

# HIGH POWER GENERATOR TEST, PGP-II

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## KEYWORDS

Model, integral equations, partial differential equations, power, pulsed microwave power generator, mathematical model, physical model, electric intensity  $E$ , magnetic flux density  $B$ , current density  $J$ , transient analysis, Poynting's vector, Faraday's law.

## ANNOTATION

The paper describes a numerical solution of a transient analysis process, inside a helical power pulsed generator. The generator function runs for approximately  $100\mu\text{s}$ . The separated components were verified by mathematical model, which was formulated in integral form. The results of a solution and values were verified by measurement. The supposed peak power of the generator is  $I_{\text{max}}=30\text{kV}$ ,  $U_{\text{max}}=50\text{kV}$ .

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