CONTENTS

THE
SCHORK
GROUP

Fundamental and
Quantitative Analysis
of the Energy Markets

On-demand Price Range Forecasts

Readers may request projections for specific markets, timeframes, etc.

For example, the sample below was prepared for PJM FE OHIO (a pricing point not included in the weekly report):

- Around-the-clock (ATC) vs. peak pricing

- 12-month strip starting June 2021

- 24/36/48-month strips for June 2021 and June 2022

- Specific hedge recommendations incorporating block and indexed pricing strategies

- Reports can be co-branded

  Contact us for on-demand price range forecast details.

⚡ PJM FE OHIO - ATC   THE SCHORK GROUP, INC.

JUNE 2021 – 48 MONTHS

R3	35.66
R2	33.35
R1	30.99
Median	28.06
S1	25.25
S2	23.41
S3	21.90

JUNE 2022 – 48 MONTHS

R3	34.97
R2	32.65
R1	30.19
Median	27.23
S1	24.42
S2	22.99
S3	21.12
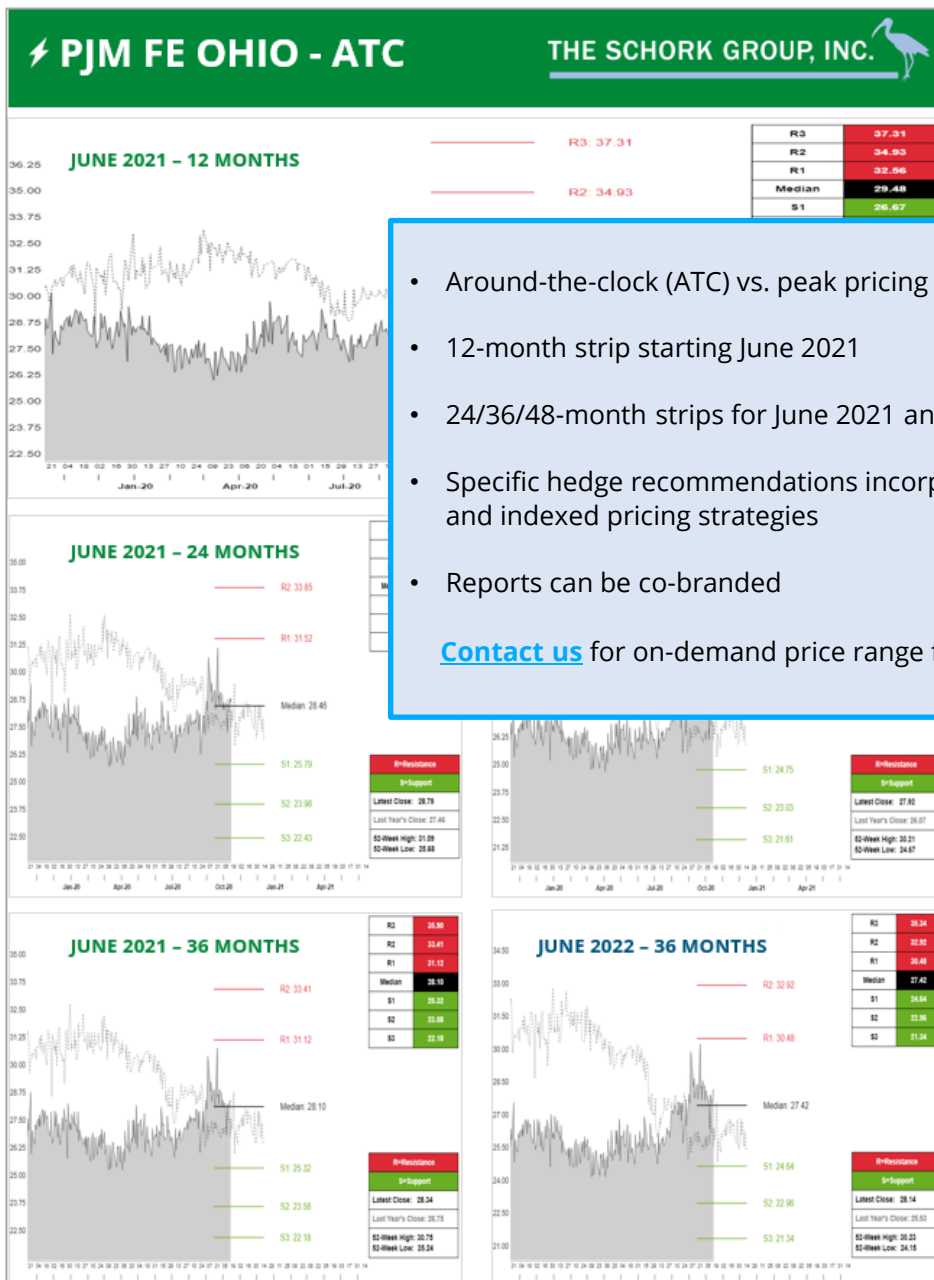
> The 2021 planned retireme[nt of the] Sammis power plant will res[ult in a] reduction in capacity. Of the[...] additional power projected [...] though 2023, 78% (5,002 [...]) generated by natural gas [combined] cycle turbines.

> Continued build outs and m[...] pipeline network will bring ad[ditional] gas into Ohio to meet the s[tate's] reliance on natural gas.

> Globalization of LNG expo[rts will] increasingly put upward pres[sure on] gas prices as end users co[mpete with] LNG plants for production.

> The biggest "unknown" is [COVID] related mitigation protocols [...] and the rapidity at which [commercial] and industrial sectors will re[turn and] resultant demand destr[uction. It's] anticipated that energy pric[es will rise] as restrictions are lifted.

⚡ PJM FE OHIO - ATC   THE SCHORK GROUP, INC.

> The PJM FE OHIO ATC June 2021 12-month strip market is in backwardation (near-term contracts are priced higher than the longer-dated contracts), a reflection of the imbalance between supply and demand. This is the highest priced and most volatile among the markets analyzed; this premium increases the blended rate for the longer terms strips.

> Fixed priced plans provide budget certainty while indexed pricing offers the opportunity to capitalize on market downturns. Combination products provide flexibility in energy buying tailored to your company's supply requirements, risk tolerance, and overall business objectives.

> > We recommend floating load requirements for June 2021–May 2022. There is still sufficient time for this market to retrace and present more favorable pricing. Any dips towards The Schork Group's probabilistic price range forecasting model's first level of support signals an opportunity to layer in hedge positions to protect against upside exposure.

> > Counterbalance the variability of the indexed pricing by looking for opportunities to lock in June 2022 24- or 36- months strips. These markets are currently trading just above the model's median.

> > As indexed markets approach expiration, hedging strategies for remaining requirements need to be scaled up accordingly.

> > **Active hedging programs and close management of procurement programs are critically important to navigate the complexities of the market and manage energy budgets.**

	# Months	Product	Below Median	S1	S2
June 2021 - May 2022	12	Index	15%	35%	50%
June 2022 - May 2024	24	Block	10%	15%	20%
June 2022 - May 2025	36	Block	10%	15%	20%

Prepared for:

COMPANY NAME
TAGLINE HERE

HOW TO USE THE REPORT

THE SCHORK GROUP, INC.

Market View

Provides analysis of key metrics of import to the energy industry.

Energy Navigator

Featured at the top right corner of each page, this icon returns the reader to the Energy Navigator.

Interactive map allows readers to click on specific gas/power pricing points and link directly to the associated analysis.

Week-over-Week Brief

Presents trend direction and potential reversals in price movement based on the Parabolic SAR indicator. This is one of several technical studies used by The Schork Group to identify price patterns and market bias.

NYMEX Henry Hub NG Futures

Fundamental and quantitative analysis of the Henry Hub Winter and Summer calendar strip markets, with a focus on the EIA's underground storage reports.

Price Range Forecasts/Hedge Recommendations

The report's layout is designed to present an at-a-glance overview of the term structure of the forward calendar strips.

The Schork Volatility Bands (SVB) are recalculated each week based on an anchor date of 30 days prior and provide future price range forecasts for the next 60 days.

The prior year's settle is represented by a dotted line and is extended to include an additional 60 days forward to provide seasonal context in which to view price activity.

SVB illustrate projected price levels at which the asset is over/under valued. The lower (green) bands represent support (S) and the upper (red) bands, resistance (R). The same data is also presented in table format.

Note: Power market analysis is based on on-peak pricing. ATC/off-peak analysis and/or customized strips (e.g., June/July/August 2021) is available by contacting us.

Strength of recommendation is based on timeframe and magnitude of the value opportunity.

Hedge positions should be layered in at/below the intersection of price and the support band.

The prior year's settle is represented by a dotted line.

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Schork Volatility Bands

The core component of the price range forecasting model is the Schork Volatility Bands (SVB). These visual representations are essentially enhanced bell curves which illustrate probability distributions for potential price range dispersion from the median over a given time period.
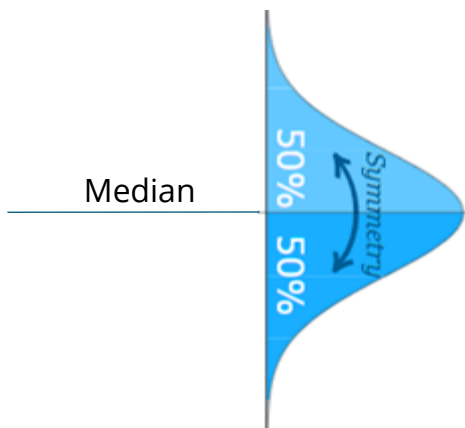
The Schork Group's underlying proprietary model employs a Monte Carlo simulation to run the data through 10,000 iterations. This technique accounts for the impact and uncertainty in random variables and prevents a small proportion of extremely large or small values from skewing the overall distribution.

Assuming fundamental/qualitative factors are consistent, it is expected that the output will follow the empirical rule wherein 99.7% of the distribution of potential prices fall within three standard deviations above or below the mean.

If the dispersion of returns from the quantitative simulations falls outside of the expected parameters, this is a signal that there is a change in the underlying fundamentals. Buying/taking long positions is advised when the market trades at/below the model's support levels, while selling/taking short positions is recommended when the market trades at/above the model's resistance levels. Continued direction within the SVB support levels indicates increasing pricing inefficiencies/market opportunities.

Actions to take are dependent upon risk tolerance, time horizon, and overall objectives. **Contact us** for information on how to apply these forecasts to your business.

Normal distribution is often represented by a symmetrical bell-shaped curve; it is expected that 50% of values will fall above/below the median:	In The Schork Group's models, the median separates the upper and lower bands (as in a normal distribution) however the dispersion of values is not symmetrical:

Median   50% 50% Symmetry

Median   50% 50%

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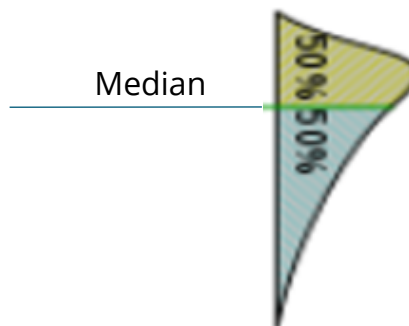
Adviser Access

Complementing the daily research note, readers have access to contact The Schork Group with questions on market activity and/or with inquiries related to their trading and hedging requirements.

We invite our readers to schedule a time to speak with us to enhance their knowledge of the energy markets and/or to review their current hedging programs.

Our goal is to forge productive and lasting business relationships. Many of our readers use a combination of our research notes and advisory services to fit their market intelligence needs.

This consultative approach is often cited as the distinguishing benefit of our service and can be scheduled via the calendar link below and/or from each week's cover email.

We look forward to hearing from you.
Click calendar to schedule.

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Profile

In 2005, Stephen Schork launched The Schork Group – an energy advisory firm that provides independent fundamental and quantitative analysis of the energy markets, with special emphasis on the impact of inconstant cost drivers on price volatility. Clients of The Schork Group represent the largest and most influential producers, marketers, financial institutions, traders, and end-users in the world.

The Schork Group is widely recognized as the energy industry's foremost provider of price range forecasting. Professionals in the global energy arena rely on The Schork Group's services to improve their economic performance while managing risk.

Through a multi-disciplinary approach to trading and idea generation, The Schork Group has developed a proprietary probabilistic modeling and volatility calculation methodology to signal statistically significant points at which buying/hedging is recommended.

The company's daily research note, **The Schork Report**, is the industry's leading briefing tool which highlights key metrics of import to the energy markets.

Presenter

Stephen Schork is a highly acclaimed speaker and is widely recognized for his ability to integrate a vast array of information into a dynamic and succinct market view. His presentations include a synopsis of the key issues affecting energy industry professionals, together with a contextual basis in which to view market action. Stephen's dynamic and thought-provoking presentations have established him as one of the industry's most sought-after energy experts.

Adviser

As a research analyst and trader, Stephen is distinguished by his skill in identifying pricing inefficiencies in and among commodity markets. Formerly a proprietary floor trader (Local) in the New York Mercantile Exchange's energy complex, Stephen Schork has more than 30 years' experience in physical commodity and derivatives trading, risk systems modeling, and structured commodity finance.

Stephen Schork is a Commodity Trading Adviser registered with the National Futures Association.

Media