Calculate the pin pitch required to keep the maximum fuel cladding temperature in the hottest rod below in sodium and lead, assuming

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**average** linear power density

The core inlet temperature of (stays constant during the transient)

Calculate the heat transfer coefficient at the beginning and end of the fuel rod

Calculate the vertical elevation of the decay heat removal heat exchanger (HHX) required for the cladding of the hottest rod to survive an unprotected loss of flow accident (ULOF) with lead and sodium coolants, assuming

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Decay heat average linear power density

, over core during natural convection conditions.

Total pressure-drop in system

Text

Description automatically generated