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1. ?????Westinghouse Electric Manufacturing Company?

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??500??

Westinghouse????????

????1886?178?????.??1889????????????????????Westinghouse
Electric Manufacturing Company??1945?10???????

????????26?????????250???,????125000?????135000????????107???(1986)

??4000?????1886????????????????????1890
????????????????1895?????????????????????????5000?????1900????????????????????1955????????????????????
1957??500?????????,70?????1100??????,
????????????????????????????????



??????56?????????????6792?,????????????????1750??????650?,????325

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2014????????1??4?AP1000
??AP1000?????????

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??????20????????28??20
??????

?????2020??????????5,800????????????????????????1,569????

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2. ?????

AREVA????????????????????500????AREVA

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AREVA????????????????????AREVA? ?????????????120????????AREVA
????????????????????????????????????

AREVA????????40????????????100

??AREVA

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AREVA????????????????2001??AREVA????????????(ALSTOM)?9.2

????????????????AREVA T&D????????????????????(AREVA)

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2004????????????(ALSTOM T&D) ?????????????(AREVA T&D)

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GEN-19601990LWR?PWR?BWR
CANDU/VVER/RBMK

GEN-19902010
advanced boiling water reactors, ABWR
80+ AP600 European pressurized reactor, EPR

GEN-2030
2500 17% 79% 2002 444
262 59% 50 31 62%

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2000 25 GIF?
2000 8 2001 3

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DOE
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DOE 2001 4 12 94 28 32 17 17 2002 9 19
20 GIF 10 94

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gas-cooled fast reactor, GFR
GFR 288 850

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?????????(lead-cooled fast reactor, LFR)????????/

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LFR????????????????????LFR????????1200????????????????????300?400

????????????????15?20??50?100????????LFR????????????????????????????????

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?????molten salt reactor, MSR??MSR

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1000????????700?800??????

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????????sodium-cooled fast reactor, SFR??SFR

??150?500????????-?-????-

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?????(very high temperature reactor, VHTR)

??HTTR????????????????????????HTR-10??

VHTR????????????????1 000??/

????????????????????????600?????

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?????super-critical water-cooled reactor, SCWR????????????????????????????374?22.1

??1.3

??1

700????????25????????510?550??

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2015?6?30??

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??2014?3

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??????EPR???????????

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1.????????????????

2.??????

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??(AFCEN)????????????(ISNI)????????(SNPI)

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??2014

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MIT????????????????????Transatomic Power????????????????2013?ARPA-E

????????????????????????????????200?????????????????????

Transatomic Power????????????????????Mark Massie?Leslie Dewan????????

Nuclearati?????????Twitterati????????????????2013?ARPA-E

????????????????????????????200?????????????????

????????????????????Russell Wilcox????????MSR????????E-

Ink????????MSR????????50????????Transatomic?MSR

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PS: ARPA-E????????????????????

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?????NPRV?

http://mp.weixin.qq.com/s?__biz=MzA3ODQyODA4MA==&mid=209738025&idx=1&sn=529ea53344

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http://baike.baidu.com/link?url=5MUn4JUP-VV9P34Ygm8OPioMX9vZmysioyTYE_22ZyBI5zR4M6Xp5u_4N7mTx_FqQwKVgkku3Bkzw5I-pFfMb_ileMA-s504qH0-FD-0VAhx_U6PEaRNox2wKwhwwA3rpYsfxahPKSqXAkBxRtObqRtRo0DO-D-lvtl74warDe

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