identical, scaled-up versions the HTGR at Fort St. Vrain, on which construction had recently been completed. The initial fuel loading and startup testing at Fort St. Vrain provided a good amount of certainty around Fulton's core arrangement since the reactors were so similar.

Fulton-1 and -2 were to be fueled with a mixture of uranium and thorium that would be contained within graphite blocks, which would serve as moderator. The core was to be cooled by helium circulating through six primary cooling loops that would ultimately reject heat to six steam generators. The entire NSSS was to be housed in a prestressed concrete reactor vessel (PCRV) measuring 91 feet high with a diameter of 100 feet, constructed of high-strength concrete. The reactor vessel was reinforced and prestressed with steel tendons. This type of reinforcing was also utilized in Fort St. Vrain.





Schematic diagram of a typical HTGR. (Image: Beao/Wikipedia)

