
Energy expert Pat Wood III ’84, with his boys (from top) Patrick, 9; William, 3; John Thomas, 8; and Charles, 7.

# Power to Change


The nation's former top energy regulator says traditional oil and gas fuels, renewable wind and solar energy, and even such unpopular technologies as nuclear and coal should all play a part in a smarter—and greener—national energy strategy.

Pat Wood III '84 chaired the Public Utility Commission of Texas under Gov. George W. Bush, leading the effort to deregulate the state's retail electric power and telecommunications industries. He is also the past chairman of the Federal Energy Regulatory Commission, where he led the response to the 2000-01 California energy crisis, the bankruptcy of Enron, the significant rise in fuel prices and the 2003 Northeastern power blackout.

Because of Wood's unique position—the former top energy regulator at both the state and national levels—*Texas Aggie* sought his opinions about the ongoing national crisis in energy generation and infrastructure.

Wood's areas of expertise include renewable energy, energy technology, power transmission and distribution, and energy regulation. He is known as a strong advocate for replacing government-centered energy regulation with a market-based approach, and he has promoted the development of a cleaner power generation fleet, liquefied

natural gas import terminals, and a more robust power transmission grid.

He received a civil engineering degree from Texas A&M, where he was president of the Memorial Student Center and received the Brown-Rudder Outstanding Student Award. After A&M, he graduated from Harvard Law School, where he was student body president. He is now the principal of Wood3 Resources and serves as an independent director of two publicly traded companies: SunPower Corp., a solar technology company, and Quanta Services, a network infrastructure contracting firm. He's also a director of three private companies: Range Fuels, a biofuels producer; Xtreme Power, a large-scale power storage provider; and, TPI Composites, a wind blade manufacturer.

*Texas Aggie* contributor **Rebecca Noah Poynter '85** interviewed him in January at his home in Houston.

**TEXAS AGGIE: What are the top energy priorities for our country?**

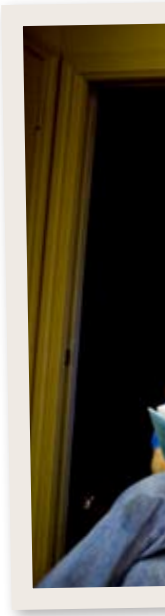
**PAT WOOD III '84:** Rejuvenating the national electric grid, realistically addressing the future of coal, and decreasing our dependence on foreign oil.

**TA: Why is the electric grid important?**

**PW:** We must take significant steps to bolster the interstate electric grid, which is the backbone transmission system of the country. We need this for the same reason that we want a strong interstate highway system; it connects markets to put people and products together. So if you can get wind power from Kansas to New Jersey (because there is not a lot of wind power in New Jersey but there is a heck of a lot in Kansas) then it can level customer costs, develop domestic resources and more efficiently dispatch energy across a big area.

**TA: What predictions and advice do you have for President Obama's administration?**

**PW:** It will be a much more assertive agenda on clean energy than we had under President Bush. I know that has a lot of people in Texas are concerned because of potential cost impact on oil, coal and gas, all of which we have plenty of in Texas. We won't see as much support for new domestic oil and gas production, which is a missed opportunity. There will be more support for bio-fuels like ethanol but less support for nuclear power, which is unfortunate. I think they will go towards carbon dioxide regulation in a way that is more complicated than a simple tax, which would work better. There will be very strong support for renewables.



Because the attitude toward coal is hostile, my one piece of advice is to take a balanced approach on coal. Today, with half our electricity coming from coal and the largest reserves of coal in the world located in this country, being anti-coal is not constructive.

**TA: Your comments on foreign oil dependence?**

**PW:** We have to step back and think

Pieces of silicon, the raw material in solar photovoltaic panels.



"Everybody loves to talk it but nobody loves to walk it. That is why I got out of the chatting class and got into developing infrastructure for my day job."

what this world is going to be like. President Obama talks about our energy appetite in term of carbon dioxide emissions. There are some coalitions that he is successfully tapping into, environmental and economic groups. But the interesting addition in recent years is national security-focused citizens. All of these combined create a super majority who agree we need to develop more of our industry resources at home.

**TA: What was your biggest accomplishment as chairman of the Federal Energy Regulatory Commission?**

**PW:** I would like to be remembered as the guy who brought discipline back into the market. The main reason I went to the FERC in 2001 was a defense, to keep the California energy market meltdown from propagating across the country. We were able to address the cause of the California deregulation failures, which had begun in 2000.

California had set up deregulation rules a little before we did in Texas but without incentives to build or procure power under long-term contracts, instead relying on the spot market. The FERC was the regulator-in-charge of approving their plan in the late 1990s and should have pushed back. When I got there, rethinking had already started to happen. By putting in balanced market rules, I wanted to send a message that we were regulators who knew what our job was and how to say 'no' to politicians who were pushing hard in the wrong direction. The market must be adequately policed.

**TA: What leadership should Washington energy regulators take?**

**PW:** Mostly get out of the way. There *is* a lot of collaboration that can happen among government agencies like the EPA, Department of Energy and Department of Interior. However, when you have independent agencies like the FERC or Nuclear Regulatory Commission, it is a little bit of a challenge. The administration must support your agency but not boss you around. It takes the president telling his appointees that they need to work with the other appointees. Structurally it is a lot to ask but you have to have a working relationship to begin bureaucratic cooperation.

## Pat Wood's Career After A&M

- 1985-86: Assistant project engineer, ARCO Indonesia
- 1986-89: Harvard Law School
- 1989-91: Baker & Botts, Washington, D.C.
- 1991-93: Legal counsel to Federal Energy Regulatory Commissioner Jerry Langdon.
- 1993-95: Legal counsel to Texas Railroad Commissioner Barry Williamson.
- 1995-2001: Chairman of the Texas Public Utility Commission
- 2001-05: Federal Energy Regulatory Commision
- 2005-today: Principal, Wood3 Resources, Houston

**TA: Do we need an energy czar?**

**PW:** President Obama has picked one; Carol Browner, the former director of the EPA under Clinton. In effect, Vice President Cheney was that under President Bush. Energy is an important issue and it affects every aspect of our economy, from our foreign relations to our everyday lives. If the president can't focus on it full-time, then he needs to put somebody senior in charge.

Woods' home office includes mementos of his time as the top energy regulator first in Texas, later for the nation. As the parents of four, he and his wife, Kathleen, own two SUVs, but one is a hybrid and the other a flex fuel Suburban.

**Q: What car do you drive?**
**A:** My car is a seven-seat Toyota SUV hybrid that gets 27 miles per gallon. My wife's car is a flex fuel Suburban which gets about half of that. I am waiting for the Chevy Volt, a plug-in hybrid car, to be available. I have four boys to put through college and a Chevy sounds good to me.


**TA: What did our country learn from collapse of Enron?**

**PW:** Develop well-balanced market rules and then enforce them. With Enron, the government should have done a better job policing the market to make sure their business strategies didn't break the rules and disadvantage the overall health of the industry. Today we are seeing the same thing in the financial industries.

**TA: Which energy thought leaders would you like to be in your fantasy car pool?**

**PW:** How about John T. Rowe, chairman and CEO of Exelon. I really like Tom Friedman. Hunter Hunt, president of Hunt Power, is one of the brightest people I know. I could include T. Boone Pickens (he is on this grid problem in a real practical way) but he's only getting in the car if it is natural gas-fired! One more I would add is Bjorn Lomborg, author of *Cool It: The Skeptical Environmentalist's Guide to Global Warming.*

**TA: Tom Friedman is leading our national energy discussion. What's your review of his book, *Hot, Flat, and Crowded: Why We Need a Green Revolution—and How It Can Renew America*?**

**PW:** He is unquestionably bright. He has seen the interconnection of the politics that have been so overbearing, our foreign engagements and our need to protect oil, and now natural gas is going to come increasingly from that same area. Friedman's key point is that prices matter and if President Obama does not set a price for carbon pollution or if the price is set too low, then the green revolution will never happen.

**TA: With our country's desire for cheap and convenient energy, can we really move from green talk to green action?**

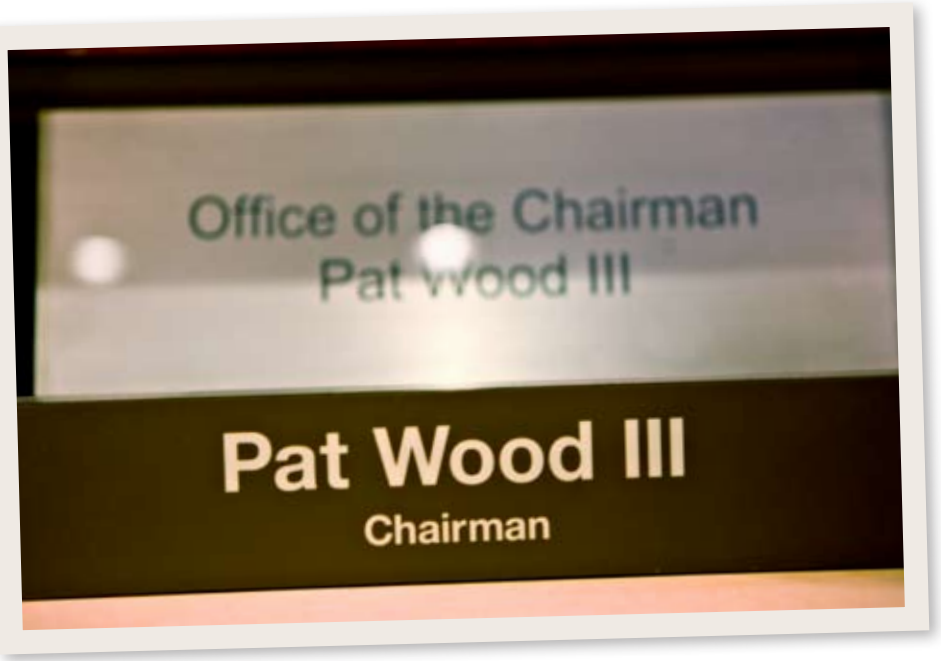
**PW:** That has been my concern for a long time, that everybody loves to talk it but nobody loves to walk it. That is why I got out of the chatting class and got into developing infrastructure for my day job.

I look at President Obama and I judge him as a genuine guy on this issue. From that great bully pulpit, he'll have a major role to play.

## Natural Gas And Renewable Energy

**TA: What is the parallel between natural gas and renewables?**

**PW:** After Hurricane Katrina, when we saw $13/Mcf (thousand cubic feet) natural gas, it sent a clear market signal that the legwork, done 20 years ago to encourage new developments technologies, had been the right thing. I am a fan of infant industry subsidy in the form of production tax credits. Then you can learn how to use the new tools and produce more efficiently. For natural gas, it has made the Barnett Shale development in Texas thrive and employed lots of people. This is exactly




why I support short to medium subsidies for renewables.

**TA: What percentage of America's electricity is currently provided by wind and solar?**

**PW:** Less than 2 percent right now. The goal originally set by President Bush was to have 20 percent by 2025. We can easily make it 15 percent by then because, I think, solar will increase very fast, but to make more it is going to take a more determined effort.

**TA: Is wind power going to "ugly up" our landscape?**

**PW:** When I take I-20 out towards Midland, I think the windmills are a beautiful sight.

**TA: What's the hundred-year outlook for electricity?**

**PW:** By the end of this century, electricity will come from wind, nuclear and solar. I am a little concerned that nuclear is not a priority under President Obama. This is a low-emission fuel and it's safe, so we need to get nuclear back on our agenda.

**TA: When you left for Washington, environmental activism wasn't really part of the Texas scene. What happened?**

**PW:** I was shocked when I moved back to Texas in 2005 and found Highland Park and River Oaks residents were protesting coal plants. It dawned on me something had happened which will be recorded as a seminal moment as a national turn toward green power. Nationally, we now have what I like to call "the red-state supporters of green" who are the galvanizing economic force in the last three years.

## Closer To Home

**TA: When Hurricane Ike came through Houston, did it give you a chance to think about the real value of electricity?**

**PW:** Our family's "hurrication" was in Bryan at my parents' home with 12 of us, including my in-laws. Their power did not go out because they had underground service in their neighborhood. So I thought about cost versus reliability of underground, which is about nine times more expensive.

When I returned to our house in Houston, I was out of power for 15 days, but I had a natural gas-fired generator that a prior owner had installed. I was impressed with the restoration teams that came here from all over the country and put the grid back together. This was the biggest restoration *ever* in the United States. We never had a direct hit on such a large urban area with such broad impact.

My in-laws are staying with us because they lost the first floor of their house in Galveston. A month after Hurricane Ike, they were charged a service termination fee by their Houston-based provider and my sweet mother-in-law was furious. This was not the kind of quality customer service I had in mind when I worked to get customer choice in Texas as chairman of the Public Utility Commission of Texas.

**TA: What should Texas A&M be doing to position itself for Texas's energy future?**

**PW:** Texas needs to be the center for old energy and new energy like natural gas, wind and solar. We are just good at it. Texas A&M needs to be the platform for energy innovation. The more energy business and thought leaders we bring to campus, the more students we can put in front of them. That leads to student summer jobs, full-time jobs, and the Aggies are on the forefront of innovation.

**TA: What did you learn at Texas A&M?**

**PW:** When I was MSC president, I think I went to more meetings than I did as either the Texas Public Utility Commission chairman in Austin or as the FERC chair in Washington. I learned quickly to streamline my time ... get in and get out.

**TA: What is your advice to students?**

**PW:** Learn everything you possibly can, but you have to get off your rear end and go after it. Aggieland is so far from the entitlement thinking I saw in Washington, and that's what makes Texas A&M special.

Rebecca Noah Poynter '85 is a writer living in Washington, D.C.

TOP LEFT PHOTO COURTESY OF PAT WOOD III '86; ALL OTHER PHOTOS BY SPENCER SELVIDGE '07