

FOR IMMEDIATE RELEASE**EUROPEAN FAST BREEDER ASSEMBLIES GO CRITICAL**

WASHINGTON, D. C., December 16, 1966 -- The European Atomic Energy Community's reactor development program passed a milestone December 15. The European research effort bore fruit when the MASURCA (Maquette Surgénératrice Cadarache) assembly in France and the SNEAK (Schnelle Null-Energie Anordnung Karlsruhe) assembly in Germany went critical.

Both are fast breeder assemblies to be used for the study of reactors of this type. Fast breeder reactors have the economically attractive characteristic of producing more fuel than they consume.

The entire Community fast reactor program is carried out in association with Euratom, which has a full exchange agreement with the U.S. Atomic Energy Commission for the pooling of information on fast reactors.

The fissile materials powering SNEAK and MASURCA amount to 350 kg of plutonium purchased by Euratom from the AEC and 1638 kg of uranium 235. The plutonium fuel elements were manufactured in Europe by the Transuranium Institute, a Euratom joint research center, and ALKEM, a private consortium in Karlsruhe.

The industrial design for MASURCA was developed by the Société belge pour l'énergie nucléaire (Belgonucléaire), while SNEAK was designed by Siemens. Both were constructed under Euratom associations as part of the Community's research program.

The two assemblies will simulate the nuclear characteristics of large-scale fast breeders. Their size is sufficient for studying neutron behavior of commercial power reactors as large as 1000 MWe and over. Fast breeder reactors of this scale are expected to be in commercial use by 1980.

The Community already has three other installations for the study of fast reactors which have been operating more than a year. RAPSODIE, a 20 MWth sodium-cooled experimental reactor, is due to go critical at Cadarache next year.