THE BROOKINGS INSTITUTION

THE ROLE OF DISTRIBUTED POWER SYSTEMS IN THE U.S. ELECTRICITY SECTOR

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PARTICIPANTS:

Closing Remarks:

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PROCEEDINGS

MR. SHULTZ: Among the things I thought was especially good about this discussion today is it's been very positive. Often you go places and you have a conference and everybody's hanging drape, "Oh, this is terrible and that's terrible --" and so on. But the general tone of the discussion has been, "Well, here's this problem. You know they're things we can do and a whole variety of things we can do," which tends to set a different tone and a very welcomed tone.

I had this thing that I use as my prop this morning produced by the Marine Corps, and I guess it's a case of necessity being the mother of invention. But, what fascinated me was that you showed us miniature versions of it. And the thing that I really noticed was there's a private company name on there that's producing them, so somebody thinks there is a market for this on some sort of scale. It's not subsidized; it's a market. So somebody's going to produce something and sell it presumably at a profit, so hurray; that's kind of the type of thing that we like to see encouraged.

Now, as far as what comes at me, in terms of energy policy from this in thinking about it elsewhere, I would say, first of all, is picking up Tom's point that'll be reiterated several times, we ought to try to create a leveled playing field for energy. A leveled playing field idea has a certain appeal to it, but what we have is an energy system totally cluttered up with subsidies and tax breaks and one thing or another. It affects practically every source of energy there is and it creates an unleveled playing field. So, as you've said it so bluntly, let's get rid of them all. That will cause every lobby in Washington to go absolutely bananas and be against you. On the other hand, I think there is a certain public appeal to saying level playing field. Why should we rig the system to give this an advantage over that? Why shouldn't various forms of energy compete on their merits against each other?

Now, in order to have a true leveled playing field, as we all know, you have to arrange it so that the full cost of any form of energy are born by that form of energy. So that means that if there is a cost of what pollution that's produced by a form of energy, that cost is not internalized, and the internal cost of production of that, so it's got to be imposed in some form.

I might say that there are also very considerable costs that we incur for oil. And I don't say we went to Iraq, or whatever because of oil, but we had a military presence in the Golf for a very long time, going apparently way back to the Carter Administration where we've had our ships there. We have

a naval base in Bahrain and so on, and a lot of it has to do with providing some stability in an area that is the source of a huge amount of oil. So their externality, so to speak, that this is imposing us, and we ought to figure out a way to do that.

When it comes to the imposition of a charge, I much prefer, myself, a revenue-neutral carbon tax to a cap and trade system. I think it is possible to design a tight good disciplined cap and trade system, but experience shows that that is unlikely or, over time, it tends to deteriorate and you tend to have too many credits that are given out. And then, if they get too broad, the next thing you know, they are fraudulent and that tends to undermine confidence in the system as good old-fashioned tax. It's better, particularly, if you make it revenue-neutral. If you make it revenue-neutral, you take away the argument that it's a fiscal drag. You take away the argument that it's just another way to raise money. You say this is, pure and simple, a device designed to produce a leveled playing field. And, at least I'm trying to make the argument so far not successful, but there's these big anti-anti-tax movements that tend to discipline anybody who votes for anti-tax. And I am saying, "Look, a revenue-neutral carbon tax is not a tax because a tax is supposed to collect money and this doesn't collect money." I haven't made the sale yet but I'm working on it. So, the first thing I think is to create a leveled playing field, and that's really tremendously important.

The second thing that needs to be done is to see to it that there is substantial sustained support for energy R&D. Now, this is, of course, something that we look to in terms of the Federal budget and DOD and RPE, particularly. But I think, on just how to do this, I'm not so sure, but it has to be done very carefully because there's a lot of private interest in supporting energy R&D, and you don't want to have the Government come on so strong and in such a way that private money says, "Well, so; I don't need to do anything."

I am most familiar with what goes on at MIT and at Stanford. In both cases, both these universities have formidable R&D programs going with a lot of really capable people. It's really exciting to see them talking about different subjects. And while they're very happy to have some Government funding, and they compete for it in both cases, most of the money that's supporting these programs comes from private companies or individuals who give the money, and I think that balance is important.

But, in any case, I underline the word sustained because you're not going to get good

research if there's sort of "here's a year's grant" or something. That doesn't get you anywhere. It's got to be possible to continue a program, have it with not an end-point on it.

So, I think if we do a leveled playing field and clear support for energy R&D, we're going to find real game changers. And I though, in the course of the discussion, there were all kinds of examples of things that we're dancing around the edges of already in the solar area, in the wind area and ways of dealing with the intermittency problem, and in many other respects.

In the third area, it seems to me we have to address -- and it's hard -- and I thought the people on the panels probably are best equipped to do it, of any that I've listen to for a while -- and that is deal with this regulatory overburden that is generally on us in this country.

And in the energy area, particularly if you're talking about electricity, you have so-called natural monopolies; that's a fact. So it needs to be some regulatory process, but it needs to be done in, I would say probably a less blunt instrument and less detail, somehow a way of doing it that's more encouraging people to do things less compulsory; "Do this, do that --" and more end-point operated regulatory regime. And this needs to be done, and it can only work if it's studied carefully. It's a mixture of Federal, State, local. It's all elaborate. But I should think, somehow, commissioning some people who really know about this to get after the subject and see how it might be sorted out to see if you can't put together kind of a model state regulatory business or things like that that are encouraging for people to move along in positive directions and not trying to tell them what to do all the time.

And I could say this across the board on regulatory activity; economists have studied regulatory activity a lot. Regulatory capture is the rule, not the exception. But it's, nevertheless so, that regulations can be drawn in such a way that they encourage activity, rather than suppress it, which is where a lot of it goes.

So, if we do these things; leveled playing field, which means eliminating subsidies and tax breaks of all kinds, and taking effective externalities, strong support for energy R&D and get the regulatory process straight. If we do those three things -- they're not easy to do. They are somewhat complex within themselves. If we do those three things and then let the market operate, then we'll probably see a different picture on energy 10 years from now, even, than we have today. A lot of it will be the same but some will be different.

And, I've been working on this issue in one way or another for 40 years now, and for the first time in the last few years, I feel as though we're really beginning to get somewhere, because there really is a recognition that it's a genuine big-time problem. The present situation is not satisfactory and you see things beginning to change. People's attitudes changing; new things coming into play. And if we can just keep at it in the kind of spirit that we've had here today, as exhibited, we're going to get there from here.

So, a note of optimism -- I'm not taking questions, I'm just asserting myself -- an optimist based on the reality that I see around me. Thank you all very much for coming to this special conference, and especially, I want to thank our colleagues here at Brookings for providing a wonderful setting and doing such a gracious job of hosting us all. So, Charlie, thank you.

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