

Does Brazil need new nuclear power plants?

Joaquim F. de Carvalho^a, Ildo L. Sauer^{a,b},

^a Graduate Program on Energy, University of São Paulo, SP, Brazil

^b Institute of Electrotechnics and Energy, University of São Paulo, SP, Brazil

Abstract:

October 2008, the Brazilian Government announced plans to invest US\$212 billion in the construction of Nuclear power plants, totaling a joint capacity of 60,000MW. Apart from this program, officials had already Announced the completion of the construction of the nuclear plant Angra III; the construction of large-scale Hydroelectric plans in the Amazon and the implantation of natural gas, biomass and coal thermoelectric plants in other regions throughout the country. Each of these projects has its proponents and its opponents, who bring forth concerns and create heated debates in the specialized forums. In this article, some of these concerns are explained, especially under the perspective of the comparative analysis of costs involved. Under such merit figures, the nuclear option, when compared to hydro plants, combined with conventional thermal and biomass-fueled plants, and even wind, to expand Brazilian power-generation capacity, does not appear as a priority.