COST ANALYSIS



MOBILIGHT LIGHT TOWER VERSUS COMMON LIGHT TOWER

This cover page is meant as an overview of the attached data so that there is clarity on its definitions, so it can be effectively applied to the fuel usage and labor cost comparisons between the Mobilight Hybrid Light Tower and the current light tower equipment used in the oil, gas mining and construction industries.

Fuel tank sizes are based on common capacity of light towers in the field versus specified capacity of Mobilight Hybrid Light Tower.

Low wage rate is based on industry statistics on entry level employment salaries in the oil, gas and mining industries.

Fuel usage is defined as: engine usage of diesel fuel at a rate of .65 gallons an hour.

Fuel cost is defined as: the common cost of diesel fuel (\$4.00 a gallon) x the rate of engine usage an hour (.65 gallons an hour) x the number of hours of engine run time.

Labor cost for checking unit daily is defined as: the low wage rate (\$22.00 hr) x amount of hours serviced (1 hr per day). Labor cost includes the daily turning on and off of lighting equipment and checking of equipment operational status. It does not include refueling, regular maintenance, parts replacement labor or material costs.

Labor refueling cost is defined as: the cost of labor to and from unit at the low wage rate (\$22.00 hr) x the amount of hours serviced (1 hr per visit) for the specific purpose of refueling.

COMMON DIESEL LIGHT TOWER 24 HR USAGE

The time required for tower lighting varies with the season, but tends to average around 10 hours per 24 hr cycle. However, it is very common that these lights run 24 hrs a day, simply because personnel are just too involved with current projects to get to the light towers, which results in dramatic fuel costs. The common capacity of light towers is 35 gallons. Many industries just look at this situation as the cost of doing business. So we have included a cost analysis on the constant running of light towers 24 hrs a day because it is a very common occurrence.

If you take a look at the supporting data, at the usual .65 gallon fuel consumption of diesel fuel an hour, the light tower consumes 15.6 gallons every 24 hrs. At a diesel fuel cost of \$4.00 hr x 15.6 gallons, it reflects a fuel cost of \$62.40 a day. With daily usage, the fuel cost for a year is \$22,776.00

Now, let's address the cost of labor for inspecting the unit daily to check fluid levels and operation. A one hour a day round trip at \$22.00 hr results in a cost of \$8,030 a year. Not to mention the lost time in productivity of personnel away from their usual duties.

Also with a fuel consumption of 15.6 gallons every 24 hrs, a 35 gallon tank needs to be filled every 2 days. Once again, that is a 1 hour round trip at \$22.00 hr. At 180 visits a year, it results in a cost of \$4,015 a year. And rarely do daily checks on equipment coincide with refueling requirements.

You will notice that these combined costs add up year by year to a fuel and labor cost near \$350,000 per light tower over a ten year period.

COMMON DIESEL LIGHT TOWER USAGE 10 HRS

As we mentioned in the 24hr analysis, the average light tower time needed, taking into consideration the varying time of seasons, is 10 hours every 24 hours. To make sure that light towers are turned on and off at the rights times, per the changes in seasonal light, would take a very disciplined and efficient schedule. But we need to consider this method, though rarely done, it can be achieved.

Again, if you take a look at the supporting data on 10 hr usage the fuel consumption is 6.5 gallons every 24 hrs. At a diesel fuel cost of \$4.00 a gallon, it reflects in a fuel cost of \$26 a day. With daily usage, the fuel cost for a year is \$9,490.

Again there is still is cost of inspecting the unit daily to check fluid levels and operation. A one hour a day round trip at \$22.00 hr results in a cost of \$8,030 a year. Not to mention the lost time in productivity of personnel away from their usual duties.

With a fuel consumption of 6.5 gallons every 24 hrs, a 35 gallon tank needs to be filled every 5 days. Once again, that is a 1 hour trip at \$22.00 hr. At 73 refuels a year, it results in a cost of 1,606 a year. And rarely do daily checks on equipment coincide with a very different schedule for refueling, which is usually handled by a separate department.

You will notice, even with a very disciplined and efficient light tower schedule, there is a combined fuel and labor cost of over \$191,000 over a ten year period.

MOBILIGHT HYBRID LIGHT TOWER

The Mobilight Hybrid Light Tower has full automation including an integrated light sensor that adjusts to the varying seasonal light tower operating requirements. It can also be set for exact on/off time schedules with a programmable timer, if needed. This eliminates the need for personnel to turn the lights on and off and adjust schedules to meet light tower operating requirements.

Solar is automatically integrated into the energy requirements of the lighting tower, working effectively with the generator and battery banks to provide continual power to the lights when needed. This drastically reduces fuel consumption, labor refueling requirements, engine run time and maintenance.

If you a take look at the supporting data, the hybrid tower fuel usage is 1.95 gallons every 24 hrs. At a diesel fuel cost of \$4.00 per gallon, it reflects in a fuel cost of \$7.80 a day. With daily usage, the fuel cost for a year is \$2,847.

Since our hardware and web based monitoring system track low fuel levels, engine run time, engine on/off, battery voltage levels, and GPS location, there is minimal need for personnel to make daily trips to check the status of the hybrid tower. Therefore, the cost of labor cost and resulting loss of productivity for checking the unit daily, as well as location, is minimal. Monitoring is 29.95 a month. The cost over a year is \$359.40

With a fuel consumption of 1.95 gallons every 24 hrs, the larger 78 gallon tank only needs to be filled every 40 days. Once again, a 1 hour refueling trip is \$22.00 hr. At 9 refuels a year, it results in a cost of \$200.75 a year.*

You will notice that there is a combined fuel and labor cost, including monitoring, of \$34,436 over a ten year period.

DATA

						MON DIESEL LIGH					
						DIESEL @24HR	S				
FUEL TANK SIZE	LOW WAGE RATE/HR	FUEL COST	DAILY FUEL USAGE		DAILY FUEL COST	YEARLY COST OF DIESEL	YEAR LABOR FOR CHECKING UNIT DAILY	LABOR FUELING COST PER YEAR (GO OUT EVERY 2 DAYS)	3YR(FUEL COST AND LABOR)	5YR(FUEL COST AND LABOR)	10YR(FUEL COST AND LABOR)
35 GA	\$22	\$4.00	15.6 GA (35*.65GAL/ HR)		\$62.40(15.6*\$4/ GAL)	\$22776(\$62.4*365)	\$8030 (365*\$22)	\$4,015 (182*22DAYS)	\$104,463.00	\$174,105.00	\$348,210.00
						DIESEL @10HR	S				
FUEL TANK SIZE	LOW WAGE RATE/HR	FUEL COST	DAILY FUE	EL USAGE	DAILY FUEL COST	YEARLY COST OF DIESEL	YEAR LABOR FOR CHECKING UNIT DAILY	LABOR FUEL COST PER YEAR (GO OUT EVERY 5 DAYS)	3YR(FUEL COST AND LABOR)	5YR(FUEL COST AND LABOR)	10YR(FUEL COST AND LABOR)
35GA	\$22	\$4	6.4GA(10*.65GA/HR		\$26(6.5*\$4/ GAL)	\$9,490(\$26*365)	\$8030(365*22)	\$1606 (\$22*73DAYS)	\$57,378.00	\$95,630.00	\$191,260.00
						MOBILIGHT					
						HYBRID LIGHT TO	WER				
FUEL TANK SIZE	LOW WAGE FI		EL COST DAILY FUE USAGE		DAILY FUE COST	YEARLY COST OF DIESEL	REMOTE MONITORING	LABOR FUELING COST PER YEAR (GO OUT EVERY 40 DAYS)	3YR(FUEL COST AND LABOR)	5YR(FUEL COST AND LABOR)	10YR(FUEL COST AND LABOR)
78 GA	\$22 \$4.00			1.95 GA (3*.65GAL/H	\$7.8(1.95*\$4 GAL)	\$2847(\$7.8*365)	\$360 (12*\$29.95) IF YOU GO OUT DAILY \$8030	\$200.75 (9DAYS*\$22)	\$10,223.25	\$17,038.75	\$34,077.50

(365*\$22)

ROI

		YR 1 WITH FUEL AND LABOR	PER MONTH for first 12 months	13th month and future months	YR3	YR5	YR10
Includes pur- chase of HY- BRID	HYBRID	\$37,315.75	\$3,109.65	\$283.97	\$10,222.92	\$17,038.20	\$34,076.40
Assume Light tower has been paid for	DIESEL @24hr run time	\$34,821.00	\$2,901.75	\$2,901.75	\$104,463.00	\$174,105.00	\$348,210.00
Assume Light tower has been paid for	DIESEL @10hr run time	\$19,126.00	\$1,593.83	\$1,593.83	\$57,378.00	\$95,630.00	\$191,260.00

SUMMARY

The cost of operation difference in the Mobilight Hybrid Light Tower and the common light tower in the field are significant. A comparison between a common light tower, running 24 hours a day, versus a Mobilight Hybrid Light tower, reflects in a fuel and labor cost difference of \$313,773.10 over a ten year period. Even with great effort to supply labor and time to turn the lights on and off at the appropriate time every day, per the changing light requirements of the seasons and operations, there is still a fuel and labor cost difference of \$156,823.10 over the same period.

Then there is the return on the investment (ROI) on the Mobilight Hybrid Light Tower. On page two of the data sheet, we amortize the investment in Mobilight Hybrid Light Tower over the first year and combine it with the fuel and labor costs. After the 13th month of operation, the Mobilght Hybrid Light Tower has paid for itself versus the common light tower operating 24 hours a day. In other words, by the end of the 13th month, the same cost has been incurred by the use of the common light tower as the Mobilight Hybrid Light Tower, which includes the purchase of the unit. By the end of the second year, the Mobilight Hybrid Light Tower cost, including the original purchase price, is the same as common light tower operating 10 hours

a day. And as stated before, unless very strict procedures are put in place, it just does not happen. And from the very first day, the fuel and labor cost of the Mobilight Hybrid Light Tower is dramatically less at \$283.97 per month, compared to the common diesel light tower operating 24 hrs a day at \$2,901.75 per month, and common diesel light tower operating 10 hrs a day at \$1,593,83 per month.

This does not include the savings in lighting life, engine maintenance and equipment replacement costs because of the significant reduction of engine running times, LED lights, solar energy and automation.

The high quality of our light tower construction and engineering are known on three continents. We currently have lighting towers that have been in the field and are fully operational after 20 years, because our light towers are built to not only perform, but to last through the most extreme conditions. The superior lighting, performance, automation, quality, innovation, durability and the resulting dramatic economic and environmental savings, make Mobilight Towers the best and brightest in the world

*The staff at the world's largest gold producing corporation, with numerous mines located in northern Nevada found, per their own research, they would save \$23,000 per year in fuel costs alone on each unit they now have in place. They did not have to refuel the Mobilight Hybrid Light Tower unit during the entire 30 day period. In fact, they still had over 30% fuel left in the tank. **That means they would only need to fill up our Hybrid Tower unit fuel tank approximately 9 times a year!** Their current consumption is 180 refuels, or refuels every other day (very common to the oil, gas, mining and construction industries). With an average run time of 3 hrs per 24 hrs, they only had 12% of their normal run time on the engine and generator. With the automated on/off function and remote monitoring, projected savings over a ten year period is well over \$325,000.00 per unit, This did not include savings on maintenance, engine and battery wear, and light replacement. And the amazing part of this performance; it was accomplished in the month of February 2014, when the cloud cover and weather was most extreme.

Please contact Mobilight Int. Inc. for details and quotes 801-280-4280.

Projections have been based on actual field tests. Performance figures are based on proper care and maintenance of equipment but are not guaranteed. Cost savings may vary depending on the age, manufacturer, components and location. This document is proprietary and confidential and intended for the user only.