

A study on the public perception in nuclear area in Brazil

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During the last years, the need for the increase in the electricity energy production both in Brazil and in the rest of the world, has been raising the tone of the debate about the environment impact. As a result of these debates, the Government and the Non-Governmental Organizations (NGO's) have requested innumerable opinion researches aiming at measuring and evaluating the knowledge and the perception of the public in relation with the best non-polluting energy sources. Prior to 2001 these researches did not have any positive effect in Brazil; however, it was in that year when a drought happened in the country and, therefore competent authorities faced the need for the development of a plan: the *Plano Nacional de Energia* (PNE2030). This plan aims, among others objectives, to finalize the construction of the Angra 3 plant and the implementation of new nuclear plants in places still to be determined. Even considering the complexity of the subject, this paper presents a field research realized from 28th September 2010 to 28th October 2010 of the current level of perception of the Brazilian population, specifically the residents of three cities of Rio de Janeiro, about the nuclear area. As a result of this work, it is suggested how the competent authorities should proceed to reach in an efficient manner, through communication campaigns both informative and educational, a greater understanding of the population about the proposed subject.

Methodology

As it is an original quantitative social research in the Brazilian nuclear area, the exploratory study becomes necessary as it is the most appropriate mean to establish explicit opinions and attitudes of respondents. Therefore we designed a survey to establish people's perceptions regarding nuclear energy, its use in various areas, its acceptance as a clean source of energy and which group would or would not have the credibility to talk about it [1].

The sample done by accessibility was implemented from 09/28/2010 to 10/28/2010 in the cities of Rio de Janeiro, Niterói and São Gonçalo with 470 respondents who were stratified by gender, age and educational level. During the analysis of variables, there was a slight predominance of male viewers (65.3%) of people with graduate degrees (216 respondents) and aged above 30 (351 respondents). It was also observed that almost 20% of respondents, i.e. 92 people, are unfamiliar with the symbol that indicates the presence of radiation. The survey results, which are presented in the figure 1 and the table 1, reveal that although most respondents were students and workers, 40.4% did not know and 34% had never heard of the Plano Nacional de Energia (PNE 2030) in Brazil.

Table 1. Degree of knowledge of respondents about the PNE2030

What will be the increase in energy with the PNE 2030?	Frequency	Percentage
3%	20	4,3
5%	50	10,6
20%	50	10,6
I do not know	190	40,4
Never heard about it	160	34,0
TOTAL	470	100

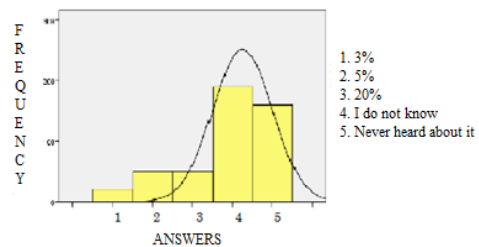


Figure 1. Histogram of the knowledge of respondents about the PNE 2030.

Reference

- [1] Almeida, R. A., Moreira, M. L., Wieland, P., Guimarães, A. C. F.: A Study on the Public Perception in Nuclear Area in Brazil. In: 20th Int. Conf. Nucl. Eng., 2012, Anaheim. Proceedings of the 20th Int. Conf. Nucl. Eng.. NY: A. Soc. of Mech. Eng. - ASME, 2012. v. 1.