**Cycle 1**

Input Condition of Average Rod: Radius = 4.09575 mm (pure uranium 4.45 w% U235)

Output Conditions:

MNDBR uniform: 1.7985

MNDBR non-uniform: 1.6670

Maximum Temperature of the Fuel: 2699.1 K @ 39.54

Pressure Drop along the subchannel: 76 kPa (negligible compared to total pressure)

Max Coolant Temperature =609.003380397 K

Max Cladding Temperature = 699.431574538 K

FQ = 2.33

FZ = 1.54826175006

FR =

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3.34464 | 3.073 | 2.49191 | 3.33808 | 3.31445 | 2.8103 | 3.18303 | 3.21425 | 3.57221 | 2.99104 |
| 3.21098 | 2.73851 | 4.00024 | 3.07451 | 3.4018 | 3.28673 | 3.36836 | 2.79324 | 2.56202 | 3.20058 |

FNΔH = 1.50671140962







