certain levels. The reference price for a particular energy resource is the IRS's determination of the annual average contract price per kWh of electricity generated from the same qualified energy resource and <u>sold in the previous year</u> in the United States.
- IRS Notice 2007-40 sets the reference price for wind facilities at 3.29 cents per kWh for calendar year 2007; however, the reference prices for other renewable energy facilities "have not been determined for calendar year 2007." The Notice states that "[t]he IRS is exploring methods of determining those reference prices for calendar year 2008."
- The credit phases out in the same ratio as the determined reference price exceeds 8 cents (as adjusted for inflation) bears to 3 cents.

Related-Party Rule

- Electricity must be sold by the taxpayer to an unrelated person. Whether persons are treated as related to each other if such persons would be treated as a single employer under the Section 52(b) regulations; generally:
  - in the case of a corporation, ownership of stock possessing more than 50% of the total combined voting power of all classes of stock entitled to vote or more than 50% of the total value of the shares of all classes of stock of the corporation
  - in the case of a partnership, ownership of more than 50% of the profit interest or capital interest of the partnership
- In the case of a corporation filing a consolidated return, such corporation is treated as selling electricity to an unrelated person if such electricity is sold to such a person by another member of the consolidated group

Section 48 Energy (Investment) Tax Credits

- Solar energy property
- Geothermal energy property
- Qualified fuel cell property
- Qualified microturbine property

"Energy Property"

- To qualify as "energy property": (1) the construction, reconstruction, or erection of the property must be completed by the taxpayer, or (2) the property must be acquired by the taxpayer and the original use of such property must commence with the taxpayer, and
- Depreciation (or amortization in lieu of depreciation) must be allowable with respect to the property, and
- The property must meet the performance and quality standards (if any) which have been prescribed by the IRS in regulations (after consultation with the Secretary of Energy) and are in effect at the time of the acquisition of the property
  - No regulations at this time--if no standards are in effect at the time of an acquisition of energy property, the property will not have to meet any later-issued standards (IRS News Release, IR-2134 (June 8, 1979))

Solar Energy Property

- Section 48(a) provides a credit equal to 30% of the basis of equipment placed in service during the taxable year which uses solar energy to generate electricity (1) 30% investment tax credit available only with respect to periods ending before January 1, 2009, and (2) 10% investment tax credit available for periods ending after January 1, 2009

Geothermal Energy Property

- Section 48(a) provides a credit equal to 10% of the basis of equipment placed in service during the taxable year which is used to produce, distribute, or use energy derived from a geothermal deposit, but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage

Qualified Fuel Cell Property

- Section 48(a) provides a credit equal to 30% of the basis of "qualified fuel cell property" placed in service during the taxable year. Credit applies to a "fuel cell power plant" which (1) has a nameplate capacity of at least 0.5 kilowatt of electricity using an electrochemical process, and (2) has an electricity-only generation efficiency greater than 30 percent
- A "fuel cell power plant" is an "integrated system comprised of a fuel cell stock assembly and associated balance of plant components which converts a fuel into electricity using electrochemical means."
- Does not include any property for any period after December 31, 2008

Qualified Microturbine Property

- Section 48(a) provides a credit equal to 10% of the basis of "qualified microturbine property" placed in service during the taxable year. Credit capped at an amount equal to $200 for each kilowatt of capacity of such property
- Credit applies to a "stationary microturbine power plant" which (1) has a nameplate capacity of less than 2,000 kilowatts, and (2) has an electricity-only generation efficiency of not less than 26% at International Standard Organization

conditions

- A "stationary microturbine power plant" means an integrated system comprised of a gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components which converts a fuel into electricity and thermal energy; also includes all secondary components located between the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency, and power factors.
- Does not include any property for any period after December 31, 2008

Investment Tax Credit Rules

- Principal energy investment tax credits:
    - Section 48 energy credits
    - Section 48A qualifying advanced coal project credit
    - Section 48B qualifying gasification project credit
- Treated as part of the general business credit under Section 38

Principal rules and limitations

- Many investment tax credit rules incorporate Code sections in effect on the day before the date of the enactment (November 5, 1990) of the Revenue Reconciliation Act of 1990
    - Bad financing rules (Section 48(a)(4))
    - Also apply to Sections 48A and 48B credits
- Section 45 tax credits "allowed"
- Public utility property rules (Section 48(a)(3))
- At-risk rules (Section 49)
- Recapture Rules (Section 50)
- Tax-Exempt Use Property Rules (Section 50(b)(3) and (4))
- Qualified Progress Expenditure Rules (Sections 48(b))
    - Also apply to Sections 48A and 48B credits
- Special rules for partnership structures and allocations (discussed above)
- Depreciable Basis Rules

Bad Financing for Investment Tax Credits

- Reduction in basis of energy property if such property is financed in whole or in part by:
    - subsidized energy financing (i.e., financing provided under a federal, state, or local program a principal purpose of which is to provide subsidized financing for projects designed to conserve or produce energy), or
    - the proceeds of a private activity bond (within the meaning of Section 141) the interest on which is exempt from tax under Section 103
- Reduction is equal to normal credit amount multiplied by the fraction which is 1 reduced by a fraction the numerator of which is that portion of the basis of the property which is allocable to such financing or proceeds, and the denominator of which is the basis of the property
    - Does not include loan guarantees or grants (see Proposed Regulation

Section 1.48-9: defining subsidized energy financing as borrowed funds; noting distinction between taxable and nontaxable grants for Section 1012 basis purposes)

Anti-Double Dip Rule

- Energy property does not include any property which is part of a facility the production from which is "allowed" as a credit under Section 45 for the taxable year or any prior taxable year
  - "Allowed" versus "allowable"
  - Section 1016(a)(2) case law and rulings
  - "Allowed" means a deduction or credit granted by the IRS which is actually taken on a return and results in a reduction of the taxpayer's income tax
  - "Allowable" means a deduction or credit which is available regardless of whether it is actually taken or claimed by the taxpayer

Public Utility Property Rules

- "Energy property" does not include "public utility property" under the investment tax credit rules of Section 48
- "Public utility property" is defined as Property used predominantly in the trade or business of the furnishing or sale of electrical energy if the rates for such furnishing or sale, as the case may be, have been established or approved by:
  - A state or political subdivision thereof,
  - An agency or instrumentality of the United States,
  - A public service or public utility commission or other similar body of any state or political subdivision thereof

Section 49 At-Risk Rules

- Basis in property placed in service by individual or closely-held corporation (5/50 value test) is reduced by "nonqualified nonrecourse financing," which includes any amount with respect to which taxpayer is protected against loss through guarantees, stop loss agreements, or similar arrangements, or any amount borrowed from person with an interest in the activity
- Qualified commercial financing is excepted (1) nonrecourse financing cannot exceed 80% of basis of property (2) not from related person, seller of property, person who gets fee for taxpayer's investment
- Special at-risk rules for Section 48 energy property (level payment loan requirements)
- Special at-risk rules for partnerships (determination made at the partner level)

Section 50 Recapture Rules

- Establish a 5-year recapture period commencing on the placed-in-service date. Recapture applies if: (1) Investment credit property is disposed of in this 5-year period, or (2) Property "otherwise ceases to be investment credit property with respect to the taxpayer"
- Percentage recapture - 100% less 20% each year from placed in service (i.e., 1st

year -- 100%, 2nd year -- 80%, 3rd year -- 60%, etc.)

- If the property is held for at least 5 years, no recapture will occur

"Otherwise Ceases to be Investment Credit Property"

- Use of the property changes within 5-year recapture period so that it no longer qualifies as investment credit property
- Leased property is returned to lessor in the case of a pass-through election under Section 50(d)
- Not triggered merely on a lease of the property by the taxpayer (Note: Exception for noncorporate lessor rules (former Section 46(e)(3), incorporated by Section 50(d)(1))
- If qualified progress expenditures have been claimed, where contract for construction of project is cancelled or abandoned
- Certain specific recapture events apply for Sections 48A and 48B tax credits
- Special rules for partnership investments (discussed above)

Tax-Exempt Use Property Rules

- Section 50(b)(3) provides that no credit is determined with respect to any investment tax property used by an organization which is exempt from income tax unless such property is used predominantly in an unrelated trade or business the income of which is subject to taxation
  - Determination is made by reference to the Section 511 unrelated business income rules with special applications of Section 514 (relating to unrelated debt-financed income and deductions) under Section 50(b)(3) and the special rules for partnerships
- Section 50(b)(4) incorporates the tax-exempt use property rules of Section 168(h)
  - Disqualified lease rules for property leased to a tax-exempt entity. (Note the broad related entity rules of Section 168(h)(4))
  - Special rules for property leased to partnerships with tax-exempt partners
  - Special rules for property owned by partnerships with tax-exempt partners

Qualified Progress Expenditure Rules

- Permits taxpayers to claim investment tax credits in advance of placed-in-service date as construction progresses on the project
- Investment credit property must have a normal construction period of two years or more to claim qualified progress expenditures
- In the case of self-constructed property, qualified progress expenditures are claimed as credits when they are properly chargeable to capital account with respect to the property
- In the case of non-self-constructed property, "qualified progress expenditures" equal the lesser of (i) the amount paid during the taxable year to another person for the construction of such property or (ii) the amount which represents that proportion of the overall cost to the taxpayer of the construction by such other person which is properly attributable to that portion of such construction which is completed during such taxable year

Effect of Investment Tax Credits on Depreciable Basis of Property

- Generally, if a credit is determined under the investment tax credit rules with respect to any property, the basis of such property shall be reduced by the amount of the credit so determined
- However, in the case of any energy credit under Section 48, only 50% of such credit is taken into account under this basis reduction rule (thus, 15% hit to basis in the case of the 30% credits 5% hit to basis in the case of the 10% credits
- If there is a recapture of investment tax credits, the basis of the investment credit property is increased by the recapture amount
- In the case of a partnership, the adjusted basis of each partner's interest in the partnership takes into account the adjustments made under these rules

Legislative Developments and Expectations

- Current expectation is that Section 45 and Section 48 placed in service deadlines will be extended. Open question is for how long and what modifications to the credits may be enacted.

Virginia State Incentives

- States offer various incentives for renewable energy projects and property:
    - Corporate tax credits
    - Sales tax exemptions
    - Property tax exemptions for increased value
    - Rebates
    - Grants
    - Loans
    - Bond programs
    - Production incentives
- Virginia does not provide an energy incentive program comparable to states like California and Massachusetts.
- Virginia Energy Plan was recently released by Governor Kaine outlining broad short-term and long-term goal for reduced energy growth and greenhouse emissions. Grant and tax incentives outlined, but no details provided.

Solar Photovoltaic Manufacturing Incentive Grant Program and Local Property Tax Exemption

- Encourages production of PV panels in Virginia through a grant of up to $0.75 per watt for panels sold in a calendar year (up to a maximum of 6MW)
- Funded up to $4.5 million per year and administered by the Virginia Department of Mines, Mineral and Energy
- Local property tax exemption for certified solar energy equipment, facilities or devices must be adopted by county/city/town by ordinance and 21 counties/cities/towns have adopted

Biofuels Production Fund and Grant Incentive Program

- Provides for a $0.10 per gallon incentive for locating a biofuel production plant in Virginia

- Applies only to plants making more than 2 million gallons per year of neat biofuels (e.g., ethanol and biodiesel)
- 6-year eligibility period and effective for fuel sales on or after January 1, 2007
- Virginia Energy Plan recommends $5 million to fund program.

Recent Grant Program (Currently Unfunded)

- Renewable Electricity Production Grant Program for electricity produced and sold from qualified energy resources at a qualified Virginia faiclity
- Photovoltaic, Salre and Wind Energy Utilization Grant Program
  - 15% of the total installed cost of PV property, solar water heating property, or wind-powered electrical generators
  - Limited to $2,000 for PV property and $1,000 for solar water heating property and wind-powered electrical generators

Other Virginia Incentives

- Virginia Coal Employment and Production Incentive Tax Credit
- Coalfield Employment Enhancement Tax Credit
- Recent Virginia Sales Tax Holiday (Oct. 5-8) for purchases of certain Energy Star qualified products purchased for non-commercial use and costing $2,500 or less
- Recently adopted voluntary Renewable Portfolio Standards (4% by 2010 and 12% by 2022)

State Incentive Considerations

- Bad financing rules need to be considered in light of any state or local incentives
  - State tax incentives generally do not raise issues
  - Grants and rebates may raise issues under Section 45 and possibly under Section 48 (taxable versus nontaxable)
  - Nongovernmental incentives do not raise issues
- Excellent state tax incentives website: Database of State Incentives for Renewables & Efficiency -- http://www.dsireusa.org -- See the Summary Tables section

Tax Credits for Facilities Using Coal

- The Code provides tax credits for certain facilities using coal to produce energy products:
  - Section 48A Qualifying Advanced Coal Facilities (IGCC and other advanced coal-based generation technologies)
  - Section 48B Qualifying Gasification Facilities
  - Refined Coal Production Facilities under Section 45
  - Indian Coal Production Facilities under Section 45
  - Section 45K extension for coke & coke gas facilities
  - Modified closed-loop biomass facilities under Section 45 (previously discussed)

Section 48A Investment Tax Credit

- For integrated gasification combined cycle (IGCC) projects:
  - ITC is 20% of qualified investment
  - Cap of $800 million in total ITCs, which represents $4 billion of investment
- For other (non-IGCC) advanced coal projects:
  - ITC is 15% of qualified investment
  - Cap of $500 million in total ITCs, which represents $3.33 billion of investment (no more than $125 million to a single project)
- Must use an advanced coal based generation technology to power a new electric generation unit or retrofit or repower an existing electric generation unit, fuel input must be at least 75% coal, and facility must have a nameplate generating capacity of at least 400 MW and meet certain emission criteria
- Certification and application process with Department of Energy and IRS
- Only certain credit amounts remaining for allocation

Section 48B Investment Tax Credit

- ITC is 20% of the qualified investment in "qualified gasification projects"
  - Cap of $350 million in total ITCs, which represents $1.75 billion of investment
  - Cap of $650 million of qualified investment per project that can be certified, which would provide maximum of $130 million of ITCs per project
- Credits almost fully allocated ($337,000 remaining)

Refined Coal Facilities

- Section 45 provides a tax credit of $4.375 per ton of refined coal produced by the taxpayer and sold to an unrelated person. Credit amount is adjusted for inflation after 1992. Currently set at $5.877 per ton
- Refined coal is a "liquid, gaseous, or solid fuel <u>produced from coal</u> (including lignite) or high carbon fly ash ... "
- Must be sold with the reasonable expectation that it will be used in the production of steam
- The use of the refined coal must result in certain emission reductions as compared to the coal used to produce it (1) 20% decrease in NOx <u>and</u> (2) 20% decrease in S02 <u>or</u> mercury
- Must increase the value of the feedstock coal by 50% or more
- Refined coal facilities must be placed in service after October 22, 2004 and before January 1, 2009
- Limitations:
  - Anti-Double Dip Rule: Facility that qualified for Section 29/45K tax credits does not qualify for Section 45 credit for refined coal facilities
  - Phase-out: The credit for refined coal is subject to a phase-out if the reference price of the feedstock exceeds a certain threshold
  - Credit reduced (up to 50%) for grants, tax-exempt bonds, subsidized

energy financing, and other federal tax credits

Indian Coal

- Section 45 also provides a tax credit to producers of "Indian coal" (coal which is produced from coal reserves which, on June 14, 2005 were (i) owned by an Indian tribe or (ii) held in trust by the United States for the benefit of an Indian tribe or its members)
- Section 45 tax credit otherwise available under Section 45 is increased by an amount (adjusted for inflation) per ton of Indian coal equal to: (1) $1.50 in the case of calendar years 2006 through 2009, and (2) $2.00 in the case of calendar years beginning after 2009
- Section 45 tax credit for any taxable year is increased by such amount for Indian coal produced by the taxpayer at an Indian coal production facility during the 7 -year period beginning on January 1, 2006, and sold by the taxpayer to an unrelated person and during such 7 -year period and such taxable year
- Indian coal production facilities must be placed in service before January 1, 2009

Section 45K Coke & Coke Gas Production

- Credit equal to $3 (not adjusted for inflation), multiplied by the barrel-of-oil equivalent of qualified fuels sold by the taxpayer to an unrelated person during the taxable and the production of which is attributable to the taxpayer. Credit can only be taken on an average barrel-of-oil equivalent of 4,000 barrels per day.
- Phase out of credit based on the estimate of the annual average wellhead price per barrel for all domestic crude oil (the price of which is not subject to regulation by the United States) does not apply
- Placed-in-service date extension for facilities placed in service before January 1, 1993, or after June 30, 1998, and before January 1, 2010
- Applies to production beginning on the later of January 1, 2006, or the date that such facility is placed in service and ending on the date which is 4 years after the date such period began.

Various Other Energy Tax Credits (Non-exclusive list):

- Enhanced Oil Recovery Credit Credit equal to 15% of the taxpayer's "qualified enhanced oil recovery costs" for the taxable year
- Oil and Gas From Marginal Wells - Credit equal to $3 per barrel of "qualified crude oil production" and 50 cents per 1,000 cubic feet of "qualified natural gas production"
- Nuclear - Section 45J provides an advanced nuclear power facility production credit equal to the product of 1.8 cents, multiplied by the kilowatt hours of electricity produced by the taxpayer at an advanced nuclear power facility during the 8-year period beginning on the date the facility was originally placed in service, and sold by the taxpayer to an unrelated person during the taxable year
- Alcohol Fuels Credit - Section 40 provides three income tax production credits for alcohol fuels (Alcohol mixture credit, alcohol credit, small ethanol producer credit)
- Biodiesel Fuels Credit - Section 40A provides the following income tax

production credits for biodiesel fuels (Biodiesel mixture credit, biodiesel credit, small agri-biodiesel producer credit, renewable biodiesel credit)

Other Tax Benefits: Accelerated Depreciation Rules

- Generally, the applicable recovery period of an electric generating facility is based on the process and equipment used to produce the electricity:
  - 15-year period for combustion turbine plants
  - 20-year period for steam-powered plants
  - 28-year period for combustion turbine plants operated in a combined cycle with a conventional steam unit
- Applicable recovery period of other properties depends on what is being produced or manufactured
- If not specified in Section 168 or Rev. Proc. 87-56, the default is a 7 -year period
- Applicable depreciation method is the 150% declining balance method

Special Depreciation Rules

- Section 168(e)(3)(B)(vi) provides special rules for certain energy properties
  - solar energy property
  - wind energy property
  - qualified fuel cell property
  - qualified microturbine property
  - geothermal energy property
  - biomass property
  - ocean thermal energy property
- Applicable depreciation period is 5 years
- Public utility rules do not apply
- Special allowance not impacted by Section 45 tax credits; but depreciable basis is reduced on account of investment tax credits

Special Depreciation Rule for Biomass Property

- Applies to "biomass property" which is a "qualified small power production facility" under the Federal Power Act (16 U.S.C. 796(17)(C), as in effect on Sept. 1, 1986). "Biomass property" is limited to certain combustion or conversion equipment, pollution control equipment and handling and storage equipment
- "Qualified small power production facility" (1) produces electricity using biomass, waste, renewable resources, geothermal resources, or any combination thereof; however, may use minimum amounts of other fuels for certain limited circumstances (2) has a power production capacity which, together with any other facilities located at the same site, is not greater than 80 megawatts, (3) is a facility that the FPC determines, by rule, meets such requirements (including requirements respecting fuel use, fuel efficiency, and reliability) as the FPC may, by rule, prescribe, and (4) is owned by a person not primarily engaged in the generation and sale of electric power (other than electric power solely from cogeneration facilities or small power production facilities)