The Energy Tax Aspects of Chillers

By Charles Goulding, Jacob Goldman and Joseph Most

Charles Goulding, Jacob Goldman and Joseph Most discuss the planning opportunities made available by the EPAct and Code Sec. 179D to companies that deferred chiller purchases during the recent economic downturn.

Many companies deferred chiller purchases during the recent economic downturn due to the high cost of chillers. As a result of the Energy Policy Act[1] (EPAct), these companies should carefully consider their chiller tax planning opportunities and act before the December 2013 EPAct expiration date for eligible chiller projects. There are multiple opportunities for favorable tax treatment, such as deductions, depending on whether the chiller is being purchased for a new building or existing building. A smart tax planning decision can only be made after analyzing each tax deduction opportunity.

Chillers are one of the more expensive building equipment items, ranging from tens of thousands of dollars to millions of dollars for large facilities. Chillers are industrial refrigerating systems that are an integral part of commercial HVAC systems. They are most frequently utilized in office buildings, industrial buildings, hotels, hospitals, apartment buildings and other large buildings.

The Tax Deduction Opportunities

The EPAct Tax Deduction

Pursuant to Internal Revenue Code (Code) Sec. 179D, building owners or tenants making qualifying energy-reducing investments can obtain immediate tax deductions of up to $1.80 per square foot.

If the building project doesn't qualify for the maximum $1.80-per-square-foot immediate tax deduction, there are tax deductions of up to $0.60 per square foot for each of the three major building components: lighting, HVAC (heating, ventilating and air conditioning) and the building envelope. The building envelope is every item on the building's exterior perimeter that touches the outside world including roof, walls, insulation, doors, windows and foundation.

The Business Expense Deduction

Pursuant to Code Sec.162, a building owner or tenant can deduct all ordinary and necessary expenses paid or incurred during the tax year in carrying on their business. It is important to note that chiller repair expenses are only available if the chiller project meets multiple requirements, all of which must be carefully documented. For example, the fact that the old unit has completed its life cycle and energy performance values should be supported by quantitative metrics.

The taxpayer cannot claim a repair expense for a capital improvement that substantially adds to the value or useful life of a building. Capital improvements are depreciated as building assets under normal tax depreciation rules. In determining the difference between an ordinary business expense and a capital improvement there has always been a fine-line based on facts and circumstances; however, the court in *FedEx Corp. v. United States* set out useful criteria in making this decision, which are:

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Chart 1

Potential EPAct Tax Deductions					
	Lighting			Building Envelope	
Total Square Footage	Minimum Deduction	Maximum Deduction	HVAC Maximum Deduction	Maximum Deduction	Total
50,000	$ 15,000	$ 30,000	$ 30,000	$ 30,000	$ 90,000
150,000	$ 45,000	$ 90,000	$ 90,000	$ 90,000	$ 270,000
500,000	$ 150,000	$ 300,000	$ 300,000	$ 300,000	$ 900,000
1,000,000	$ 300,000	$ 600,000	$ 600,000	$ 600,000	$ 1,800,000

- industry custom
- comparison of the economic useful lives of the part and the whole
- whether the larger and smaller units of property can function without each other
- whether maintenance on the smaller property can occur while affixed to the larger property.[2]

In a recent private ruling obtained by Energy Tax Savers, Inc., the IRS ruled that a $1 million replacement chiller can qualify for Code Sec. 162 repair treatment.[3].

Chiller Tax Deduction Analysis

New Buildings

With new buildings, the tax deduction opportunity is provided under Code Sec. 179D. A $0.60-per-square foot EPAct HVAC tax deduction is typically available for buildings under the following circumstances:

- high-efficiency chillers installed as component elements of very efficient systems
- chillers included with thermal storage systems
- rental apartment buildings or hotels,
- buildings less than 150,000 square feet,
- hybrid fuel chillers
- central chiller plants serving buildings with less than 150,000 square feet

For larger buildings, in order to obtain the maximum HVAC tax deduction for installing a chiller, the owner needs to combine the chiller with an energy-efficient HVAC system. An example of this is a thermal storage system, which when installed with a new high-efficiency chiller and package unit will often reduce energy costs to where the maximum EPAct deduction is a possibility, particularly in jurisdictions with time-of-day electricity pricing differences.[4] Large EPAct deductions are also typically available for an apartment building that installs a chiller because the energy standards for apartment buildings are based on devices that are less efficient than chillers.[5]

A building with less than 150,000 square feet is the typical size building where a chiller can be installed on its own, reduce energy use below the required levels and thus qualify for immediate EPAct HVAC tax deductions. Chillers can also be powered in ways other than by electrical energy. These hybrid fuel chillers use other forms of energy, such as natural gas or low-grade waste heat, and in the right situation can reduce energy cost more so than an electric chiller.

A final opportunity for large HVAC EPAct tax deductions from installation of a chiller is for a central chiller plant that serves multiple buildings with less than 150,000 square feet. In this situation, every building supported by the central chiller plant can qualify for large HVAC tax savings.

The $0.60-per-square-foot maximum HVAC deduction is achieved when total building energy use is reduced by 16.67 percent or more.[6] The following chart shows the possible immediate EPAct tax deductions at various square footages for a new building:

To obtain the $0.60 to $1.80-per-square-foot EPAct tax deductions, the required energy cost reduction must be documented by an IRS-approved energy-simulation model. The ever-popular United States Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program also requires building energy modeling. Moreover, recognizing the increasing importance of building energy-efficiency measures, the recently revamped LEED system places much more emphasis on granting LEED qualifying points for energy-efficiency measures. The only way to accurately size HVAC systems to the building envelope and other building systems is to model the building. As a result of improvements in CAD systems and modeling interfaces, along with the huge increase in professionally trained software modelers, soon every new building will be modeled as matter of course.[7]

Existing Buildings

Existing building chiller projects may be eligible for the $1.80-per-square-foot Code Sec. 179D immediate tax deduction described above or a deduction

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The Comptroller also noted that "many entities in the service industry are incorrectly electing to use the cost of goods sold [COGS] deduction to determine margin." The Comptroller explained that Tex. Tax Code §171.1012 provides that in determining COGS, the term "goods" means real or tangible personal property sold in the ordinary course of business, and not services. The Texas Tax Code does not provide a COGS deduction for businesses that provide services.

Because Margin Tax law does not provide a COGS deduction for businesses that provide services (such as dry cleaners, law firms, parking facilities, rental services, towing companies, *etc.*), entities that originally elected to file using the COGS method but are not eligible for the COGS deduction will have to file an amended report using the 70-percent method to determine taxable margin (or if eligible, the "EZ method"). The compensation method could be elected on future filed reports.

ENDNOTES

1 *River Garden Retirement Home v. Franchise Tax Board*, Calif. CtApp, 186 Cal.App.4th 922, [Calif.] ST. TAX REP. (CCH) ¶405-214 (July 15, 2010).

2 *Farmer Bros. Co. v. Franchise Tax Board*, Calif. CtApp, 108 Cal.App.4th 976 (2003), *cert. denied*, SCt, 540 US 1178 (2004).

3 *Abbott Labs. v. FTB*, Calif. CtApp, 175 Cal. App.4th 1346 (2009).

4 *In re Gabriel S. and Frances B. Baum*, NY DTA, Tax Appeals Tribunal, DTA Nos. 820837 and 820838, [N.Y.] ST. TAX REP. (CCH) ¶406-321 (Feb. 12, 2009).

5 Unless otherwise noted, all references to the "Code," "Code Sec." and "Reg. §" refer to the provisions of the Internal Revenue Code of 1986 and the regulations promulgated thereunder.

6 *Dechert LLP v. Pennsylvania*, Pa. SCt, No. 12 MAP 2008, 998 A2d 575 ¶204-027, [Pa.] ST. TAX REP. (CCH) ¶204-027 (Jul. 20, 2010).

7 *Graham Packaging Co. v. Commonwealth of Pennsylvania*, Pa. Commw.Ct., 882 A2d 1076, [Pa.] St. Tax Rep. (CCH) ¶203-456 (2005).

International Tax

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Modification of Affiliation Rule for Purposes of Rules Allocating Interest Expense

The act will prevent taxpayers from using certain techniques to minimize the amount of foreign-source interest expense, and thereby boost foreign-source income—thus allowing taxpayers to use more foreign tax credits. The amendment's method is to include certain foreign subsidiaries in the U.S. affiliated group for purposes of allocating the deductions. The act also modifies the affiliation rules to strengthen these anti-abuse rules.

Termination of 80/20 Rule

Under current law, dividends and interest paid by a domestic corporation are U.S.-source income to the recipient and subject to gross basis withholding tax if paid to a foreign person unless at least 80 percent of a corporation's gross income during a three-year period is foreign-source income and is attributable to the active conduct of a foreign trade or business (an "80/20 company"). Furthermore, interest received from an 80/20 company can increase the foreign-source income of, and, therefore, the amount of foreign tax credits that may be claimed by, a U.S. multinational company. The act will repeal the 80/20 company rules (and the 80/20 rules for interest paid by resident alien individuals). The amendment will include relief for existing 80/20 companies that meet specific requirements and that are not abusing the 80/20 company rules.

Technical Correction to Statute of Limitations Provision in the HIRE Act

The act will make a technical correction to the foreign reporting and withholding tax compliance provisions with respect to ownership of foreign assets legislated under the Hiring Incentives to Restore Employment (HIRE) Act[3] to clarify the circumstances under which the statute of limitations will be tolled for corporations that fail to provide certain information on cross-border transactions or foreign assets. Under the technical correction, the statute of limitations period will not be tolled if the failure to provide such information is shown to be due to reasonable cause and not willful neglect.

ENDNOTES

1 Education Jobs and Medicaid Assistance Act of 2010 (P.L.111-226).

2 Unless otherwise noted, all references to the "Code," "Code Sec." and "Reg. §" refer to the Internal Revenue Code of 1986 and the regulations promulgated thereunder.

3 Hiring Incentives to Restore Employment Act of 2010 (P.L. 111-147).

Energy Tax

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for properly documented property repair expenses. A smaller building should choose the property repair expense deduction because chillers are typically very expensive, and that deduction is not based on the square footage of the building, whereas the EPAct deduction is. An example of this is a 140,000-square-foot building

that installs a $300,000 chiller. The $0.60-per-square-foot EPAct HVAC tax deduction would be $84,000, but the repair expense deduction would be $300,000.

However, in many situations where the existing building chiller installation would qualify for the EPAct deduction, the installation could probably be considered a capital improvement and thus would not be eligible for the property repair expense deduction. In order to qualify for the repair expense deduction on a chiller replacement, owners commonly make a "one-for-one similar kind" of chiller replacement. It is crucial to have a chiller tax study thoroughly documenting repair expense eligibility since the IRS is going to start with a presumption that the chiller should be capitalized.

A good chiller tax study should incorporate about 10 documentation factors that make it easy for the auditor to verify repair expense eligibility. The chiller tax study should be prepared by tax experts intimately familiar with building energy and chiller technology.[8] If a building energy simulation model exists and the EPAct deduction and repair expense deduction amounts are similar, it may make sense to use the model as documentation, rather than expending the effort required for a separate tax study.

If a chiller project qualifies for either tax deduction, but the taxpayer is contemplating a future investment that will only qualify for the EPAct deduction, then it would make more sense to first use the repair expense tax deduction. This is evidenced by the following example: Presume the taxpayer replaces an existing chiller on a 120,000-square-foot building at cost net of rebate for $72,000 and is eligible for either a $72,000 EPAct tax deduction (120,000 x $0.60/sq.ft.) or a $72,000 repair expense deduction. If the same taxpayer is contemplating an LED lighting project by 2013, it may make more sense to first select the $72,000 repair expense and potentially obtain a $1.80-per-square-foot EPAct deduction upon the completion of the future LED project. With this approach, the taxpayer can maximize the universe of tax opportunities.

Conclusion

Chillers are very expensive building equipment items. However, installing them presents large tax deduction opportunities. When advising on tax planning for a chiller deduction, it is important to look at the type of building and whether it is an existing building being retrofitted or if the building is new. It is also important to take potential future energy efficiency projects into account when making the decision of which deduction to take first. As seen above, if the correct decisions are made, the tax savings can be quite large.

Endnotes

1 Energy Policy Act of 2005 (P.L. 109-58).

2 *See, FedEx Corp. v. United States,* 291 FSupp2d 699 (DC Tenn. 2003).

3 *See,* Charles Goulding, Jacob Goldman and Taylor Goulding, *The Tax Aspects of Thermal Storage & Time of Day Pricing,* Corp. Bus. Tax'n Monthly, Nov. 2009, at 13.

4 *See,* Charles Goulding, Jacob Goldman and Malcolm Thomas, *Legal and Technology Changes Enable Large Tax Deductions for Apartment Buildings,* Corp. Bus. Tax'n Monthly, Dec. 2009, at 15.

5 *See,* Charles Goulding, Jacob Goldman and Malcolm Thomas, *Legal and Technology Changes Enable Large Tax Deductions for Apartment Buildings,* Corp. Bus. Tax'n Monthly, Dec. 2009, at 15.

6 *See,* Charles Goulding, Raymond Kumar and Kenneth Wood, *New Efficient HVAC Drives Large Tax Deductions for Buildings,* Corp. Bus. Tax'n Monthly, May 2009, at 11.

7 *See,* Charles Goulding, Jacob Goldman and Kenneth Wood, *Tax Deductions for HVAC Efficiency,* Building Operating Mgmt., Apr. 2010, at 58.

8 *See,* IRS LTR 162.16-00 CAM-116271-09.

Unclaimed Property

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Pennsylvania Offers Amnesty

The Pennsylvania Treasury is granting companies with delinquent unclaimed-property-reporting obligations in Pennsylvania amnesty from penalties and interest if they come into compliance. Companies may enter the amnesty program between now and October 31, 2010. The program is open to first-time filers as well as any company with gaps in its reporting history. To qualify for the amnesty program, companies must contact the Pennsylvania Bureau of Unclaimed Property and complete an electronic questionnaire. The Treasury will then direct companies on the best course of action to pursue amnesty. All companies are eligible to participate, except those currently under an unclaimed property audit or self-audit.

The Treasury recommends that interested companies email the Unclaimed Property Bureau at *upamnesty@patreasury.org* to request a questionnaire. Companies may also contact the bureau *via* telephone, 1-800-379-3999.

Delaware Passes Administrative Review Law

In the last edition of the State Tax Return, we reviewed Delaware S.B. 272,[11] which creates an administrative review process following