

Locking in Today's Fuel Prices for Tomorrow:

Is it Worth the Risk?

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Although fuel prices have gone down after going through the roof last summer, many believe they will rise once the economy begins to level off. By using Energy Price Risk Management, transit agencies may be able to create budget certainty and protect themselves from market volatility.

>BY ALEX ROMAN, Managing Editor

WHEN FUEL PRICES ESCALATED LAST SUMMER it severely impacted many transit agencies who suddenly found themselves paying double the amount written into their budgets. The effects of those escalating fuel prices caused many agencies to scramble to find ways to offset the increased expenditures, which often included cutting services or raising fares, all while ridership was climbing toward record numbers.

Because of the instability in fuel pricing, many transit agencies began to look into the practice of Energy Price Risk Management (EPRM), — commonly referred to as fuel hedging — which is a tool used to stabilize fuel costs, involving a contractual commitment by a transit agency to pay a pre-determined price for future fuel purchases, thus eliminating market uncertainty.

“The main problem for public transit agencies is that fuel is a major input to their business. In many cases, it is the second-largest expense after labor, but labor is a known cost. What agencies don’t know is what fuel is going to cost,” explains Jeff LeMunyon, principal for Linwood Capital LLC, a commodity trading advisory firm based in Minneapolis.

LeMunyon adds that because fuel is extremely variable in price, as has been evident over the past few years, it becomes a problem for transit agencies because it creates a level of financial uncertainty. He believes, therefore, that the solution is for transit agencies to create some kind of fuel cost certainty, which can possibly be accomplished through an effective EPRM program.

A LESSON

Explaining the way EPRM works is often difficult, but it

helps if you have an understanding of how commodities are traded, bought and sold. For transit agencies using diesel fuel, the commodity market is heating oil futures: heating oil prices are used as a proxy for diesel prices as both are distillates and the prices are highly correlated. Two important factors in commodity trading are the spot price (current market cost), and the futures price, which is forecasted weeks to years in advance. Depending on the current inventory of oil and levels of demand, spot prices can be higher or lower than future prices.

As a general rule, if forward prices are higher than spot prices, inventories are large relative to demand. If forward prices are lower than spot prices, it indicates tight supplies and low inventories relative to demand. When forward prices are lower than spot prices, a transit agency can "lock in" a price for its future fuel needs at prices lower than spot prices. This, however, often occurs as nominal prices are relatively high.

"If markets are going up, you probably want to hedge more because you're managing risk. And if markets become relatively low, then you'll want to lock in those things and take advantage of that low price opportunity," explains LeMunyon.

The trick for agencies entering into an EPRM agreement, therefore, is figuring out when to purchase on the spot market and when to lock in a contract for the future, while finding an acceptable average that fits within your agencies' budget.



LEMUNYON

WHAT ARE THE BENEFITS?

Simply put, entering into an EPRM agreement creates budget certainty. Meaning if an agency eliminates the inherent price volatility of fuel, it can create a budget knowing what its fuel costs for the year will actually be.

"The idea of being able to promote



By implementing Energy Price Risk Management, the Michigan-based Ann Arbor Transit Authority saved \$563,000 in fuel costs for Fiscal Year 2008.

the value of this type of contract was sort of handed to us on a silver platter, because within the same fiscal year we've gone from paying \$4.17 a gallon in July to \$1.18 a month ago," says Ed Pullan, procurement officer for the **Charlotte (N.C.) Area Transit System (CATS)**.

Like many in the transit industry, escalating fuel prices last summer propelled CATS into EPRM, which they began to institute last January. Previously, CATS solicited price quotes from area suppliers and placed orders, daily, from the lowest bidder. Although they received competitive price quotes, CATS was paying a high price for fuel and faced with a severe over expenditure, since it had only budgeted \$2.40 a gallon.

"We realized we had to think a little bit more innovatively about how we were going to control this in the future," explains Pullan, who adds that CATS has budgeted \$2.45 a gallon for Fiscal Year 2010, and can currently lock in prices at about \$1.75 for any portion of its estimated 3.5 million gallons the system will use.

"The three key goals of what we're doing right now are price protection, unlimited supply and budget stability," says Jean Leier, manager, public and community relations, for CATS.

Obviously, building that certainty into your budget can save hundreds of thousands of dollars.

The **Greater Cleveland Regional Transit Authority (GCRTA)** had bud-

geted \$18.8 million for its 2010 fuel before entering into a contract in January of this year. Having now purchased 80 percent of its fuel, GCRTA projects that its fuel costs for 2010 will now be lowered to \$9.8 million.

"We are quite pleased," says Gale Fisk, executive director, office of management and budget for GCRTA. "Timing is everything, and we have been very opportunistic."

Because of EPRM, Michigan-based **Ann Arbor Transportation Authority (AATA)** saved \$563,000 in fuel costs for Fiscal Year 2008, paying \$1.78 a gallon when prices had hit the \$4 mark. **Phil Webb**, controller for AATA, says that the agency, which has practiced EPRM since around 2004, enjoyed significant peace of mind when fuel prices escalated, as well as yearly when it's time to create a budget.

"When we go through our budgeting process, we could pretty much know within so much certainty what our fuel is going to cost," he says. "Last summer, some transit agencies had to make other arrangements, whether it was cutting services or elsewhere, because fuel prices were much higher than expected. We didn't have to do that."

ON THE FLIPSIDE

Of course, when a transit agency locks in a price on fuel on the futures market that is above the spot price, there is a flipside of the coin as well.

For instance in March, the AATA lost



CATS recently budgeted \$2.45 a gallon for fuel in its Fiscal Year 2010 budget, but is currently able to lock in any amount of its estimated 3.5 million gallons at about \$1.75 a gallon.

\$49,300 and, \$167,500 overall since October, on its fuel contracts.

Additionally, the **Topeka (Kan.) Metropolitan Transit Authority**, searching for a way to ensure the agency could budget its fuel prices when they began escalating last summer, entered into a diesel fuel contract at \$4.35 per gallon in May 2008 for 12 months and lost more than \$215,000 over eight months when prices plunged.

"We were just desperate to get something that was stable," says Topeka's CEO **Janlyn Nesbett-Tucker**, who adds that the agency's decision also came at a time when it appeared as if there was no ceiling on the cost of fuel.

The key to entering into an EPRM program as LeMunyon explains, is establishing what you will pay for fuel in the future, today. Therefore, losing money from time to time, much like saving it, is just par for the course.

"All of the gains and all of the losses that you're going to incur over some period of time should add up to zero," he says. "In other words, the benefit that you've gotten over that time frame is the certainty of future cost. You're not going to blow your budget, that's the real value."

LeMunyon adds that once you've established what you will pay for fuel and can budget for it without having to scramble to fill the gap if the price suddenly escalates, you shouldn't really care what happens afterward. Meaning, yes, you may have been able to get fuel at a

cheaper price today if you wouldn't have paid more for it yesterday, but since nobody can predict the future, eliminating yourself from the volatility of the market will still give you peace of mind.

"Whether the market is high or whether the market is low, it's always good news, bad news," LeMunyon says. "When the market is high, you are really saving your neck, but you may have to hedge at high prices. And when you go the other way, you may be underwater losing a lot of money, but the good news is you can lock in further forward at the low prices."

The positives of not locking into fuel contracts is that over time, whether you pay \$3 a gallon today or \$1.50 a gallon tomorrow, there is a nice average number that comes out at the end of the year. The unfortunate part for transit agencies, though, is that they simply will not know what that average is beforehand.

DEVELOP A PLAN

The unfortunate part of EPRM is that if you want to be successful, you can't just decide to lock in at a set price for a long period of time.

Topeka's Nesbett-Tucker says that the pressure caused last summer by rising prices was a key factor in the agency deciding to lock in for 12 months. She adds that if Topeka decides to enter into another contract, it will definitely be for shorter periods of time to protect the agency from suffering similar financial consequences.

It may take a bit of trial and error until a transit agency becomes well-versed on the ins and outs of EPRM. To start, though, it is wise to become as familiar with the practice as possible, by seeing what other agencies' experience has been and what companies are out there to help.

Spot vs Futures

A major reason to enter into an Energy Price Risk Management contract is to provide your agency with the ability to battle oil market volatility. But, you may ask yourself what drives the difference in spot and forward pricing? And, why it may be a good idea to purchase futures rather than make all your fuel purchases on the spot market? **Jeff Lemunyon**, principal for **Linwood Capital LLC**, gives his take:

"The biggest reason is because of the level of inventories with respect to expected demand. Right now, petroleum inventories in the U.S. are huge. So, say that you are a guy who holds petroleum inventory and your factory is slowing down and you're not going to do anything with it any time soon, you want to sell it and that's what drives down the spot price, but the forward prices remain high," he says.

"Another way of looking at that is that if you were to buy spot today and stick in a tank, you would have to pay the cost of capital, storage and insurance, and so that's part of what the forward price incorporates as well. It's not entirely that, but the holding cost of the product is part of what the higher forward cost is. The curve is not always that way, sometimes forward prices are less. In a perfect world with perfect info, the forward pricing curve for petroleum would be flat because it's produced continuously and consumed continuously. The perfect world would have the perfect level of inventory and all demands and supplies would be known, and you'd have this flat curve because you'd never be storing more or less than you actually need."

Companies, such as Linwood Capital, will also come out and explain the inner-workings of EPRM, including how it works, what the ultimate risk versus reward may be, and the various options an agency can choose to secure its future fuel prices (swaps through a financial institution, exchange traded futures, etc). These outfits will also discuss what your agency's goals are and what is permissible by the laws established in your area. Sometimes, these laws need to be updated to include new technology or reflect an agency's growing needs.

Once everything is settled and an agency is ready to proceed, the most important matters are to determine how much of its fuel an agency wants to purchase ahead of time and to develop a plan for making those purchases. One thing to keep in mind is the fine line between purchasing futures and speculating.

"You don't want to [purchase] it all because your situation may change and you might end up being over-hedged," says GCRTA's Fisk. "The law we have now indicates that we can purchase all that we are going to use directly in operations and it is not considered speculating, but if we purchase fuel that was beyond our operational requirement that would be considered speculating."

LeMunyon says that Linwood Capital's clients are typically anywhere from 18 months to 36 months ahead in their forward-pricing windows, with the percentages often varying.

"Most of our clients have a policy limiting their forward pricing to 90/95 percent of their projected consumption, allowing for a small variation of their consumption, because they never want to be more than 100 percent hedged," he says. "Transit agencies are very consistent consumers of fuel because the routes, buses, etc., are always the same."

Always trying to stay ahead of the curve, AATA's Webb explains that his agency recently made a slight change to its philosophy.

"We were at 18 months, but as prices got lower, we made the decision to go

from 18 months to 24 months out, to take advantage," he says. "Even though those further out months are still 40 cents higher than the spot month, it's a safe bet. If gas prices go up 40 cents, then we'd be right on it, but if they go up by a dollar or two, then we'll come out ahead."

LeMunyon stresses that having a plan or philosophy in place will also help a transit agency rationalize decisions to its board, taxpayers or the public, which may come in handy on occasions where it is on the losing side.

"An agency really needs to put a rationale behind it — why they are doing what they are doing when they are doing it," he says. "So when you [purchase] an

As for the agencies taking part in EPRM programs, the feedback is positive.

"We've had people say to us that it is risky. We have looked at it and said staying on the open market is riskier," says GCRTA's Fisk. "It certainly looks, to us, like it's going to be very successful."

Adds CATS' Pullan: "Although it's in its very early stages and we've yet to have the opportunity to place a fixed price agreement, I'm very happy with the program at the outset."

LeMunyon says the market volatility that exposed itself last summer has caused an increase of interest industry-wide.

"Certainly, there is increased interest," he says. "When you see the reality of \$4 a



Because fuel prices are expected to rise once the recession is over, the AATA's Phil Webb says now be a great time to look into EPRM.

entire year of fuel at \$3 a gallon and it goes to \$1.50 a gallon, you can say 'yes, but here's why we did it when we did it,' and then it makes sense."

IS IT FOR YOU?

"If the general question were should everyone hedge in some way, shape or form? The answer is yes because of one simple reason: public transit agencies do not benefit in any way from being exposed to energy markets. So, a systematic way of doing that over the long term is going to make sense to them," says LeMunyon.

gallon for fuel and realize that for essentially no money, no real cost, you can currently lock in those gallons at half that price, that certainty is attractive."

With many predicting that fuel prices will again rise once the economy levels off, now may be just the time to at least investigate if Energy Price Risk Management is right for your agency.

"With fuel prices right now being so low, now may be a real good time to get into a program like this," says the AATA's Webb. "That way, if the economy picks up and fuel prices start going up again like they are expected, you'll be locked in." ■