

# ISO 10645:2022-04 (E)

## Nuclear energy - Light water reactors - Decay heat power in non-recycled nuclear fuels

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	<b>Scope</b> .....	1
2	<b>Normative references</b> .....	1
3	<b>Terms and definitions</b> .....	1
4	<b>Symbols and subscripts</b> .....	2
4.1	<b>Symbols</b> .....	2
4.2	<b>Subscripts</b> .....	3
5	<b>Calculation of decay heat power</b> .....	3
5.1	<b>General</b> .....	3
5.2	<b>Power histogram</b> .....	3
5.3	<b>Contribution of fission products</b> .....	4
5.4	<b>Contribution of actinides</b> .....	6
5.4.1	<b>Contribution of <math>^{239}\text{U}</math> and <math>^{239}\text{Np}</math></b> .....	6
5.4.2	<b>Contribution of other actinides</b> .....	7
5.5	<b>Contribution by neutron capture in fission products</b> .....	7
5.5.1	<b>Contribution of <math>^{134}\text{Cs}</math></b> .....	7
5.5.2	<b>Contribution of other fission products</b> .....	9
5.6	<b>Total decay heat power</b> .....	9
<b>Annex A (informative) Example of a calculation</b> .....		16
<b>Bibliography</b> .....		20