Plan GOELRO and Soviet Electric Power Development

**Primus Inter Pares**

Electric power is a priority sector in Soviet economic development, long favored and extolled as the panacea of a backward nation. In each planning period, with the exception of the abortive Third Five Year Plan 1938 to 1941, the rate of growth for the electric power industry has been greater than that for industry as a whole. Since 1918 it has accounted for over 11 percent of all industrial capital investment, a figure exceeded only by engineering and the combined oil and gas industry.

Large-scale expansion has resulted, with capacity increasing 191 times between 1913 and 1975, production 509 times, and with exports of electricity in 1975 more than five and a half times larger than national production. What was a relatively neglected sector is now second only to the United States in generating capacity and production. Although the latter is still less than 50 percent of the U.S., its per capita production now exceeds that of industrialized countries such as France and Italy.

Imported equipment and foreign engineers were the basis for this growth. Up to 1930 almost 90 percent of all boilers, generators and turbines were imported. If by 1938 domestic production was largely satisfying these demands, it was because of foreign technical help. Now, however, the Soviet Union is a major exporter of power technology. It is involved in research, design and/or construction of power projects in some thirty countries, apart from Eastern Europe, it has penetrated West European markets and has supplied turbines to Canada. Its achievements in power engineering rival in international respect those of its space program.

1. SSSR TsSU, Narodnoe khoziaistvo SSSR, various editions.
2. Ibid.
4. Ibid., pp. 100, 116-17.
Ideological Motivations

At a time when steam was the primary motive force, Engels ascribed a revolutionary role to electrification. With visionary enthusiasm and reference to Dupre’s research, he saw high-voltage electrical transmission freeing industry “from almost all constraints imposed by local conditions.” This would not only be “the most powerful factor to eliminate antagonisms between town and country” (i.e., the proletariat and peasantry) but would cause “productive power to grow so much that its management will be increasingly beyond the powers of the bourgeoisie.” Not surprisingly, Engels saw electricity as “a tremendous revolution.”

Lenin not only elaborated, but institutionalized the revolutionary role of electricity. He saw it leading to the even distribution of population, science and culture, to the intensification of labor productivity, and to the elimination of backwardness and disease, etc., in the most remote regions. Electrification would not only transform small-scale farming—as well as ensure victory over the kulaks, but its use in the home “will free millions of ‘domestic slaves’ from the need to waste three-quarters of their lives in stinking kitchens.”

If on the political front Communism was unthinkable without political power in the hands of the Soviets, then on the economic front the reorganization of agriculture and the development of sophisticated engineering industries were unthinkable without a new technical basis—electrification. “The century of steam was the century of the bourgeoisie, the century of electricity is the century of socialism.” Lenin considered electrification “the most important of all the large tasks confronting us,” for “what are all the plans worth . . . without a plan of electrification? They are worth nothing.” Without electrification “there will be an inevitable return to capitalism.” Thus, in a land of slogans, none is more quoted or enduring than Lenin’s dictum that “Communism is Soviet power plus the electrification of the whole country.”

9. Ibid., XLIII, 60-61, 69.
10. Ibid., XXIII, 94-95.
11. Ibid., XLI, 31; XLIIV, 9; XI, 108.
12. Ibid., XL, 108.
13. Ibid., XL, 156, and Steklov and Fotieva, p. 117.
15. This first appeared in Lenin’s speech at the Moscow guberniia conference of the Bolshevik Party on 21 Nov. 1920: Lenin, XLII, 30. For an exhaustive inventory of Lenin’s pronouncements on electrification, see Steklov and Fotieva, loc. cit.