Example of Saving by AIP Providing Distributed Generated Power 3/20/14

Steel Smelter

Consideration: 15 years Energy Service Agreement for Onsite 7.5mW of Power Generation equipment

Objective: Provide a 7500 kW/h of continuous demand ready onsite power to eliminate all demand charges from local utility in order to reduce energy costs, sell excess power to increase net profit on smelting operations. In addition move to 6 day work week operating 12 hours per day closed on Sunday.

Onsite Power Equipment: Provided by **American Independent Power LLC**

Review of Current Operations: Based on the current power provided by local Power company due to demand charges that increase operational costs the current average monthly power bill averages $600,000.

a. **Utility Provides 7.5mW service billed at $0.085/kWh plus Demand Charges**
b. **Average Monthly Bill $600,000.00**
c. **Billed as $431,950.00 at $0.085 plus $168,050 in demand charges**
d. **Operating 7 days per week 10 hour days**
e. **Average daily operational usage 7058kw/h**

I. Saving Results from Onsite 7.5mW providing 7500 kW/h of continuous Electrical Power 24 hours per day 365 days per year:

Steel Smelter comparison results for current monthly electrical bill of $600,000/MN with Onsite LN2G Power Generation Equipment:

The table below showing AIP placing a 7.5mW power plant on-site providing 180,000 kWh per day showing the Smelter the savings if the AIP system were operating onsite but does not include the additional saving from Net Metering (storing the excess power) or with the for a 1:1 credit or purchase.

Chart 1 (based on 30 day month) allowing 5 days per year for maintenance

Total kWh Used Monthly 7 days/week	Total Costs Avg. Monthly **Utility Cost w/demand charges**	**AIP** Provided kWh Monthly	Monthly billing from AIP@ $0.9/kWh	Utility Cost @ $085/kWh Monthly	Utility Demand Charges	Total Costs Through **AIP**	**Est. Monthly Savings with AIP**
5,081,765	$600,000.00	5,400,000	$486,000.00	$431,950.00	$168,050.00	$486,000.00	**$114,000.00**
					Total Yearly Saving without sale back to utility		**$1,368,000.00**

II. Upside benefit to Smelter from On-site Supply of continuous power 24/7

(Note: Net Metering credit or Utility buy back of excess power various State to State, County to County and governed by Sample Policy # 475 (SIEC) see PDF) ***Insert PDF***

Example of a 6 day work week: **6(six) 24 hour per day production week using LN2G:** Immediate savings through Net Metering =

- Usage for 52 days per year at 40% of daily operating power of 169,392kW=67,755kW/day
- **Available for sale** or 1:1 credit using AIP onsite power plant= AIP daily 24/7 power of 180,000kW less 67,755kW used leaving **112,245kW/d 52 days out of the year for resale.**
- Daily excess power available 313 days per year = 180,000kW/day provided by AIP less 169,392 of daily operating requirements leaving **10,608kW available for resale per day.**
- By running the LN2G power system around the clock on non- production days **9,157,044kWless 53,040kW for maintenance** per year that can be "sold" back to the utility for an estimated price of $0.045/kWh. ($412,067.00)/year

Sale back to Utility for Excess Power example: (this will vary depending on the location)

Smelter Estimated Monthly Power Costs (a)	kWh used per month 6 day production week (b)	AIP Continuous Monthly Billable Power 7 days per week (c)	AIP kWh sold back to Utility per month (d)	AIP Billable kWh per Month @ $0.09/kWh (e)	Utility Net Metering Buy Back @ $0.045/kWh (f)	Net Monthly Power Costs after power purchase (g)	Monthly Saving after AIP Charges & Excess Power Purchase (h)
$600,000.00	293,605	5,400,000	758,667	$486,000.00	$34,339.00	$451,661.00	$148,339.00 a-g=h
						Total Yearly Saving with sale back to utility	**$1,780,068.00**

Summary: The figures stated above are reasonable estimates based on the current known average monthly utility bill of $600,000.00 including Demand provided and the on-site review of the operations. Based on installing a 7.5W LN2G

system the average monthly savings by eliminating demand charges is estimated at $114,000.00 plus the Net Metering purchase of $34,399.00 for a total savings of $148,339.00 per month for a total 1 year saving of $1,780,068.00.

Additional Resulting Benefits: In addition to the direct electric costs saving shown above the other indirect benefits are:

- Power cost are stable and fixed well into the future (no increases)
- No interruption of business dues to power outages
- Can expand operations without putting burden on grid
- Energy produced through sustainable Green Energy
- Cost saving by operating 6 days per week vs. 7 days

TOTAL ANTICIPATED POTENTAIL SAVINGS BY INSTALLING AIP LN2G ON-SITE POWER = 25%