

Hydrogen Production Facilities Plant Performance and Cost Comparisons

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LIST OF ACRONYMS AND ABBREVIATIONS

AGR	acid gas removal
AR	as received
ASU	air separation unit
ATS	advanced turbine system
C&PS	Office of Coal and Power Systems
¢/kscf	cents per thousand standard cubic feet
CCT	clean coal technology
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
DOE	U.S. Department of Energy
ETE	effective thermal efficiency
ETTP	Eastern Tennessee Technology Park
FGD	flue gas desulfurization
FY	fiscal year
H ₂ SO ₄	sulfuric acid
HHV	higher heating value
HRSG	heat recovery steam generator
HSD	hydrogen separation device
ID	inside diameter
IGCC	integrated gasification combined cycle
lb/h	pound per hour
MMBtu	million British thermal units
MW	megawatt
N/A	not applicable
NO _x	oxides of nitrogen
O&M	operations and maintenance
OD	outside diameter
ORNL	Oak Ridge National Laboratory
PFBC	pressurized fluidized-bed combustion
ppm	parts per millions
PSA	pressure swing adsorption
psia	pounds per square inch absolute
psig	pounds per square inch gage
R&D	research and development
scfd	standard cubic feet per day
SCR	selective catalytic reduction
SF	separation factor
SNCR	selective non-catalytic reduction
SO ₂	sulfur dioxide
SO ₃	sulfur trioxide
TBD	to be determined
TCR	total capital requirement
tpd	tons per day