

The Merchant Power Plant “Rag”

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“Ragtime,” the musical about the converging lives of people with different backgrounds but essentially similar aspirations, at the turn of the last century, was a recent Broadway hit. Merchant Power Plant development is the ragtime of our coming millennial decade. This article, by focusing on three characters in the musical (and how their perspectives—levitation, syncopation and calculation) provides insights on merchant power plant prospects. The concepts are based on personal experience.

LEVITATION (THE MAGICIAN HARRY HOUDINI)

The show narrator Harry Houdini, besides being an escape artist, spent the latter part of his life debunking mediums and other phantasmagorical spiritualists: those who magically made the table rise. He was the rating agency of his age.

Notwithstanding some overheated commentary, merchant plants are not about levitation: rising on the spirit of deregulation and the inevitable virtuous triumph of the low heat rate plant. After looking behind the curtain, they are mostly about three things:

- Markets where price signals really are able to affect what power is purchased;
- Fuel plans that include some type of collaborative support from fuel providers, and make possible revenue fuel play options; and

- The support of both of central Ragtime antagonists: Coalhouse Walker, the syncopated rag piano player (a fictional character) and J.P. Morgan, whose house he took over, and wired to explode.

Let's look at each: In the mid '90s, merchant plants were portrayed in the press as the inevitable by-product of Orders 888 and 889; a sure fire successor to PURPA-based IPPs. To this, "hard headed" realists steeped in the last decade rejoined that in the absence of firm, contract based cash flows, 50-50 debt equity ratios would be needed, if projects were to be done at all.

The reality turns out to be that we are probably in a transition of markets to a form where forward price curves can provide comfort to merchant sales at least where, on a regional and site specific basis, power transmission and scheduling makes this feasible. However, the existence of potential demand, by itself as a result of shrinking reserve margins, doesn't create new merchant markets unless regulators permit the need to be reflected in prices in the marketplace. Where, whether because of utility resistance or mandated retail rate discounts, the impact of price signals cannot be experienced, the true impetus to levitation for merchant plants of retail markets—prices—cannot be experienced.

A principal "magical" appeal of New England—today, at least—is not just the obvious market opportunity created by the possibility of displacing aging and in some cases mothballed powerplant stock, but the regulatory movement toward a transparent price market with competition at all levels, which gives developers confidence to move forward.

In any case, even with good market workable pricing signals, the need for risk management—the preservation of power price market competitiveness in the face of constantly shifting markets—is present. While clearly all cost control measures—such as construction, supplies—help, the central key seems to be strength of MPP project fuel plan—availability and terms. Ability to play the "spark spread" and to have a certain degree of flexibility simply to sell gas rather than power clearly are keys to success. Ability to subordinate some portion of fuel cost—in effect in consideration for providing a high load factor at a good price—clearly is another part of the game.

Review of a fuel consultant's report to a lender on any New England powerplant project for example, will undoubtedly reflect a recognition of certain key market background factors and also elements

of specific contract analysis.

Market background:

- (1) the growth of competitive gas delivery infrastructure;
- (2) shift to end user purchase from suppliers from LDCs, which will serve to maintain competitive gas costs; and
- (3) shift to focus on fuel as competitive edge rather than as a customer pass through to price.

In this light, an analysis of the efficacy of a merchant plant fuel plan will undoubtedly consider whether it provides for:

- (1) regular flexible readjustment and for a fundamental market focused backup Default Fuel Management Plan;
- (2) flexibility in gas purchases to correspond to power sales patterns, as they change from time to time;
- (3) responsiveness of acquisition policy within these parameters to seasonal variations;
- (4) overall incentives to optimize benefits of all types of fuel management arbitrage; and
- (5) firm transportation arrangements.

Examples of types of fuel management incentives being utilized in different projects contractually include discounting gas prices up front for an exchange of upside to the gas supplier and indexing gas prices to electric prices.

SYNCOPATION

(THE JAZZ PIANO PLAYER COALHOUSE WALKER)

Fuel management leads us to power syncopation. Coalhouse Walker was a talented piano player, whose syncopated rag rhythms

were a disciplined antecedent of the more improvisational jazz we know today. Indeed, ragtime lent itself to pre-programmed automatic player pianos, that operated on its own interior infrastructure.

Unlike the rock and roll tower of bankable sound which PURPA—and its foster daddy, rate base economics—provided for powerplant finance credit support, merchant plant management and finance are about three things:

- Having the resources, skills and flexibility to play the “spark spread” between gas costs and power sale;
- Meaning, too, the ability to tap into different markets, while still sounding certain base chords with ongoing reliable revenue assurance with particular firm offtakers; and
- Cumulative reliability to demonstrate creditworthiness notably, to J.P. Morgan, who, after all, ultimately finances the show.

Syncopation requires derivatives. Effective risk management techniques will distinguish the emerging MPP industry from the old IPPs. Standard & Poors emphasizes the value of in place power marketing services; also required today is plant information and technology; real time data acquisition abilities to track price fluctuations and load flows in volatile markets.

MPP use of hedging techniques may be expected to increase, bringing with it new critical issues such as the exposure to counterparty risk (and ability to measure such risk on a continuing basis). Sales strategies based on market niches may be feasible and attractive in certain instances, although as S&P notes: “as in the case for most commodity markets, identifying, developing and dwelling in that ephemeral position on the “kinked” portion of the demand curve may prove to be forever elusive.” Hence, the effort to fashion merchant plants around strong industrial offtakers or establish them as split-offs from utility plants selling back to utilities, or entering other long term off-take arrangements which strike a solid capacity-payment like chord, in a world of a jumble of time sensitive, volatile energy notes.

Discipline to manage arbitrage scenarios requires two other elements, besides ability to stay current on price status.

- Overall initial project design with a view to preserving flexibility in energy transaction options for transportation, sales, transmission and mode of operation, as well as form of credit support.
- An in-place in-house risk management infrastructure—misnamed, perhaps, the back office—to make possible the exploitation of the options: forward pricing, cash trading and scheduling and operations—the ability to hedge, optimize sales and optimize transportation.

While IPPs required discipline relative to particular locked in customers, the syncopation of the new merchant energy centers must be informed not improvisational, and move with the disciplined beat of the arbitrage infrastructure behind it.

CALCULATION (BANKER J.P. MORGAN)

They had better be disciplined, because J.P. Morgan was no jazz fan. J.P. Morgan disliked the sound of competitive chaos and favored rationalized industries and stable markets. He would be more at home in our ongoing consolidation of all types of utilities which we are now seeing, than in the governmentally imposed franchise regulation and holding company bar fragmentation which gave us first power fiefdoms and then derivatively PURPA project finance plays. He would coolly assess “merchant plants” as really being

- The “politically correct” name for building blocks for establishing or reconstructing the service outlets of an industry of national/ even global convergent energy business enterprises built around the great energy companies.
- A basis ultimately for secured portfolio finance in different segments of capital markets than utilities were financed in the past.

In short, not an end in themselves, but a mechanism for the rationalization of markets to be judged that way from a financeability standpoint.

For the financial analysts, as for the leading developers, the so called “merchant plant” market is really a single amalgam of the acquired old plants—slated for upgrade—and the new plants being developed as spark spread pioneers. Consistent with the risk management approach to which they are compelled by the market to subscribe, they are not simply electricity supply entities standing in a vacuum; they are part of convergence of electricity producing profit centers with other energy supply profit-making strategies: notably natural gas transportation, distribution and sales.

They are also, however, conceptually the technologically primitive precursor of storage systems for the distribution of a non-fungible energy commodity (you can’t run computers on natural gas). Hence they cannot simply be valued as just energy options plays.

However viewed, merchant plants are building blocks of large enterprise endeavors. There will be creative partnering with respect to individual power stations, with transmission capabilities. There may even be some privately sponsored, politically convenient “green apples” serving specialized public markets bobbing in a surge of “microsoft” electrons. But the notion of a wave of large scale privately sponsored MPPs succeeding the IPP wave of the ‘80s may be undue extrapolation.

Correlatively, project finance will be restored to simply an alternative technique for getting the energy station funding job done—drawn from the antediluvian ‘80s, but adapted to new realities.

While bankers wring their hands about “immature” debt markets, next generation financiers and internal corporate CFOs are already conceptualizing power revenues as merely a type of cash flow, which, once the risk management markets have gotten statistically comfortable with its aggregate forward price curve profile, may be credit enhanceable to a level where security is possible. Securing has been done with multiple IPP projects from a single company; it has been done with mortgages and even utility receivables; it can be done with merchant plant revenues as well, perhaps in the context of a refinancing of initially conventionally financed facilities.

J.P. Morgan, reduced by the end of the IPP era to thin margins on competitively bid “cookie cutter” type deals, may reemerge as the artful financial counterparty—absorber of forward price risk, as a kind of insurer—to the masterful syncopators of energy station revenue output maximization.

WHAT ABOUT IMAGINATION?

But, you may (or may not) be asking, is that all there is? What about imagination and creativity? What about Tateh—the Ragtime immigrant figure who started out doing cut out books that served to simulate motion if you flipped the cut outs fast enough and wound up successfully doing “motion pictures” in Hollywood?

Yes, he has a Ragtime merchant power plant part too, depending on his bent: he may go into retail power sales (proving the superiority of a green electron to a thermally produced one to retail customers); he may, for a while, be a developer of a few successful PURPA-like MPP plants; or he may just be that lawyer sitting at the deal-making convocation of Houdini, Coalhouse Walker and Morgan making helpful suggestions on how to stitch the energy rag together so that the particular merchant plant flag will fly—or at least making sure everyone is playing from the same sheet of music.

One thing is sure, however, everyone in the game will do it better, though, if they clearly hear the strains of the Merchant Powerplant Rag.

ABOUT THE AUTHOR

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