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FISCAL IMPACT
Renewable Energy Partial Abatement Of Property Taxes

Orni 15, LLC (Ormat Nevada, Inc.)
Jersey Valley

Background

The project is located on public land 50 miles southeast of Battle Mountain, Nevada. The project will produce 15 megawatts of electricity using a binary system consisting of hybrid water and air cooled units. The project will supply energy to the Sierra Pacific Power Company (SPPCo) electrical transmission system.

As stated by Ormat Technologies, Inc. in its SEC 10-k report to the SEC for the year ended December 31, 2009:

> Hydrothermal geothermal energy is derived from naturally occurring hydrothermal reservoirs that are formed when water comes sufficiently close to hot rock to heat the water to temperatures of 300 degrees Fahrenheit or more. The heated water then ascends toward the surface of the earth where, if geological conditions are suitable for its commercial extraction, it can be extracted by drilling geothermal wells. The energy necessary to operate a geothermal power plant is typically obtained from several such wells which are drilled using established technology that is in some respects similar to that employed in the oil and gas industry. Geothermal production wells are normally located within approximately one to two miles of the power plant as geothermal fluids cannot be transported economically over longer distances due to heat and pressure loss. The geothermal reservoir is a renewable source of energy if natural ground water sources and reinjection of extracted geothermal fluids are adequate over the long-term to replenish the geothermal reservoir following the withdrawal of geothermal fluids and if the well field is properly operated. Geothermal energy power plants typically have higher capital costs (primarily as a result of the costs attributable to well field development) but tend to have significantly lower variable operating costs (principally consisting of maintenance expenditures) than fossil fuel-fired power plants that require ongoing fuel expenses. In addition, because geothermal energy power plants produce 24hr/day weather independent power, the variable operating costs are lower.[1]
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> In the United States, the purchasers of power from our power plants are typically investor-owned electric utility companies. In each case, we enter into long-term contracts (typically called PPAs) for the sale of electricity or the conversion of geothermal resources into electricity. A power plant's revenues under a PPA used to consist of two payments — energy payments and capacity payments, however our recent PPAs provide for energy payments only. Energy payments are normally based on a power plant's electrical output actually delivered to

[1] Ormat Technologies, Inc. - 10-K Report to SEC, for the year ended December 31, 2009: p.15

the purchaser measured in kilowatt hours, with payment rates either fixed or indexed to the power purchaser's "avoided" power costs (i.e., the costs the power purchaser would have incurred itself had it produced the power it is purchasing from third parties, such as us) or rates that escalate at a predetermined percentage each year.[2]

Currently, geothermal power plants are valued by the Department as locally assessed property on behalf of the counties pursuant to NRS 362.100(1)(b), which states that "the Department shall appraise and assess all reduction, smelting and milling works, plants and facilities, whether or not associated with a mine, all drilling rigs, and all supplies, machinery, equipment, apparatus, facilities, buildings, structures and other improvements used in connection with any mining, drilling, reduction, smelting or milling operation."

Analysis

In general, locally assessed real property must be valued according to the requirements of NRS 361.227. Replacement cost new of the improvements, less depreciation at the rate of 1-1/2% per year for a maximum of 50 years, is added to the full cash value of the improved land. Personal property is valued based on acquisition cost less depreciation identified in the Personal Property Manual approved by the Nevada Tax Commission.

The Taxpayer did not report a purchase price for land. The county assessor has a current taxable value of $1,143,449, or $135 per acre for 8,470 acres. The acreage includes five BLM leases for drilling the steam heat resource. For purposes of this analysis, the Assessor's taxable value was used for the value of land in 2010. For the balance of the 20 years for which the abatement may be granted, an appreciation factor of 1% per year was applied to the value of the land. The appreciation factor is a conservative estimate based on the 10 year average annual growth rate for land and improvements in Pershing County from 2000-01 to 2009-10.[3]

The Taxpayer also reported several project cost areas as "personal" property rather than as real property. The Department used the acquisition cost reported by the Taxpayer for each cost center but determined that all components were real property, based on the framework for analysis provided in the 2011-12 Personal Property Manual, Appendix F. In particular, the criteria for determining whether property is real or personal are based on the following:

(1) An item is real property if it is attached to, imbedded in or permanently resting upon land or an improvement, or is attached by other means that are normally used for permanent installation, and cannot be removed without substantially damaging the item or the land or improvement with which it is being used; or

(2) An item is real property if the use or purpose of an item that is not otherwise physically annexed to land or an improvement is so adapted that it is:

(1) A necessary, integral or working part of the land or improvement;
(2) Designed or committed for use with the land or improvement; or
(3) So essential to the land or improvement that the land or improvement cannot perform its desired function without the nonattached item.

Underlying both the physical or constructive annexation tests is a determination of intent. An assessor must consider whether the item is intended to be a permanent part of the land or improvement, taking into account physical or constructive annexation, and other objective manifestations of permanence.

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[2] Ormat Technologies, Inc. - 10-K Report to SEC, for the year ended December 31, 2009: p. 30

[3] Department of Taxation, "Statistical Analysis of the Roll," 2009. Pershing County's average growth rate from 2000-01 to 2009-10 was .82%. State of Nevada's average growth rate for the same period was 11.22%.

The typical components of a geothermal generation facility consist of site preparation activities, including construction survey, grading, trenching, drainage features, diversion channels, detention ponds, culverts for road crossings, containment berms, and firebreaks. Other components include access roads and utilities such as telecommunication lines, foundations for generator step-up transformers, steam turbine generation, ancillary foundations in the power block, operations and maintenance buildings, electrical equipment enclosures; water delivery systems including pumps, wells, water storage tanks, waste and wastewater management; fire protection systems, including piping systems, fire hydrants, and sprinkler deluge systems; electronic systems to control equipment and facilities operations; lighting systems; fencing, controlled access gates, switchyard and substations; geothermal wells, injection wells, drill pads, wellhead, production pumps, injection pumps, flash tanks, pre-heaters, vaporizers, and gathering pipes.

The Department's understanding is that the power block consists of components either attached to the land or "so essential to the land or improvement that the land or improvement cannot perform its desired function without the nonattached item," for example, cooling tower foundations. In addition, as evidenced by the BLM geothermal lease NVN-77483[4] and Nevada Power's integrated resource plan approved by the PUCN, which indicates that a purchase power agreement has been signed for a period of 20 years from the commencement of production, this generation facility appears to be intended as a permanent installation. This analysis therefore applies the requirements of NRS 361.227(1)(b) to determine the taxable value of the improvements. Depreciation of an improvement must be calculated at 1.5 percent of the cost of replacement for each year of adjusted actual age of the improvement up to a maximum of 50 years.

The Department also did not adjust upward the reported acquisition cost to reflect any appreciation. The Department used the current tax rate of $3.0968 per hundred (0.030968) for Tax District 2 without further adjustment. Under current law, the maximum tax rate could go up to $3.66, however, the project is also subject to the tax abatement afforded under NRS 361.4722, which limits tax dollar increases to no more than 8% per year.

The calculation of the renewable energy abatement contained in the attached spreadsheets takes into account the required distribution of remaining taxes after abatement as between the State of Nevada Renewable Energy Fund (General Fund in the first year only) and local governments, in the proportion of 45/55. Stated another way, 55% of the total taxes generated by the estimated taxable value is abated. Of the remaining 45% of tax dollars, 45% is distributed to the State of Nevada Renewable Energy Fund (or the General Fund in 2010 only) and 55% is distributed to local governments. The calculation assumes the State of Nevada loses the 17 cent per hundred levy for the State debt fund.

Estimate of Tax Abatement

Based on the assumptions and conditions noted above, the estimated fiscal impact for the duration of the abatement for 20 years is as follows:

Total Taxable Value of the Project in 2010:	$89,712,450
Total Taxable Value of the Project in 2029:	$64,708,248

[4] Ormat Technologies, Inc. - 10-K Report to SEC, for the year ended December 31, 2009: p. 33:
"BLM leases issued after August 8, 2005 have a primary term of ten years. If the geothermal lessee does not reach commercial production within the primary term the BLM may grant two five-year extensions if the geothermal lessee: (i) satisfies certain minimum annual work requirements prescribed by the BLM for that lease, or (ii) makes minimum annual payments. Additionally, if the geothermal lessee is drilling a well for the purposes of commercial production, the primary term (as it may have been extended) may be extended for five years and as long thereafter as steam is being produced and used in commercial quantities (meaning the geothermal lessee either begins producing geothermal resources in commercial quantities or has a well capable of producing geothermal resources in commercial quantities and is making diligent efforts to utilize the resource) for thirty-five years. If, at the end of the extended thirty-five year term, geothermal steam is still being produced or utilized in commercial quantities and the lands are not needed for other purposes, the geothermal lessee will have a preferential right to renew the lease for fifty-five years, under terms and conditions as the BLM deems appropriate."

Estimated capital cost per kW (89,712,450/15,000)	$5,981/kW

Total Taxes Due, First Year After Completion:	$ 972,375
Total Renewable Energy Abatement @ 55%:	$ 534,806
Total Taxes Available to Local Governments and Energy Fund:	$ 437,569
Total Taxes Available to Local Governments only	$ 240,663

The amount of the abatement for each year thereafter approximates the amount obtained in the first year and continues during the period of abatement as follows:

Total Taxes Due during Period of Abatement (20 years):	$16,734,164
Total Renewable Energy Abatement, 20 years:	$ 9,203,790
Total Taxes Available to Local Governments and Energy Fund:	$ 7,530,374
Total Taxes Available to Local Governments only	$ 4,141,706

See attached spreadsheets for the amounts by year and by local government entity.

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FISCAL IMPACT
Renewable Energy Partial Abatement Of Sales/Use Taxes

Orni 15, LLC (Ormat Nevada, Inc.)
Jersey Valley

In accordance with the provisions of Chapter 701A of the Nevada Revised Statutes, Ormat Nevada Inc. ("Ormat") has requested a Sales and Use Tax Abatement for their Jersey Valley Renewable Energy Project. This project is located in Pershing County. Upon approval this project would be granted a partial abatement of Sales and Use Tax for a period of three years, commencing on April 1, 2010[1].

The Nevada State Office of Energy has provided to the Department of Taxation a completed copy of the Renewable Energy Tax Abatements Application for this project. According to Schedule 6 of this application, Ormat will purchase a total of $26,685,000.00 worth of tangible personal property subject to Sales and/or Use Tax during the first year of the abatement period. At the current Sales or Use Tax rate for Pershing County, the full Sales Tax for these purchases would be $1,894,635.00 less any applicable collection allowance.

According to Schedules 7 and 8 of this application, Ormat will purchase a total of $1,000,000 worth of tangible, personal property subject to Sales and/or Use Tax in each of the last two years of the abatement period.

Based on this information, the Department of Taxation projects the following Sales Tax related fiscal impact for the three years of the abatement period.

Sales Tax Component	1st Yr. Apr 1 thru March 31, 2011	2nd Yr. Apr 1 thru June 30, 2011	2nd Yr. July 1, 2011 thru March 31, 2012	3rd Yr. Apr 1, 2012 thru March 31, 2013
Sales/Use Tax (General Fund) (2%)	($533,700.00)	($6,000.00)	($14,000.00)	($20,000.00)
Local School Support Tax (2.6%) (2.25%)	$693,810.00	$5,625.00	$16,875.00	$22,500.00
Basic City Relief (.50%)	($133,425.00)	($1250.00)	($3,750.00)	($5,000.00)
Supp. City County Relief (1.75%)	($466,987.50)	($4,375.00)	($13,125.00)	($17,500.00)
County Option (.25%)	($66,712.50)	($625.00)	($1,875.00)	($2,500.00)

[1] Upon approval, the Sales and Use Tax abatement will normally be effective as of the original date of the application. However, this application was granted a provisional approval with an effective date of April 1, 2010.

Total Amount Abated:	1st Year:	$ 1,200,825.00
	2nd Year:	$ 45,000.00
	3rd Year:	$ 45,000.00
Total Impact on Local/ County Government :	1st Year:	$ 667,125.00
	2nd Year:	$ 25,000.00
	3rd Year:	$ 25,000.00