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## NOMENCLATURE

$c, C$	specific heat, kJ. kg <sup>-1</sup> . K <sup>-1</sup> , kJ.kmol <sup>-1</sup> .K <sup>-1</sup>
$ex, \overline{ex}$	specific exergy, kJ.kg <sup>-1</sup> , kJ.kmol <sup>-1</sup>
$EX$	exergy, MJ
$\dot{EX}$	exergy flow, MW
$g, \overline{g}$	specific Gibbs free energy, kJ.kg <sup>-1</sup> , kJ. mol <sup>-1</sup>
$h$	specific enthalpy, kJ.kg <sup>-1</sup> , kJ.mol <sup>-1</sup>
$H$	enthalpy, kJ
$\dot{m}$	mass flow rate, kg.s <sup>-1</sup>
$n$	number of moles
$p$	pressure, kPa, MPa
$\dot{Q}$	thermal power, MW
$\overline{R}$	universal gas constant,
$s$	specific entropy, kJ.kg <sup>-1</sup> .K <sup>-1</sup> , kJ.mol <sup>-1</sup> .K <sup>-1</sup>
$S$	entropy, kJ.K <sup>-1</sup>
$T$	temperature, °C, K
$u$	specific internal energy, kJ. kg <sup>-1</sup>
$v$	specific volume, m <sup>3</sup>
$x$	molar fraction, -

## Greek symbols

$\eta$	efficiency, -
$\tau$	time interval, s

$\mu$  chemical potential, J. mol<sup>-1</sup>, kJ. kmol<sup>-1</sup>

## Subscripts

C	Chemical
DES	Destruction
DW	Dwell
IN	Inlet, input
IRR	Irreversible
M	Mechanical
OUT	Outlet
OV	Overall

## Superscripts

PLS	Pulse
R	Reference state
REV	Reversible
RR	Restricted Ref.
SH	Shell side
TB	Tube side
T	Thermal
$p, v$	Isobaric, isocoric

## Acronyms

BOP	Balance Of Plant
BZ	Breeding Zone
CAS	CASsette
DEMO	DEMONstration fusion power reactor
DIV	DIVertor
EES	Energy Storage System
FW	First Wall
HCPB	Helium Cooled Pebble Bed
HCSG	Helical Coil Steam Generator
IHTS	Intermediate Heat Transfer System
IHX	Intermediate Heat eXchanger
LHV	Lower Heating Value
OTSG	Once Through Steam Generator
PCS	Power Conversion System
PFC	Plasma Facing Components
PHTS	Primary Heat Transfer System
VV	Vacuum Vessel
WCLL	Water Cooled Lithium Lead