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5P30 - Concept designs of a compact LTD generator with a pulse rise time of 100 ns.

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The paper presents the structure of the LTD generator on the basis of HCEIcsa 160-0.1 with an output current level of about 1 megamper and a rise time of 100 ns. We have considered various design options and carried out a numerical simulation of the LTD cavity operation. The dependences of the output pulse parameters for different arrangement are obtained. The possibilities for creating a LTD generator with a petawatt output power are discussed.

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