



An Energy Efficiency Workshop & Exposition

Palm Springs, California

*Numbers Game - Getting the Best Terms and
Conditions*

Why Pre-Payments Matter and
What Should Be Done About
Them

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Why Prepayments Matter and What Should Be Done About Them

- Types of Prepayments
- Why Prepayments Matter to Investors
- The Problem with the Mortgage Analogy
- Three Methods for Handling Prepayments
- Recommendation



Three Types of Prepayments

- **Changes in scope, particularly eliminations of ECMs**
 - Not the focus of this presentation
 - Very expensive to fix, but not much can be done except do the best possible job on the front end scoping the project
- **Terminations for Convenience**
 - In part or in whole
 - True T for C is fairly uncommon and an acceptable risk
 - BPA type re-financings will be punished by the market
- **Prepayments of Excess O&M funds**
 - Can come at any time, in any amount
 - A problem for all of us in this room



Why Prepayments Matter –

Government Perspective

- The government sees prepayments as a way to use excess funds, thereby not losing the funds in an appropriation cycle, and as a means to shorten the term.
- It generally seems like a “good thing to do”, much like paying a bit more on your mortgage.
- How can this be a bad thing?



Why Prepayments Matter –

Investor Perspective

- When investors invest in an ESPC or DSM contract, we have to assume it will go to term because the cash flows from the investment are match funded to a liability of equal term.
- When the asset goes away (or is reduced) due to prepayments, the liability stays the same creating a real loss for the investor if interest rates have fallen.
- As a result, virtually all debt securities, including Treasuries, are either non-callable or have a make-whole provision, that protects the investor from losses due to early pre-payments.



Why Prepayments Matter –

Investor Perspective (cont.)

- **Example:** Assume a 20 year \$10 million ESPC contract, priced at 8% that suffers a \$1m pre-payment at the end of year 1. Assume rates fall to 7.75% after funding
 - Scheduled Payment: \$83,644/mo for **240** months
 - Actual Payment: \$83,644/mo for **194** months
 - Scheduled PV of Interest: \$5.952 million
 - Actual PV of Interest: \$5.26 million
 - **Economic loss to Investor: \$0.726 million (12%)**



Why Prepayments Matter – The Problem with the Mortgage Analogy?

- **How is this pre-payment risk worse than that faced by investors in mortgage backed securities?**
 - Residential MBS securities do not have pre-payment penalties, which is why we can all pay a little extra every month;
 - Instead, MBS pools have detailed statistical models, based on **hundreds of thousands** of mortgages to estimate the expected life of the pool
 - Factors include: location , level of interest rates, age of loans etc.
 - Investors match fund the assets against what the expected duration is, not the term. Example: 7 years duration vs 30 year term.
 - Price is higher for the right to pre-pay.



Why Prepayments Matter – The Problem with the Mortgage Analogy?

- ❑ **In ESPC and Areawide contracts, none of these conditions exist:**
 - 10's of transactions, not 100's of thousands
 - Pre-payment is not highly correlated with interest rate movements, but appropriation events, which appear random to investors
 - Most deals go to term, so investors have to plan on them going to term. But then we lose money when they don't. Mortgages rarely go to term.



Three Options for Handling Pre-payments

- **Option 1: Continue as we are.**
 - Many investors will not participate in this market due to the pre-payment risk.
 - If pre-payments expand, some current investors will simply leave the market.

- **Option 2: Make-Whole Penalty**
 - This is the traditional financial solution.
 - Can result in high penalties if rates have fallen far.
 - Not an easy contractual term for the government to accept



Three Options for Handling Pre-payments

Option 3: Reinvest Proceeds:

- Permit Pre-payments, but invest the amounts in order to pay off the end of the term.
 - This approach was reviewed in the FEMP Utility Energy Services Contracts –Lessons Learned booklet;
 - It is designed to achieve the two primary goals of the government when it prepays:
 - Use up existing appropriated dollars when available
 - Shorten the term of the government's obligation
- By using the funds to pay the last payments, investors are held harmless.



Three Options for Handling Pre-payments

Option 3: Example: Assume a 20 year \$10 million ESPC contract, priced at 8% that suffers a \$1m pre-payment at the end of year 1. Assume rates fall to 7.75% after funding

- | | |
|-------------------------------------|-----------------------------------|
| ➤ Scheduled Payment: | \$83,644/mo for 240 months |
| ➤ Actual Payment: | \$83,644/mo for 204 months |
| ➤ Total Savings to Government: | \$3,011,184 |
| ➤ Actual Payment to Investor: | \$83,644/mo for 240 months |
| ➤ Economic loss to Investor: | \$0.00 (0%) |

Government Objectives

- Use Excess Funds
- Shorten the Term

Investor Objectives

- No Economic Loss
- No Change to Term



Recommendation

- ❑ **Option 3: Reinvest Proceeds** provides a fair alternative to the present practice of random pre-payments which harm investors in ESPC and DSM transactions.
- ❑ Both the government's and investor's primary objectives are met.
- ❑ Neither side gets all that it wants:
 - The government will not benefit fully from immediate principal pay-downs
 - Investors will have additional administrative expense