

In fact, in my own State of Massachusetts, the New England Power Pool imposed 10 voltage reductions and several temporary blackouts during 1988. A report performed for the Greater Boston Chamber of Commerce found that the business community of Massachusetts lost approximately \$86.8 million because of those outages.

This subcommittee has jurisdiction over the Defense Production Act, which designates energy as "a strategic and critical material" for purposes of sustaining the defense industrial base of this country. We must reauthorize that legislation in 1990, giving us an opportunity to see what might be done to enhance our energy security on a long-term basis.

One avenue that we would certainly like to explore is renewable and alternative fuels.

We believe that this is a pioneer hearing in two respects: We think this is the first Congressional opportunity to consider the contributions of these fuels to national security, and we feel that it is the first effort to consider renewable and alternative fuels as a package, in order to advance a policy or strategy to maximize these contributions.

What we are thus hoping for this morning is a sense of the total possibilities of these energy sources and what we in Congress might do to help realize this potential.

I look forward to the testimony of our distinguished witnesses. I ask unanimous consent to insert in the record the material referred to in my statement.

[The prepared statement of Mr. Neal can be found in the appendix.]

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Mr. NEAL of Massachusetts. Mr. Sklar.

STATEMENT OF SCOTT SKLAR, EXECUTIVE DIRECTOR, UNITED STATES EXPORT COUNCIL FOR RENEWABLE ENERGY

Mr. SKLAR. Thank you, Mr. Chairman.

I'd like my statement in the record, as well, in its entirety.

Mr. NEAL of Massachusetts. Without objection.

Mr. SKLAR. The U.S. Export Council for Renewable Energy was formed by the nine U.S. trade associations to promote exports of alcohol fuels, geothermal, hydropower, passive solar, photovoltaic, solar thermal, wind, and wood energy equipment and services. We formed because we believe that our only survival was to develop the U.S. infrastructure to promote exports of our technology abroad, and over 50 percent of our technologies are sold overseas.

While that's exciting in some ways, it shows that the United States market is not as great as it ought to be, and that we are losing our potential to use these technologies, and losing our technological lead. The security implications are important, because if we lose our basic capability to commercialize this technology, we will be importing most of it from our international competitors, and therefore relying for our future energy sources produced from these international competitors overseas.

We will find ourselves in the same place we are with fossil fuels, importing half our energy today. That's why we are very interested

in what this subcommittee is doing, revisiting the issue of the domestic markets.

The fact of the matter is that the domestic programs and support of development and commercialization of renewables energy is falling behind. From the charts I brought: The Federal R&D funding programs for renewable have fallen precipitously over the 8 years. As you can see, in the second chart there, in comparison with our international competitors, the red line is where the United States used to be, and now you can see the blue line, as we have fallen underneath in just R&D support. That is a tragedy, since we lead technologically.

Thirty-five percent of our energy in this country is used for buildings, to provide lighting, heating, and cooling. Currently, there is no coordinated policy for energy in buildings in this country. The programs supporting it, residential credits, tax credits are gone. R&D support—\$74 million for buildings in 1981. The administration is proposing \$1 million for fiscal year 1991. The Solar Energy and Energy Conservation Bank, which is a HUD program that the full committee oversaw, the authorization was allowed to expire, and as a result very little subsidized money is going out for consumers of solar energy equipment.

What does it mean in the real world? Well, when we had the incentives we have 1.2 million solar hot water systems installed in the United States, since 1975. That sounds like a lot. The city of Tokyo alone has 1.5 million in less time frame. That is because there is an aggressive Government policy to promote use of alternative energy equipment.

My recommendations—instead of going in great detail, because of our short time—I wanted to lay out. That our broad industry associations believe that this is very important for this subcommittee to understand. While R&D is important and must be increased, and OMB and the administration are looking in that direction, that's only one step. The other steps are, how do we build a marketplace for these applications in a logical and scaled-up manner?

There are four ways to do it in reality beyond R&D. The first one is increased Federal procurement. The Federal Government is the largest purchaser of energy, and there are two or three ways that the Government can step up procurement. First, it can require, as we currently do in the Department of Defense, that all Federal buildings utilize energy conservation/renewable energy equipment if cost effective and then build in the kind of life-cycle costing criteria to make sure it is cost-effective. Since the taxpayer pays the utility bills and the U.S. Government owns these buildings for 40 years, one way or another, at least they ought to look at the long term in terms of energy costs and maintenance costs for these buildings.

There are a range of technologies that the experts later on—Mr. Johnson and Mr. Block—will talk about, but the fact is that the energy savings is profound. If the Federal Government leads in procurement policy, the State governments will follow, and the State governments are the second largest builders and owners of buildings. Finally, the private sector will pick up from that.

My view is that the procurement policy in the building sector is essential.