



An AEP Company

CUSTOMER INSIGHTS

DECEMBER 2018



Market Overview – AEP Energy Trading

Natural Gas:

- During the month of November 2018, natural gas and power significantly rallied as below normal temperatures throughout the month stoked fears of an already tight storage situation heading into winter.
- With natural gas storage about 20% below 2017 levels, and strong demand in November, prompt month natural gas at Henry Hub (January 2019) catapulted \$1.351/MMBtu to close at \$4.612/MMBtu.
- Most of the significant strength occurred through March, as all of 2019 was up \$0.363/MMBtu to \$3.204/MMBtu, while Calendar 2020 was actually down almost a penny to \$2.669/MMBtu.

Power PJM – Ohio:

- Similar to natural gas, power saw huge gains up front as January AEP – Dayton Hub on peak gapped up \$9.72/MWh to \$56.50/MWh.
- All of Calendar 2019 was up \$2.56/MWh to \$40.20/MWh, and Calendar 2020 was up \$0.73/MWh to \$36.61/MWh.

Power Illinois:

- PJM ComEd zone November 2018 day-ahead on-peak power rose \$4.87/MWh closing the month at \$39.38/MWh.
- MISO Illinois.Hub November 2018 day-ahead on-peak power gained \$0.68/MWh closing \$39.59/MWh to end the month.

Any references made to prompt month natural gas will normally be associated with a range starting the first day of the month through the final settlement of the respective prompt month natural gas contract. Other references to forward natural gas prices and all power prices will be based on a range starting the first day of the month through the final day of the month. This report made by AEP Energy contains projections and future expectations that are based on reasonable assumptions, but any such statements may be influenced by innumerable factors that could cause actual outcomes and results to be materially different from those anticipated, including (without limitation) changes in utility regulation and the allocation of costs within regional transmission organizations, including ERCOT, PJM, MISO and SPP.

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866-258-3782 care@AEPenergy.com
 fax 312-488-5049 **AEPenergy.com**
 225 West Wacker Drive, Suite 600 / Chicago, IL 60606
 303 Marconi Blvd., Suite 400 / Columbus, OH 43215

On-Site Financing Structures

There are two ownership structures for business customers in the solar market—direct ownership and power purchase agreements. When considering a solar system project, it's important to understand available financing structures. Let's look at three financing structures:

1. Direct Ownership

When you finance the system yourself, you purchase the solar system outright and assume all costs and risks associated with its operations and maintenance. You retain all the associated energy offsets and behind-the-meter savings as well as the federal and (and in rare cases, state) tax credits and tax depreciation benefits. Click [here](#) to read more.

2. Power Purchase Agreement (PPA)

Third-party ownership through a PPA is a medium- to long-term agreement in which you commit to clean energy purchases without incurring the capital expense. With a PPA, you can lock into a fixed electricity price for the solar system's production during the contract term. Click [here](#) to read more.

3. Leases: Capital versus Operating

A solar operating lease is similar to a PPA, but instead of paying for the power generated, you are "renting" your system. In other words, you would pay a fixed monthly lease payment during the term of the contract. Under a capital lease, the lessee acts as the owner of the solar asset for tax purposes; the lessee is able to capitalize all the tax and depreciation benefits. Under an operating lease, the lessor owns the solar system and lessee makes monthly lease payments (expenses are off the lessee's balance sheet). The ITC belongs to the lessor. This lease option is best for businesses that cannot utilize the tax and depreciation benefits.

Off-Site Structures

With an off-site solar option, the electricity generation can be delivered to your site from a remote solar facility. Below are off-site options to consider for your business.

1. Virtual PPA

A virtual PPA (VPPA) is a financially-settled arrangement available in regulated markets. Under a VPPA, you enter into a contract with a solar project owner to pay for the solar electricity generated by the project at an agreed upon contract price. The project owner then sells the generated electricity into the local wholesale market on a merchant price basis. This market sale of generation, combined with the market purchase, acts like a financial exchange—creating a virtual PPA. Click [here](#) to read more.

2. Community Solar

Community solar has emerged as a simplified off-site solution for those customers that are seeking solar energy but are unable to do so due to location or financial issues. Community solar involves building off-site solar arrays that produce enough electricity for dozens or even hundreds of homes and/or businesses. Households and businesses can become subscribers where they receive credits on their utility bill for their respective share of electricity produced. This bill crediting system is known as virtual net metering (VNM).

Moving Forward

Businesses, municipalities, and nonprofits are increasingly selecting solar solutions as associated costs continue to decline—allowing this technology to be cost effective. A solar solution can help businesses stabilize their future energy costs, reduce their carbon footprint and achieve corporate sustainability goals.

The process to evaluate and execute a solar solution can be a challenging task, especially if you are considering solar for the first time.

AEP Onsite Partners has helped many businesses evaluate and implement solar energy solutions that create stability for the future of their organizations. To date, AEP OnSite Partners has developed over 115 MW of solar projects.

About AEP OnSite Partners

AEP OnSite Partners provides behind-the-meter services and solutions to help customers reduce energy costs and risks.

We collaborate with your team to understand specific operational needs and develop customized services and solutions to improve your energy positions using our market knowledge, technical expertise and investment capital.

Are you interested in learning more about how a solar solution can benefit your organization? Our AEP Energy team is here to answer your questions. Reach out to Juan Alvarez, Business Development Director for AEP OnSite Partners, at jcalvarez@aepes.com or contact your AEP Energy sales representative to learn more.



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