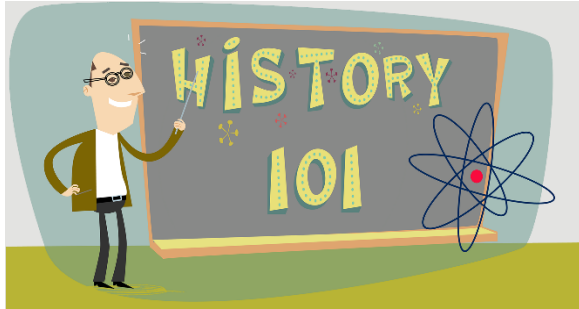


## “Too Cheap to Meter”: A History of the Phrase



Donald Hintz, Chairman of the Nuclear Energy Institute, said at 2003 conference that the nuclear industry had been “plagued since the early days by the unfortunate quote: ‘Too cheap to meter’.” Those four words had become a standard catchphrase for what critics claim were impossibly sunny promises of nuclear power’s potential.

Not so fast, Hintz countered. He noted that Atomic Energy Commission Chairman Lewis Strauss, in a 1954 address to science writers, had coined the phrase to describe fusion power, not fission. Nuclear power may be a victim of mistaken identity.

Hintz was not alone in this view. Over the past four decades, antinuclear and pronuclear versions of what Strauss meant by “too cheap to meter” have appeared in articles, blogs, and books. Even Wikipedia has weighed in, on the pro-nuclear side. Reconciling the two versions isn’t easy since Strauss wasn’t explicit about what power source would electrify the utopian future he predicted.

“Transmutation of the elements, unlimited power, ability to investigate the working of living cells by tracer atoms, the secret of photosynthesis about to be uncovered,—these and a host of other results all in 15 short years. It is not too much to expect that our children will enjoy in their homes electrical energy too cheap to meter,—will know of great periodic regional famines in the world only as matters of history,—will travel effortlessly over the seas and under them and through the air with a minimum of danger and at great speeds,—and will experience a lifespan far longer than ours, as disease yields and man comes to understand what causes him to age. This is the forecast for an age of peace.” \*

Nuclear critics believe Strauss was speaking of nuclear power and claim that, as AEC Chairman, he spoke for a budding industry too. The most thorough defense of Strauss appeared in a 1980 article by the Atomic Industrial Forum.

Citing the opinions of Strauss’s son, former AEC staff, and a Strauss biographer, the AIF argued that Strauss’s omission of a power source in the passage was likely deliberate since he could not make explicit reference to “Project Sherwood,” the AEC’s still secret fusion power program that Strauss championed.

Moreover, the article noted, Strauss understood well that nuclear power would not pay for some years and that his utopian vision might be realized only by his “children’s, children’s, children.” Neither the industry nor the AEC, the AIF article notes, shared Strauss’s optimism.

While the AIF correctly notes the AEC Chairman’s interest in fusion, there is no evidence in Strauss’s papers at the Herbert Hoover Presidential Library to indicate fusion was the hidden subject of his speech. Staff suggestions for the address reflected current issues in the AEC’s civilian reactor program—the new Atomic Energy Act, President Eisenhower’s Atoms for Peace, the Shippingport nuclear power plant, the agency’s efforts to declassify information, and medical uses of reactor-produced isotopes.

While it is true that Strauss could not explicitly discuss classified fusion research, the speech is barren of implicit hints of a new source of power. Strauss focused on fission—the discovery of fission, fission-product applications, and the economic feasibility of fission power.

Strauss's optimism for fission continued several days later when reporters on a Meet the Press radio broadcast asked him about the quotation and the viability of "commercial power from atomic piles." Strauss replied that he expected his children and grandchildren would have power "too cheap to be metered, just as we have water today that's too cheap to be metered." That day, he said, might be "close at hand. I hope to live to see it."

By contrast, when Strauss finally revealed the AEC's fusion research program, he was not nearly as optimistic. In August 1955, he cautioned "there has been nothing in the nature of breakthroughs that would warrant anyone assuming that this [fusion power] was anything except a very long range—and I would accent the word 'very'—prospect."

In the years after the speech, the lay public and the power industry never questioned that Strauss's predictions were for fission power. The New York Times Pulitzer Prize winning science reporter, William Laurence, attended Strauss's speech and featured the catchphrase prominently in articles and a book. He wrote of the prediction, "All signs point to the realization within the next decade of a price for nuclear fuels so low that only hydroelectric power, which alone is produced without any cost for fuel could compete with it."

The electric power industry was not happy with their new catchphrase. Industry officials distanced themselves from Strauss's speech, sometimes diplomatically calling Strauss too optimistic.

Others were blunt. The president of Cleveland Electric Illuminating disparaged too cheap to meter as "a myth" given the small contribution fuel costs made to a customer's electric bill. Electrical World called "too cheap to meter" a "delusion" that would make it harder for utility companies to explain electric costs to customers. In the meantime, the editors declared, utilities would welcome many more customers "with a meter in each and every one."

This skepticism was echoed by more sober evaluations of nuclear power economics at the AEC and within the industry. Former AEC Commissioner James Ramey was probably correct when he said, "Nobody took Strauss' statement very seriously."

It is likely, then, that nuclear critics and proponents are partially correct. "Too cheap to meter" was a prediction for a fission utopia in the foreseeable future. But Strauss was speaking for himself.

"A serious governmental body ought not to indulge in predictions," he said to the science writers. "However, as a person, I suffer from no such inhibition and will venture a few predictions before I conclude."

He may have believed that he could step away from his Chairman's role, indulge in speculation, and that history would note the difference.

\* Lewis Strauss's full speech is available in [here](#). "Too Cheap to Meter" is on page 9.

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