



LIQUIDITY MANAGEMENT: CREDIT ON THE OFFENSE

A company of **Allianz** 

 **EULER HERMES**
ENERGY
Transforming risk to reward

BACKGROUND: TRADITIONAL CREDIT MANAGEMENT IN THE ENERGY INDUSTRY

Traditional credit management, in perception and reality, has been a process of controlling risk and structuring mitigation requirements. In the energy industry, these controls and requirements have mostly been implemented by using the most rudimentary of tools, including cash postings, letter of credit, and open credit allocations. While individually appropriate, these methodologies do not fully meet the needs of the energy market participants. The gap between the need to contract for commodity and associated transportation, processing, finance, and the financial tools to meet that demand has only recently begun to close.



THE GAP BETWEEN THE NEED TO CONTRACT FOR COMMODITY AND ASSOCIATED TRANSPORTATION, PROCESSING, FINANCE, AND THE FINANCIAL TOOLS TO MEET THAT DEMAND HAS ONLY RECENTLY BEGUN TO CLOSE.

The development of alternative assurance is still evolving, however, industry acceptance for alternative methodologies is growing at a rapid pace becoming more mainstream every day. Evidenced by the fact that only a few years ago, the usage of alternative methods was nearly nonexistent to today, where there are billions of dollars of otherwise stranded liquidity now available to the market. Many participants have embraced these new tools creating a positive effect for their market liquidity and as a result, their margins.

WHY IS THERE A NEED FOR NEW LIQUIDITY METHODOLOGY?

CAPITAL OPTIMIZATION PRIORITIZED

Capital optimization, meaning the highest and best use of internal capital resources, is at the forefront of energy companies' strategic approach. At the same time, some of the largest balance sheets in the world, represented by the insurance carriers, are looking to mobilize their resources for the best possible return. Awareness of the importance of making every dollar count rings similar in the halls of energy and pillars of finance. Both energy and insurance have evolved to work in tandem. These firms recognize that adoption of new strategies may well make the difference between the success or failure.

REGULATORY INFLUENCE

For energy, the legacy of Dodd-Frank and similar legislation has mandated a new and growing emphasis on administration and capital management. The market position of a firm can determine how much overhead must be accepted in order to strategically maximize their asset base. These overheads come at a price and carry significant responsibility that must be administered and paid for. Regulations from all jurisdictions, federal to local, have had major impact on capital management, and imposed new challenges to remain commercially viable.

MARKET IMPACTS

The energy industry has endured severe shocks over the last 20 years. The frequency of shocks is increasing. Technology, global integration, changes in the political landscape, population, and a profound sense of urgency have been drivers in both terms of circumstance and the reactions in price. It is important to realize each time there is a significant negative market event, the energy industry has not only rebounded, but thrived.

Unfortunately, the anticipation of impactful events has created a rift between those tasked to safeguard assets and those tasked with growing the business. Industry leaders recognize the need to close the gap and the entry of new capital resources is the result. The task now is to understand and employ these new resources in a manner consistent with the goals of your firm. This speaks to one of the most human challenges: change.

WHY IS THERE A NEED FOR NEW LIQUIDITY METHODOLOGY? (CONT.)



HUMAN REACTIONS

Progress inherently requires change: in process, in policy, in priorities, in resource allocation, and a fundamental change in mindset. We have all seen once universal technologies and standard business practices fall by the wayside to innovation. Despite some latent outdated perception to the contrary, the environment in energy has evolved from the historic “boom and bust”, to a more managed landscape.

Capital and operational discipline has been at the core of this evolution. Technology has allowed exploration results to become more reliable. Governance is granular. Supply chain dynamics have improved with an influx of capital previously focused on other market segments. All these influences have evolved into more demanding expectations of company performance. Credit, treasury, and risk functions are becoming more integrated with asset management and commercial growth. That integration has led to new responsibilities previously not considered core to this group’s effort, thus requiring a rethinking of how to accomplish the goals of the enterprise in a manner different from just a few years ago.

While some bristle at the idea of a change in the DNA of these roles, empirical evidence abounds that those who embrace the opportunity, have, are and will continue to, thrive. Integrating effective legacy policies with market proven, innovative tools is a proven methodology.

MARKET ACCEPTANCE HAS GROWN TO A LEVEL WHERE THERE IS NO LONGER A QUESTION OF IF YOU WILL ENCOUNTER THE NEED OR DEMAND FOR THESE TOOLS, BUT WHEN. UNDERSTANDING AND INTEGRATION INTO YOUR POLICIES AND OPERATIONAL PROCESS PUT YOU IN FRONT OF THE OPPORTUNITIES MADE POSSIBLE BY IMPROVED LIQUIDITY.

WHAT ARE THE PROVEN TOOLS AVAILABLE?

Euler Hermes has been at the forefront of innovation via the Euler Hermes Energy team. Energy requires uniquely large notional values, liquidity and fungibility. The insurance and surety carriers look favorably on these attributes and consider them fundamental to mitigating risk. Since 2015, this unique group has been working with energy market participants to perfect access to the vast capital strength available via third party clearing of credit risk and collateral requirements to unsecured balance sheets in the insurance industry.

The efforts have yielded results in the form of ***Energy Credit Insurance*** and ***On Demand Payment Bonds*** that are fully integrated/compliant with industry practice. Such has been the acceptance to date, that literally billions of dollars of liquidity have been safely returned to the market by simply integrating these tools into the credit and assurance environment. This means less balance sheet burden, less capital cost, increased capital availability, and ultimately more margin opportunity for buyers, sellers, transporters, processors, and storage owners of energy commodity.

1

**ENERGY CREDIT
INSURANCE
(AKA CREDIT
CLEARING)**

2

**ON DEMAND
PAYMENT
BONDS**

WHAT ARE THE PROVEN TOOLS AVAILABLE? (CONT.)



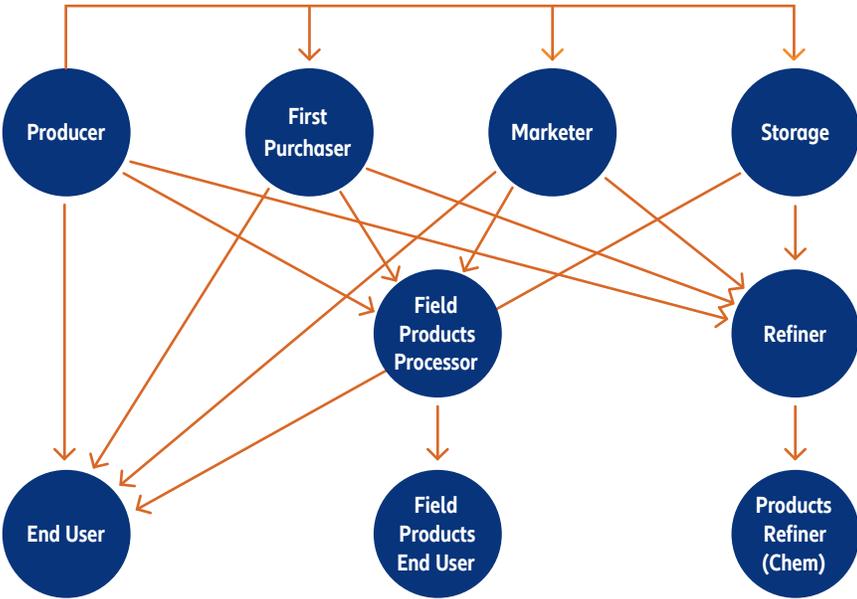
1 ENERGY CREDIT INSURANCE (AKA CREDIT CLEARING)

Globally, trillions of dollars in transaction value are credit cleared via credit insurance every year. Energy utilization has only evolved in recent years as the industry became more knowledgeable and comfortable with the dynamics of our energy markets.

Energy Credit Insurance is true to its name, the counterparty credit obligation is insured (cleared) via the insurance carrier. Meaning should the counterparty default, the insurance pays out according to the terms of the policy. It may be used with almost any contract for commodity or services and follows the construct of an insurance policy. This typically includes a deductible and/or copay (structured by the customer), straightforward claim procedure, reasonable payout time frames and flexible coverage application across your counterparty set.

Pricing is easily absorbed in transaction values and can be completely opaque to the counterparty. Utilization frees up balance sheet overhead, improves the credit rating of your receivable base, promotes more liquidity at better margins consequently becoming a catalyst for growth. Energy Credit Insurance is applicable across the entire supply chain.

Energy Credit Insurance (AKA Credit Clearing) touchpoint graphic Each connection establishes a touchpoint of application



WHAT ARE THE PROVEN TOOLS AVAILABLE? (CONT.)

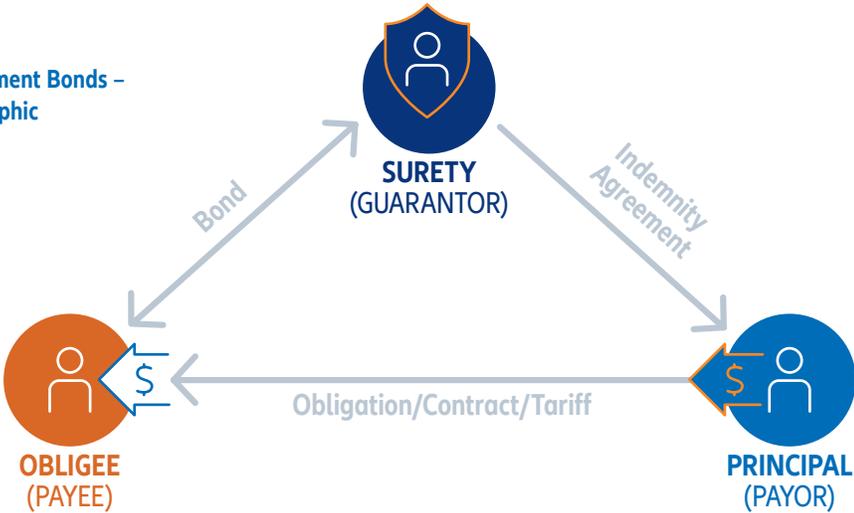
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ON DEMAND PAYMENT BONDS

On Demand Payment Bonds (ODP's) offer a viable alternative/adjunct to Letters of Credit. Typically presenting better credit, lower cost, and always off-balance sheet (unsecured), the effect on both sides of the table is a net positive to any application. Primarily designed for collateral and assurance obligations, ODP's have successfully been used in support of commodity transactions as well. While bonds are used for a wide variety of obligations, the unique nature of the ODP's requires a step back from most assumptions.

Understanding the bond is straightforward. There are three parties to the transaction: the principal (the payor), the obligee/beneficiary (the payee), and the surety (the guarantor). If the principal doesn't pay the obligee/beneficiary, the surety steps in, pays the obligee/beneficiary and exercises rights on the principal. All parties come to an agreement via the bond itself; no different than a Letter of Credit. The claim terms are clearly spelled out for the the obligee/beneficiary identical to a L/C.

On Demand Payment Bonds – Bond Trilogy Graphic



WHAT ARE THE PROVEN TOOLS AVAILABLE? (CONT.)

BENEFITS OF EH ENERGY RISK MANAGEMENT TOOLS

		TCI	LC	Open	Prepay	ODP Bond
Highlights	Provides for Risk Transfer	✓	✓	✗	✓	✓
	Bankruptcy Protection*	✓	✓	✗	✓	✓
	Slow Pay Protection	✓	✓	✗	✓	✓
	External Credit Support	✓	✗	✗	✗	✓
	Strong Credit Issuer	✓	✓	✗	✗	✓
	Covers All Commodities	✓	✓	✗	✓	✓
	Unsecured Obligation	✓	✗	✓	✗	✓
Implementation & Maintenance	Ease of Implementation	✓	✓	✓	✓	✓
	Ease of Documentation Requirements	✓	✓	✓	✓	✓
	Ease of Maintenance	✓	✓	✓	✗	✓
	Counterparty Friendly	✓	✗	✓	✗	✓
	Flexible	✓	✗	✗	✗	✓
	Industry Specific Support	✓	✓	✓	✓	✓
Cost And Valuation	Cost Effective for Company	✓	✓	✓	✗	✓
	Cost Effective for Counterparty	✓	✗	✓	✓	✓
	Counterparty Flexible	✓	✗	✓	✗	✓
	Contract Integration	✓	✗	✓	✗	✓

* Recent precedent suggests LCs may be vulnerable to recall in bankruptcy



INTEGRATING ENERGY CREDIT INSURANCE AND ODP'S

STEP ONE: AWARENESS

Are you truly aware of the credit leverage and credit clearing options in the market? If so, do you believe you are optimizing them to their greatest effect? If not, what barriers stand in your way?

The energy markets have operated in a similar fashion for so many years that many mistakenly think that the process and tools they use today are all that exist or are the only methods that meet credit/capital standards for the industry. When in fact, the newer tools exceed those standards and are rapidly becoming mainstream. Some of the awareness gap is simply education, and some is a reticence to change. Those that are not educated or unwilling to evolve have lesser tools than those that are educated and have evolved.

Euler Hermes Energy solutions, and the team that supports them, can remove the concerns, help create acceptance, prove the ROI, work with your specific needs to optimize the use of, and application for Energy Credit Insurance and ODP's.

COMPOUNDED BENEFITS: 1 + 1 = 3

Consider that every dollar value restricted by credit or stranded in assurance postings has not only cost associated, but an almost incalculable opportunity value. In addition, the secondary effects on the balance sheet, VAR and liquidity compound the risks. By clearing the credit and payment risks to a third party, you gain the liquidity uplift concurrently with the associated economic and opportunity benefits. This compounds the effects and offers you a level of flexibility previously unavailable.

LEVERAGING INTERNAL LIQUIDITY

Market position depends on your capital and credit balance. Expanding this horizon has been challenging due to the costs of capital, restrictive policies and a lack of innovation. In truth, until recent years, there hasn't been an effective methodology that addressed all three components. By addressing the overriding restrictions, Euler Hermes Energy has created effective tools that address each issue.

INTEGRATING ENERGY CREDIT INSURANCE AND ODP's (CONT.)

INNOVATION WITH CERTAINTY

The evolving energy market environment mandates the consideration, if not reliance, on sound new methodologies to effectively grow business. In the realm of credit, assurance and liquidity management, Energy Credit Insurance and ODP's have a proven track record, are supported by the largest capital pools in the world and have provided billions of dollars in capital relief in the few years since their adoption within the energy industry. Integration in your management matrix has become straight forward. Counterparty acceptance is growing rapidly. Euler Hermes Energy provides the support and commitment to meet market requirements.

RESTRICTIVE POLICIES: EVOLVING THE BASELINE

Starting over a decade ago, the energy markets have imposed increasingly restrictive policies for credit management and assurance. While founded in sound management, the liquidity impacts have been severe. The good news is energy commodity (power/renewables, natural gas, crude oil, refined products), transportation, processing and refining sectors now represent an extremely efficient, well-managed environment. That said, restrictive policies create a catch 22 between asset protection and commercial growth.

The market entry from new capital resources has helped fill this void. The insurance and surety industries represent the largest balance sheets in the world. These institutions have committed to energy and are committed to deploying in these markets. Energy Credit Insurance and ODP's allow you to clear the risk to superior credit thus allowing for maintenance of conservative policies while allowing for growth opportunities.



THE INSURANCE AND SURETY INDUSTRIES REPRESENT THE LARGEST BALANCE SHEETS IN THE WORLD. THESE INSTITUTIONS HAVE COMMITTED TO ENERGY AND ARE COMMITTED TO DEPLOYING IN THESE MARKETS.

INTEGRATING ENERGY CREDIT INSURANCE AND ODP's (CONT.)

CAPITAL COSTS: MOTIVATION FOR INNOVATION

Increasing sensitivity to capital preservation and qualified deployment have yielded a wide range of approaches. Internal capital charges, shorter yield expectations, and limited flexibility created the environment. Migration to capital optimization is a core component in management approach to the market. The core result is the need to “pay for the money” is now intrinsic to almost every commercial discussion.

Until recent years, restrictions inherently left opportunity on the table. When growth is essential to success, for corporations and their employees, realizing the potential of every economic resource is critical. Releasing stranded capital tied up in counterparty postings or assurance requirements is now essential to commercial growth. The tools are available, vetted, and supported economically at substantial levels. The utilization of these tools creates a compounded liquidity impact by moving the stranded capital from a neutral position on the balance sheet to a deployable state at a lower cost than traditional methodology.

Lower costs, stronger counterparty credit positions, more fungible capital capacity all add up to greater liquidity.



INCREASING SENSITIVITY TO CAPITAL PRESERVATION AND QUALIFIED DEPLOYMENT HAVE YIELDED A WIDE RANGE OF APPROACHES.

RELEASING STRANDED CAPITAL TIED UP IN COUNTERPARTY POSTINGS OR ASSURANCE REQUIREMENTS IS NOW ESSENTIAL TO COMMERCIAL GROWTH.

INTEGRATING ENERGY CREDIT INSURANCE AND ODP's (CONT.)



THE IMPORTANCE OF FREE CASH FLOW

For stakeholders, there has been an intriguing shift in determinate metrics for the health, stability, and attractiveness, of a company. That shift has been toward free cash flow. In the minds of shareholders, analysts and counterparties, free cash flow has been replacing earnings as the gold standard of financial performance metrics. Free cash flow is less easily manipulated than net income. Any financial process that demonstrably increases free cash on hand is, in this market, something management finds helpful. The words "free cash flow" are now in quarterly updates as well as the written mention in financials. But because free cash flow is a metric outside the realm of Generally Accepted Accounting Principles, there's no standard definition of the term.

The most common meaning used by major corporations today is operating cash flow (a GAAP-defined term) minus capital expenditures, but companies also meld dividends, debt, capital leases, and divestitures of property, plant, and equipment into their calculations. The application of any financial process that minimizes cash margining requirements increases the amount of reportable cash to the bottom line. What a company does with the cash is up to the CFO, but make no mistake, whether it be an increase in degrees of freedom or an increase in cash on hand, the benefit to the company in cash operating efficiency is marked.

DIRECT TO THE BOTTOM LINE

The resultant calculation of free cash flow is based on growth-oriented CAPEX and the maintenance capital expense, which some companies use exclusively. If companies only invest in maintaining existing equipment rather than also investing in new equipment, for example, they tend to stagnate, thus increasing enterprise risk. Cash is the lifeblood for any company's health, regardless of the eventual GAAP-applied calculation.

Overall, the number of companies mentioning free cash flow in their 10-Ks and defining it there has risen. The increased importance of free cash flow can be directly related to the accounting scandals and related negative effects of the early 2000s. Those massive disruptions prompted managers, investors and capital resources to search for a measure of corporate financial performance that couldn't be so easily manipulated. Enter free cash flow.

The return of capital to a fungible, more liquid state via the use of Energy Credit Insurance and ODP's results in an increase for free cash flow which translates directly back to the bottom line.

UTILIZATION IN ACTION: HOW TO IMPLEMENT LIQUIDITY TOOLS

From renewable asset to power switch from well head to burner tip, Energy Credit Insurance and ODP's apply to the supply chain transaction points and assurance requirements for credit support. The almost universal functionality creates innumerable opportunities to utilize these tools for capital/credit optimization on both sides of the balance sheet. For insight, take a look at the following catalogue of applications and the associated results...

For more information, please visit
www.eulerhermes.us/energy.



APPLICATION USE STUDY

COMMODITY SUPPLY

A midstream operator and a large producer forged a long-term processing and terminalling agreement, and associated off take agreement. The producer exposure to the midstream operator exceeded their internal credit limit. Producer requested that the midstream operator post an on-demand payment bond to secure the transaction.

VOLUME: 25,000 BPD

NOTIONAL VALUE: \$58 MM USD

GOAL: The goal was to collateralize the exposure on top of the existing open credit lines.

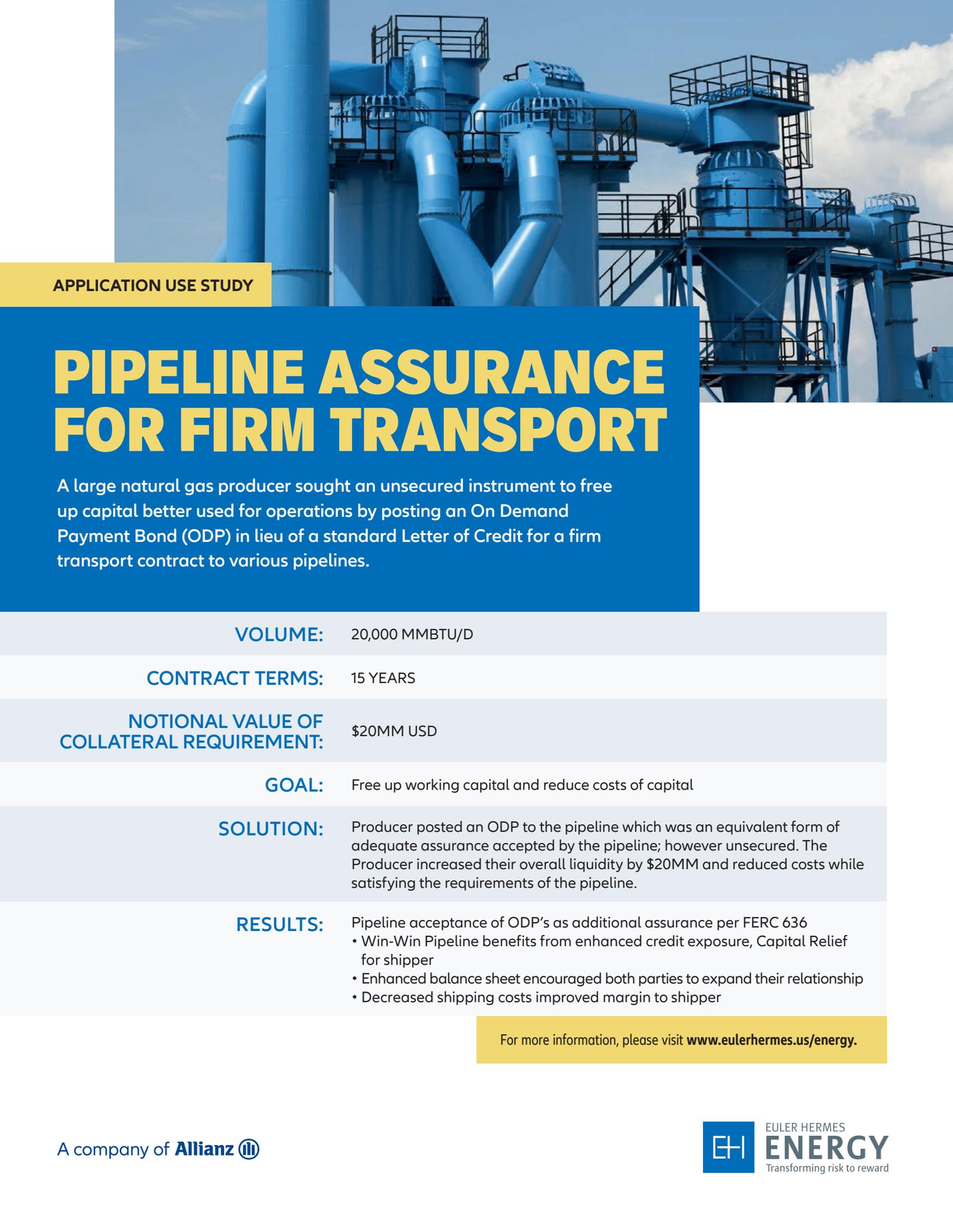
SOLUTION: Midstream operator posted an on-demand payment bond that satisfied the collateral requirements put forth by the producer.

RESULTS:

- Producer doubled their gross exposure to the midstream operator while adhering to internal open credit limits
- Midstream operator absorbed the cost of the bond into the deal economics
- Costs equated to less than 5 cents per bbl

Deal was consummated, producer found a premium outlet for their crude production, midstream operator acquired reliable long-term supply that enabled them to expand their footprint geographically. Producer maintained existing open credit line with midstream operator and was able to double their business together via the on demand payment bond.

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APPLICATION USE STUDY

PIPELINE ASSURANCE FOR FIRM TRANSPORT

A large natural gas producer sought an unsecured instrument to free up capital better used for operations by posting an On Demand Payment Bond (ODP) in lieu of a standard Letter of Credit for a firm transport contract to various pipelines.

VOLUME: 20,000 MMBTU/D

CONTRACT TERMS: 15 YEARS

NOTIONAL VALUE OF COLLATERAL REQUIREMENT: \$20MM USD

GOAL: Free up working capital and reduce costs of capital

SOLUTION: Producer posted an ODP to the pipeline which was an equivalent form of adequate assurance accepted by the pipeline; however unsecured. The Producer increased their overall liquidity by \$20MM and reduced costs while satisfying the requirements of the pipeline.

RESULTS: Pipeline acceptance of ODP's as additional assurance per FERC 636

- Win-Win Pipeline benefits from enhanced credit exposure, Capital Relief for shipper
- Enhanced balance sheet encouraged both parties to expand their relationship
- Decreased shipping costs improved margin to shipper

For more information, please visit www.eulerhermes.us/energy.



APPLICATION USE STUDY

COLLATERAL ALTERNATIVE TO INDEPENDENT SYSTEM OPERATOR (ISO)

Large utility has posting requirements to various ISO's. The utility implemented a collateral optimization strategy and determined posting surety bonds and/or fronted letters of credit offered by insurance providers increased balance sheet liquidity and lowered costs of capital.

VOLUME: Varies seasonally, collateral requirement base value \$40MM USD

NOTIONAL VALUE: \$40MM USD

GOAL: Release working capital currently restricted by LoC posting

SOLUTION: ISO's acceptance of EHE ODP Surety Bond in addition to/lieu of LoC posting

RESULTS: Integrated utility was able to reduce working capital commitment

- Enhanced working capital/liquidity deployed to enhance revenue generating operations
- Already solid balance sheet, further enhanced for the Integrated Utility
- Superior Credit rating of collateral for all ISO market participants
- ISO achieves goal of improving liquidity of market participants without incurring additional risk

For more information, please visit www.eulerhermes.us/energy.



APPLICATION USE STUDY

CLEARING PHYSICAL CREDIT EXPOSURE TO THIRD PARTY BALANCE SHEET TO INCREASE REVENUE & PROFIT

Commodity Trader needed additional open credit to lock in deal. Internal credit limit was capped out and requiring the counterparty to post an L/C was unfavorable option.

NOTIONAL VALUE: \$25MM Credit Line Required by Buyer based on Contract Terms. Commodity Trader only had \$15MM in open credit available to the buyer from their internal credit limit.

GOAL: Capture contract/sale and additional profit without adding additive open credit exposure to the balance sheet.

SOLUTION: Seller purchased energy trade credit policy for \$10mm in value that covered both accounts receivable exposure and physical mark to market exposure (known as spread loss risk).

RESULTS: Trader was able to project \$25mm in open credit to the buyer, while maintaining the \$15mm credit limit on their balance sheet. This led to an increase in volume, revenue, profit without adding any additional risk at a cost lower than the trader's required internal cost of capital.

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