Shaping Electric Power Systems in California
Charles David Jacobson, Ph.D.
Morgan Angel & Associates, Washington, D.C.

The history of electric utilities in California has been rich with controversy over who should own the systems and how they should be developed. As in other states, private ownership initially predominated, with municipalities and later the state government playing modest roles in regulating prices and services. Almost from the outset, however, critics complained that private electric utility enterprises overcharged consumers, improperly influenced governmental decision-making, and failed to invest in facilities needed to fulfill public goals.

In some cases, such concerns prompted municipal governments to acquire their own electric utility systems. Largely inspired by city-building and economic development goals, for example, Los Angeles built one of the country’s largest municipally owned water and power enterprises during the first decades of the twentieth century. After years of debate and court battles, Sacramento also acquired its own electric utility system in 1946.

Controversies also have arisen over harmful aspects of electric utility development. From the early twentieth century to the present day, Los Angeles’ water and power activities in the Owens Valley have come under attack for draining the economic life out of that area and damaging its environment. Choices concerning nuclear power also have elicited sharp controversy. In the case of Sacramento's Rancho Seco nuclear power plant, years of intense debate over costs, safety, and environmental issues culminated with a referendum closing the facility in 1989.

During the 1990s, California’s state government initiated a radical restructuring of the utility industry intended both to cut costs to consumers and to encourage better decision-making about new technology and facility development. Major elements of the restructuring included transfer of control over the transmission network to an Independent System Operator (ISO), disposal of much of their generating capacity by privately owned utilities, and the creation of a Power Exchange on which utilities would procure electricity from competing generating firms. Competition and the invisible hand of the market, restructuring advocates believed, would serve to protect consumer interests more effectively than existing forms of regulation or government ownership.

These hopes went unfulfilled. For a variety of reasons, including unexpected growth in electricity demand, limits on generating capacity, and market manipulation and withholding of capacity by generating firms, wholesale electricity costs spiked dramatically in 2000 and 2001 even as many areas of the state suffered shortages and rolling blackouts. By the summer of 2001, major features of the restructuring plan had been abandoned, and the state government played a greater rather than lesser role in electricity provision than before the initiation of the market-oriented reforms.

California’s experiment with electric utility restructuring broke sharply in many ways from older approaches to organizing and regulating the industry. At the same time, striking similarities can be discerned between the goals of the restructuring and those of earlier generations of reformers. Like many earlier reformers, architects of the restructuring sought to supplant what they believed to be messy and inefficient forms of political decision-making over electric utility development with more apolitical, efficient, and impersonal mechanisms.

Electric utility systems, however, are of central importance to the political as well as the economic functioning of modern society. Historical experience suggests that politics and questions concerning the accountability of governmental institutions have been, and will likely remain, of critical importance both in articulating desirable paths of development for the electric utility industry and in determining whether or not such visions are realized.
Book Review


Levied for flood control and locked for barge navigation, the Upper Mississippi is an artifact from an era when grain farming dominated the Midwest economy, and the farm lobby in Congress easily swayed engineering design. Historian John O. Anfinson has written a surprising book about the builders who answered to Congress. Where many books praise the engineering that opened America’s mainstream, and others condemn engineering for doing too much, Anfinson shows how technology followed culture. His engineers never control the political process. Boost-erism, regionalism, work relief, and the farmer’s hatred of railroads change the towboat river more profoundly than any innovation of hydraulic design.

Two visions of the river merge in Anfinson’s story. Grangers of the 1870s hoped that a minimum channel depth of 4 ½ feet would boost enough river shipping to keep railroads from raising their rates. The U.S. Army Corps of Engineers responded with a system of dikes, levees, and dams to regulate water levels. After spending more than $500 million on hundreds of projects, the engineers came to believe that the drought- and flood-prone towboat channel could never compete with the certainty of shipping by rail. “The more the Corps improved the river for navigation, the less shippers used it,” Anfinson claims (p. 103). Only lumber sustained river commerce in the early decades of the 20th century. By 1920 the river’s commerce had virtually died.

Conservationists, meanwhile, desired for a forested Mississippi unscarred by industrialization. In 1922, Will Dilg of the Izaak Walton League targeted mill pollution, floating garbage, fish-killing soil erosion, and backchannel sedimentation. Dilg spearheaded the Upper Mississippi River Wildlife and Fish Refuge, signed into law by President Coolidge in 1924. But soon conservationists split a midwestern plan to revive barge navigation. Navigation boosters now demanded a 9-foot guaranteed depth through a series of slack water pools. In 1930 the farm lobby overrode protest from railroads. Three years later the National Industrial Recovery Act provided $51,000 so that the corps could remake the free-flowing river into a locked navigation staircase of 29 elongated lakes.

In 1940 the nation remained divided over the future of America’s mainstream. Boosters predicted a shipping revival. Conservationists saw calamity. Both predictions came true.

Reviewed by Todd Shallat, Boise State University
Water and Sanitation Research in Tampere, Finland
Petri S. Juuti and Tapio S. Katko

Since the late 1990s, researchers from Tampere University of Technology, Institute of Environmental Engineering and Biotechnology (IEEB), and University of Tampere, Department of History have conducted inter-, multi-, and transdisciplinary research on long-term development of water and sanitation services. In addition to history research, it has made links with futures studies as well. This research initially focused on Finland, but more recently also on Europe and beyond.

In connection with the European Union-funded research project called WaterTime, the study “Water, Time and European Cities” was conducted analyzing the key decisions in 29 European cities in 13 countries from the mid-1800s to 2003.

Some of the key conclusions of the study include:
(i) Fundamental strategic changes have been decided upon often without any evidence of their potential superiority
(ii) In the early phases of establishing the systems, options and alternatives were likely discussed more often than later when the established systems were expanded
(iii) Institutional changes are needed, but they should not be done for the mere sake of change—like the idea of reinventing private concessions or operators in a completely ahistorical context
(iv) Integration of water supply and sewerage would be logical based on experiences from the Nordic and several other case countries. In any case, ensuring adequate cooperation between water and sewerage services could be a first natural step in terms of Integrated Water Resources Management
(v) In the historical context, we have evidence that water services cannot be considered merely managing an economic good. Instead, all the requirements of water based on political, economic, socio-cultural, technological, environmental and legislative dimensions have to be taken into account

The objective of another project is to enhance our understanding of the development of water use, water supply, water pollution control and sanitation services, and their overall long-term impacts in Nepal, South Africa, Kenya, and Finland. There is also one truly global, multi- and interdisciplinary project, “Environmental History of Water,” which focuses on the long-term development of community water supplies and sanitation and their future implications on a global scale. The project involves some 40 researchers and 20 countries.

The historical cases and studies so far have revealed that there is probably a wider diversity of options and development paths—whole sets of institutional arrangements—than anyone imagined. For example, it is obvious that water services are highly dependent on local conditions. Instead of promoting one-fits-for-all ideas, we should think of alternative ways of managing water services. These approaches should be based on visionary and strategic thinking while also utilizing institutional memory and lessons learned. In this sense, path dependence, that is, early choices made in establishing new systems that may constrain future choices, are highly relevant.

In addition to inter- and multidisciplinary studies, researchers should consider developing trans-disciplinary approaches. In water research—like in water resources and services management—we certainly need to achieve a balance between quantity, quality and priority.

See the following selected publications:
Hukka J.J. & Katko T.S. 2003. Water privatisation revisited—panacea or pancake?
James McCarty: Public Works Leader

The passing of James E. McCarty in January, 2005, is a sad reminder of the loss of a valuable friend to the Public Works Historical Society. It is truly unfortunate that an oral history was not completed before he died, because many of his experiences as an engineer and public works director might have been passed along to future generations in what has become one of the most important series of publications that the society and APWA supports.

Those of us who knew Jim, however, will not forget his many contributions to the field of public works. A former APWA president and member of the PWHS Board of Trustees, he had a distinguished career matched by a warm and affable personality.

Born in Stockton, California, and a product of the state’s public schools, he received a degree in civil engineering at the University of California at Berkeley in 1943. During World War II, Jim served on active military duty as an officer and a combat engineer in the Army Corps of Engineers from 1943 to 1947. After the war he continued military duty in the Army Reserves, achieving the rank of Lt. Colonel when he retired in 1962. His military experience in an engineering battalion attracted him to a career in public works as a civilian.

It was quite unusual that Jim McCarty spent his entire professional career with one city—Oakland, California—not very far from his birthplace. Beginning as a junior engineer in 1947, he assumed the position of public works director in 1969, a position he held until his retirement in 1983. He began by helping to design and build the city’s infrastructure, and ultimately spearheaded the organization of a citywide public works program through four separate departments. His influence could be seen in every facet of the city’s public works—street resurfacing; street cleaning; sign, signal, and street-marking improvements; parking; drainage; freeway development; railroad crossings; and city redevelopment in general.

Jim not only served his city well, but brought his expertise to bear on many state and national organizations. He was APWA President in 1977–78, and also served as Chair of the APWA Research Foundation, a member of the Task Force on Emergency Management, and on the Editorial Advisory Board for the APWA Reporter. In 1981 he was named a Top Ten Public Works Leader of the Year, and in 1989, he also received Honorary Membership. He accrued similar honors with the American Society of Civil Engineers in 1993, and also was selected as an Honorary Member of ASCE. Serving as president of both APWA and ASCE was a feat possibly only matched by one other person. He also received the Greeley Local Government Service Award.

As a member of the Board of Trustees of the Public Works Historical Society, Jim added his professional stature and solid advice to the fledgling body. His willingness to work actively with both historians and practitioners on the board added credibility to the organization and helped give it the kind of recognition that allowed PWHS to move forward since its origins in the mid-1970s.

On July 8, 1983 Robert D. Bugher, Executive Director of APWA, wrote a letter to Jim McCarty on the occasion of his retirement. In that letter, Bob recalled many of Jim’s accomplishments and contributions, thanking him for his many years of service to APWA and the public works profession. “[O]ne thing we do know for sure,” Bugher noted, “Jim McCarty is a true professional in every sense of the word. You have earned the respects of your colleagues at all levels of government and in the private sector, as well.” Jim did this without fanfare, and in many cases, behind the scenes. In the public works history of recent years, people like Jim McCarty made a difference and deserve to be remembered.

Martin V. Melosi
Editor

PWHS Chapter Historian Tips

- It is extremely beneficial to enter into an agreement with a library or university for archival of chapter information.
- When a notable individual retires, determine their plans for disposition of their personal and professional files. Oftentimes these documents provide a wealth of information and are willingly donated to historians.
- When submitting nominations for awards, retain a copy of the nomination information in your files. Frequently these individuals/projects become vital to a chapter, agency or state history.
- If a time capsule is opened in your area, take care to document the contents and obtain copies, if possible.
Congress 2006

The 2006 APWA Congress and Exposition: The Best Show in Public Works was scheduled for September 10–13 in New Orleans. Given the human and property devastation resulting from Hurricane Katrina and subsequent flooding of the New Orleans area, the APWA Board of Directors was forced to consider the feasibility of holding the meeting in New Orleans given conditions in the Gulf States.

This challenging task required formation of a Board subcommittee to weigh a number of factors including the status of physical structures and accommodations in New Orleans, the impact of the hurricane on local APWA members and Congress volunteers, as well as our desire to support recovery efforts in New Orleans and contribute to the economic health of the region.

After balancing these factors and determining availability in other cities, the Board decided to move the 2006 Congress from New Orleans to Kansas City. The dates will remain the same—September 10–13. We will return to New Orleans in the third week of August in 2008 when we believe the city and our volunteers in the region will be in a better position to host APWA’s 6,500 delegates. The decision to defer holding Congress in New Orleans required the Board to revisit commitments to Indianapolis in 2008. In light of the changes, plans have been made to hold APWA’s 2012 Congress in Indianapolis.

On behalf of the APWA Board of Directors, we appreciate your understanding—and that of the affected Chapters and volunteers—of the difficult set of circumstances that led us to this decision. We are optimistic that this course of action will best serve APWA’s members during upcoming Congresses. If you have any questions, feel free to contact me at pking@apwa.net or contact Dana Priddy, Director of Meetings, at dpriddy@apwa.net. Questions related to the 2006 Exhibit may also be directed to Kent Riffert, Director of Operations, at kriffert@ntpshow.com.

Peter B. King
Executive Director

Announcements

The Society for Industrial Archeology is offering Industrial Heritage Preservation Grants for the study, documentation, and/or preservation of significant historical industrial sites, structures, and objects. For further information contact Lynn Rakos at lrakos@hotmail.com or Nancy Hachtel at 440-951-6069.

One of the technical, professional journals for the public works industry, Public Works Management and Policy, will now be headquartered at George Mason University’s School of Public Policy. The peer-reviewed journal provides a place for the publication of research and practice in transportation, infrastructure, and the environment, and creates a dialogue between academics and practitioners examining public infrastructure issues. For more information contact sppnews@gmu.edu.

Dec. 1–4, 2005. The International Water History Association will hold its fourth biennial conference in Paris, France. The event is co-organized and hosted by UNESCO. The conference program addresses diverse topics related to water and history. The program’s themes will include Water and Technology, Water and Religion, Water and Climate and Water and Health. For further information please contact: iwha@comevent.com.

Proposal for Papers: The International Committee for the History of Technology Program Committee welcomes proposals for individual Papers and Sessions for the 33rd Symposium in Leicester, U.K. August 15-20, 2006. The deadline for proposals is February 1, 2006. The symposium theme is “Transforming Economies and Civilizations: The Role of Technology.” For further information please contact James Williams, Program Committee Chair at techjunc@pacbell.net or visit the website at http://www.icohtec.org.

Congress Summary

Monday’s Public Works Historical Society luncheon packed a great deal of announcements and information into a 90-minute time period. The recipients of the PWHS Able Wolman and Michael Robinson Awards, which recognize the best new book and article (respectively) published in the field in public works history, were announced. Assistant Professor of History at Colorado State University, Dr. Jared Orsi received the Wolman Award for his book *Hazardous Metropolis: Flooding and Urban Ecology in Los Angeles*. Dr. Michael Rawson, author of “The Nature of Water: Reform and the Antebellum Crusade for Municipal Water in Boston,” was present to receive his award. He thanked the Society and its members and extended his appreciation to the society for recognizing the works of individuals who write on the history of public works projects and their impact to society.

PWHS President Howard Rosen presents the Michael Robinson Award to Dr. Michael Rawson.

Tuesday’s PWHS workshop session “The Role of the Mississippi River in Pioneering Water Transport Systems” featured Dr. John Anfinson, Historian with the Mississippi National River & Recreation Area in St. Paul. Dr. Anfinson discussed how the system of locks and dams revolutionized shipping of goods and people from St. Louis to St. Paul and, by extension, life in the Midwest. He offered insight into how politics shaped the landscapes of the Upper Midwest and how taming the river has affected economic sustainability, river ecology, and biological diversity. Following the workshop session Dr. Anfinson signed copies of his book *The River We Have Wrought*.

Chapter anniversaries were recognized with commemorative patches presented to 14 chapters. Ten, thirty, forty and fifty-year milestones were acknowledged.

Left to right: Howard Rosen, PWHS President; Michael Moore, Ventura County Chapter (10th); Ron Calkins, Ventura County Chapter (10th); Keith Pugh, North Carolina Chapter (50th); Joe Soucie, Nebraska Chapter (40th); Ken Curtis, New Mexico Chapter (40th); Noel Thompson, Kentucky Chapter (50th); Steve Schmidt, Kansas City Metro Chapter (40th); Rouen Liu, Hawaii Chapter (40th); Mike Asbury, KC Metro Chapter (40th); Herb Blomquist, South Dakota Chapter (40th); Theron Roschen, Sacramento Chapter (40th); Bob Moorhead, Washington Chapter (50th)

The featured speaker of the luncheon was Dr. Scott Anfinson, archaeologist for the Minnesota State Historic Preservation Office based at the Minnesota Historical Society. His presentation “Place of Nature to Place of Work: The Transformation of St. Anthony Falls in Minneapolis” provided a look at the growth of Minneapolis from a “natural wonder” tourist center to one of the world’s leading industrial centers of lumber and flour production in only a quarter century. Highlighted by historical photos, the presentation served to heighten the interest in the St. Anthony Falls Lock and Dam area.

Monday’s Congress schedule also included the Chapter Historian’s Meeting. Representatives from seven chapters, PWHS leadership and APWA staff discussed ways in which chapters can identify holes and gaps in their history. Watch future issues of the *Public Works History* for hints and suggestions gleaned from this meeting.

Dr. Scott Anfinson
**Book Review**


*Devastation and Renewal* offers a look into the dark legacy of Pittsburgh’s industrial past and the attempts to clean up the city and its surroundings. The book contains ten essays that the authors presented at “Pittsburgh’s Environment: A Historical Perspective,” held in September of 2000. The result is an environmental biography of Pittsburgh.

The book is a fusion of environmental and urban history, consistent with Joel Tarr’s previous works. Modeled after such pioneering works as Andrew Hurley’s *Common Fields: An Environmental History of St. Louis*, Craig Colten’s *Transforming New Orleans and Its Environments: Centuries of Change*, and Char Miller’s *On The Border: An Environmental History of San Antonio*, *Devastation and Renewal* is a valuable addition to this growing field of literature.

The book covers myriad subjects pertaining to Pittsburgh’s environmental history. Among these are Edward K. Muller and Joel A. Tarr’s discussion of the interaction between the natural and built environments. This is particularly well done. The authors show, in great detail, the process of landscape change caused by Pittsburgh’s industrial focus. Their points concerning transportation and sewage are especially fascinating as the authors tie in geography as well as engineering. Other subjects discussed are air pollution, water and wastewater, the evolution of environmental politics, and the area’s environmental movement.

Despite the wide range of subjects presented within the volume, five common topics run throughout the work; the conflict between environmental responsibility and economic prosperity, the slow process of changing societal beliefs and values, the conflict between the people, industry and the government, ignorance (sometimes supposed) of the long-term effects of environmentally irresponsible behaviors, and the evolution of the environmental movement in Pittsburgh. Of these five, the focus on air and water pollution. As Pittsburgh’s industries gave the city the reputation as being a “smoky, dismal city, at her best (p. 3),” and pumped an unfathomable amount of pollutants into the three rivers surrounding the city, the contamination of the soil could have been discussed more fully. *Devastation and Renewal* has much to offer both the academic and popular audiences. All of the contributors are to be commended on the depth and originality of their research, as much of it was drawn from primary source materials. Perhaps the book itself will play a role in the continued environmental renewal of the area by encouraging others to maintain the city’s renewal after eons of abuse.

Reviewed by Tom McKinney, University of Houston

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**Now accepting 2006 Award Nominations**

It’s your time to shine! APWA’s Awards Program was established to recognize outstanding individuals, groups, and chapters representing the best in the public works profession. The Public Works Historical Society is soliciting nominations for the two awards presented by the Society. The Abel Wolman Award recognizes the single best new book published in the field of public works history. This award is intended to provide encouragement and recognition to historians whose research and publications have made outstanding contributions to the history of public works. The Michael Robinson Award recognizes the single best article published in the field of public works history. This award is intended to provide encouragement and recognition to historians and practitioners whose research and publications have made outstanding contributions to the history of public works.

Individuals, publishers and chapters are invited to submit nominations. For details and nomination information, check the APWA web pages at http://www.apwa.net/About/awards.
Correction

We would like to extend our deepest apologies to Ken Eyre for omitting his name in our last newsletter. He wrote the outstanding review of Robert J. Kapsch’s book Canals. Ken submitted an excellent review, along with pictures, and it is with deep regret that his name was omitted as author for this review.

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