

# MINNESOTA • REVENUE

December 9, 2002

Mr. Mike Taylor  
Minnesota Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101

Note: Accelerated depreciation and the 10% federal tax credit are only available to businesses or individuals with businesses operating on the property where the equipment is located (a home-based business for example). Consult a tax attorney about your specific situation.

Subject: Depreciation

Dear Mr. Taylor:

## ISSUES

The following information has been requested:

- MACRS 5-year depreciation rates table.
- Information on the value of the double-declining depreciation benefit for renewable energy systems that a business might install.
- In the following example, the solar energy system costs \$15,000 and has a 20-year life with a salvage value of \$1,000. There is also a 10% first-year federal tax credit. What is the Year 1 cost after incentives to a business in the 34% tax bracket (is that the correct federal rate for a small business?).

## DETERMINATION

The MACRS 5-year depreciation rate table is shown below.

Solar, wind and geothermal energy equipment is subject to the five year Modified Accelerated Depreciation System (“MACRS”) – General Depreciation System (“GDS”). This method—MACRS-GDS—uses the 200% double declining balance (switching to straight-line) method of depreciation.

The value of using this method is that a taxpayer can take greater deductions in the earlier years, thus accelerating when deductions can be taken. This acceleration is even greater as a result of the federal “bonus depreciation” system recently enacted. (See discussion section below.)

I am not certain that I understand what you mean by the “year 1 cost after incentives”. However, the discussion section below describes how federal MACRS and the bonus depreciation system works and clarifies how Minnesota modifies the federal depreciation system.

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### DISCUSSION

The following table shows the Modified Accelerated Cost Recovery System (MACRS) – General Depreciation System (GDS) percentages for five-year property using the half-year convention.<sup>1</sup>

MACRS - GDS 5 Year Property - Half Year Convention	
Year	Percentage
1	20.00%
2	32.00%
3	19.20%
4	11.52%
5	11.52%
6	5.76%

Minnesota generally conforms to the federal MACRS depreciation system.

Five year MACRS-GDS can be used on certain energy equipment that uses solar or wind energy to generate electricity, to heat or cool, or to provide hot water in a structure. This depreciation method also applies to equipment used to derive energy from a geothermal deposit. This method also applies to a qualifying small power production facility within the meaning of section 3(17)(C) of the Federal Power Act.<sup>2</sup>

As a result of the events of September 11, 2002, Congress enacted the Job Creation and Worker Assistance Act of 2002. Certain provisions of this act allow for an immediate 30% special depreciation allowance (“bonus depreciation”) in the first year the asset is placed in service. This bonus depreciation is allowed on assets placed in service after September 10, 2001. The bonus depreciation does apply to MACRS-GDS property with asset lives of less than 20 years.

The bonus depreciation is taken in the year the asset is placed in service. The basis in the property is reduced by the bonus depreciation claimed and then the regular depreciation methods apply. For example, consider your example of a \$15,000 MACRS-GDS asset with a five-year life using the half-year convention. The following table shows the federal depreciation calculation for an asset placed in service after September 10, 2001.

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<sup>1</sup> For information on depreciation see IRS Publication 946 (How to depreciate property) available at [www.irs.gov](http://www.irs.gov).

<sup>2</sup> IRC § 168(e)(3)(B)(vi)

<b>Federal Bonus Depreciation As Applied To MACRS-GDS</b>							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Basis	\$15,000						
First Year Bonus Depreciation	<u>\$ (4,500)</u>						
Reduced Basis	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500	
Year 1 - MACRS (20%)	\$ (2,100)						
Year 2 - MACRS (32%)		\$ (3,360)					
Year 3 - MACRS (19.2%)			\$ (2,016)				
Year 4 - MACRS (11.52%)				\$ (1,210)			
Year 5 - MACRS (11.52%)					\$ (1,210)		
Year 6 - MACRS (5.76%)						\$ (604)	
<b>Total Depreciation</b>	<u>\$ (6,600)</u>	<u>\$ (3,360)</u>	<u>\$ (2,016)</u>	<u>\$ (1,210)</u>	<u>\$ (1,210)</u>	<u>\$ (604)</u>	<u>\$ (15,000)</u>

The Minnesota Legislature did not fully conform to the federal bonus depreciation system. Minnesota disallows 80% of the federal bonus depreciation. In the example above, Minnesota would disallow \$3,600 of the \$4,500 claimed for federal income tax purposes. This disallowed amount is allowed on a straight-line basis over five years. So, for the above example, the Minnesota depreciation would be as follows:

<b>Minnesota Bonus Depreciation Modification</b>							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Federal Bonus Depreciation	\$ 4,500						\$ 4,500
MACRS GDS Depreciation	\$ 2,100	\$ 3,360	\$ 2,016	\$ 1,210	\$ 1,210	\$ 604	\$ 10,500
<b>Total</b>	<u>\$ 6,600</u>	<u>\$ 3,360</u>	<u>\$ 2,016</u>	<u>\$ 1,210</u>	<u>\$ 1,210</u>	<u>\$ 604</u>	<u>\$ 15,000</u>
<b>Minnesota Modification</b>							
80% Bonus Dep. Disallowed	\$ (3,600)						\$ (3,600)
Minnesota Dep. Recapture		720	720	720	720	720	3600
<b>Depreciation for MN Purpose</b>	<u>\$ 3,000</u>	<u>\$ 4,080</u>	<u>\$ 2,736</u>	<u>\$ 1,930</u>	<u>\$ 1,930</u>	<u>\$ 1,324</u>	<u>\$ 15,000</u>

If you have any questions, please call me at (651) 282-5747.

Sincerely,

/s/

William J. Lunka  
Corporate Technical Manager