

REPORT ON A VISIT TO LES CABLES DE LYON  
(June 26, 1970)

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Persons seen : Mr. Jocteur, RF  
Mr. Thévenon, HV

They had already performed a number of RF tests on both cables. The cable without semiconductor shows an extraordinary long risetime of ~ 60 ns (10<sup>0</sup>/o to 90<sup>0</sup>/o) over 112 m. This was not expected and no convincing explanation exists for it. A conjecture is that the Al wires do not make good contact between each other.

The cable with semiconductor shows a risetime of 30 to 40 ns (10<sup>0</sup>/o to 90<sup>0</sup>/o) over 117 m. The exact measurement of the risetime is dependent on the "square" input pulse.

I repeated with Mr. Jocteur most of the pulse response tests. Mr. Jocteur had previously measured the attenuation curve 0.1 to 20 MHz: For the cable with semiconductor this is very near to the expected curve from design considerations.

They are going to send us a set of curves summarizing all the measurements.

Concerning the HV test I agreed to reducing the number of hours and increasing the voltage. Instead of 140 h at 35 kV r.m.s., both cables will be tested for 24 h at 43 kV r.m.s.. The rule is

$$(\text{voltage}) \times (\# \text{cycles})^{8.5} = \text{const.}$$