

Diesel Generator Leasing Costs As Utilized in the PVRR Calculations (Used for Item G of Updated Table 4-8)¹

¹ WPS got a bid from Cummins Diesel for leasing diesel generators for their own and ATC's needs, which totaled 70 MW. WPS then provided a bid to ATC for 13.5 MW. The first cost table relates to the costs from Cummins, but scaled to 13.5 MW. The second cost table includes some ancillary costs for services provided by WPS, like air permitting costs. The final table is the sum the leasing and ancillary services costs.

Diesel Generator Leasing Cost Estimate From Cummins Diesel:

Diesel Generator Size (MW)	1.35
Number of Generators in Original Bid From Cummins Diesel to WPS	52
Total Amount of Diesel Generation in Cummins Bid to WPS (MW) ¹	70

Number of Generators in Bid From WPS to ATC	10
Total Amount of Diesel Generation in WPS Bid to ATC (MW)	13.5

¹ Assumes a total of 4 sites with 13 units per site. It is difficult to site much more than 13 diesel units (17.5 MW) because of space limitations at distribution substations and because distribution substation loads are typically less than 20 MW. Air permit restrictions would also probably limit the number of units per site.

		Yearly Costs for 10 Generators (13.5 MW)
Monthly 1.35 MW Diesel Lease Cost (June, July, Aug)	\$13,090	
Monthly 1.35 MW Diesel Lease Cost (Remaining 9 Months)	\$5,236	
Yearly 1.35 MW Diesel Lease Cost (3*13,090 + 9*5,236 = \$86,394)	\$86,394	\$863,940
Monthly Transformer Lease Cost Per Diesel (June, July, Aug)	\$1,900	
Monthly Transformer Lease Cost Per Diesel (Remaining 9 Months)	\$700	
Yearly Transformer Lease Cost Per 1.35 MW Diesel Per Year	\$12,000	\$120,000
Low Voltage Power Distribution for House Power Per Diesel Per Year	\$2,926	\$29,258
Cable Rental Per 1.35 MW Diesel Per Year	\$2,644	\$26,438
Ancillary equipment for assembly and tear down per diesel per year ²	\$268	\$2,681
Labor for assembly and teardown per diesel per year ²	\$757	\$7,570
Unit Mobilization and Demobilization per diesel per year ²	\$750	\$7,500
Total		\$1,057,388

² These one-time costs are split over four years.

WPS Estimated Ancillary Costs For Connecting Diesels to the Distribution System, Air Permits, Etc.⁴

		Yearly Costs for 10 Generators (13.5 MW)
Installation Costs per site (One-time charge) ³	37,000	9,250
Administration/Project Management per site (One-time charge) ³	10,000	2,500
O&M Labor per year per site including truck ⁵		24,000
O&M Fuel at \$85/MWH for 29.9 hours for 10 generators (13.5 MW)		34,310
Air Permit/Emissions Testing per site per year	7,338	7,338
Air Permit Application Including Modeling per site (One-time charge) ³	13,500	3,375
Equipment Rental per site per month ⁶	4,387	52,644
Total		133,417

³ These one-time costs are split over four years.

⁴ It is unclear how much it would cost to lease land for the diesels and therefore to be conservative was not included. The bid from WPS was for \$9,833/mo. ATC understands that WPS may be willing to renegotiate this portion of the bid.

⁵ This estimate is from WPS's Dale Wiley.

⁶ Vacuum Control Recloser (Circuit Breaker, Metering, Current Transformer, PT), etc.

		Yearly Costs for 10 Generators (13.5 MW)
Diesel Leasing Cost and Ancillary Substation Costs for 13.5 MW	Grand Total	1,190,805