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Edison to Enron
To the Jack Bowen family
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“In a nation built so largely around the accomplishments and values of business, we should pay more attention to our business history.”
— R. Hal Williams, 1986
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KEN LAY ATTACHED A NOTE to a book he returned to me between the time of Enron's collapse and his fateful trial. *Insull* by Forrest McDonald (University of Chicago Press, 1962) was a masterful account about the towering rise and stunning fall of a business titan in the first third of the twentieth century. "I apologize I've not been able to read the book on Insull [sic]," Lay wrote. "There have just been too many demands on my time." And no doubt Ken Lay was working furiously, preparing for trial and running what he excitedly described as his three new businesses. He probably wrote the note well past a normal person's endurance point. He was always like that—almost superhuman in his work, doing the little extra to cover some base in his vast universe of possibility and ambition.

People had given Ken many books that he never opened, much less read. I know. I was his repository for such material during my sixteen years at Enron. But I told him that McDonald's biography was very relevant to his present predicament. Like him, Samuel Insull had been a Great Man of the energy industry, an icon of his city (Chicago), a Horatio Alger story. Insull, too, had gone from near-universal reverence to vilification, suddenly and completely. And, most important, Insull's defense strategy seemed to be one that Lay could employ effectively.

In the twilight of his life, Insull had put his five-decade career building America's electricity industry on trial, not just his last years with his bankrupt holding companies. He spoke matter-of-factly on the stand about his intentions and failures, knowing that honesty was his rock in thick or thin. The point, partly, was to ask the jury: *Why would I suddenly take up crime?* And to tell the jury: *You would have done about the same if you had been me.* The other part of Insull's strategy was to confess to overoptimism and an inability to heed caution. And he took full responsibility for the debacle, even apologizing to his subordinates.
In short, Insull humanized himself on the stand. The jury acquitted on the facts and in the face of such humility.

Ken Lay took a far different approach after his company's collapse. He did not flee to another country as had Insull, who feared for his personal safety and harbored pessimism about receiving a fair trial. Instead, Lay fled to another reality. With his legal advisors and number-two-man Jeff Skilling, Lay constructed an alternative universe, a strategy that was not discouraged by his inner circle, a story told in Enron and Ken Lay: An American Tragedy (Book 3 of this trilogy). Thus came the other worldly arguments: Enron was a great company. Jeff Skilling and I were a great team. Enron would be thriving today if it were not for the criminal actions of a few employees, some short sellers, and a hostile press. And then there was Lay's contempt at the whole proceedings, and even toward his own counsel on the stand.

The book that Lay did not find the time to read is an inspiration for this present work. The Insull saga, like the rise and fall of Lay himself, shows how unforgiving the market can be toward even the most powerful, particularly when they believe themselves to be insulated from the vicissitudes of capitalist commerce. Forsaken prudence applies to other individuals and their companies in our telling, beginning with Thomas Edison, the great inventor who founded the U.S. electricity industry, and continuing with John Henry Kirby, the founder of the company that over eighty years would metamorphose into Enron.

Edison summoned Insull from England to America in 1881, whereupon the two built the company that in 1892 became General Electric. Insull left Edison to father the modern integrated electricity industry in the next decades, achieving results as successful, orderly, and enduring as that done for petroleum by John D. Rockefeller.

Electricity, traditionally produced from either coal or white coal (hydro-power), found a new primary energy source near the end of Insull's career when long-distance pipelines linked southwest natural gas fields to major population centers around the country. Costlier, dirtier manufactured (coal) gas was displaced, and natural gas went on to become the second leading option to generate electricity next to coal.

Long-distance transmission unleashed America's third great energy industry, natural gas. The history of gas pipelining is the prehistory of Enron, a company that began as a conglomeration of four Texas-sourced gas transmission systems. Ken Lay, Mr. Natural Gas, forged a career as a gas pipeliner before leaving Transco Energy in 1984 to head the company soon to become, through merger and acquisition, Enron. Thus the present book spans just over a century,
the time from when Thomas Edison first focused on electricity (1878) to when Ken Lay became head of his own company (1984).

Countless books have been written on electricity and natural gas, but few attempt to cover the long, rich history upon which a number of today’s notable companies and company divisions emerged. This book attempts to fill that gap for industry practitioners, energy historians, Enron aficionados, and other interested readers.

Many generous, sharing people have brought this ambitious trilogy on political capitalism to life. My thanks begins with the board of directors of the Institute for Energy Research for their patience and support, as well as IER president Thomas J. Pyle.

As the history book of the trilogy, I respectfully acknowledge professor emeritus of history at my alma mater, Rollins College, Gary Williams, who first noticed my facility for summarizing data and opinions to get to the essence of things. He sought my contrary views in an open, fruitful manner in the classroom, providing an ideal of scholarship that is too often neglected today. And like a good professor, he made history fun and relevant.

Murray N. Rothbard (1926–1995) inspired my interest in the interdisciplinary approach to history that begins with economics but also relies on philosophy, political science, and other social-science disciplines. Rothbard, more than any other person, brought together the worldview known today as the science of liberty, and I will always be proud of having been his doctoral student for the degree of political economy.

Patient funding for this multi-year project has come from the late W. J. Bowen, Robert L. Bradley, the estate of Gordon A. Cain, Jeremy Davis, the late James A. Elkins Jr., Jerry Finger, the late Frank A. Liddell Jr., Leo Linbeck Jr., John H. Lindsey, W. R. Lloyd, Robert C. McNair, George Peterkin Jr., Doris Fondren Lummis, W. R. Lummis, Clive Runnells, Walter Negley, L. E. Simmons, David M. Smith, R. Graham Whaling, and Wallace Wilson. I also thank Douglas Wyatt for his friendship and support.

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Any shortcomings, of course, are my responsibility alone.

Robert L. Bradley Jr.
June 2011
Introduction: Energy History in Rhyme

BOOK 1 OF THIS ENRON-INSPIRED TRILOGY on political capitalism\(^1\) provided an overarching view of capitalism, the mixed economy, and energy markets. The present book (Book 2) covers the corporate and personal background leading up to the creation of Ken Lay’s Enron. Book 3 will chronicle Enron’s history and survey the post-Enron world.

Why three books? Why a theory volume and a background book rather than simply one integrated tome about Enron proper? The short answer is the necessity and challenge of properly understanding a complex and important subject, one that previous attempts have failed to adequately illuminate.

The rise and fall of Enron is a landmark in the annals of business, the history of energy markets, and applied political economy. Descriptions and interpretations of this iconic-to-disgraced corporation have produced a library of books and essays, inspired countless classroom discussions, and shaped many worldviews. Few if any business events have drawn more attention than that given to Enron, and it ranks as a notable event in the history of modern Western capitalism.

Reliable theory and accurate background must cut through the cacophony to capture the significance of and derive the proper lessons from Enron. Theory gives meaning to complex events that otherwise would be only an unintelligible conglomeration of data. But the theory must be sound, or the meaning it gives to history will be false. Hence the presentation of a multidisciplinary worldview in *Capitalism at Work: Business, Government, and Energy* (Book 1).

Background, or prehistory, is also necessary to understand events. Aristotle said: “He who thus considers things in their first growth and origin . . . will

\(^1\) Political capitalism is defined in Book 1 as “a variant of the mixed economy in which business interests routinely seek, obtain, and use government intervention for their own advantage, at the expense of consumers, taxpayers, and/or competitors.”
obtain the clearest view of them.” Alfred Chandler, the dean of business historians, wrote: “Most histories have to begin before the beginning.” That is certainly true for our subject. The Enron of the 1980s began as a group of natural gas transmission companies dating back to the 1920s and the 1930s. Enron was Ken Lay’s third and final stop at a natural gas company. In addition, there is the “historical continuum that connects [Samuel] Insull with Enron,” a fascinating linkage that ties the hubris of great men with the mixed economy (or the smartest-guys-in-the-room and political capitalism). Hence this volume: *Edison to Enron: Energy Markets and Political Strategies*.

Ultimately, though, the purpose of history lies beyond itself by usefully informing current understanding. “The disadvantage of men not knowing the past is that they do not know the present,” G. K. Chesterton wrote in 1933. In this regard, Enron serves as an infamous, riveting example of the whys and wherefores of organizational failure and the perils attending the government side of the mixed economy.

Enron’s lessons, rightly understood, are timeless. But many conclusions have been incomplete or misinformed, for no analysis of the company has chronicled the company’s quarter-by-quarter evolution to understand the driving motivations of Ken Lay, Enron’s board of directors, and other key decision makers. Hence the series finale: *Enron and Ken Lay: An American Tragedy* (Book 3), which builds upon the worldview of Book 1 and the background of Book 2 to understand the company in you-are-there fashion.

The history of Enron’s background brings to life the development of America’s electricity and gas industries, the patterns of which are germane to continuing industry changes. “Anyone wishing to see what is to come should examine what has been,” observed philosopher Niccolò Machiavelli, “for all the affairs of the world in every age have had their counterparts in ancient times.” These now-versus-then resemblances follow from the common motivations of money, power, status, love, sex, and creed. They also follow economic law, where similar causes produce similar effects, other things being equal.

Yet history is not mere replication. Mark Twain allegedly said that “history does not repeat itself; it rhymes.” Similarities must be grasped, but literal repetitions should not be expected. As Ludwig von Mises said: “The outstanding fact about history is that it is a succession of events that nobody anticipated before they occurred.” Change and even surprise hallmark history.

The motivations of human action may be finite and eternal, but it cannot be known which motivation will prevail. For example, men are tempted by the acquisition of power, but they are also driven by the honors that history bestows on high virtue. Thus, it cannot be known whether an unconstrained vision of power will triumph over the goodness of discretion and humility. George Washington sought honor and practiced prudence; Napoleon sought
power and did not. It was, in each case, a free choice that could not be anticipated from history alone. But what the study of the past does impart is this: *If* people replace prudence with hubris, *then* sooner or later there will be a price to pay. Such is the rhyme of history from Julius Caesar to Savonarola, to the Stuarts of England, to the Bourbons of France, to legions of others. And so too is it with three pivotal figures of this book: John Henry Kirby, Samuel Insull, and Ken Lay.

That is the sort of truth and wisdom imparted by good history. But what about *bad* history? What is it, and what are its effects?

The first sort of bad history is *irrelevant history,* which is devoid of real-world application. History that explains events by means of disembodied ideas or mysterious forces is counterfeit. Better a mere chronicle without explanation if effects cannot be traced back to causes. Humility in the search of historical causation at least avoids the appearance of certainty when there is little or none.

Far worse, though, is bad history that reaches *wrong conclusions* and imparts *false lessons.* Arthur Schlesinger Jr. asserted that "honest history is the weapon of freedom" (by *honest,* he presumably meant *objective*). Yet Schlesinger, one of the most revered historians of his generation, set back the cause of both freedom and history with a predetermined dogma of Progressivism, from which he shaped his evidentiary narrative.

Schlesinger’s belief in activist government, or Progressivism, may have been sincere rather than cynical. But his history was nonetheless dishonest, being biased in motive, inaccurate in description, and mistaken in its teachings.2 "Who does not know that the first law of historical writing is the truth," asked Cicero. Untruth has consequences: Arthur Schlesinger’s misinterpretation of the Great Depression haunts our understanding of the cause and cure of today’s Great Recession.

"The business historian hopes that by providing facts and generalization he will help political, social, and cultural historians to write more intelligently about business and business men as these touch their various fields," Henrietta Larson has stated. This is the public-spirited purpose of scholarship to better business, government, and civil society. To achieve this high purpose, however, academics and pundits, not only business participants, must develop and advance *good* history and discourage, discard, and correct bad.

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result of political capitalism, under which special government favor propels profit centers and can even define a whole company.

But Capitalism at Work went beyond political economy. Part I’s Heroic Capitalism developed the theory of best practices behind personal and organizational success—and the opposite practices fostering failure. Adam Smith, in his early day, understood commercial success and failure in terms of prudence versus self-deceit, independence (authenticity) versus cronyism, and a natural order versus an imposed disorder. Smith’s path from “over-weening conceit” to the “most humiliating calamity” of bankruptcy illuminates Enron as well as episodes in the present book, whose central figures scaled mountains only to precipitously fall, through some combination of personal folly and reversals in the general economy that left little room for error.

The enigmatic Ken Lay (1942–2006), in particular, was not an engineer, an accountant, a financier, or even a lawyer. Nor did he claw his way up the corporate ladder, apprenticing in the different core divisions. Lay was a Ph.D. economist interested in the ways and means of Washington, D.C., the place he knew intimately from his stints with the Navy, the Federal Power Commission, and the Department of Interior. So when Lay returned to the private sector, and when he got his own show at the company that would become Enron, he focused on regulated assets and sought regulatory opportunity. He got political to get government favor. In the jargon of economics, he was a rent-seeker, a master at positioning his company to receive a special tax provision, a regulatory nuance, or a check signed on the U.S. Treasury.

But this master rent-seeker did not invent his trade. Political capitalism had a long history in the United States before Enron. In particular, America’s three major energy industries—electricity, oil, and natural gas—all had long, complicated legislative and regulatory histories that predated the career of Ken Lay. The preponderance of such interventionism had active, typically crucial, industry support. Whether the interventionism involved an import restriction, a public subsidy, an entry restriction, a tax code carveout, or a price or quantity control, a well-defined industry segment was politically at work. This regulatory inheritance is a focus of the present book.

The background of Enron and Ken Lay unearths various links and parallels between individuals, events, and companies, along with dramatic examples of success/failure cycles. History meets itself coming and going in the Enron saga.

With Ken Lay and Enron atop the historical pyramid, its immediate parents are located in the 1970s and early 1980s, with the furthest ancestors reaching back in the early 1900s. Lay’s pre-Enron career centered on Florida Gas

Company and Continental Group (1974–81) and then Transco Energy Company (1981–84). Jack Bowen, who built Florida Gas (chapter 8) before leaving to head the soon-to-be-political Transco (chapter 9), hired Lay at both stops and became his business mentor.

The career of Jack Bowen (1922–2011) offers a window into the business and political sides of the natural gas industry. Despite supply challenges brought on by federal price controls, which became the law of the land in 1954 for gas sold in interstate commerce, Florida Gas Company innovatively matched supply and demand to make a viable project. Contracts were signed with Florida customers who were eager to replace coal, coal gas, and fuel oil with a cleaner, more economical alternative—natural gas.

But construction required a certificate of convenience and necessity from the Federal Power Commission (FPC) in Washington. (This agency, now the Federal Energy Regulatory Commission, was where Ken Lay worked shortly before joining Florida Gas.) A coalition made up of fuel-oil dealers and companies involved in carrying coal, organized as the high-sounding Florida Economic Advisory Council, opposed the project. After a 19-month cat fight between a hundred attorneys representing 41 parties, a 3–2 FPC decision cleared the way for the Sunshine State to receive natural gas service in 1959, one of the last regions of the country to so graduate.

Bowen’s company became another bright light in the American gas industry. Even with its temperate climate limiting home heating, Florida was a good place for a desirable fuel for electrical generation. But interstate gas shortages from federal wellhead price controls caught up with Florida Gas in the late 1960s. Repositioning the company was a task that would go to talented, tough Selby Sullivan after Jack Bowen left Florida Gas to take over Transco Companies. Transco’s major asset, Transcontinental Gas Pipe Line, was the leading gas wholesaler to New York City, Philadelphia, and Washington, D.C. (Transcontinental had been built in 1950 by Ray Fish, a major figure of this book.)

The pernicious consequences of federal wellhead price controls also caught up with Transcontinental, which had to impose severe curtailment on its customers for want of gas. Bowen aggressively addressed the problem, and played federal politics at every turn, but the solution turned into another problem when the company contracted for more gas than its customers could take. After Bowen brought Ken Lay to Transco as its president, resolving the gas surplus problem became Lay’s task, and he was still working on it when he was hired away to run a large natural gas company down the street, Houston Natural Gas.

Bowen, who did not discourage Lay’s departure, turned to George Slocum as the future of Transco, a decision that did not turn out well. The so-called take-or-pay problem of excess gas (really a can’t-take-but-must-still-pay problem), coupled with other company missteps, some of these were regulatory and political, resulted in Transco’s distress sale to Williams Companies, Inc., in 1994. Transco lost its independence just short of its 50th anniversary.
Jack Bowen was a talented engineer-turned-businessman and an inspirational leader. He built one company and revitalized another, at least temporarily. But in the end, he could not overcome federal price controls that left interstate pipelines hamstrung against their unregulated intrastate rivals (prominently including Houston Natural Gas) and the needs of the marketplace.

The ancestry of the Jack Bowen story brings the narrative to Clint Murchison (1895–1965), the man who hired Bowen in 1949 at Delhi Oil Corporation. A Midas-touch investor—and arguably the Warren Buffett of his day—Murchison loved the energy business and particularly natural gas pipelining (chapter 6). Along with his legendary sidekick Sid Richardson, Murchison was in the middle of the 1920s–1950s Southwest oil and gas boom.

Jack Bowen’s mentor, and thus Lay’s grandmentor, Clint Murchison was the quiet force behind Florida Gas Company. Murchison also fathered the gas-transmission systems of Southern Union Gas Company (now part of Southern Union Company) and Trans-Canada Pipe Lines (now part of Trans-Canada Corporation). In the 1920s, Southern Union piped natural gas to New Mexico cities and towns for the first time—a wholly market-based advance. But Trans-Canada, which entered service in 1958, was no free-market creation.

Late in his storied career, Murchison went political with his obsession to build an all-Canadian pipeline from gas-rich Alberta east to the population centers of Ontario and Quebec (chapter 7). Economics dictated a transnational approach instead, under which Canadian gas from Alberta would drop down to the U.S. Pacific Northwest and points south and east, while U.S. southwest gas would extend north to reach Ontario and Quebec.

But Murchison—finding a powerful political ally in C. D. Howe, Canada’s “minister of everything”—went all-out to get the wrong pipeline built. Tepid support in Canada for a project sponsored by a fat-cat Texan created a political hurdle to join the sour economics of the north-of-the-border project. Still, Murchison and Howe—both in search of their monument, and finding themselves emotionally wed to a slippery slope—prevailed. Six years of toil climaxed in a vitriolic parliamentary debate that shook Canada and strained cross-border relations. The tawdry tale was out of character for Murchison, whose career was mostly about creating wealth through market entrepreneurship, not redistributing and destroying wealth via political entrepreneurship.

From Ken Lay back to Jack Bowen back to Clint Murchison; from Houston Natural Gas back to Transco Energy back to Florida Gas back to Trans-Canada back to Southern Union Gas. Part II covers this trigenerational journey into the U.S. natural gas industry, replete with grand moments of market-wealth creation and low episodes of political-wealth subtraction. Market entrepreneurship and political entrepreneurship in the natural gas business hardly began with Ken Lay and Enron.

Another sweep of energy history emanates from Houston Natural Gas Corporation (HNG), the company that hired Ken Lay less than three years after
the death of its esteemed chairman, Robert Herring. As CEO from 1967 until his
death in 1981, Herring built the modern HNG (chapter 13), which was primarily a Texas gas-transmission company. This mega-intrastate was about the same size as the mighty interstate Transco Energy, the company that Ken Lay left.

Herring had a mentor in Ray Fish (1902–62), the most notable builder of energy infrastructure in history (chapter 11). Among other projects, “Mr. Pipeliner” constructed four major interstates: Tennessee Gas Transmission (1943), Transcontinental Gas Pipe Line (1950), Texas-Illinois Natural Gas Pipeline (1951), and Pacific Northwest Pipeline (1956). Involved in this history were other major interstates, such as El Paso Natural Gas (serving California) and Texas Eastern Gas Transmission (serving the Northeast). Texas Eastern would itself own Transwestern Pipeline Company (1960), an interstate pipeline serving California that Lay’s HNG bought in 1984. When one adds HNG’s unrivaled intrastate system and Samuel Insull’s Natural Gas Pipeline of America (1931), a goodly portion of the U.S. gas pipeline history falls within the scope of this book.

The entrepreneurs behind the above interstates would not take no for an answer from a regulatory system that was designed to block or delay entry and

![Diagram of the interstates and their executives](image)

**Figure I.1** Three generations of interstate gas pipeline executives are shown here, with Ken Lay (3rd generation) following Jack Bown and Robert Herring (2nd generation) and Clint Murchison and Ray Fish (1st generation). V. F. Neuhaus and M. D. Matthews linked the indicated individuals, as described in chapters 6 and 13, respectively.
to favor either entrenched fuels (coal and fuel oil) or, increasingly, the already existing interstate supplier. The company builder behind El Paso was Paul Kayser; behind Tennessee Gas, Gardiner Symonds; behind Texas Eastern, Reginald Hargrove; and behind Transcontinental, Claude Williams. Clint Murchison also qualifies as a pipeline entrepreneur, although, like Ray Fish, he left the operations of the ensuing company to others. Jack Bowen, too, overcame regulatory hurdles and vested interests to displace manufactured gas with its superior natural alternative.

Houston Natural Gas was founded in 1925 as the natural gas spinoff of Houston Oil Company of Texas, itself founded in 1901 by John Henry Kirby. Initially capitalized at an unheard of $30 million, Houston Oil was a crude-oil driller that found large quantities of gas that it decided to market rather than flare or cap inside the well. Thus, Houston Oil created a wholly owned subsidiary, Houston Pipe Line Company (HPL), to pipe methane to Houston.

But when HPL reached the city limits and failed to win a wholesale contract with Houston's only retail distributor, Houston Natural Gas was created as a separate company to purchase gas from HPL for resale to residential and commercial customers. Chapter 12 describes this forward integration. One-on-one combat (sometimes literally) ensued as HNG wrestled the incumbent gas distributor in Houston for business. Such rivalry contradicted the textbook view that so-called natural monopolists cannot compete.

In 1957, HPL was purchased by Houston Natural Gas, achieving the wholesale-retail integration that would have occurred originally if not for the vagaries of Texas antitrust law. It was this surviving company that expanded its natural gas operations and diversified into other energy and nonenergy businesses in the next decades—and then became the foundation for acquisitions and mergers that resulted in Enron.

The background and history of Houston Natural Gas, spanning much of the twentieth century, is rich with lessons for the Enron story. The career of John Henry Kirby in the first decades of the century parallels that of Ken Lay in the last decades. In their prime, Kirby and Lay each sported grand businesses. Each became Mr. Houston, the city's go-to person for employment, civic projects, and political campaigns. Both men started modestly and reached the top, only to fail, fall, and become folklore.

It is difficult to overestimate just how towering Kirby was during a several-decade period in Houston and southeast Texas, if not swaths of the South. He was Texas's first great industrialist and inaugural multimillionaire, earning the moniker "father of industrial Texas." Kirby was the Prince of the Pines, the man

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5. For further discussion of the politics behind the Natural Gas Act of 1938, see the Epilogue, pp. 503-505.
Figure I.2 Ken Lay began as CEO of Houston Natural Gas (HNG), which through merger and acquisition became Enron. The history of HNG can be traced back to John Henry Kirby's Houston Oil Company. The four leaders of HNG before Lay were (bottom left) Frank Smith (1933–55) and (bottom right) Bus Wimberly (1955–67), and (top left), Robert Herring (1967–81) and (top right) M. D. Matthews (1981–84).
with a million-dollar smile, and Lord Bountiful. Kirby embraced innumerable causes, private and political, making a difference in each. He was bigger than life, with towns, streets, and babies named for him.

But Kirby was also the Prince of Bankruptcy (chapter 10). Kirby’s grand company went bankrupt three years after its founding in 1901, before reemerging five years later to achieve prosperity. But his fortunes reversed again during America’s Great Depression, and Kirby’s company went bust in 1934, with Kirby himself dying six years later. Lay’s Enron collapsed after a 17-year run, and Lay died five years later. That Enron began as the legacy of John Henry Kirby is history in rhyme.

The meteoric rise and fall of Enron and Ken Lay finds another powerful, fascinating precedent in energy history. Enter Samuel Insull, Mr. Electricity in the first third of the century, just as Ken Lay was Mr. Natural Gas later in the century. Insull (1859–1938) ingeniously developed and applied the right business model to accelerate the electricity business by years if not decades (chapters 2–4). Lay repositioned underperforming natural gas as a premium fuel for power generation across the United States and in Europe during his brief reign.

Each man built a company (in Insull’s case, several companies) in his own image. Their transformations also involved trade association leadership, prolific speechmaking, and political activism. Such statesmanship, coupled with soaring company and personal wealth, gave each Great Man an aura of invincibility.

Yet both men failed to overcome success—spectacularly. Reaching too far, with grand ambitions unchecked, the energy titans quickly descended to depths that had scarcely been imaginable just a few years earlier. Few, if any, industries offer such compelling stories and such an intriguing parallel as that of Samuel Insull and Ken Lay. But it happened in the Edison-to-Enron world of energy.

Still, Samuel Insull’s historical importance is much richer and deeper than that of Ken Lay. Whereas Lay rode political trends and played politics for much of his ascent, and spearheaded product development in government-created competitive space, Insull’s half-century of work in electricity (1881–1932) was far grander. The Chief, as he came to be called, pioneered scale economies in production and consumption; matched the countryside to the city to increase load-factor efficiency and promote universal service; applied two-part rate making to solve the economic-calculation problem for a product that had to be instantaneously produced and consumed, not stored; and developed innovative financing techniques for a rapidly expanding industry. Insull also fathered statewide public utility regulation for his industry, trading (cost-based) rate regulation for franchise protection (territorial monopoly).

Insull, in short, did for electricity what John D. Rockefeller accomplished for petroleum. Many Americans put away their provisional candles when electricity
became reliable. And Chicago—Insullopolis to some—emerged from Insull’s business and civic leadership as the New York City of the Midwest, indeed as the Second City of the entire United States.

Insull’s debt-burdened holding companies, however, controlling an eighth of the national power market, could not withstand the Great Depression. Insull’s inability to turn down big new deals, even ones outside his expertise, based on a belief that promoting national recovery was both his opportunity and his duty, proved fatal. Middle West Utilities entered bankruptcy in 1932, as well as his new holding companies Insull Utility Investments and Corporation Securities Company of Chicago. More than a half million Americans lost most or all of their investment. Because company loans carried his personal guarantees, Insull’s net worth, once as high as $150 million, went negative (chapter 5).

Facing Congressional critics and state and federal lawsuits after his bankruptcy, Insull pleaded innocent and strategically put his whole illustrious career on trial. In the end, he was acquitted. The jury saw a failed man more than a dishonest one. Insull’s desperate actions to save his empire involved more philosophic fraud than prosecutable fraud. Good intentions, manipulated accounting, fruitless results. “If self-preservation is the first law of nature, we certainly were not interested, forgetting all about the morals of the case, in depreciating the value of the very securities that represented a lifetime of effort on our part,” Insull testified. For his last several years, the faded icon lived abroad in modest and self-imposed exile, a titan disremembered.

Ken Lay, too, faced the wrath of a large constituency that had sung his praises and had invested much with him in heady times. But at trial, Lay misleadingly and tragically tied his legal case to Jeff Skilling’s, his chief lieutenant, who had done so much, however inadvertently, to destroy Enron. With defiance and arrogance on the witness stand replacing humility, Lay’s philosophic fraud could not be distinguished from prosecutable fraud. Lay was found guilty on all counts, just the opposite of Insull’s verdict some 70 years before. The past can inform the present, and in Ken Lay’s case, he ignored the lessons of history at great cost.

Fortunes, indeed, can change quickly and completely when consumers reject the bad and the not-good-enough. The case studies of Insull and Lay, not to mention that of John Henry Kirby, decades apart, show how unforgiving the market can be toward even the most powerful, particularly when they believe themselves to be insulated from capitalism’s perennial gale of creative destruction, to use the term of economist Joseph Schumpeter.

Ken Lay banked on Enron’s unassailable competitive advantage—what he also termed “house advantage.” A century before, John Henry Kirby pronounced his Houston-based megacompany “one of the most meritorious enterprises ever organized.” Two years later it was in receivership. Kirby’s company would recover, but Mr. Houston went personally bankrupt in 1933, four years into the Great Depression (and one year after the Insull collapse).

The commonalities of John Henry Kirby and Ken Lay encompass more than personality, geography, and fate. As mentioned, Kirby’s Houston Oil Company
sired Houston Natural Gas, which became HNG/InterNorth in 1985 and Enron a year later.

History meets itself with Kirby, Insull, and Lay, all icons who failed in the end. But Shakespeare's "slings and arrows of outrageous fortune" also reached others in our chronicle. The Boss, as Jack Bowen came to be called, rose to the top and presided at two Fortune 500 companies, but federal price controls on wellhead natural gas in interstate commerce defeated his best-laid plans. Although he never went through personal or corporate insolvency, Bowen's multidecade career ended disappointingly.

Thomas Edison, genius inventor but haphazard businessman, dodged insolvency only with the mighty aid of boyish Samuel Insull, who, fresh from England, quickly assumed Edison's business affairs and kept the pieces together for what eleven years later became General Electric Company (chapter 1).

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Political business cycles and the fickle mistress of political entrepreneurship are major themes in the history of electricity and natural gas in the United States. Enron was a quintessentially political company, feasting on special government favor and gaming complex regulation. Without the noncapitalist side of the mixed economy, Ken Lay and Enron would be little known, perhaps unknown, to history.

The dizzying rise and precipitous fall of Insull's holding-company empire reflected the unintended consequences of government intervention, not only the tragic Napoleonic phase ending Insull's career. The expansionary finance of the Federal Reserve Bank (est. 1913) was Insull's play money to buy and pyramid in the Roaring Twenties. Insull was the bankers' Great Man and ensconced in industries that were protected by public utility regulation. The multistate holding company—and the numbing complexity and accounting legerdemain therein—was a device for utilities to navigate around the unwanted aspects of otherwise protective state regulation.

Insull's unhealthy proclivities were aided and abetted by post-Crash public policy. Herbert Hoover's normalcy campaign for business was the green light that Insull coveted to not pull back or turn away. Insull expanded for the common good, as he explained each step of the way, and utility stocks were advertised as depression-proof. Such investment, after all, was in protected monopoly space.

Insull's titanic fall was sealed by the repeated setbacks of the general economy. Little else could have been expected, in retrospect, with above-market wage guidelines, tariffs, tax increases, deficits, public works, codes of "fair competition", and other nostrums of Hoover, FDR, or both. What the federal referee in Insull's bankruptcy called "the tragedy of the century" was the failure
of the New Deal to let market forces liquidate the malinvestments of the boom and build up from there.

Whatever the level of regulatory constraint, there remain best business practices, including case studies of failure that help illuminate the prerequisites for success. The importance of general rules, as well as sound premises, humility, continual learning, and plan revision, are as true for productive organizations today as when Adam Smith and Samuel Smiles explored the interplay of capitalism and character in earlier times.

"In the last resort, sheer insight is the greatest asset of all," stated Herbert Butterfield. Business executives should become wiser as they live and learn history. But complacency, arrogance, and hubris have all too often displaced wisdom, in part from an underappreciation of how the mighty have fallen. The failure to overcome success, as it were, is a major theme of this trilogy. But how much of failure is due to external factors and how much to bad decision making?

Forrest McDonald fronted his biography Insull with Ecclesiastes 9:11: "I returned, and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favor to men of skill; but time and chance happeneth to them all." In McDonald’s telling, happenstance brought down a good, talented, accomplished man. Insull, in this sense, hardly deserved his fate, and given a bit of historical twist, he could have gone out on top, or certainly wealthy and wise. (The same might be said for Ken Lay, who had planned to cede the reins to Richard Kinder instead of Jeff Skilling in 1997.)

Yet McDonald’s opus explains how Insull lost his Smilesian prudence as his spellbinding career progressed, a turn that the Great Depression harshly exposed. External circumstances ruined Insull only because his decisions increasingly eroded his margin for error. Prudent men know when to temper ambition and throttle back, particularly later in their careers. Insull had his perfect exit in 1926, when he was honored with a request by Parliament to return to his homeland to revamp Britain’s balkanized electricity grid. Instead, he imagined his empire to be under attack by enemies and layered unnecessary debt upon his fundamentally sound business. New projects were undertaken in the teeth of the Great Depression as if it were his calling. ("He took on greater and greater burdens until it appeared as if he were attempting to carry the entire American economy on his shoulders," McDonald lamented.)

The prudent man plans for storms in order to weather them. Did not Samuel Smiles tell Insull as much? "The uncertainty of life is a strong inducement to provide against the evil day," Smiles wrote in Thrift. To be prudent in good times and to prepare for bad "is a moral and social as well as religious duty."
The fable about the grasshopper and bees emphasized by Smiles went unheeded by the man who was arguably the most important practitioner, or advocate, of Smiles.6

Insull had brought this Smilesian message to his audiences. "I want to urge you," the Chief lectured employees in 1911, "to provide for a rainy day, to use your influence among your fellow-workers, so that they will provide for a rainy day." Such care, Insull explained, "is not only a benefit to you but a benefit to those who are dependent on you, who are family connections of yours, as nothing can so help a man to take a proper view of affairs in times of trouble as to feel that he is supported by a respectable bank account." Yes, Insull was selling something—company stock—to this audience, but it was generic advice too.

Believing that the October 1929 reversal was temporary, and acquiescing in Herbert Hoover's plea to practice business as usual (to act imprudently, in retrospect), Insull turned to debt time and again to steady his stocks and in hopes of bringing back prosperity. Out went the Smilesian virtues of thrift, forethought, and economy, leaving the necessary but insufficient attributes of perseverance, integrity, and sobriety to deal with a moribund economy. Insull had no reserve fund or contingency plan; he became intoxicated by success and blundered his way until he was "too broke to be bankrupt."

Prudence is tested not only by swings in the macroeconomy but also by the small fates of history. Jack Bowen's roller-coaster career would have been much steadier had President Eisenhower in 1956 stuck to his script to end federal price controls on wellhead natural gas. But with the bill on his desk, a surprise veto (owing to an industry lobbying impropriety) allowed regulatory promiscuity to survive, grow, and fester, resulting in debilitating natural gas shortages in the 1970s and, indirectly, problematic gas surpluses in the 1980s.

Ken Lay's career as a political entrepreneur owed much to public-utility regulation of natural gas and electricity, as well as to Eisenhower's reversal and the energy politicization that came from Richard Nixon's wage-and-price

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6. Smiles fronted *Thrift* with this fable:

A grasshopper, half starved with cold and hunger, came to a well-stored bee-hive at the approach of winter, and humbly begged the bees to relieve his wants with a few drops of honey.

One of the bees asked him how he had spent his time all the summer, and why he had not laid up a store of food like them.

"Truly," said he, "I spent my time very merrily, in drinking, dancing, and singing, and never once thought of winter."

"Our plan is very different," said the bee: "we work hard in the summer to lay by a store of food against the season when we foresee we shall want it; but those who do nothing but drink, and dance, and sing in the summer must expect to starve in the winter."
control order of August 1971. Prudence in the mixed economy is different from prudence in the market economy if for no other reason than that the different vistas of opportunity and decision-making the two present and the different business leaders they require.

Such interventionist watersheds changed history for the worse. Yet an absence of best practices mattered too, for Kirby, Insull, and Lay’s heady booms left little slack come adversity. Time and chance happeneth to all, but they work for the prepared and against the unprepared—and against those unschooled in history.

The past is prologue when it comes to Enron. Not only have there been Enron-like organizational failures after the fall of Ken Lay’s company, beginning with accounting firm Arthur Andersen, Enron’s most important partner in misdirection. On the macroeconomic plane, there has also been the breakdown of Big Government à la political capitalism (Ken Lay’s sandbox) wherein Business brought out the worst in Government, and Government brought out the worst in Business.

Enronish behavior in the private and public sectors seemingly resulted in the smartest guy in every room, leaving companies shattered and the economy sagging with malinvestments. But rather than liquidating the bad investments per Enron, a new New Deal by the party in power—Republican and then Democrat—chose to prop up malinvestments via deficit spending and other means. And so the recession turned into the Great Recession, just as government activism transformed a depression into the Great Depression eight decades before.

The Enron problem, in other words, transcends Enron. The smartest-guys-in-the-room phenomenon is an ideal type of personal and organizational failure. It may be a wholly private-sector problem or, in its more pronounced cases, such as Enron itself, a private-public problem. The troubles of Arthur Andersen (which came into national prominence with Insull’s troubles and died with Enron), AIG, and Lehman Brothers were analogous to Enron’s modus operandi. One example reeks with irony. “Another lesson from Enron is that corporate behavior is fundamentally a product of the culture of the company,” wrote Franklin D. Raines, CEO of Fannie Mae, in 2002. “At Fannie Mae we take pride in the tone we set at the top, in our risk management focus, in our commitment to integrity and intellectual honesty and in the values of our people.”

7. The term is defined as follows: “An ideal type is formed by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those onesidedly emphasized viewpoints into a unified analytical construct.”
Yet Raines and Fannie Mae were all about an insular culture; accounting trickery; denial, arrogance, and hubris; and political capitalism. With liabilities parading as assets, it was bankruptcy walking. This and other examples led Bethany McLean and Peter Elkind to comment:

Enron’s bankruptcy seems not to have delivered this message, as the subsequent accounting scandals at AIG and Fannie Mae, which originated with the same please-the-Street impulses (but without such dire results), showed. But maybe, just maybe, a couple of decades in the slammer for Ken Lay and Jeff Skilling will send the message home.

But these authors missed the public-policy forest. The message is not so much pelting punishment for the failed and guilty. It is not throwing more regulation after bad. It is reforming a socioeconomic system that allows the worst to get on top.


Less, not more, government intervention, removes false safe harbors, promotes prudence in place of opportunism, and checks artificial booms that must turn into corrective busts. This is the lesson of history that this book and trilogy points toward. Learning from Enron’s background, its prehistory, to better guide the post-Enron world is the work of the chapters to follow—and energy history in rhyme.