FitchRatings

Public Finance
Public Power
United States

U.S. Public Finance Prepaid Energy Transaction Rating Criteria

Sector-Specific Criteria

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This report updates and replaces the *U.S. Public Finance Prepaid Energy Transaction Rating Criteria* dated June 10, 2022.

Related Criteria

Structured Finance and Covered Bonds Counterparty Rating Criteria (March 2023)

U.S. Public Power Rating Criteria (March 2023)

Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (August 2022)

U.S. Public Finance Structured Finance Rating Criteria (February 2021)

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Scope

This report describes Fitch Ratings' approach to assigning and maintaining ratings on prepaid energy transactions, which are typically structured to provide municipal utilities with a long-term, fixed supply of energy — mainly natural gas or electricity — at a unit price that reflects a predetermined and fixed discount to the market energy price. These criteria build upon Fitch's master criteria report, *U.S. Public Finance Structured Finance Rating Criteria*.

Key Rating Drivers

Fitch considers three major factors to determine the credit rating of prepaid energy transactions: counterparty credit quality, transaction mechanics and structure, and legal issues and consideration. Each of the key rating drivers below is of equal importance for the analysis.

Counterparty Credit Quality: The rating of prepaid energy bonds will be limited to the lowest rated counterparty whose default risk is not otherwise mitigated by guarantees, collateralization and replacement requirements, or other enhancements described in these criteria. Most prepaid energy bond ratings still generally reflect the long-term rating of the commodity supplier or its guarantor. However, in cases where the credit quality of other counterparties is weaker, insufficiently enhanced or not consistent with Fitch's criteria regarding counterparties in structured transactions, the rating on the bonds may reflect the credit of that counterparty.

Transaction Mechanics and Structure: Fitch's analysis focuses on the payment obligations of the transactional counterparties and the collective sufficiency of those payments to cover operating and debt service requirements, as well as a potential mandatory redemption payment. Fitch evaluates structural credit enhancement, both with respect to the sufficiency of cash reserves to provide liquidity and the potential heightened payment risk of counterparties that experience a decline in their credit profiles.

Legal Issues and Consideration: Fitch's analysis of prepaid energy transactions relies on the agreements to be legal, valid and binding obligations of the respective counterparties through both a review of applicable terms and conditions as well as opinions from counsel.

Transaction Framework

Prepaid energy bonds are typically issued by municipal joint action agencies or nonprofit corporations acting on behalf of one or more municipal utility systems (issuers). Proceeds are used to prepay a supplier for a specified quantity of a commodity to be delivered to the issuer. The issuer will then deliver the commodity to the purchasing utilities over the life of the bonds. The purchasing utilities pay for all quantities delivered, typically at a monthly index price less a predetermined fixed discount providing an economic benefit.

The issuer and supplier generally enter into matching commodity swap agreements with a commodity swap provider to hedge the risk of changes in commodity prices and accommodate the difference between the fixed cost established through the bond financing and the monthly index price paid by the purchasing utilities.

Payments received from the purchasing utilities, together with commodity swap payments and any cash payments from the supplier (in lieu of delivery), are structured to be sufficient to pay the required debt service on a timely basis.

Debt service funds — and sometimes other reserves — are typically invested via a guaranteed investment contract (GIC) or forward purchase agreement (FPA), given payments by the purchasing utilities and swap provider are made monthly and debt service payments are made semiannually.

Bondholders are secured by, and generally rely on, counterparty payments, together with available cash reserves, to receive full and timely debt service payments.

Redemption of the bonds is required if the purchase agreement (PA) — agreement to purchase the commodity between the issuer and the supplier — is terminated prematurely. Payment responsibilities upon termination can vary widely by counterparty. However, the supplier typically has the primary payment obligation for the termination payment. The termination payment combined with the required payments from other counterparties is sufficient to ensure full repayment of the outstanding bonds.

Counterparty Credit

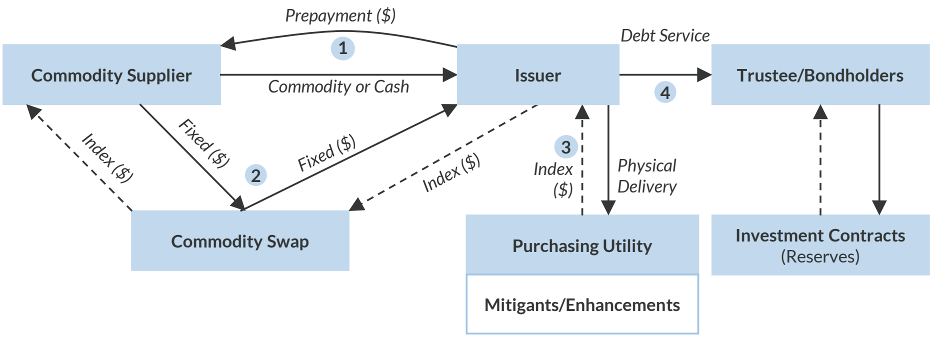
Prepaid energy transactions involve multiple counterparties: typically, the supplier and its guarantor, purchasing utilities, a commodity swap provider, and investment providers. With the exception of the purchasing utilities, the transaction parties, including the supplier and its guarantors, are generally large financial institutions or affiliates thereof. Each party is generally required to perform its obligation for bondholders to receive timely and sufficient payment of principal and interest, unless exposure to a specific counterparty is sufficiently mitigated by cash reserves, excess transactional cash flows or other mechanisms (see Fitch's Analysis of Mitigants in Prepaid Energy Transactions below). The transaction's rating will therefore reflect that of the lowest rated counterparty after giving effect to the relative guarantees, enhancement and/or other mitigants.

If Fitch does not rate a participating counterparty, guarantor or enhancement provider, it will assign its own private rating, Credit Opinion or credit score. Fitch reserves the right to use another credit rating agency's publicly monitored rating in place of a required Credit Opinion or credit score when the underlying analytical approach is viewed as largely consistent with Fitch's approach.

Fitch may evaluate the transactional portfolio credit risk using its Portfolio Stress Model. Please refer to the report *State Revolving Fund and Municipal Finance Pool Program Rating Criteria* for more details.

Fitch will assign a private rating if a relevant counterparty is the weakest link and exposure is not otherwise mitigated.

A Structural Overview of a Prepaid Energy Transaction



1 **Prepay Agreement**
- Bond proceeds are used to make a one-time prepayment to a supplier in exchange for a commodity to be delivered.
- Supplier delivers the commodity (or cash in lieu of delivery) to the issuer over the life of the bonds.

2 **ISDA**
- The issuer and supplier enter into matching commodity swap agreements with a commodity swap provider returning each to index-based commodity pricing.

3 **Supply Agreement**
- Issuer delivers gas to purchasing utility, who pays for all quantities delivered at an index price.

4 **Trust Indenture**
- Payments received from purchasing utility, together with swap netting payment and any cash payments from the supplier (in lieu of delivery), are structured to be sufficient to pay the required debt service on a timely basis.

ISDA – International Swaps and Derivatives Association, Inc.
Source: Fitch Ratings

Supplier

The supplier's obligation broadly includes delivering the commodity, or cash equivalent in lieu of delivery, over the life of the bonds. In the event of a termination of the PA, the supplier is generally required to make a payment in line with undelivered quantities and unearned amounts, which together with the required payments of the other counterparties is sufficient to redeem all outstanding bonds. Fitch's assessment of the supplier's — or its guarantor's — credit is consistent with its Issuer Default Rating (IDR).

Purchasing Utility

The purchasing utility pays for the delivered commodity at a discount to a specified index price. Fitch's assessment of the purchasing utility is consistent with the utility's revenue-supported debt rating (or IDR if available), or Fitch's Credit Opinion should the entity not have an outstanding Fitch rating. In its assessment, Fitch will also consider the characteristics of the supply agreements (SAs), including but not limited to any contractual step-up provisions to absorb capacity allocated to a defaulting utility and/or additional coverage that may be associated with contracted savings if there is more than one purchasing utility.

For transactions that include more than one purchasing utility, Fitch's aim is to determine the extent to which the transaction can withstand separate defaults by each of the purchasers. For transactions that include 10 or more purchasing utilities, Fitch will evaluate the transactional portfolio credit risk using its Portfolio Stress Model. Please refer to the *State Revolving Fund and Municipal Finance Pool Program Rating Criteria* for more information about the Portfolio Stress Model.

Swap Providers

Mirrored and mutually terminating commodity swap agreements are the most common mechanism used to eliminate commodity price risk for the supplier and purchaser. Pursuant to the agreements, the supplier and purchaser will each typically contract with a third party to exchange a price corresponding with the fixed-debt service requirements, for a price relating to an index for the prepaid commodity. Furthermore, interest rate swaps may be used to hedge interest rate fluctuations on variable-rate bonds. In both these cases, Fitch will assess both the long- and short-term ratings of the swap providers to determine the degree to which the provider's rating factors into the rating on the bonds. See Counterparty Criteria, Collateralization and Replacement Criteria (Applicable for Swap and GIC Counterparties) below for more details.

In lieu of a commodity swap, the purchasing utility or utilities and the gas supplier may instead elect to hedge the risk of changes in the price of natural gas through ongoing adjustments to the monthly volumes delivered under the PA and SA, eliminating the need for a swap provider assessment.

Investment Agreement Providers

Investment agreements, including GICs and FPAs, may be used to provide returns on funds that are a part of the trust estate. These funds may include the debt service fund, or reserve funds to mitigate other counterparty default, such as the commodity swap provider or purchasing utility. Fitch will assess both the long- and short-term ratings of the investment agreement provider to determine the degree to which the provider's rating factors into the rating on the bonds. See the Counterparty Criteria, Collateralization and Replacement Criteria (Applicable for Swap and GIC Counterparties) below for further details.

Funds invested directly by the issuer must be invested in qualified investments outlined in Appendix A.

Counterparty Rating Assessment

The ratings of the supplier (or its guarantor), purchasing utilities, commodity swap provider and investment agreement provider are determined by the relevant analytical group at Fitch. For example, the Financial Institutions group assigns bank ratings and the Public Power group assigns the utility ratings or Credit Opinions.

Mechanics and Structure

Sufficiency of Coverage or Funds

Fitch examines the transaction documents to determine if the obligations of the counterparties in aggregate are sufficient to cover the amount, frequency and timing of the bond payment obligations when needed. In particular, Fitch reviews the documents to determine if the stated obligations of the counterparties as described in the multiple contracts are sufficient, if paid, to cover debt service requirements on a timely basis in any scenario, including force majeure events.

Contracts

The primary types of contracts that govern prepaid energy transactions include:

- Trust indentures (issuer, bondholders);
- PAs (supplier, issuer);
- SAs (issuer, utility);
- Commodity swap agreements (swap provider, issuer, supplier);
- Investment agreements (investment provider, issuer, trustee);
- Funding agreements (supplier, funding provider).

Purchase Agreement

The supplier is required under the PA to deliver the issuer-specified quantities of the commodity over the life of the bonds. Any failure to deliver requires a payment by the supplier that, together with other pledged revenues, is sufficient to make required debt service payments. Bondholders have historically not been exposed to noncredit-related failure to deliver (i.e. lack of demand or force majeure). The PA will automatically terminate if the supplier fails to make a payment in lieu of delivery. The supplier or its guarantor will then be required to make a termination payment sufficient, together with other pledged payments, to redeem the bonds.

Supply Agreement

The purchasing utility is required under the SA to pay for all delivered quantities (take-and-pay) for the life of the bonds. The price paid by the utility corresponds with a specific index price less a contracted discount. Its obligation is paid from its own revenues as an O&M expense. Failure by the utility to pay for delivered quantities will result in a termination of the SA with that purchasing utility and, depending on the structure, could result in a shortfall in debt service payments and/or potential termination of the PA.

Bondholder exposure to the purchasing utility is generally limited to approximately two months of gas consumption at prevailing market prices. This amount represents the maximum quantities delivered without payment before the gas SA would be terminated and the gas redirected for sale to other parties. In some structures, the payment risk related to the purchasing utility's obligation may be mitigated, as discussed in the section Fitch's Analysis of Mitigants in Prepaid Energy Transactions.

Swap Agreement

When prepaid energy transactions use a swap to convert the price of the commodity from a fixed price corresponding with debt service to an index price corresponding with the price of the commodity, Fitch examines the commodity swap provider based on the factors outlined in the section Counterparty Criteria, Collateralization and Replacement Criteria (Applicable for Swap and GIC Counterparties).

The failure of the swap counterparty to make the required netting payment to the issuer in a price environment where the index price of the commodity is below the fixed price that corresponds with debt service would result in a shortfall in required monthly debt service deposits and a potential termination of the PA.

Investment Agreements and Qualified Investments

GICs, FPAs or other investment agreements are frequently used to invest debt service funds or reserves established to protect bondholders from specific counterparty defaults. Fitch assesses the investment counterparty and appropriate collateralization provisions based on its criteria in each case. The investment of all other funds is subject to the qualified investments outlined in Appendix A.

Performance failure by the investment provider or losses incurred on investments could result in a missed debt service payment in transactions where invested proceeds are necessary for regular debt service payments or the redemption of bonds.

Funding Agreement

In certain transactions, the gas supplier may enter into a funding agreement, whereby the gas supplier uses the bond proceeds to make a loan in an equal amount to a funding provider. The funding provider will be required to make scheduled monthly payments to the gas supplier.

The funding provider will also be required to make a final payment that will mirror the scheduled termination payment owed by the gas supplier under the PA. However, upon certain PA termination events, early redemption of the bonds will not occur unless the funding provider exercises its option to accelerate the funding agreement. In the event the funding agreement is not accelerated, gas deliveries will stop, but scheduled monthly payments from the funding provider will continue to be used for debt service payments on the bonds. Redemption of the bonds will occur at the earlier of a termination payment event or at the maturity date of the bonds.

Fitch will consider the credit quality of the funding provider as a transactional counterparty when evaluating the credit quality of the prepay transaction.

Fitch's Analysis of Mitigants in Prepaid Energy Transactions

For structural mechanisms, referred to as mitigants, to reduce or eliminate counterparty risk, Fitch compares the size of the mitigant to the bondholders' maximum exposure to the respective counterparty and whether the timing of payment to the trustee ensures there is no shortfall or delay in debt service payments. Mitigants have included mandatory agreements by suppliers to purchase unpaid obligations or receivables, or fund shortfalls in debt service reserve requirements; surety bonds from insurance providers designed to fund unpaid obligations; custodial arrangements enhancing swap counterparty risk; collateral posting and replacement provisions; cash reserves held by the issuer; and other structural features that retain excess cash flow to meet debt service requirements.

If cash reserves are available to mitigate a purchaser's obligation, Fitch assesses whether the reserves are sufficient to cover an individual purchaser default on the maximum two-month scheduled delivery under a stressed gas price scenario. Specifically, Fitch will calculate the maximum two-month exposure assuming a gas price of $8.70 per million British thermal units (MMBtu), which approximates the higher of the 95th percentile of the 20-year historical gas spot prices and the average of the maximum daily gas prices in each year since 1997. Fitch may modify the stressed gas price in a period of elevated gas prices, but any such change would be communicated publicly and applied consistently to all prepaid energy transactions.

If cash reserves are invested, Fitch assesses the investment provider based on the factors outlined in the Counterparty Criteria, Collateralization and Replacement Criteria (Applicable for Swap and GIC Counterparties) below.

If enhancement is provided by a surety bond or through a receivables purchase or funding agreement, Fitch will consider whether the specific terms of the enhancement, together with the creditworthiness of the provider, sufficiently mitigate the counterparty risk to warrant a rating or Credit Opinion higher than that assigned to the purchaser alone.

The existence of a custodial agreement to mitigate commodity swap exposure could enable Fitch to look through the front-end swap provider to the back-end swap counterparty as the ultimate swap counterparty from a credit risk standpoint. To accomplish this, the custodial arrangement must provide for all required payments made under the back-end swap to be remitted by the custodian directly to the issuer in the event the front-end swap provider fails to make the corresponding payment to the issuer on the front-end swap.

Fitch views the role of the custodian as a paying agent and views the counterparty exposure to the custodian as an operational risk. The custodian holds the funds for a very short period of time (typically less than one day), providing very limited exposure to the custodian. Fitch's analysis relies on such roles to be fulfilled by counterparties that have extensive experience and a proven operational track record as a custodian.

Counterparty Criteria, Collateralization and Replacement Criteria (Applicable for Swap and GIC Counterparties)

Fitch's analysis relies on all swap and investment agreement counterparties in the prepaid energy transactions having the operational knowledge and capability to perform the functions which they are contractually obligated to perform. In most cases, counterparty roles are performed by highly rated institutions, usually banks, but Fitch will consider nonbanks as eligible counterparties for certain functions on a case-by-case basis. For more information on the topic, please see Fitch's *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

Fitch also considers the provisions of relevant counterparty agreements to determine the extent to which counterparty credit risk may be fully or partially mitigated. Where collateralization is applicable, Fitch examines the sufficiency of collateral posting based on the framework explained in the *Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum*, including certain advance rates that may apply, depending on the type of collateral.

Where collateralization is applicable, this is expected to be completed within 14 calendar days of the triggering event. Otherwise the counterparty's obligations will be assessed commensurate with its rating. For more information on the topic, please see the *Structured Finance and Covered Bonds Counterparty Criteria: Derivative Addendum*.

When considering collateralized obligations in its rating determination, Fitch requires minimum counterparty long-term ratings or IDRs, as outlined below. If the counterparty does not have a public rating, Fitch may assign a private rating or Credit Opinion, as appropriate.

Minimum Long-Term Rating

Highest Category of Transaction Rating	Minimum Long-Term Rating of Collateralized Counterparty
AAA	BBB+
A	BBB
BBB	BBB–
BB	BB–
B	B–

Source: Fitch Ratings

For example, counterparties rated 'BBB+', whose obligations have been sufficiently collateralized, could support a transactional rating of at least 'AA–', after factoring the credit quality of the other relevant counterparties. Alternatively, to the extent that the rating of the same collateralized counterparty was lowered to 'BBB', the transactional rating could be no higher than 'A+'.

Fitch further examines replacement provisions for swap and investment agreement counterparties, if permitted by the transaction structure. Replacement of a swap counterparty is expected to be contractually agreed to be completed within 30 calendar days of the triggering event. Replacement of an investment agreement provider is expected under the contracts within 60 calendar days of the counterparty becoming ineligible. Failure to replace the investment agreement provider in the specified time period could result in a downgrade, to the extent the investment agreement provider becomes the lowest-rated counterparty. For more information on the topic, please see Fitch's *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

Termination Analysis

Termination of the PA — between supplier and issuer — is required for a transaction to terminate and completely unwind. The PA termination events vary by transaction and include optional and mandatory termination events. Fitch will examine whether, upon final termination of the PA, the stated payment obligations of the counterparties, in aggregate, will be sufficient to redeem all outstanding bonds, plus accrued interest.

Surveillance

Absent amendments to any of the contracts governing a prepay transaction, ongoing surveillance reviews will focus on confirming delivery of contracted quantities of gas or electricity and timely payment by each of the relevant counterparties, as well as changes in the relevant counterparties and their respective credit quality.

Rating Assumption Sensitivities

Prepaid energy ratings are generally sensitive to changes in the credit quality of the transactional counterparties, whose default risk is not otherwise mitigated by guarantees, collateralization and replacement requirements, or other structural enhancements. Any shift in the rating or credit quality of a counterparty below the prevailing rating of the prepaid energy issuer would likely result in negative rating action. Conversely, shifts in the rating or credit quality of all the counterparties above the prevailing rating, or the successful mitigation of the weakest link, could move ratings higher.

Legal Issues

Enforceability

It is critical that many of the agreements outlined herein can be relied on as legal, valid and binding obligations of the respective parties because they are the central funding sources for bondholders. For example, the counterparty may be creditworthy, but it must also be obligated to make payments as needed. Fitch seeks an opinion that states the guarantee and swap agreements are enforceable against the provider in accordance with its terms, except in the event of a bankruptcy or other form of insolvency of the provider only.

It is important that the enforceability opinions be based on the laws of the state under which the support is governed. If the provider is a non-U.S. entity, Fitch may require an enforceability opinion from both foreign and domestic counsel based upon the ultimate materiality of the contract to the transaction.

Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a transaction-by-transaction or issuer-by-issuer basis, and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective rating action commentaries, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature, or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria but where the analysis described in the criteria requires modification to address factors specific to the particular transaction or entity.

Criteria Disclosures

In the initial rating report or rating action commentary, Fitch expects to disclose the following items:

- Counterparty payment obligations;
- Lowest-rated (weak link) counterparty;
- Rating sensitivities;
- Revisions to stressed gas prices (if applicable);
- Any variations to criteria will be detailed in Fitch's transaction rating reports (as previously mentioned in the Variations from Criteria section).

Data Sources

Fitch's key rating assumptions and ratings are based on analysis of transaction documents for various prepaid energy projects, publicly available information and data received from issuers, arrangers, underwriters, consultants, and other third parties, in addition to Fitch's analytical judgment.

Limitations

Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions, available at www.fitchratings.com.

Appendix A: Qualified Investments

Some structures allow for funds held in transaction accounts to be invested into qualified investments — also known as permitted, authorized or eligible investments. These investments are used as a short-term repository for cash, usually only until the next payment date.

Transaction documents typically specify a simple set of rules on applicable forms of investment and how they must be managed. When investing is possible, Fitch analyzes whether such rules restrict potential investments and maturities to address their market and credit risk.

Market Value Risk

To avoid liquidating investments at a discount, resulting in a market value loss for the prepay transaction, qualified investments are typically:

- Held to maturity;
- Expected to return the invested principal in full;
- Due to mature before the prepay bonds' next payment date.

However, where early liquidation of the investment is possible, a third-party guarantee or repurchase agreement from an eligible counterparty — with primary risk ratings, including relevant remedies — is expected to cover any market losses.

Credit Risk

Qualified investments expose the prepay transaction to the creditworthiness or liquidity of the underlying security, obligor or deposit provider. To minimize this risk, Fitch expects each broad category of investments to have minimum ratings in line with those included in the table below.

Fitch's Definition of Qualified Investments

Investment Category	Minimum Fitch Rating	Other Credit Rating Agency (if No Fitch Rating)[a]	Notes
Securities (31 Days–365 Days)	AA– or F1+	Not applicable	—
Money Market Funds	AAAmmf	AAAmmf	Other credit rating agency rating with preservation of capital and timely liquidity
U.S. Government Obligations[b]	No minimum rating applies	No minimum rating applies	—

[a]Ratings from another credit rating agency are only applicable if a Fitch rating is absent. Ratings refer to the Fitch-equivalent rating assigned by the credit rating agency. [b]Any government obligation guaranteed, backed or issued by the relevant government without specified rating limits. Obligations of public entities or states are excluded if they are not fully backed or guaranteed by the sovereign.
Source: Fitch Ratings