25-01-31 TheBuzz web

Thu, Jan 30, 2025 1:11PM 27:51

SUMMARY KEYWORDS

Public utilities, private utilities, electricity prices, Tucson City Council, electric utility, investor-owned utilities, publicly owned utilities, cheaper financing, regulatory process, rooftop solar, water utilities, infrastructure needs, public-private partnerships, water scarcity, cost-shifting.

SPEAKERS

Speaker 2, Christopher Conover, Michael Dauphinais, Speaker 1, Severin Borenstein, Joe Kane, Nicole Cox

---

M **Michael Dauphinais** 00:00

Following is an azpm original production.

C **Christopher Conover** 00:09

Welcome to The Buzz. I'm Christopher Conover this week how public and private utilities differ. The Tucson City Council received an update last week from a firm it hired to study the feasibility of building an electric utility to take over for the UniSource-owned Tucson Electric Power. The report is still some weeks away from completion, but council members heard the basics and talked about what topics they would want to be sure are addressed within its pages. Electricity, water and natural gas are routinely provided by both local governments and private companies. But Are there advantages to who brings those needed commodities to your home? We start this week's show by asking that question of Dr Severin Borenstein. He's a professor of business administration and public policy at the Haas School of Business at the University of California Berkeley. I started by asking him about trends in electricity prices.

S **Severin Borenstein** 01:15

Well, it's actually not going up faster than inflation in most places. California is a notable exception, but if you actually take California out of the national average, the rest of the country has gone up about at the same rate as inflation over the last few years. Now, inflation has been high, and people are unhappy about that, but electricity rates outside of California have been climbing with all the other prices.

C **Christopher Conover** 01:41

So a big reason there's a push in Tucson to talk about taking over the city, taking over the

So a big reason there's a push in Tucson to talk about taking over the city, taking over the electric utility, is that that group thinks they can save money and do a better job for less money. Do public utilities traditionally do a better job at keeping electric bills low versus investor owned private companies?

S Severin Borenstein 02:05

Well, the evidence is actually pretty mixed on that there are certainly situations where there are some great publicly owned utilities that have managed to keep costs down. In some cases, it's because they had preferential access to hydropower, particularly from the northwest, by law, and that power tended to be a lot less expensive. So that's not really a more efficient utility. It's just a legal difference that allows them to buy federal power. But overall, the evidence is pretty mixed on whether they actually run a more efficient system, all the way from generation down to distribution of the power. There are certainly plenty of instances of publicly owned utilities that have not done a good job, and there are plenty of instances of investor owned utilities that have not done a good job. It is a bit hard to compare them, because publicly owned utilities mostly have much smaller and denser service territories. So in California, for instance, PG and E, the biggest utility serves an area that is larger than many of the New England states combined the density of its demand it serves. That is the kilowatt hours per square kilometer that it delivers. Is about 1/60 of the density of some of the Silicon Valley publicly owned utilities, for instance. So you can't really compare that those service territories very easily, because they're so different. They definitely can get cheaper financing that cheaper financing can be helpful. It does come from with a bit of risk, though. So when we've seen utilities really stumble and screw something up, when they're investor owned utilities, the shareholders usually end up eating some of that problem, whereas when they're publicly owned utilities, there are no equity holders to hit with the costs, and so the publicly owned utilities have to pass it through to the customers in whatever region they're serving. So it's cheaper financing. It does have some tax advantages on the financing, because government entities get a preferred tax status, but it also does come with some downside risk that a real big screw up could be more costly. We have seen this just in the last couple weeks, some concerns for a while, when there was a concern that Los Angeles Department of Water and Power may have started one of the big LA fires. And this hasn't been fully fleshed out yet, but if that happened to LA DWP, there are no equity holders that they could hit to take those losses. It would have to come from Los Angeles, and that would be a pretty big hit for the taxpayers of Los Angeles.

C Christopher Conover 05:15

Talking about Los Angeles, that's a publicly owned utility, PG and E in California is privately owned. I've lived in cities where it was publicly owned. I live in a city now where it's privately owned. Is how common is it for electrical utilities to be run by a local government?

S Severin Borenstein 05:37

So there are far more publicly owned utilities and co ops than there are investor owned utilities in the US, but in the US, the investor owned utilities are far larger on average. So about two thirds of the entire demand is served by investor owned utilities, but a third of it is served by publicly owned utilities, including some very well known ones like Los Angeles Department of

Water and Power, which is the largest publicly owned utility in the country. So there is a real mix in the US. And then there are co ops, which act essentially very similarly to publicly owned utilities, but are not part of a government entity.

C Christopher Conover 06:20

So here, the city of Tucson makes up about half of the metro area, so there would be plenty of people still getting power from other utility providers here in the metro area. Are there efficiencies of scale that might start being missed out on, and if a metro area gets split in two like that?

S Severin Borenstein 06:42

Yeah, well, they're both economies of scale and diseconomies of scale that observers have pointed out. There's certainly some economies of scale in dealing with some of the transmission and distribution systems, but it's not clear how big you have to be to actually get a lot of those economies, there are diseconomies of just the size when you start losing incentives and control down to the local areas so that you may not get as much incentive to for good performance. You know, there's a, I think an even bigger issue when we start talking about publicly owned utilities versus investor owned, and that is that in most of the US economy, we have most goods provided by private companies. And the idea is that private companies tend to be innovative. They tend to try to do lower costs in order to raise their profits, and those incentives are weaker, typically in publicly owned entities, publicly operated entities. And if you've dealt with your Department of Motor Vehicles or the military or lots of other government entities, you've seen a lot of government inefficiency. But on the other hand, we don't have the one thing in utilities that we have in most of the economy, and that is competition. We're not going to have local utilities that compete on the distribution side of the business. They can compete on the energy provision side, so many parts of the country have competing companies that will go out and buy your electricity for you, but they still deliver it over the local monopoly owned distribution company, and that distribution company is going to be a monopoly, because you're not going to have multiple sets of lines going down the street

C Christopher Conover 08:43

Exactly. There's only one set of lines that comes into the house, and that's that's the set of lines you've got.

S Severin Borenstein 08:51

So we're sort of stuck. We have two bad options. We either have the government owned utility, which we all know of examples of government not having incentives to do things very efficiently, or we have a privately owned but we don't have the sort of competitive market we have in many other products. Instead, we have a monopolist and that means we have to regulate them, and the regulatory process is really imperfect and fraught. The regulator typically doesn't have anywhere near the resources of the companies themselves. So when they get into these regulatory hearings, it's often a real mismatch between a large corporation

that can throw a lot of money into experts and lawyers and so forth, and a government entity that is often not very well funded, they don't pay their personnel very well, and so it's hard to keep the best people. And so that's also a really not great option. Unfortunately, those to date are the two options. And. And so around the country, you look around and you see examples in both cases, of systems that, in many cases, don't work very well.

C Christopher Conover 10:09

Earlier, you mentioned, companies have different ways of getting that energy to the consumer. And as we said, there's only one set of lines that goes to the consumer. But how that energy gets in the line? There are a number of options. Here in Southern Arizona, we get 300 days of sun a year. Rooftop solar becoming more and more popular. How does rooftop solar affect electric rates?

S Severin Borenstein 10:35

Well, rooftop solar is a complex impact on electricity rates, because in most areas, and I don't know Tucson well enough to comment on this, but in most areas, the price we pay for electricity is much higher than the actual cost of delivering additional kilowatt hours to us. When somebody puts in rooftop solar and stops buying from the utility, and particularly if they have net metering, which most parts of the country do, which means they can net out all of their rooftop solar production from their bill. They end up paying for a lot smaller share of those grid investments. Now, typically they are not cutting the cord and disconnecting from the system, and so they are still enjoying the benefits of the grid. And in fact, they are, if they don't have a battery, they every second of the day, they are either bringing power in or sending power out. And so they're still using the grid, but they're not paying as much for the grid as other customers are. And so in California, this has become a real equity issue, particularly since wealthier people tend to be the ones who put in rooftop solar. On the other hand, in a very sunny place, they can be pretty efficient, and if you're land constrained, so you can't build the large solar farms, which are typically much lower cost than rooftop solar, then you really can have an efficient rooftop solar system. The problem is that in most parts of the country, the incentive for the household to put it in is much larger than the actual benefit to the system as a whole. So you can get this problem of a cost shift where people put in solar and they actually end up raising the rates for other people, because you still got to pay for all those transmission lines and all those distribution lines and all the overhead and fixed cost, regardless of whether that customer is taking a small amount of power off the grid and producing a lot in their own panels, which most of which is going into the grid and coming off of the grid. Or if they're not putting in solar and they're taking it all off the grid.

C Christopher Conover 12:53

There's been talk about micro grids here, maybe a homeowners association putting in a small grid, or an apartment complex or something like that. It sounds like the problem is the same, if you want to call it a problem with rooftop solar, because the distribution is still the distribution system.

S Severin Borenstein 13:11

Yeah, you know, the microgrids tend to be more cost effective than putting it on each roof. So in some ways, they're better efficiency improvement, but they still have this problem that if they're still hooked up to the grid, and the investments still need to be made to connect that neighborhood to the grid, then then those costs still need to be covered, and if you're covering them through the volumetric charge, the per kilowatt hour charge, then that neighborhood is paying a lot less into it. Now, one of the solutions that many places consider is collecting less of the revenue through the per kilowatt hour charge, and more through a fixed monthly charge. And that's in fact, you know, most water systems collect a much higher share of their revenue through a fixed monthly connection charge regardless of how much water you use, and then a lower price per gallon on the amount of water you use.

C Christopher Conover 14:20

All right, well, thanks for spending some time with us and trying to explain what is turning into a very complex question.

S Severin Borenstein 14:27

Yeah, it is, and it's really vexing because, you know, you talk to economists, and in many cases, they will say, Well, here's the right way to do this. And this is one of those cases where there just isn't a right way to do it. There's wrong ways and really wrong ways, but every approach is going to have some real problems for the community to deal with.

C Christopher Conover 14:51

That was Dr Severin Borenstein of the University of California, Berkeley. You're listening to The Buzz after the break. We examine pub. Public versus private ownership of another utility that's important to Arizonans. Stay with us.

S Speaker 1 15:07

We could all use a little help navigating the news these days. The consider this podcast wants to give you a hand six days a week. We'll help you make sense of the day's biggest news story and what it means for you in less than 15 minutes. Listen now to the consider this podcast from NPR.

C Christopher Conover 15:23

Welcome back to The Buzz. I'm Christopher Conover. We're looking at the advantages and disadvantages of public and private utility ownership this week. We heard about electric utilities in our first interview. Now we turn our attention to water. Joe Kane is a fellow at the Brookings Institution where he has studied ownership of water utilities. He starts by telling us how water utilities differ from others.

J Joe Kane 15:51

So when we talk about water and then water utilities there, there's this whole fragmented jigsaw puzzle almost across the country, where there are 50,000 different water systems across the country, yeah, which, which is surprising to a lot of a lot of people, that you know, these systems, geographically speaking, they do not always match our, you know, municipal boundaries. They don't always match our watershed boundaries. So in other words, kind of the catchment area for stormwater and issues like that. And so you have publicly owned and operated utilities, privately owned and operated utilities, or investor owned utilities, is what they're often called. And then some of these utilities provide only drinking water. Some only provide wastewater. Some provide both. It varies, including the system size too. So of those 50,000 systems I was describing, you know, 45,000 of those 50,000 serve fewer than 10,000 people each. So, you know, it's a bit apples and oranges when it comes to all like you know, how do we compare a water utility, let's say, in the southwest, to a water utility near the Gulf Coast in near the Great Lakes and the Northeast, just because the water issues can vary pretty significantly from those regions like in the southwest, it's more water scarcity and and sort of conservation needs in in the Upper Midwest, it's well they've got enough water. The problem is their systems are really old, and so they're dealing with leaking pipes and some other investment considerations. And so your question on very roundabout way of answering your question of when, when is it better service? It's less I would argue, in terms of, is it a, you know, a public versus a private kind of issue. It's more just sort of the history of of the individual system. I mean, a lot of these systems have been around for 50 to 100 plus years, and so it's a bit of, well, how old is the system? Are they experiencing population growth, for example, with their customer base? And it's a combination of sort of these service and operational concerns alongside sort of the economic concerns in which the market they operate, that then translates into reliable, affordable service, and really, you know, the end of the day, the bills that we pay. So that's a long answer, Chris, but that's where I would start.

C Christopher Conover 18:22

When we talk about these different systems, publicly owned systems, be they owned by a city, a county or some other level of government. Privately owned systems, those investor owned systems, could and most people would probably believe whether it's true or not, have more money. So when it comes to these older systems, is there an advantage to being a publicly owned system versus an investor owned system? And when you were talking about old systems in other parts of the country, from here, at least Flint, Michigan, popped into mind for me. So are there any financial advantages as systems age, to upgrade them or just fix them?

S Speaker 2 19:08

The ultimate goal, again, is to provide safe, reliable service, right? I mean, that's legally speaking. I mean, that's the regulations that federally whether you're a private, you know, system, or a public one, like you have to provide safe, reliable service period. Now, given the delivery of that, right, how do we deliver and execute on that? Is a different story where, you know, locally owned and operated systems, which are the vast majority, you know. So we're talking, you know, that stat before, of the 45,000 of the 50,000 serve a lot of, you know, smaller populations. You know, more than 88% of these 50,000 systems are are publicly owned

and operated. So the vast, vast majority of the water, if you will, that that communities receive tends to be publicly provided. And that public provision of water often has, you know, a nonprofit mentality. There are different governing rules in place, if you will, in terms of rate setting effects. You know, quite literally, what are the rates even charged to different customers? There isn't really that profit maximization, you know, mentality certainly among those publicly owned systems, because, like, legally and otherwise, they're really meant to provide, like, a public good or a public service for folks, um, the and you actually, in many cases, those systems, they would say that, hey, given the cost that we have to do to provide this, you know, of all these water treatment plants and pipes and other, you know, physical infrastructure we have to maintain, you're actually getting kind of a bargain for the price you're actually really paying into it. Now, investor owned utilities, private utilities, I don't like to, you know, cast them as a villain here, but, but obviously, if they're investor owned, they've got shareholders. They've got investors that they have to obviously, that, you know, they want revenue as a part of that. And so some of the larger systems or utilities, they can traverse multiple states. They do have to respond to some, you know, state level, you know, public service commissions on, on rate setting, so just in a total free for all. And then, you know, in some other cases, there are public private partnerships, so you have a combination of public and private divisions. So it gets, it gets very confusing, but, but I would just say, in a nutshell, it isn't so much, Well, is it public versus private and one is better than the other? It's just the local dynamics are just so different. And more than anything, I would say, what does the balance sheet look like for that system? I mean, were there like big, big projects that had to be paid for, let's say, with a with a shrinking population? So this is the case of, like Flint, for example, also Jackson, Mississippi, where in those cases, they're kind of extreme cases, but they're cautionary tales of, you can't get blood from a stone, right? And so the investment needs are going up at a time where the customer base is least able to pay for it. And so this has created questions and concerns all over the country, particularly in an inflationary environment where the price of water can't just endlessly go up, uh, even if these these infrastructure needs are also going up.

C Christopher Conover 22:31

We've heard that in rural areas of of Arizona, not just southern Arizona, where water districts are very small, maybe 200 households at most, and they've had trouble if they have to sink deeper wells, for example, because, as you said, blood from a stone. There's only so much they can raise monetarily. It sounds like that's a common problem, regardless of where you are in the country, and what the issue is, be it deeper, wells, aging infrastructure, all kinds of things. Yeah, yeah. I mean, there's certainly an urban, rural divide here. I mean, I I also don't like to generalize, say, Oh, well, all rural systems are kind of facing capacity challenges, and they haven't figured it like there are some rural systems that are very well performing and doing what they can and led by some pretty innovative folks, you know, in some pretty tumultuous times, there are also larger urban systems that just because they're larger and they have bigger budgets doesn't necessarily mean they're doing great either. So you can generalize say, Well yeah, smaller system, you know, smaller population, bigger sort of infrastructure needs, in some cases, at least over like a land area that can create challenges, both in terms of the operations, but also the sort of the capital improvement needs and sort of system needs and and this is why, you know, a stat I like to often cite is more than three quarters of our public spending each year on our water infrastructure is at a state and local level. So in as much as we look at kind of the federal government as well, they can just swoop in and provide more money to rain down, pun intended, to solve these issues like that often isn't the case, because the primary owners, operators, investors in this infrastructure are inherently local and to a

lesser extent, but also important at a state level too. It really seems like, when you're talking about the money, and so much of it does come down to money, that the old adage, at least out here in the West, is really true that, once again, whiskey is for drinking and water is for fighting, in so many ways, but just a different. Look at it as systems age, and be they municipal systems or investor owned systems. How do you pay because we have to have the water at the end of the day? Yeah, it's not an option. I mean, there's different types of use. Users. So I mean, of course, household users. I mean, how we turn on the tap, right? I mean, we just kind of take it for granted in most cases. And it's an essential service as became more visible or aware during during the pandemic, and until that that tap kind of goes dry, we don't really think too much about, well, where does it come from? So a lot of us aren't even aware of what our water bill is, it may be bundled into our rent payment or mortgage payment. There's often a lack of understanding, education and visibility for a lot of these issues, until there is a problem, and then the local utility kind of becomes the boogeyman, or like, you know, oh well, you should have done something about this. And, you know, we kind of very easily point the finger at them, but, but in many cases there, and I'm not trying to be an apologist for utilities, but, but they're kind of overwhelmed. They don't have a lot of capacity. And meanwhile, the challenges are only getting more serious. When you look at, for example, in the West, we just saw this in LA, you know, wildfire concerns. You know, these systems were not designed to combat, you know, extreme impacts and situations. You know, these systems were not designed, you know, 50 plus years ago for for these realities that are hitting them. And so it creates a bit of a conundrum of of, you know, how do we keep kind of existing service, again, safe, reliable, affordable at a time where actually it's a moving target, where actually those costs are going up for the systems and and then meanwhile, there's a lot of unpredictability or uncertainty at a federal and national level on these, these issues. And so it is a tricky question, and I wish I had the, you know, the silver bullet solution of, well, yeah, just do this one thing and it'll solve it, and we'll have affordable water for years to come. And it's, I wish it was that easy, but I think in many cases, a lot of systems, all right. Well, we will leave it there. Thanks for spending some time with us. Thanks, Chris. That was Joe Kane of the Brookings Institution, and that's the buzz for this week. Tune in next week as our show celebrates a milestone. You can find all our episodes online at azpm.org and subscribe to our show wherever you get your podcasts. Just search for the buzz Arizona, we're also on the NPR app. Zac Ziegler is our producer, with production help from Maggie Farmer, Our music is by Enter the Haggis. I'm Christopher Conover, thanks for listening.

N Nicole Cox 27:41

Like this podcast, your support makes AZPM original productions like this. One possible Donate at azpm.org/give,