

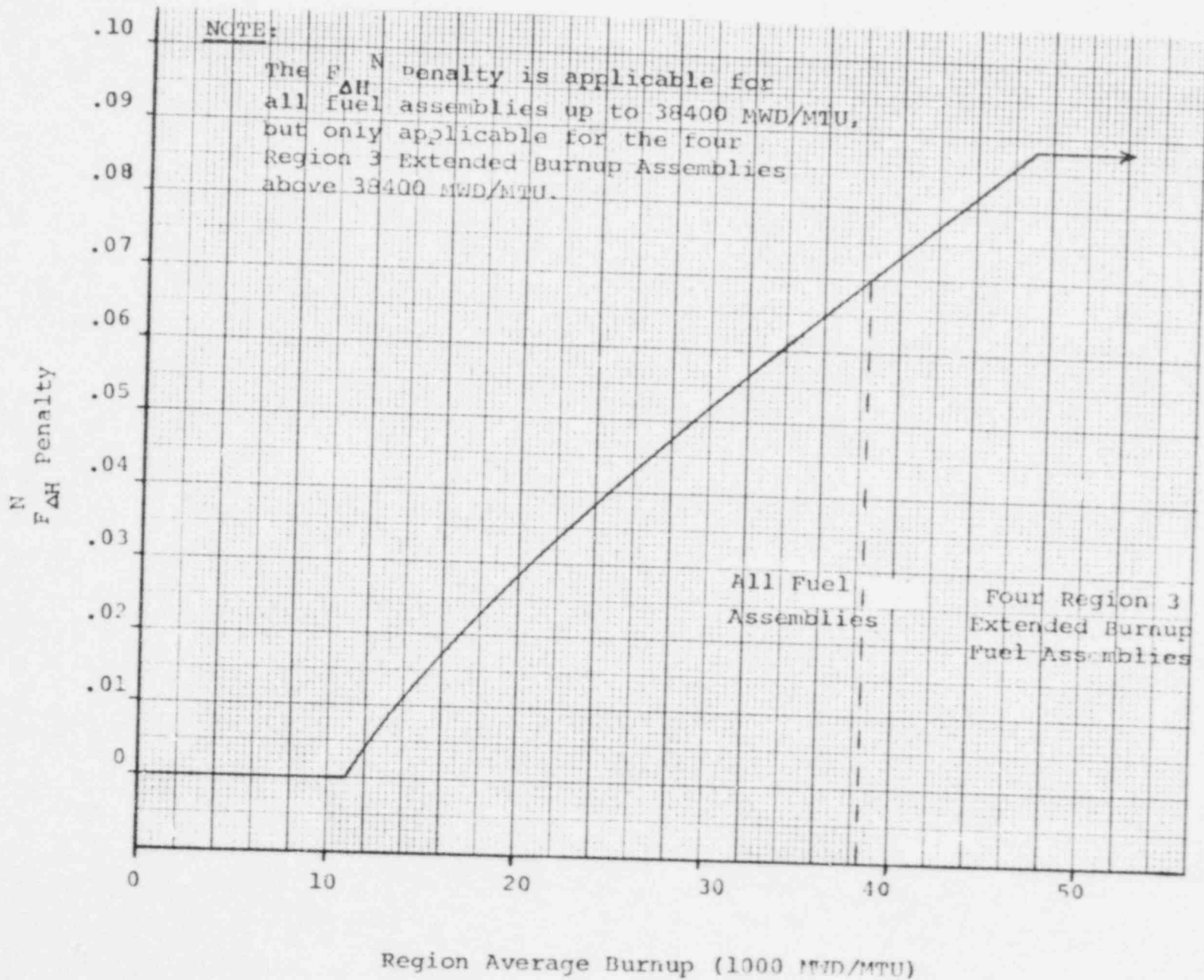
Attachment 1

Zion Station Units 1 and 2

NRC Docket Nos. 50-295 and 50-304

8012110267

POOR ORIGINAL



$F_{\Delta H}^N$ Penalty vs. Region Average Burnup

FIGURE 3.2-6

In accordance with the approved Westinghouse model as presented in WCAP-8381, no collapses are expected throughout the fuel cycle of operation. The predicted minimum times for clad flattening are:

<u>Fuel Region</u>	<u>EFPH</u>
1	19,500
2	>30,000
3*	>30,000

for Zion Unit 1. The predicted minimum times to collapse for Unit 2 are:

<u>Fuel Region</u>	<u>EFPH</u>
1	27,000
2	>30,000
3*	>30,000

A design criterium requires that proposed reload fuel region exposure levels expected at the time of discharge not exceed the predicted minimum collapse time. Operation in the exposure range in which clad collapse is postulated is not permitted under these technical specifications.

The predicted minimum time to collapse for all reload fuel regions is greater than 30,000 effective full power hours.

* Except that the four (4) Region 3 assemblies to be used in the Extended Burnup Program have a predicted minimum time to collapse greater than 41000 EFPH.

DNB Parameters: The limits on the DNB related parameters assure that each of the parameters is maintained within the normal steady state envelope of operation assumed in the transient and accident analyses. The limits are consistent with the initial FSAR assumptions and have been analytically demonstrated adequate to maintain a minimum DNBR of 1.30 throughout each analyzed transient.

The 12 hour periodic surveillance of these parameters thru instrument readout is sufficient to ensure that the parameters are restored within their limits following load changes and other expected transient operation. The 18 month periodic measurement of the RCS total flow rate is adequate to detect flow degradation and ensure correlation of the flow indication channels with measured flow such that the indicated percent flow will provide sufficient verification of flow rate on a 12 hour basis.

A quadrant to average power tilt will be indicated by the excor detectors. The excor current tilt is indicated by the arrangement of the current recorders on the control board. Four 2-pen recorders are provided, the pens are grouped so that, in the absence of a tilt, the two