



## Fuel Performance Framatome Cogema Fuels

NEI High Burnup Dry Storage Workshop  
April 27, 2000

Joe Sapyta

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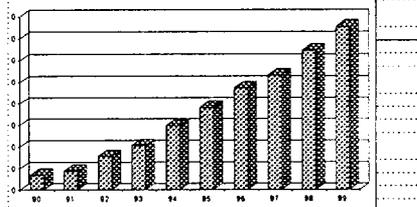
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## Burnup Increase by Year

Cumulative # of Mark-B FA's Discharged  
>40,000 MWd/mtU Burnup



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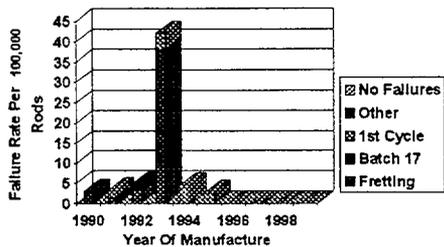
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## Failure Rate For Mark-B Fuel By Year Of Manufacture



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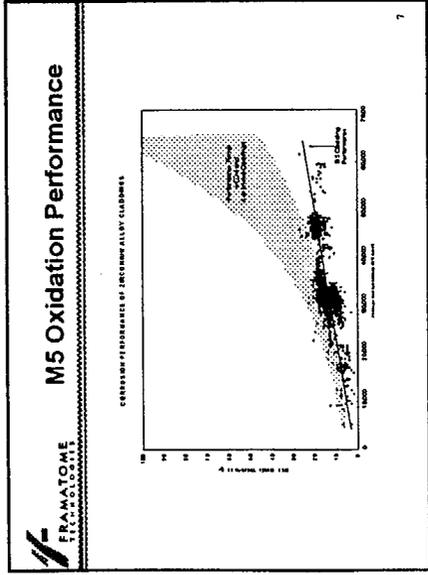
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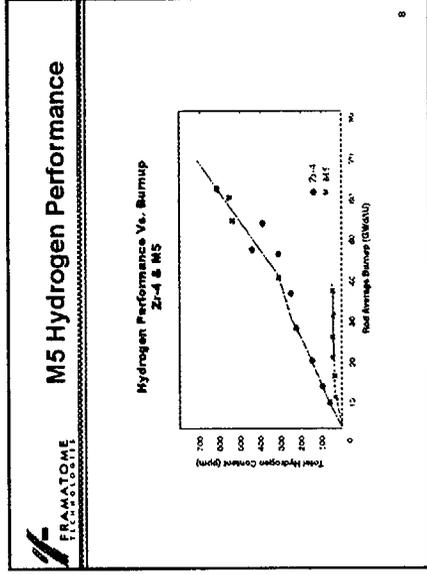
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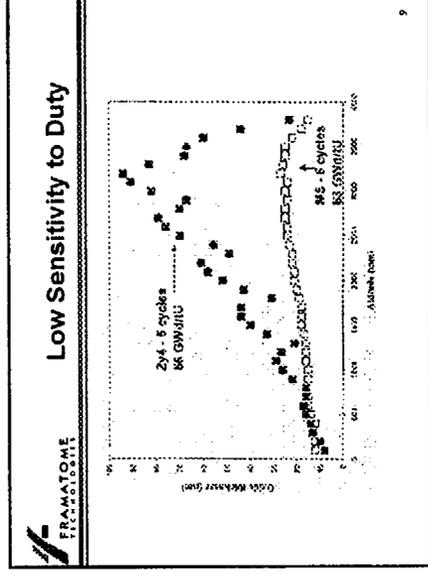
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## Summary

- No fuel failures in last four years as bumup increases
- Rods above 50 GWD/MT with oxide layer > 80 microns
- M5 oxidation exhibits no acceleration. Corrosion is a factor of 3-4 lower than Zr-4 at high bumup. √ *Greater margin and higher attainable burnups.*
- M5 has more beneficial and consistent creep performance. √ *Greater margin*
- M5 has a very low sensitivity to duty. √ *Predictable performance.*

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