

## Lampiran 2. Input CITATION pada SRAC

Input CITATION berikut ini adalah dengan parameter bahan bakar *inner fuel* 2,23 %, *outer fuel* 1,5% , ukuran  $x = 85$  cm,  $y = 85$  cm, dan  $z = 180$  cm, daya termal 1000 MWth. Angka yang berwarna hijau menunjukkan parameter-parameter tersebut.

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FUL1
MACRO FOR INNER FUEL (2.23W/O Th-U) BY PIJ
1 1 1 1 2 1 4 3 -2 1 0 0 0 2 0 1 0 0 0 / SRAC CONTROL
1.0000E-20 / BUCKLING
$HOME/SRACLIB-JDL32/pds/pfast Old File
$HOME/SRACLIB-JDL32/pds/pthml O F
$HOME/SRACLIB-JDL32/pds/pmcrs O F
$PDS_DIR/UFAST Scratch Core
$PDS_DIR/UTHERMAL S C
$PDS_DIR/UMCROSS S C
$PDS_DIR/MACROWRK S C
$PDS_DIR/MACRO S C
$PDS_DIR/FLUX S C
$PDS_DIR/MICREF S C
& Caution : Directory for PDS will not be made or deleted in program.
& If you set Scratch, members will be deleted.
61 46 1 1 /
61(1) /
46(1) /
61 /
46 /
4 7 7 3 1 1 7 0 0 0 5 0 6 4 5 0 0 9 0 0 / PIJ CONTROL
0 100 50 5 5 5 -1 0.0001 0.00001 0.001 1.0 10. 0.5 /
1 1 1 2 3 3 3 / R-T
3(1) / X-R
1 2 3 / M-R
0.0 0.2413 0.3414 0.3919 0.4687 0.57 0.615 0.6616 / RX
4 / NMAT
FUE1X0AX 0 3 1200. 0.82 0.0 / 1 : INNER FUEL 2.23 W/O
XU030009 2 0 5.313830E-4 /1
XTH20009 2 0 2.332955E-2 /2
XO060009 0 0 4.772187E-2 /3
CLD1X0BX 0 3 873. 0.13 0.0 / 2 : CLADDING
XFEN0001 0 0 6.091092E-2 /1
XCRN0001 0 0 1.740312E-2 /2
XNIN0001 0 0 8.701560E-3 /3
MOD1X0CX 0 2 658. 1.0 0.0 / 3 : MODERATOR
XH01H008 0 0 5.219106E-2 /1
XO060008 0 0 2.60955E-2 /2
REFLX0DX 0 6 658. 1.0 0.0 / 4 : REFLECTOR
```

XH01H008 00 4.7508E-2 /1  
 XO060008 00 2.3754E-2 /2  
 XFEN0008 00 1.7886E-2 /3  
 XCRN0008 00 5.2140E-3 /4  
 XNIN0008 00 2.4294E-3 /5  
 XMN50008 00 2.5977E-4 /6  
 0 / PEACO  
 FUL2  
 MACRO FOR OUTER FUEL (1.5W/O Th-U), SAME GEOMETRY WITH THE  
 ABOVE CASE  
 11112 143-21 10002 01000 / SRAC CONTROL  
 1.0000E-20 / BUCKLING  
 3 / NMAT  
 FUE2X0EX 03 1200. 0.82 0.0 / 1 : OUTER FUEL 1.5 W/O  
 XU030009 20 3.579140E-4 /1  
 XTH20009 20 2.350302E-2 /2  
 XO060009 00 4.772187E-2 /3  
 CLD2X0FX 03 873. 0.13 0.0 / 2 : CLADDING  
 XFEN0001 00 6.091092E-2 /1  
 XCRN0001 00 1.740312E-2 /2  
 XNIN0001 00 8.701560E-3 /3  
 MOD2X0GX 02 658. 1.0 0.0 / 3 : MODERATOR  
 XH01H008 00 5.219106E-2 /1  
 XO060008 00 2.60955E-2 /2  
 0 / PEACO  
 CORE  
 SAMPLE FOR CITATION-3D(X-Y-Z), 1/4 CORE  
 00010 00001 05002 01000 / SRAC CONTROL  
 1.0000E-20 / BUCKLING (NOT EFFECTIVE)  
 30-1 / NM NXR ID  
 11 / IXKY IDELAY (CALCULATE KINETICS PARAMETERS)  
 5.0CM MESH SIZE IN EACH DIRECTION  
 EPS(FLUX) < 1.0E-4, EPS(KEFF) < 1.0E-5, ZONE 4:BLACKNESS  
 001  
 00000000000010000000000  
 10000000000011000000000001  
 900  
 0.  
 003  
 00001100000010010141000000  
 0.0001 0.00001  
 0.0 0.0 1000.0 1.0 0.1250  
 004  
 1 5.00000 2 10.00000 2 10.00000 2 10.00000 2 10.00000 2 10.00000  
 2 10.00000 2 10.00000 2 10.00000 0  
 2 10.00000 2 10.00000 2 10.00000 2 10.00000 2 10.00000  
 2 10.00000 2 10.00000 1 5.00000 0  
 4 20.00000 32 160.0000 0

005

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3 3 3 3 4 4 4 4 4
3 3 3 3 3 3 4 4 4
3 3 3 3 3 3 3 4 4
3 3 3 3 3 3 3 3 4
3 3 3 3 3 3 3 3 4
3 3 3 3 3 3 3 3 3
3 3 3 3 3 3 3 3 3
3 3 3 3 3 3 3 3 3
3 3 3 3 3 3 3 3 3
3 3 3 3 3 3 3 3 3 / AXIAL REFLECTOR
3 3 3 3 4 4 4 4 4
2 2 2 3 3 3 4 4 4
1 1 1 2 2 3 3 4 4
1 1 1 1 2 2 3 3 4
1 1 1 1 2 2 2 3 4
1 1 1 1 2 2 2 3 3
1 1 1 1 1 1 1 2 3
1 1 1 1 1 1 1 2 3
1 1 1 1 1 1 1 3 / CORE
```

008

-2 1 1

999

1 2 3 / MATTERIAL NO. BY ZONE

3 / NMAT FOR CORE

FUL1A010 0 0 0.0 0.0 0.0 / HOMOGENIZED INNER FUEL

FUL2A010 0 0 0.0 0.0 0.0 / HOMOGENIZED OUTER FUEL

REFLA0D0 0 0 0.0 0.0 0.0 / REFLECTOR