



HWSSC Photo-Voltaic Project

Lessons Learned



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HWSSC Photo-Voltaic Project

- **Building Description**
 - HWSSC is a 10 story 850,000 sq, ft. building.
 - 1,900 building occupants.
 - All electric building.
 - Average electrical use a year is 23,000,000 kwh.



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- **Talked to Solar Experts at Energy Conf**
 - Developed Support Resources

- **Researched Possible Funding Sources**
 - Illinois Clean Energy Foundation
 - Renewable Energy Resource Program
 - GSA



HWSSC Photo-Voltaic Project

- **Contacted DOE-FEMP**
 - **Vast Experience with Renewable Projects**
 - **Familiar with Energy Contracting & Funding**
 - **Suggested UESC with Local Utility**
 - **Talked to Com Ed, Very Happy to Help**



HWSSC Photo-Voltaic Project

- Design
 - 100Kw System based on size of roof.
 - Com Ed Rate Structure
 - Choose Flat Panels – Cheaper
 - Choose Sanyo HIT Modules – Most Efficient



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- **Contracting**
 - Com Ed Presented Proposal for Design
 - Held Negotiation Session
 - Final Agreement Called for Down Payment and then 6 Milestone Progress Payments.
 - After Each Milestone, Payment Spread Out Over Next 6 Utility Bills.



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August 6



HWSSC Photo-Voltaic Project

- **Facts**

- 6,700 Square Feet of Roof Space
- 528 Solar Modules
- Conversion rate of 18.3%
- 25 Year Warranty on each Module
- Peak Production Thus Far 92 KW
- Expandable, at cost of \$15,000 for 8 Modules.



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- Snow – melts from panels fairly quickly.
- Dirt – washes off with any rain.
- Damage – so far none, panels were walked on during winter
- Maintenance – so far none.
- PowerLight Monitoring – very helpful.

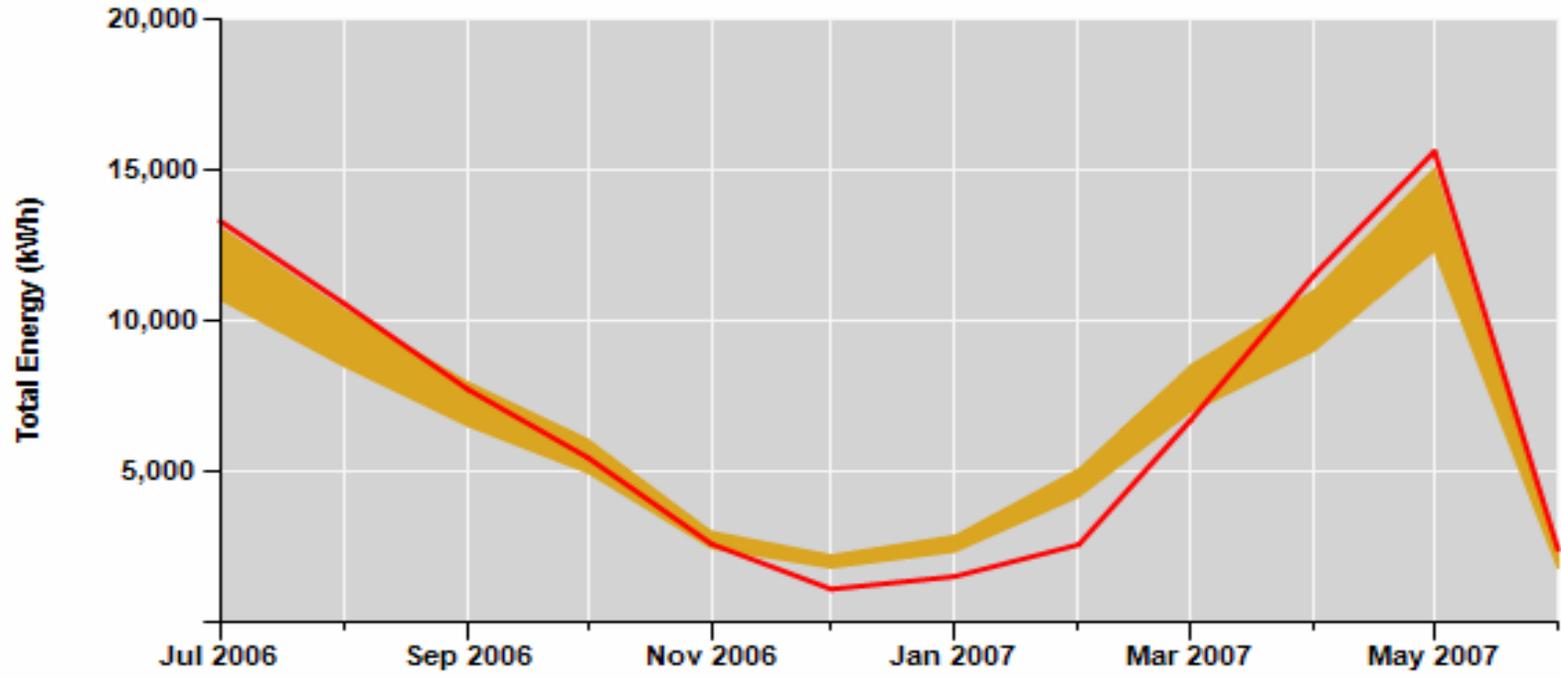


HWSSC Photo-Voltaic Project

Energy Produced vs. Expected

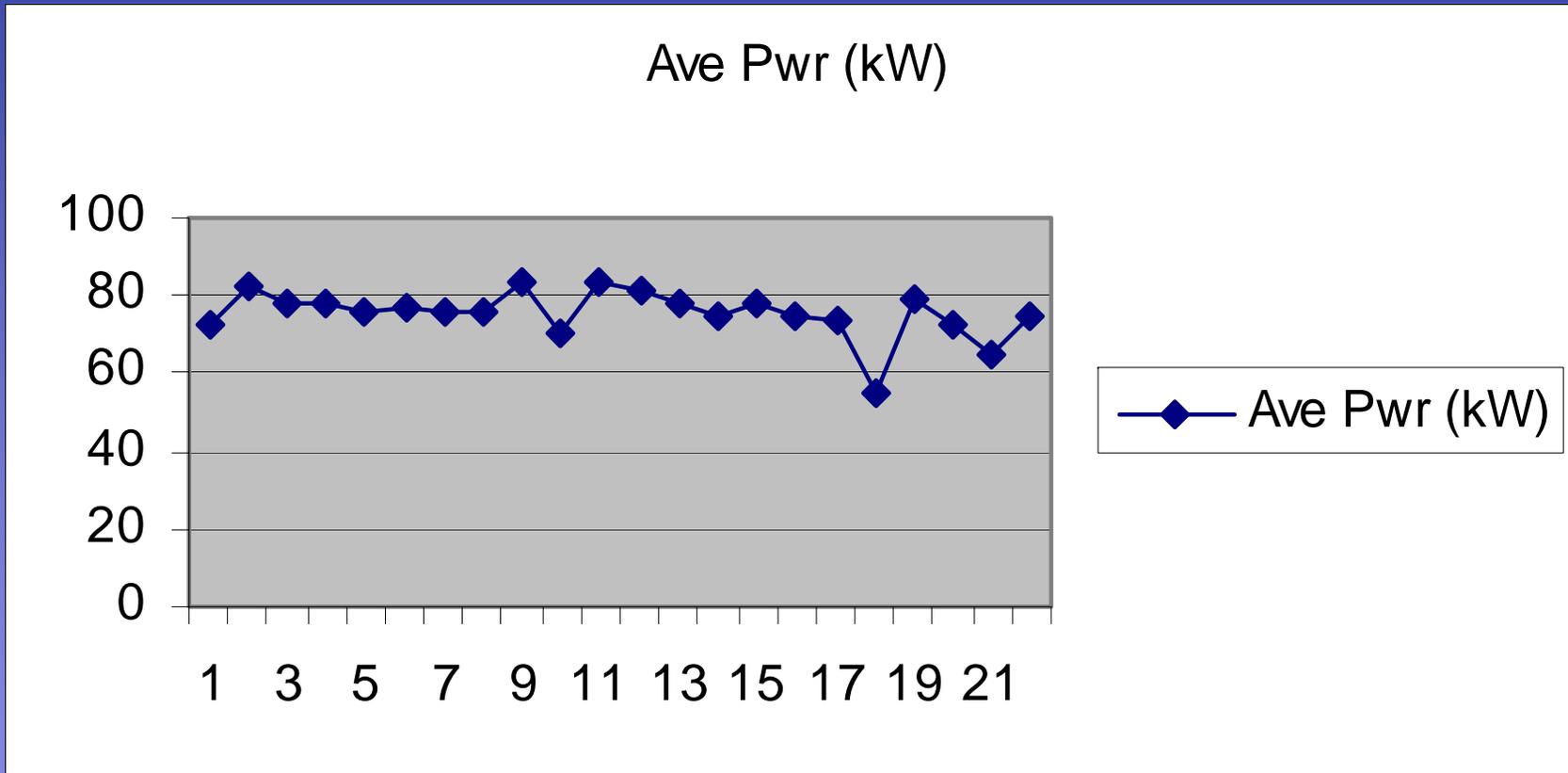
■ Simulated Energy (kWh) — Total Energy (kWh)

July 2006 - June 2007



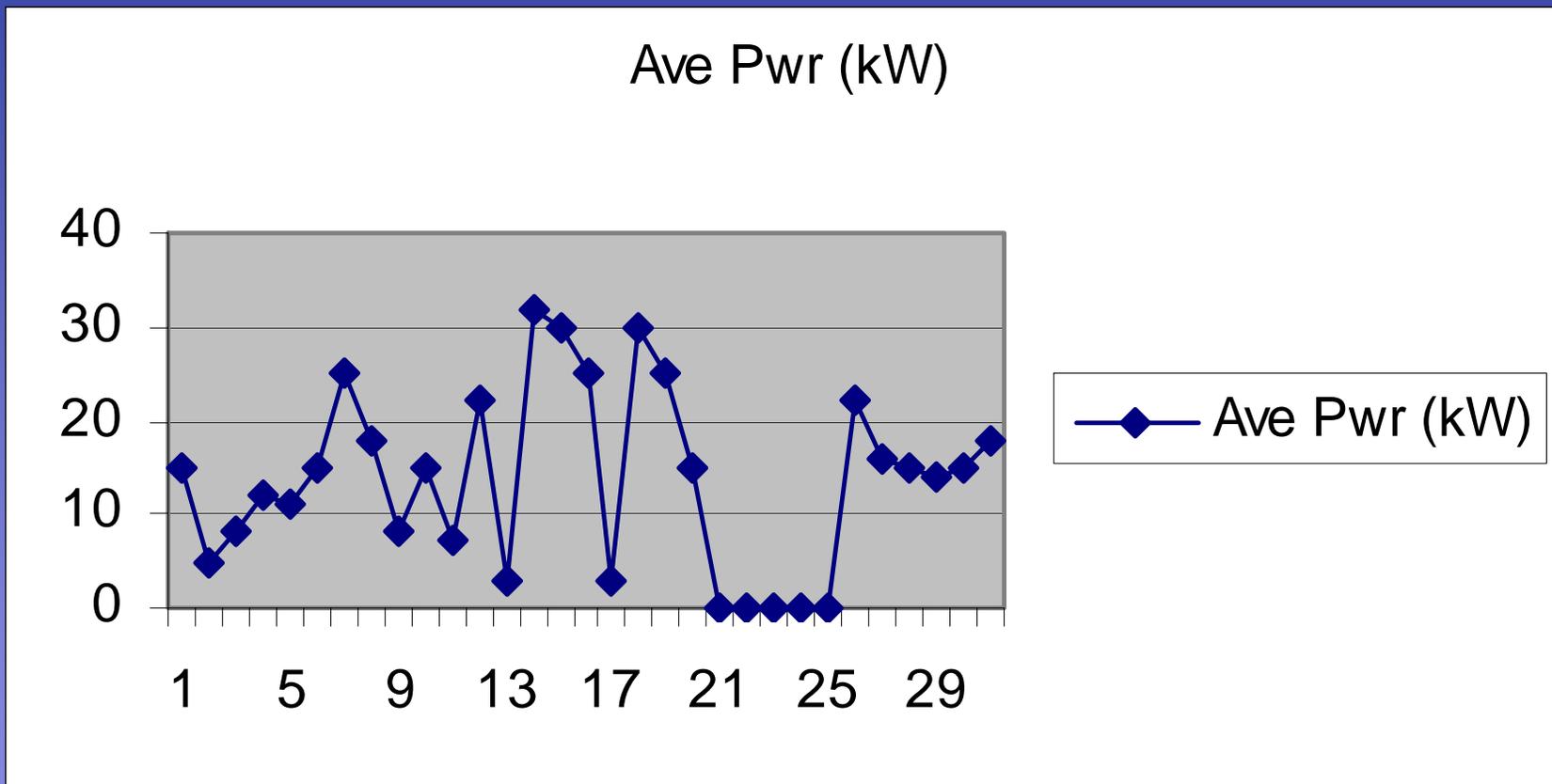


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- **FACTS**

- Peak Production 92 kW
- Have created 83,626 kWh of energy since inception.
- Estimated 46.3 tons of Carbon Dioxide has been saved.
- Coldest day -7
- Warmest day 103



Would you like to know more about this session?

- **First Name**
- **Company**
- **Address**
- **e-mail address**
- **Don't forget to fill out and drop off your session evaluations.**



For More Information

Would you like to know more about this session?

Larry Smith

Social Security Administration

600 West Madison Street

Chicago, IL 60661

larry.g.smith@ssa.gov

Don't forget to fill out and drop off your session evaluations!



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New Orleans
August 5-8